



Systems, Equipment, & Parts Catalog

Agricultural, Industrial, & Petroleum Equipment / Process Components & Control Systems





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EXPERTISE

MEI employs a solid team of individuals with a strong knowledge base behind our turn-key equipment packages and specialty systems. Between inside sales, outside sales, support, and engineering we have over 300 years of industry experience at your disposal. Whether you need a specialty part or building a new liquid manufacturing facility, our experts are on hand to help you figure out exactly what you need.



SUPPORT

MEI is privately-held and operated, which means we build our business on relationships, not profits. When you call MEI, we have people standing by to take your call and resolve any issues you may have. Simply put, we put our customers first. When you speak, we listen. From the moment there is a need to beyond the day it is delivered, we are focused on providing the highest quality products and the best services at a fair price.



QUALITY

As our name indicates, Murray Equipment began as an equipment house over 60 years ago. Today, that legacy still runs deep. We strive for long-term partnerships with our customers, and for us that begins with a quality product. As both a manufacturer and distributor, we know the importance of each system component. That's why our shelves are lined with inventory that reflects the highest customer value.



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CONTROLS & AUTOMATION

Ready to take your production facility to the next level? MEI's modular designed controls allow you to automate your operations as you see fit. These innovative products are backed by the only company that offers 24/7 emergency support: (260) 480-1340.

CONTROL SOFTWARE

MEI offers a variety of controls to help you automate your liquid loadout. Controls are built in **our own UL 508A facility** from readily available components that can be found at your local electrical supply house.



◀ **SCAN QR WITH PHONE OR TABLET TO
LEARN MORE. OR VISIT
WWW.ICS-CONTROLS.NET/CONTROLPRO**



CONTROLS & AUTOMATION

3RD PARTY INTEGRATION SOFTWARE

ControlPro

ControlPro is a powerful, flexible software tool designed to bridge the gap between your office(s) and the plant. It can operate stand-alone or in conjunction with multiple 3rd party softwares. Programmed to accommodate a wide variety of real-life complex operational scenarios, ControlPro streamlines fertilizer manufacturing, blending, wholesale and retail.

While ICS ControlPro can be run stand-alone, by connecting with your agronomy and/or back office software, it creates a fully automated end-to-end solution.

- Send and receive data from industry-leading back office and agronomy software package(s).
 - Formulas
 - Customers
 - Products
 - Delivery Ticket & Batch Information
 - Dispensed Amounts
 - EPA Numbers
 - Field Images
 - And More!
- Manage orders from multiple originators (locations and/or companies in the case of leasing).
- Send and receive information in real-time upon batch and/or ticket completion.
- Create custom fields to accept more information from 3rd party software or to store additional information in ICS ControlPro.
- Allow daily exceptions to service customers on the fly then report to manually enter data into 3rd party software.

LIQUID LOADOUT AUTOMATION

MEI offers a variety of controls to help you automate your liquid loadout. Controls are built in **our own UL 508A facility** from readily available components that can be found at your local electrical supply house.

ICS LOADOUT CONTROLS

Automate the blending and loadout of your liquid fertilizer and crop chemicals with these user-friendly, yet sophisticated control systems. Engineered to operate as stand-alone units or in conjunction with other ICS automation products, the controls take advantage of the latest field technology. ICS controls are field-tested and operator-approved for ease-of-use and reliability.



	ICS 160c	ICS 180c	ICS 240c	ICS 360	ICS 24-7-8
RAW MATERIALS					
Configurable Raw Materials	Up to 16	Up to 24	Up to 70 (20 Fertilizers, 30 Chemicals, and 20 Totes/Premix)	Up to 72 Standard Expandable	Up to 20
Available Outputs (Valves & Pumps)	Up to 28	Up to 46	64 Standard Up to 160 with Expansions	96 Standard Up to 240 with Expansions	8 Standard Up to 56 with Expansions
Meter Inputs Included	2 High Speed; 12 Standard	4 High Speed; 12 Standard	4 High Speed; 32 Standard	4 High Speed; 32 Standard	4 High Speed; 12 Standard
User Configurable	Yes	Custom	Yes	Custom	Custom
PLUMBING CONFIGURATIONS					
No of Loadout Points	2 (Top or Bottom Fill)	2 (Top or Bottom Fill)	4 (Top or Bottom Fill)	Variable	2 (Top or Bottom Fill)
No of Loadout Points Simultaneously	1	2	2	3	2
Premix Tanks	No	Yes	Yes, 20 Raw Materials	Yes, 24 Raw Materials	No
Hand-Adds	Yes	Yes	Yes	Yes	No
Repackaging	Yes	Yes	Yes	Yes	No
Independent Auxiliary Switches	4	4	6	6	0
SOFTWARE					
Touchscreen Interface	Yes	Yes	Optional	With Compatible Monitor	Yes
User-Defined Parameters	Names, Sequencing, Air Purge Timer	Names, Sequencing, Air Purge Timer	Names, Sequencing, Air Purge Timer	Names, Sequencing, Air Purge Timer	Names, Sequencing, Air Purge Timer
Delivery Tickets	Print Full Size	Through ICS ControlPro	Through ICS ControlPro	Through ICS ControlPro	Print Slip & Full Size
ICS ControlPro Compatible	Yes	Yes	Yes	Yes	Yes
Unattended	No	No	No	No	Yes
SECURITY					
Key-Switch Protected Manual Backup Controls	Yes	Yes	Yes	Yes	Yes
Pump Protection	Yes	Yes	Yes	Yes	Yes
Remote Support	With Internet Connection	With Internet Connection	With Internet Connection	With Internet Connection	With Internet Connection

LIQUID LOADOUT (CONT.)

MEI offers a variety of controls to help you automate your liquid loadout. Controls are built in **our own UL 508A facility** from readily available components that can be found at your local electrical supply house.

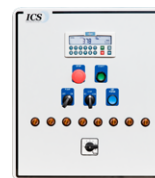
UNATTENDED LOADOUT OPTIONS

MEI ICS 24-7-8 Options

PART NUMBER	DESCRIPTION
ICS 24-7-SIGN	Electronic signature capture pad
ICS 24-7-GATE	Gate/Door opener panel
ICS 24-7-PRINT	High-capacity thermal printer
ICS 24-7-START	Start/Stop Panel (One needed per bay)
ICS 24-7-VALVE	Valve position indication panel

ICS PRODUCT PRESETS

Want to automate the loadout of a few products? These entry-level, stand-alone control panels automate up to 8 pumps, 9 valves, and 8 meters ensuring precision and accuracy. Preset the desired output amount and loadout the products with ease.



	ICS PRESET-1	ICS PRESET-2	ICS PRESET-4	ICS PRESET-8
RAW MATERIALS				
Configurable Raw Materials	1	2	4	8
Available Outputs (Valves & Pumps)	1 Pump & 1 Loadout Valve	2 Pumps, 2 Valves, 1 Loadout Valve	4 Pumps, 4 Valves, 1 Loadout Valve	8 Pumps, 8 Valves, 1 Loadout Valve
Meter Inputs Included	1	1	4	8
PLUMBING CONFIGURATIONS				
No of Loadout Points	1	1	1	1
Pump On/Off	Yes	Yes	Yes	Yes
Valve On/Off	Yes	Yes	Yes	Yes
Air Purge	Yes	Yes	Yes	Yes
NTEP-Approved Control Interface	Yes	Yes	No	Yes
SOFTWARE				
User Interface	Keypad	Keypad	Touch Screen	Keypad
User-Defined Parameters	Pump Delay, Air Purge, Overrun Compensation, K-Factor	Pump Delay, Air Purge, Overrun Compensation, K-Factor	Names, Pump Delay, Air Purge, Overrun Compensation, K-Factor	Pump Delay, Air Purge, Overrun Compensation, K-Factor
Delivery Tickets	Serial Printer Compatible	Serial Printer Compatible	Serial Printer Compatible	Serial Printer Compatible
Configurable Names	No	No	Yes	No
SECURITY				
Meter Signal Timeout	Yes	Yes	Yes	Yes
Remote Support	No	No	No	No
Configuration Lockout Switch	Yes	Yes	No	Yes

MIX PLANT AUTOMATION

MEI offers multistage controls to help you manage your liquid manufacturing. Controls are built in our **own UL 508A facility** from readily available components that can be found at your local electrical supply house.

MIX PLANT CONTROL SYSTEMS

Improve your efficiency and raise the quality of your fertilizer and chemical mixes with ICS controls. Engineered to operate as stand-alone units or in conjunction with other ICS automation products, these controls take advantage of the latest field technology. ICS controls are field-tested and operator-approved for ease-of-use and reliability.



	ICS M180	ICS M240	ICS M360
RAW MATERIALS			
Configurable Raw Materials	Up to 24	Up to 48	Up to 72 Standard Expandable
Available Outputs (Valves & Pumps)	Up to 46	64 Standard>Up to 112 with Expansions	96 Standard>Up to 240 with Expansions
Meter Inputs Included	4 High Speed; 12 Standard	4 High Speed; 32 Standard	4 High Speed; 32 Standard
PLUMBING CONFIGURATIONS			
No of Discharge Points	3 (Top or Bottom Fill)	4 (Top or Bottom Fill)	6 (Top or Bottom Fill)
No of Discharge Points Simultaneously	2	2	3
Premix Tanks	Yes	Yes, 16 Raw Materials	Yes, 24 Raw Materials
Eductor Controls/Hand-Adds	Yes	Yes	Yes
Repackaging	Yes	Yes	Yes
Independent Auxiliary Switches	4	6	6
SOFTWARE			
Touchscreen Interface	Yes	Yes	With Compatible Monitor
User-Defined Parameters	Names, Mix Cycle Timer, Sequencing, Air Purge Timer	Names, Mix Cycle Timer, Sequencing, Air Purge Timer	Names, Sequencing, Air Purge Timer
Delivery Tickets	Through ICS ControlPro	Through ICS ControlPro	Through ICS ControlPro
ICS ControlPro Compatible	Yes	Yes	Yes
SECURITY			
Key-Switch Protected Manual Backup Controls	Yes	Yes	Yes
Pump Protection	Yes	Yes	Yes
Remote Support	With Internet Connection	With Internet Connection	With Internet Connection

CHEMICAL INJECTION

Premix Expansion Panel



PART NUMBER	DESCRIPTION
ICS PRE-150-8	Premix Expansion Panel

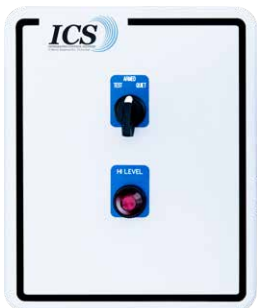
PLUMBING CONTROLS

MEI offers modular controls to help you manage your liquid manufacturing.

TANK VOLUME CONTROLS

MEI ICS High Level Alarms

Ensure you do not overfill your product tanks. These NEMA 4X indoor/outdoor UL-listed high level alarms provide an audible alarm and strobe signal, as well as disconnect pump power.



PART NUMBER	DESCRIPTION
ICS HIGHALARM1	<ul style="list-style-type: none">Configurable multi-tone alarm (eight tones at 73-85dB)Strobe signalCan disconnect pump powerAdjustable float (4" to 30") or derated tanks a(36" to 96")Not for fluids that require explosion proof or intrinsically safe electronicsRegular alarm testing recommended <p>Options: Electric operated butterfly valve to close fill line with battery backup system</p>
ICS HIGHALARM2	ICS HIGHALARM1, but <ul style="list-style-type: none">2 floats within a tank - 2 audible alarms & strobe signalsValve is positively closed when higher float is tripped and will not reopen until tank level is reduced

MEI ICS Tank Sensor & Remote Display

Keep an eye on your liquid inventory levels. This display panel provides graphical illustration of liquid levels of up to 12 tanks remotely.



PART NUMBER	DESCRIPTION
ICS 12TANK	<ul style="list-style-type: none">Monitor up to 12 tanksConnects to all 4-20MA sensorsStatic IP address needed for remote accessMultiple panels can be integrated with ease

MEI ICS LevelPro



PART NUMBER	DESCRIPTION
ICS 12TANK	<ul style="list-style-type: none">Monitor up to 12 tanksConnects to all 4-20MA sensorsStatic IP address needed for remote accessMultiple panels can be integrated with ease

MEI INTEGRATED CONTROL SYSTEMS (ICS)



MEI ICS series controls are constructed in **our in-house, climate-controlled UL 508A facility** using industry-standard components. They are field-proven, customer-approved and found in facilities of all sizes across North America.

We stock our preset and control boxes, so they can be readily available to our customers. Call (260) 484-0382 for more information.

PLUMBING CONTROLS (CONT.)

MEI offers modular controls to help you manage your liquid manufacturing.

AIR VALVE ACTUATION CONTROL PANELS

MEI ICS Valve Control For Liquid Handling Systems

Quickly move liquid product throughout your facility. These control boxes give you the ability to automatically open and close valves to move liquid from one place to another. They can be used with other MEI controls or integrated with 3rd Party products. See System Component Valves for air valves and accessories.



PART NUMBER	DESCRIPTION
ICS VALVEBOX4	Control up to 4 air valves. Requires 120 VAC to operate.
ICS VALVEBOX6	Control up to 6 air valves. Requires 120 VAC to operate.
ICS VALVEBOX8	Control up to 8 air valves. Requires 120 VAC to operate.
ICS VALVEBOX10	Control up to 10 air valves. Requires 120 VAC to operate.
ICS VALVEBOX12	Control up to 12 air valves. Requires 120 VAC to operate.
ICS VALVEBOX16	Control up to 16 air valves. Requires 120 VAC to operate.

MEI ICS Valve Control For Dry Material Handling Systems

Quickly move dry material throughout your facility. These control boxes give you the ability to automatically open and close gates to move product from one place to another. They can be used with other MEI controls or integrated with 3rd Party products. See System Components Valves for air valves and accessories.



PART NUMBER	DESCRIPTION
ICS MACBOX10	Control up to 10 air valves. Requires 120 VAC to operate.
ICS MACBOX20	Control up to 20 air valves. Requires 120 VAC to operate.

CHECK OUT OUR LINE OF AIR ACTUATED VALVES



See page 87 for our line of electric and air actuated valves.

MEI offers inline, butterfly, ball, poppet valves and more from a variety of suppliers.

Not sure which valve is best for your application? Call us today to speak to one of our knowledgeable sales representatives: (260) 484-0382.

DRY FERTILIZER AUTOMATION

Need to automate dry fertilizer, chemical, or feed production? MEI has the tools you need.

DRY FERTILIZER BLEND TOWER ALLEYWAY CONTROLS

MEI ICS Reclaim Control Panel with Manual Override Controls

This panel integrates with MEI Dry Blend Tower Automation Control Panel and controls all fertilizer alleyway and reclaim operations. Panel graphically represents dry blend tower reclaim system and indicates all reclaim operations.



PART NUMBER	DESCRIPTION
ICS DTSAW0-8	<ul style="list-style-type: none">Controls reclaim elevator operationShows motor ampsGraphically represents distributor positionIndicates high and low bin levelsControls are UL 508A rated and labeled
ICS DTSAW9-16	ICS DTSAW0-8, but for 9-16 Bins

MEI ICS In-Cab Wireless Controls

Control all alleyway reclaim operation from the payloader with this industrial ruggedized 9" touch screen tablet, which provides reliable operations in harsh environments.



PART NUMBER	DESCRIPTION
ICS DTSTABLET	<ul style="list-style-type: none">Indicates distributor positionControls elevator and reclaim operationsDisplays bin level informationShows motor ampsSystem alarmsIndustrial ruggedized 9" touchscreen tablet

DRY FERTILIZER RECEIVING CONTROLS

MEI ICS Receiving Control Panel

This panel controls dry fertilizer receiving operations to dry fertilizer building.



PART NUMBER	DESCRIPTION
ICS DTSRECPT	<ul style="list-style-type: none">Displays motors ampsSystem alarmsControls are UL 508A rated and labeled

DRY FERTILIZER BLEND TOWER BATCHING CONTROLS

MEI ICS Dry Tower Automation Interface Panel with Manual Override Controls

This panel integrates with MEI Dry Blend Plant Manager Software for total automation operation. The panel graphically represents the dry blend tower and indicates all tower operations. The panel controls chemical impregnation operation as well.



PART NUMBER	DESCRIPTION
ICS DTS0-8	<ul style="list-style-type: none">Displays distributor positionShows high and low bin levelsIndicates gate positionsControls chemical impregnationManual override controls are included for manual operation.Controls are UL 508A rated and labeled
ICS DTS9-16	ICS DTS0-8, but for 9-16 Bins

DRY FERTILIZER AUTOMATION (CONT.)

DRY FERTILIZER BLEND TOWER BATCHING CONTROLS (CONT.)

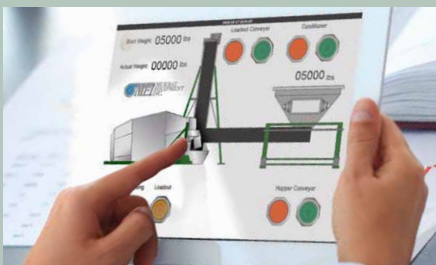
MEI ICS Wireless Controls

Manage your fertilizer blending from a mobile device such as an iPad, smart phone or tablet. There are several levels of automation to control a single rotary or vertical blender up to a full scale, fully automated, dry fertilizer blending operation. Tablet, iPad, or mobile device is NOT INCLUDED.



PART NUMBER	DESCRIPTION
ICS DHS-D1	Operate EITHER a Rotary or Vertical Blender from the Loader NOT INCLUDED: Scale weight capture, MEI Interface
ICS DHS-D2	Operate EITHER a Rotary or Vertical Blender from the Loader NOT INCLUDED: Scale weight capture, MEI Interface Expandable for future full automation
ICS DHS-D3	Operate EITHER a Rotary or Vertical Blender Operate a single hopper or multiple hopper system Partial Automation: "Buildup" Capture scale weights Receive & send agronomy software information via MEI Interface

MURRAY EQUIPMENT IS A PROVEN PROVIDER OF DRY CONTROLS



While MEI is known for its cutting-edge, reliable liquid fertilizer automation solutions, we are also transforming the dry fertilizer industry.

We partner with the industry's leading dry equipment providers to engineer innovative, complete systems across the country.





LIQUID FERTILIZER/CHEMICAL LOADOUT

Want to quickly dispense liquid fertilizer from storage tanks? These products allow you to automate the loadout of fertilizers and chemicals dramatically increasing through-put.

LOADOUT SKIDS

Easily transfer fertilizer and value-added products from storage tanks into cage tanks, nurse tanks, and tractor trailers.

LIQUID FERTILIZER/CHEMICAL

Retail System for Custody Transfer Applications

Automate the blending & loadout of up to 10 fertilizers or micronutrients quickly and easily. This stand-alone compact pump and meter skid includes a touch-screen control panel along with a pre-configured pump, meter, and valve system. The integrated MEI ICS series control panel is field-tested and operator-approved for usability. It interfaces with MEI's other automation products giving you the ability to continually take advantage of the latest in automation technology.



PART NUMBER	DESCRIPTION
MLS 250MASS	<ul style="list-style-type: none">Control up to 10 fertilizers or micronutrientsStandard 250 GPM stainless steel pumpWeights-and-Measures approved 2" stainless steel mass flow meterMultiple loading point options with auto and manual operationFiltered loadout linePreset loadout valuesSequential product deliveryAutomatic compensation overrunTimed air purgeLoad transaction ticket printing <p>Compatible with: MEI Interface, 3rd party software. Dimensions: 54" Width x 144" Length x 5' Height</p>
MLS 350MASS	MLS 250MASS, but with a 350 GPM pump and 3" mass flow meter.
MLS 450MASS	MLS 250MASS, but with a 450 GPM pump and 3" mass flow meter
MLS 650MASS	MLS 250MASS, but with a 650 GPM pump and 4" mass flow meter

Commercial System for Non-Custody Transfer

For non-retail applications



PART NUMBER	DESCRIPTION
MLS 250MAG	Same as above, but with a 250 GPM pump and 2" magnetic flow meter.
MLS 350MAG	MLS 250MAG, but with a 350 GPM pump and 3" magnetic flow meter.
MLS 450MAG	MLS 250MAG, but with a 450 GPM pump and 3" magnetic flow meter.
MLS 650MAG	MLS 250MAG, but with a 650 GPM pump and 4" magnetic flow meter.

For loadout controls & automation, including unattended loadout, see page 5.

CUSTOM LOADOUT DESIGN



Have specific loadout requirements? Unsure of the best way to handle your concerns? MEI has built hundreds of systems in North America.

When you need speed, accuracy, increased throughput, flexibility, MEI can help. We have the components and experience to help you move product for years to come.



RAILCAR UNLOADING

Need to offload railcars? MEI has the equipment you need to quickly move inventory from rail into storage.

RAILCAR UNLOADING

MEI offers railcar unloading equipment engineered to meet the specific requirements of many products.

STANDARD RAILCAR UNLOADING

Railcar to Storage Unloading

This scalable system is designed to efficiently off-load railcars into storage tanks.



RAIL UNLOADING

PART NUMBER	DESCRIPTION
RCS 2RAILCAR	<p>Off-load 2 cars. Each system comes with a single pump/plumbing station located centrally with multiple railcar hookups along a rail header.</p> <p>Pump/Plumbing Station:</p> <ul style="list-style-type: none">• 250 GPM straight centrifugal pump with 15 HP motor• 4" basket strainer• 2 - 4" butterfly valves to control flow along rail header to pump• Air purge• Stainless steel residual product collection tank• 4" 304 stainless steel pipe with slip weld fitting• 1 - 3" butterfly valve to control discharge flow• Prefabricated 304 stainless steel components <p>Railcar Header:</p> <ul style="list-style-type: none">• 4" 304 stainless steel schedule 10 pipe• 2 Railcar hookups spaced 55' apart <p>Railcar Hookup (Per Hookup):</p> <ul style="list-style-type: none">• 25' x 3" EPDM Suction/Discharge Hose• 5" x 3" Aluminum railcar fitting• Butterfly valve• Sample port
RCS 4RAILCAR	4 railcar hookups, 4" rail header, and 350 GPM straight centrifugal pump with 20 HP motor
RCS 6RAILCAR	6 railcar hookups, 6" rail header, and 450 GPM straight centrifugal pump with 25 HP motor
RCS 8RAILCAR	8 railcar hookups, 6" rail header, and 650 GPM straight centrifugal pump with 40 HP motor
RCS 10RAILCAR	10 railcar hookups, 6" rail header, and 850 GPM straight centrifugal pump with 50 HP motor

Railcar Unloading Options

PART NUMBER	DESCRIPTION
RCS SIDE	Place pump at rail header end instead of middle
RCS 4RAILHOSE	4" Railcar hookup hose instead of 3" (per hookup)
RCS 6HDPE-2-10	6" HDPE SDR11 pipe instead of 6" 304 stainless steel pipe
RCS 8HDPE-6-8	8" HDPE SDR11 pipe instead of 6" 304 stainless steel pipe

Multiple rail sites and dual pump options available. Call for details.



MIX PLANTS

Need a way to mix dry and liquid plant food, chemical, or liquid feed? Look no further than Murray Equipment. Dramatically improve product quality, availability and production rates.

STANDARD MIX PLANTS

Seamlessly mix liquid and dry chemicals and feed according to custom recipes and formulas.

STANDARD NTEP-APPROVED FERTILIZER & CHEMICAL MIX PLANT

Standard Murray Mix Plant

For over 65 years, Murray's mix plants have set the standard for quality and efficiency in the industry. Our mix plants can be easily configured to your facility and liquid mix requirements. All mix plants are built with **NTEP-approved** components and to weights-and-measures specifications.



MIX PLANTS

PART NUMBER	DESCRIPTION
MIX SMP-10	<p>Tank:</p> <ul style="list-style-type: none">• 10 ton, 2500 gallon 304 stainless steel tank• 4 stainless steel baffles for improved agitation• 36" diameter ½" square stainless steel tank lid with 24" x 36" manway• Perforated tank sump screen• Sample port• Stainless steel vortex breaker• Stainless steel temperature gauge• Mechanical tank rinse <p>Agitation:</p> <ul style="list-style-type: none">• 304 Stainless steel agitator frame• Lightnin series 10 mixers• Specifically engineered to mix tank size• 48" diameter agitator blades• Low RPM high volume agitation <p>Pump:</p> <ul style="list-style-type: none">• 4"x 3" - 10 A-70 A.N.S.I. specification chemical process pump with stainless steel impeller and sever service cartridge seal• 400 GPM capacity• 20 hp high efficiency motor with 208/240/480 volt capabilities <p>Scales:</p> <ul style="list-style-type: none">• Mettler Toledo multi mounts 10,000 pound load cells• Rice Lake 480 legend series indicator with stainless steel enclosure• All components are NTEP approved <p>Tank Plumbing:</p> <ul style="list-style-type: none">• 2 - 3" ANSI flanged eductor ports• 3" flanged recirculation port with diverter deflector• Self-draining sump to eliminate residual product• 6" flanged sump outlet <p>Manual Controls:</p> <ul style="list-style-type: none">• Work area with stainless steel top• Manual lever actuated air control valves• Motor control and motor starters mounted in a NEMA 4X enclosures and assembled to UL508A standards in our electrical assembly area <p>Pump and Tank Frame:</p> <ul style="list-style-type: none">• Tank frame constructed of painted steel structural 8" C channel• Pump frame constructed of painted steel structural 6" C channel• Optional Stainless Steel Frames <p>Compatible with: MEI Mix Plant Manager Software & Murray Interface</p>
MIX SMP-15	Same as above, but with 15 ton, 3500 gallon tank and 6"x4" - 10 A-80 A.N.S.I. specification pump with 25 hp motor for up to 600 GPM.
MIX SMP-25	Same as above, but with 25 ton, 6000 gallon tank and 6"x4" - 13 A-80 A.N.S.I. specification pump with 40 hp motor for up to 900 GPM.

SYSTEM-SPECIFIC EQUIPMENT

Customize the standard mix plant to your specific liquid and facility requirements.

FERTILIZER ADD-ON KITS

Acid-Grade Fertilizer Kit

This kit includes the standard mix plant add-ons for manufacturing products that use nitric, citric, phosphoric, phosphorus, and other acidic raw materials.



PART NUMBER	DESCRIPTION
MIX AGKIT10	<ul style="list-style-type: none">Replace 304 Stainless Steel Tank with 316L Stainless Steel Tank & Wetted ComponentsHeating/Cooling Coils3" Eductor with 15 gallon stainless steel funnel
MIX AGKIT15	MIX AGKIT10, but for 15 ton/3500 gallon tanks & with 4" eductor
MIX AGKIT25	MIX AGKIT10, but for 25 ton/6000 gallon tanks & with 4" eductor

Clear-Grade Fertilizer Kit

This kit includes the standard mix plant add-ons for manufacturing products that use potash, urea, and other clear-grade raw materials.



PART NUMBER	DESCRIPTION
MIX CGKIT10	<ul style="list-style-type: none">Heating/Cooling Coils3" Eductor with 15 gallon stainless steel funnel
MIX CGKIT15	MIX CGKIT10, but for 15 ton/3500 gallon tanks & with 4" eductor
MIX CGKIT25	MIX CGKIT10, but for 25 ton/6000 gallon tanks & with 4" eductor

Suspension-Grade Fertilizer Kit

This kit includes the standard mix plant add-ons for manufacturing 0-24-0 and 9-27-0 and other suspension fertilizer.

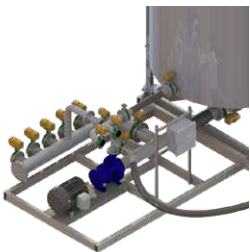


PART NUMBER	DESCRIPTION
MIX SGKIT	<ul style="list-style-type: none">Heating/Cooling CoilsAnhydrous ammonia injection loop with air dampening, water flush, check valve, and rinse3" Eductor with 15 gallon stainless steel funnel
MIX SGKIT15	MIX SGKIT10, but for 15 ton/3500 gallon tanks & with 4" eductor
MIX SGKIT25	MIX SGKIT10, but for 25 ton/6000 gallon tanks & with 4" eductor

PRODUCT PLUMBING

Suction Manifold Kits

These traditional, economical kits are ideal in scenarios where potential cross-contamination is of minimal concern and speed is not of primary importance.



PART NUMBER	DESCRIPTION
MIX 304SM4	304 Stainless steel suction manifold for 4 products
MIX 316SM4	316L Stainless steel suction manifold for 4 products
MIX 304SM6	304 Stainless steel suction manifold for 6 products
MIX 316SM6	316L Stainless steel suction manifold for 6 products
MIX 304SM8	304 Stainless steel suction manifold for 8 products
MIX 316SM8	316L Stainless steel suction manifold for 8 products

304 Stainless Steel Frames

Upgrade your mix plant frame for improved weather and chemical resistance and overall plant longevity.

PART NUMBER	DESCRIPTION
MIX 304FRAME10	Replace carbon steel mix plant and agitator frames with 304 stainless steel frames on the 10 ton/2500 gallon mix plants.
MIX 304FRAME15	MIX 304FRAME10, but on the 15 ton/3500 gallon mix plants.
MIX 304FRAME25	MIX 304FRAME10, but on the 25 ton/6000 gallon mix plants.



SYSTEM-SPECIFIC EQUIPMENT (CONT.)

Customize the standard mix plant to your specific liquid and facility requirements.

PRODUCT PLUMBING (CONT.)

Overhead Plumbing & Support Kits

For increased speed, improved equipment longevity, and reduced cross-contamination, overhead plumbing is desirable.



PART NUMBER	DESCRIPTION
MIX 304OH4	304 stainless pipe, air valves, and air controls for bringing 4 products in over-the-top
MIX 316OH4	316L Stainless pipe, air valves, and air controls for bringing 4 products in over-the-top
MIX 304OH6	304 Stainless pipe, air valves, and air controls for bringing 6 products in over-the-top
MIX 316OH6	316L Stainless pipe, air valves, and air controls for bringing 6 products in over-the-top
MIX 304OH8	304 Stainless pipe, air valves, and air controls for bringing 8 products in over-the-top.
MIX 316OH8	316L Stainless pipe, air valves, and air controls for bringing 8 products in over-the-top.

DRY MATERIAL CONVEYOR SYSTEMS

Dry Material Hoppers



PART NUMBER	DESCRIPTION
MIX HOP5TON	5 ton hopper with screen, and air operated slide gate. Hopper Dimensions: 8' Width x 8' Length x 5' Height
MIX HOP5TON-DW	MIX HOP5TON, but with declining weight system.
MIX HOP8TON	8 ton hopper with screen, and air operated slide gate. Hopper Dimensions: 8' Width x 12' Length x 5' Height
MIX HOP8TON-DW	MIX HOP8TON, but with declining weight system.
MIX HOP10TON	10 ton hopper with screen, and air operated slide gate. Hopper Dimensions: 8' Width x 12' Length x 5' Height
MIX HOP10TON-DW	MIX HOP10TON, but with declining weight system.

Conveyors

Conveyor height is dependent on mix plant height. Call for details.



PART NUMBER	DESCRIPTION
MIX AUGER	21 foot stainless steel auger
MIX BELTVEYOR	21 foot belt veyor
MIX DRAGCHAIN	25 foot enclosed stainless steel drag chain

SYSTEM-SPECIFIC EQUIPMENT

Customize the standard mix plant to your specific liquid and facility requirements.

OPTIONAL EQUIPMENT

316L Stainless Steel Tank & Standard Wetted Components

For handling acid-grade liquids such as nitric, citric, phosphoric, phosphorus, standard 304 stainless steel parts can be replaced with 316L stainless steel.

PART NUMBER	DESCRIPTION
MIX 316TANK10	Replace 304 stainless steel tank and standard wetted components with 316L stainless steel in the 10 ton/2500 gallon mix plant.
MIX 316TANK15	MIX TANK316-10, but for 15 ton/3500 gallon mix plants.
MIX 316TANK25	MIX TANK316-10, but for 25 ton/6000 gallon mix plants.

Digital 316 Temperature Gauge

Monitor tank temperature digitally remotely.



PART NUMBER	DESCRIPTION
MIX DIGITEMP	Replace standard dial temperature gauge with 316L stainless steel digital temperature gauge

Stainless Steel Eductors

Add dry and liquid materials from the floor. It is recommended 10 ton mix plants use 3” and 15 and 25 ton plants use 4”.



PART NUMBER	DESCRIPTION
MIX 3EDUCTSSCO	304 stainless steel 3” eductor with 15 gallon 304 stainless steel funnel, and suction hose with 3” hose barb assembly.
MIX 3LIQSSCOMP	MIX 3EDUCTSSCO, but with 316 stainless steel components.
MIX 4EDUCTSSCO	304 stainless steel 4” eductor with 15 gallon 304 stainless steel funnel, and suction hose with 4” hose barb assembly.
MIX 4EDUCTSSON	MIX 4EDUCTSSCO, but without a funnel.



MIX PLANTS

FACILITY DESIGN



Know what you want to do, but need help connecting all the components? We have an experienced team of sales reps and in-house engineers that can make your goals a reality.

Contact us today.

We'll connect you with a MEI representative to find out what you would like to accomplish and get the ball rolling.



PREMIX TANKS

Need to premix crop chemicals or nutritional products? MEI offers customized premixer and eductor systems that allow you to add product to final mixes.

PREMIX TANKS

Need to mix small quantities of additives, dry solubles, and/or micronutrients? Consider these premix units.

MULTI-PRODUCT PREMIX TANKS

Poly Premix Unit

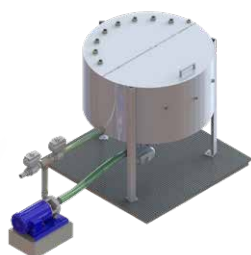
Used in many applications, this poly premix unit is an affordable liquid and dry chemical mixing/injection system.



PART NUMBER	DESCRIPTION
MIX 35GMPMIX1P	<ul style="list-style-type: none"> 35 gallon polyethylene mix tank MP Flowmax 5 1 ½" Pump 2 HP single/1 phase Motor Recirculating plumbing
MIX 35GMPMIX3P	MEI 35GMPMIX1P but with three/3 phase.

Stainless Steel Premix Unit

Mix up to 250 gallons of additives, dry solubles, and/or micronutrients. MEI premix units can be run stand-alone for manual mixing, or incorporated into a larger automated systems for full automated mixing.



PART NUMBER	DESCRIPTION
MIX PMT15084X4	<p>Pump & Plumbing:</p> <ul style="list-style-type: none"> 2 x 1 ½" stainless steel 3HP 3 phase pump with high speed motor Recirculating plumbing <p>Tank:</p> <ul style="list-style-type: none"> 150 gallon 304 stainless steel mix tank Removable half lid 2" outlets 2 - 1 1/2" recirculation couplers 3 bolted down legs Vortex breaker 10 - 1" couplers <p>Scale:</p> <ul style="list-style-type: none"> 4' x 4' pre-calibrated floor scale 480 indicator <p>Options: 316 stainless steel tank, no lid but with rinse ring, jug rinse, 4 legs instead of 3, single phase pump, cast iron pump, additional couplers, scale printer (call for pricing for options).</p> <p>Tank Dimensions: 42" diameter x 44" height Total Dimensions: 48" width x 48" length x 48" height</p>
MIX PMT1508	MIX PMT15084x4 but without scale.
MIX PMT12084X4	<p>MIX PMT15084x4 but with 120 gallon tank.</p> <p>Tank Dimensions: 42" diameter x 39" height Total Dimensions: 48" width x 48" length x 43" height</p>
MIX PMT1208	MIX PMT15084x4 but with 120 gallon tank and without scale.
MIX PMT20084X4	<p>MIX PMT15084x4 but with 200 gallon tank.</p> <p>Tank Dimensions: 48" diameter x 46" height Total Dimensions: 48" width x 48" length x 50" height</p>
MIX PMT2008	MIX PMT15084x4 but with 200 gallon tank and without scale.
MIX PMT25084X4	<p>MIX PMT15084x4 but with 250 gallon tank.</p> <p>Tank Dimensions: 48" diameter x 52" height Total Dimensions: 48" width x 48" length x 56" height</p>



PREMIXERS



CROP PROTECTION HANDLING EQUIPMENT

MEI offers chemical manufacturers a cost effective solution to servicing their dealer's storage and repackaging needs. We provide storage and dispensing systems that can be custom fit to your specific chemical and application needs.

BULK SYSTEMS

Configurable bulk storage and dispensing systems designed for dealers and/or supplier programs.

RETAIL SYSTEMS

Retail Bulk Chemical System

Store and dispense chemicals for retail applications. The standard system comes with tank large enough to take advantage of bulk purchases, along with a pump & meter stand that includes an NTEP certified, weights and measures approved meter.



PART NUMBER	DESCRIPTION
CHM SYS-3	Tank: <ul style="list-style-type: none">• 6,100 gallon• Constructed of 304 back welded stainless steel with #4 polished finish• 304 stainless steel legs• 16" stainless steel manway• Two 2" female threaded fittings on the top• Two 2" female threaded openings in the sidewall• Two in-tank eductors 180 degrees apart• One 2" male threaded opening at the bottom of the tank Dimensions: 96" diameter x 226" overall height Dispensing System: <ul style="list-style-type: none">• 2" x 2" self-priming centrifugal Cast Iron pump with a 5 hp, 3 phase, 3600 TEFC electric motor• NTEP certified, weights and measures approved TCS 682 AF Cast Iron meter with a 5-wheel re-settable head with totalizer and 3/4" stainless steel air eliminator• Pump and meter are mounted on a tubular steel stand• This system has sufficient valves and fittings to direct product either through the meter to loadout or back to the tank for recirculation. Plumbing: <ul style="list-style-type: none">• 1 lb/1 oz conservation vent with vent baffle• Stainless steel locking ball valves• Bottom fill adapter to simplify tank filling• All cross linked polyethylene 2" suction and recirculation hose• 1" x 12' EPDM delivery hose and nozzle valve
CHM SYS-1	CHM SYS-3, but single phase.
CHM SYSPUMP-3	CHM SYS-3, but without meter & stand.
CHM SYSPUMP-1	CHM SYS-3, but single phase and without meter & stand.

Retail Bulk Chemical System for Liquids Not Compatible with Iron



PART NUMBER	DESCRIPTION
CHM SS-SYS-3	CHM SYS-3, but includes a stainless steel pump and meter.
CHM SS-SYS-1	CHM SS-SYS-3 but single phase.
CHM SS-SYSPUMP-3	CHM SS-SYS-3, but without meter & stand.
CHM SS-SYSPUMP-1	CHM SS-SYS-3, but single phase and without meter & stand

Retail Bulk Chemical System Tank Options

Systems can be configured to your specific requirements. Standard tank can be replaced with the following tanks. (Additional tank sizes, materials, and constructions are available. Call for details.)



PART NUMBER	DESCRIPTION
CHM 2400SSTANK	2400 gallon: 72" diameter x 147" tall
CHM 4300SSTANK	4300 gallon: 96" diameter x 155" tall
CHM 5100SSTANK	5100 gallon: 96" diameter x 138" tall

PART NUMBER	DESCRIPTION
CHM10000SSTANK	10,000 gallon: 144" diameter x 198" tall
CHM 12000SSTANK	12,000 gallon: 144" diameter x 222" tall



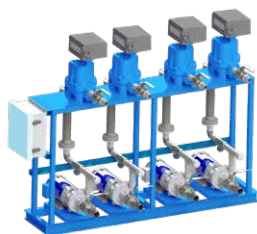
CROP PROTECTION
HANDLING EQUIPMENT

CHEMICAL DISPENSING SYSTEMS

DRY IMPREGNATION/CHEMICAL DISPENSING SYSTEM

Multi-Product Pump & Meter Stand

Need to inject multiple chemicals into your dry fertilizer blends? Or, are you a chemical dealer in need of an efficient dispensing solution? Either way, these dual-purpose multi-product pump and meter stand gives you the accuracy, precision, and speed you need to deliver and/or inject liquids. All meters are **NTEP-approved** for the resale of chemicals.



Valve box (as shown) is optional.

PART NUMBER	DESCRIPTION
CHM IMP4	4 Pumps: <ul style="list-style-type: none"> 2" x 1 1/2" straight centrifugal 316 stainless steel pump 5 hp, single phase, 3600 TEFC electric motor 4 Meters: <ul style="list-style-type: none"> NTEP certified, weights and measures approved TCS 682 AF cast iron meter 5-wheel re-settable head with totalizer Plumbing: <ul style="list-style-type: none"> 304 stainless steel pipe 304 stainless steel strainer with 1/8 perforation filter 304 stainless steel flex hose 2 manual service valves <p>All parts are mounted on a tubular steel stand</p>
CHM IMP2	CHM IMP4, but with 2 pumps, 2 meters, and 1 manual service valve.

Stand Options

As each pump and meter configuration will handle a different chemical, each configuration can be customized individually. Below are some options to ensure chemical and equipment compatibility.

PART NUMBER	DESCRIPTION
CHM ADD304	Replace a single pump and meter configuration with 304 Stainless Steel wetted parts.
CHM ADD316	Replace a single pump and meter configuration with 316 stainless steel wetted parts.
CHM ADD3PHASE	Replace single phase pump motors with 3 phase motors.
CHM ADDAIRVALVE	Replace manual valves with air actuated valves.

Single Product Cast Iron Pump & Meter Stand

Only have a single chemical you need to dispense and/or inject into a dry blend? Like our multi-product stands, these versatile systems are engineered to provide the accuracy, precision, and speed you need.



PART NUMBER	DESCRIPTION
CHM 682/51-2	<ul style="list-style-type: none"> 2" x 2" self-priming centrifugal cast iron pump 5 hp, single phase, 3600 TEFC electric motor NTEP certified, weights and measures approved TCS 682 AF cast iron meter 5-wheel resettable head with totalizer Tubular steel stand This system has sufficient valves and fittings to direct product either through the meter to loadout or back to the tank for recirculation.
CHM 682/53-2	CHM 682/51-2 but 3 phase pump motor

CHEMICAL DISPENSING SYSTEMS (CONT.)

Single Product Stainless Steel Pump & Meter Stand

Only have a single chemical you need to dispense and/or inject into a dry blend? Like our multi-product stands, these versatile systems are engineered to provide the accuracy, precision, and speed you need.



PART NUMBER	DESCRIPTION
CHM 682/CF51SS	<ul style="list-style-type: none"> 2" x 1 1/2" straight centrifugal 316 stainless steel pump 5 hp, single phase, 3600 TEFC electric motor NTEP certified, weights and measures approved TCS 682 stainless steel meter with PTFE elastomers 5-wheel resettable head with totalizer Tubular steel stand This system has sufficient valves and fittings to direct product either through the meter to loadout or back to the tank for recirculation
CHM 682/CF51SE	CHM 682/CF51SS, but with EPDM elastomers
CHM 682/CF53SS	CHM 682/CF51SS, but with 3 phase pump motor
CHM 682/CF53SE	CHM 682/CF51SS, but with 3 phase pump motor and EPDM elastomers
CHM 682CF51SSM	CHM 682/CF51SS, but with 304 Stainless Steel wetted parts
CHM 682CF51SEM	CHM 682/CF51SS, but with 304 Stainless Steel wetted parts and EPDM elastomers
CHM 682CF53SEM	CHM 682/CF51SS, but with 3 phase pump motor and 304 Stainless Steel wetted parts
CHM 682CF53SSM	CHM 682/CF51SS, but with 3 phase pump motor, 304 Stainless Steel wetted parts, and EPDM elastomers

YARAVITA® PROCOTE® DRY IMPREGNATION SYSTEMS

Elite Dry Impregnation System for YaraVita® PROCOTE®

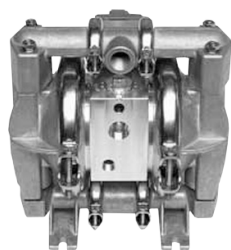
Floor and dry tower compatible, variable flow rate, and high PSI



PART NUMBER	DESCRIPTION
YAR HYDRA-CELL	Elite dry impregnation system
YAR TOTE-SYST	Outdoor protection/heat/agitation kit
YAR PLUMBING	Standard plumbing package
YAR H-CCONTROL	Scale & indicator
YAR HYDRA-CAL	20,000 mL Calibration Column for Hydra Cell Elite Dry Impregnation System

Standard Dry Impregnation System for YaraVita® PROCOTE®

Floor blender compatible, single flow rate, standard PSI



PART NUMBER	DESCRIPTION
YAR WILDEN	Standard dry impregnation system
YAR TOTE-SYST	Outdoor protection/heat/agitation kit
YAR PLUMBING	Standard plumbing package
YAR SCALE-W	Scale and indicator

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CROP PROTECTION
HANDLING EQUIPMENT



NH3 HANDLING EQUIPMENT

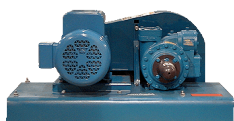
Need specialty equipment for NH3 handling? Murray Equipment carries a full line of equipment. We also have experts on-hand to answer any questions you may have. Call us today at (260) 484-0382 for expert help and service.

PUMP ASSEMBLIES & PUMPS

PUMP ASSEMBLIES

Blackmer Sliding Vane Positive Displacement Pump Assemblies

Ideal for high volume anhydrous ammonia bulk plant service and transfer applications, these pump assemblies contain an internal safety relief valve, replaceable casing liner, and end discs for easy rebuilding of the pumping chamber. The pump comes preassembled with a motor on a mounting plate.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW	RPM	MOTOR
BLK LGL2-53	LGL Series Ductile Iron	2" Flanged	Up to 100 GPM	740	5 HP, 3 Phase
BLK LGL3-103	LGL Series Ductile Iron	3" Flanged	Up to 200 GPM	740	10 HP, 3 Phase

PUMPS

Blackmer Sliding Vane Positive Displacement Pumps

Replacement pumps for Blackmer positive displacement pump assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW	PSI	COMPATIBLE MOTOR
BLK LGL2ONLY	LGL Series Ductile Iron	2" Flanged	Up to 100 GPM	Up to 150 PSI	182T, 184T
BLK LGL3ONLY	LGL Series Ductile Iron	3" Flanged	Up to 200 GPM	Up to 150 PSI	184T, 213T, 215T, 254T, 256T

COMPRESSORS

Blackmer NH3 Oil-Free Gas Compressors

Blackmer oil-free gas compressors deliver high efficiency in handling propane, butane, anhydrous ammonia and other liquefied gases. They are ideal for railcar unloading and vapor recovery applications.



PART NUMBER	COMPRESSOR	BORE	STROKE	PD CFM (M ³ /H)	MAX BRAKE HP
BLK LB161B	Model LB161B	3.0"	2.5"	2.0 @ 100 RPM 16.5 @ 825 RPM	7.5 kw
BLK LB361B	Model LB361B	4.0"	3.0"	4.3 @ 100 RPM 35.5 @ 825 RPM	15 kw

Compressor assemblies including mounting plates and motors available upon request. Call for details and pricing.



TANK & GENERAL VALVES

GLOBE VALVES

Squibb Taylor Globe Valves

Ductile iron globe valve



PART NUMBER	DESCRIPTION
SQT AL308P	¾" FNPT
SQT AL310P	1" FNPT
SQT AL312P	1 ¼" FNPT
SQT AL314P	1 ½" FNPT
SQT AL316P	2" FNPT
SQT AL320P	3" FNPT

ANGLE VALVES

Squibb Taylor Angle Valves

Ductile iron angle valve



PART NUMBER	DESCRIPTION
SQT AL309P	¾" FNPT
SQT AL311P	1" FNPT
SQT AL313P	1 ¼" FNPT
SQT AL315P	1 ½" FNPT
SQT AL317P	2" FNPT
SQT AL321P	3" FNPT

MANIFOLD

Squibb Taylor Relief Valve Manifold

Date Sensitive. Valves are current.



PART NUMBER	DESCRIPTION
SQT A1416-A	2" NPT with 2 SQT A1310A relief valves

EMERGENCY SHUTOFF VALVE

Squibb Taylor Emergency Shutoff Valve

In-line emergency shutoff valve



PART NUMBER	DESCRIPTION
SQT N550-10	1 ¼" FNPT and 47 GPM
SQT N550-16	2" FNPT and 70 GPM
SQT N550-24	3" FNPT and 178 GPM

EXCESS FLOW VALVES

Squibb Taylor Excess Flow Valves

Ductile iron excess flow valve



PART NUMBER	DESCRIPTION
SQT A1705-50	1 ¼" NPT x 1 ¼" FNPT and 50 GPM closing flow
SQT A1710-95	2" NPT x 2" FNPT and 95 GPM closing flow
SQT A1711-95	2" NPT x 2" FNPT and 95 GPM closing flow
SQT A1713-165	2" NPT x 2" FNPT x 1 ¼" FNPT and 165 GPM closing flow
SQT A1713-225	3" NPT x 3" FNPT x 2" FNPT and 225 GPM closing flow

BLEEDER VALVES

Rego Bleeder Valve



PART NUMBER	DESCRIPTION
REG TSS3169	¼" Bleeder Valve

Squibb Taylor Bleeder Valve



PART NUMBER	DESCRIPTION
SQT A1911	¼" NPT 304 stainless steel bleeder valve

RELIEF VALVES

Squibb Taylor Vapor Relief Valves

Date Sensitive. Valves are current.



PART NUMBER	DESCRIPTION
SQT A1327	¼" NPT relief valve for piping and hose. 350 PSI relief setting.
SQT A1301A	¾" NPT relief valve for storage and nurse tanks. 250 PSI relief setting.
SQT A1310A	1 ¼" NPT relief valve for storage and nurse tanks. 250 PSI relief setting.

BACK CHECK VALVES

Squibb Taylor Back Check Valves

Ductile iron back check valve



PART NUMBER	DESCRIPTION
SQT A1727	1 ¼" NPT x 1 ¼" FNPT
SQT A1728	2" NPT x 2" FNPT
SQT A1733	2" NPT x 2" NPT
SQT A1729	3" NPT x 3" FNPT

LOADOUT VALVES

HI-FLOW HOSE-END VALVES

Squibb Taylor Hi-Flow Hose-End Globe Valves

Ductile iron hi-flow hose-end globe valve



PART NUMBER	DESCRIPTION
SQT A330	1 ¼" FNPT x 1" FNPT
SQT A331	1 ¼" FNPT x 1 ¼" FNPT

Squibb Taylor Hi-Flow Hose-End Valve Assemblies

Ductile iron hi-flow hose-end valve assembly



PART NUMBER	DESCRIPTION
SQT A1525	1 ¼" FNPT x 1 ¾" Female Acme
SQT A1527	1 ¼" FNPT x 2 ¼" Female Acme

QUICK ACTING HOSE-END VALVES

Squibb Taylor Quick Acting Hose End Angle Valves



PART NUMBER	DESCRIPTION
SQT AL343	1" FNPT x 1 ¾" Acme ductile iron quick acting hose-end angle valve with minimum loss.
SQT AL345P	1 ¼" FNPT x 1" FNPT ductile iron quick acting hose-end angle valve.

NURSE TANK VALVES

Squibb Taylor Hi-Flow Nurse Tank Valves



PART NUMBER	DESCRIPTION
SQT A525P	1 ¼" NPT x 1 ¾" Acme ductile iron hi-flow nurse tank valve. Used for filling or vapor return. 100 GPM excess flow/fill rate at 50 PSI.
SQT A520R	1 ¼" FNPT x 1" FNPT ductile Iron hi-flow nurse tank valve. Used for liquid withdrawal. 45 GPM excess flow rate.

RISER VALVES

Squibb Taylor Hi-Flow Nurse Tank Valves



PART NUMBER	DESCRIPTION
SQT A1477EP	1 ¼" NPT x 1" FNPT with ¼" FNPT plugged outlet ductile iron riser valve. Used for filling or vapor return. 70 GPM excess flow rate
SQT A490R-95	1 ½" FNPT x 1 ¼" FNPT with ¼" FNPT hydrostatic relief outlet ductile iron riser valve. 95 GPM excess flow rate.

FITTINGS & COUPLERS

BREAKAWAY & SWIVEL

Squibb Taylor TriPod Safety Couplers for NH3 Risers

Tripod safety coupler. Includes mounting bracket & U Bolt kit



PART NUMBER	DESCRIPTION
SQT TP-6-1000	1" NPT and 77 GPM capacity
SQT TP-7-1000	1 1/4" NPT and 126 GPM capacity

Squibb Taylor Hose Swivel

RotaSeal hose swivel with PTFE pressure-core seal design



PART NUMBER	DESCRIPTION
SQT AL109	1" NPT
SQT AL111	1 1/4" NPT

COUPLINGS

Squibb Taylor Safety Fill Coupling



PART NUMBER	DESCRIPTION
SQT A1131F	1 3/4" Female Acme x 1" NPT ductile iron filler coupling. 7 3/16" Long

Squibb Taylor Standard Fill Coupling



PART NUMBER	DESCRIPTION
SQT A1151F	1 3/4" Female Acme x 1" NPT ductile iron filler coupling. 3 1/8" Long

Squibb Taylor Female Filler Coupling



PART NUMBER	DESCRIPTION
SQT A1157FS	3 1/4" Female Acme x 2" NPT ductile iron filler coupling. 3 11/16" Long

ADAPTORS

Squibb Taylor Male Acme x FNPT Adaptors



PART NUMBER	DESCRIPTION
SQT A2013S	1 3/4" Male Acme x 1" FNPT ductile iron adaptor

Squibb Taylor Male Acme x Male Acme Adaptors



PART NUMBER	DESCRIPTION
SQT A2005S	1 3/4" Male Acme x 1 3/4" Male Acme ductile iron adaptor
SQT A2007S	2 1/4" Male Acme x 2 1/4" Male Acme ductile iron adaptor

Squibb Taylor Male Acme x NPT Adaptors



PART NUMBER	DESCRIPTION
SQT A2002	1 3/4" Male Acme x 1" NPT ductile iron adaptor
SQT A2060S	2 1/4" Male Acme x 1 1/4" NPT ductile iron adaptor
SQT A2063S	3 1/4" Male Acme x 2" NPT ductile iron adaptor
SQT A2065S	3 1/4" Male Acme x 3" NPT ductile iron adaptor

GASKETS & O-RINGS

Squibb Taylor Acme O-Ring



PART NUMBER	DESCRIPTION
SQT 1102A-16	1 3/4" Acme Rubber O-Ring

Squibb Taylor Acme Gaskets



PART NUMBER	DESCRIPTION
SQT 1E8126	2 1/4" Acme Buna-N Gasket
SQT 1E8128	3 1/4" Acme Buna-N Gasket

CAP & CHAINS

Squibb Taylor Cap and Chains



PART NUMBER	DESCRIPTION
SQT P145	3/4" Rain Cap for SQT A1310A Relief Valve (3/4" NPT)
SQT A2080C	1 3/4" Female Acme Plastic Cap with Strap
SQT A1176CS	3 1/4" Female Acme Steel Cap with Chain

GAUGES & INDICATORS

PRESSURE GAUGES

Squibb Taylor Pressure Gauge

2 ½" Stainless Steel pressure gauge with ¼" NPT bottom mount



PART NUMBER	DESCRIPTION
SQT AA3160-60	Indicates 0-60 PSI
SQT AA3160-160	Indicates 0-160 PSI
SQT AA3160-400	Indicates 0-400 PSI

FLOAT GAUGES

Squibb Taylor Percent Float Gauge

Top mounted aluminum percent float gauge. Mount in a senior flanged coupling with 2 ½" diameter bolt circle. Comes with Buna-N gasket and 4 zinc-plated steal mounting screws.

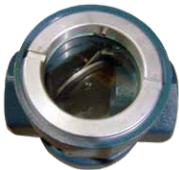


PART NUMBER	DESCRIPTION
SQT AA214E	For 41" diameter tanks
SQT AA240E	For 46" diameter tanks

FLOW INDICATORS

Rego Sight Flow Indicator

Ductile iron sight gauge with integrated stainless steel swing check valve.



PART NUMBER	DESCRIPTION
REG A7794	2" FNPT
REG A7796	3" FNPT

Squibb Taylor Flow Indicator

Stainless steel flow indicator. Indicates flow in both direction. Assembly includes flapper, 4" dial, forged steel adapter, screws, and spirotalllic gasket.



PART NUMBER	DESCRIPTION
SQT 5520-2	For 2" pipe.
SQT 5520-3	For 3" pipe.



NH3 HANDLING EQUIPMENT

NH3 HOSE

COUPLED FLEX HOSE

Stainless Steel Double-Braided

Stainless steel double-braided flex hose. Forged steel schedule 80 NPT ends. 300 PSI & 180°F

Applications: Anhydrous ammonia for agricultural use.



PART NUMBER	DESCRIPTION
SQT SSFLEX1X18	1" NPT x 18" Hose Assembly
SQT SSFLEX1 1/4	1 1/4" NPT x 18" Hose Assembly
SQT SSFLEX2X18	2" NPT x 18" Hose Assembly
SQT SSFLEX3X18	3" NPT x 18" Hose Assembly

SAFETY EQUIPMENT

CLOTHING

Goggles



PART NUMBER	DESCRIPTION
MSA 791245	1 soft frame non-vented goggles
MSA 791226	1 soft frame vented goggles

Respirator



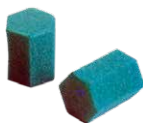
PART NUMBER	DESCRIPTION
SAF RESPIRATOR	1 box of 20 dust/mist respirators

Face Shield



PART NUMBER	DESCRIPTION
SAF FACESHIELD	1 8" dropdown face shield

Ear Plugs



PART NUMBER	DESCRIPTION
SAF EARPLUG	1 box of 200 pair of Therma Soft cylindrical PVC ear plugs

PVC Gloves



PART NUMBER	DESCRIPTION
MSA PVCGLOVES	1 pair PVC gloves, cloth lined. Size large.

Disposable Gloves



PART NUMBER	DESCRIPTION
MSA GLOVES	1 pair nitrile safety gloves
LSS 12194PL	1 box of 100 nitrile disposable safety gloves

Sleeve Cover



PART NUMBER	DESCRIPTION
SAF SLEEVE	5 pairs of Saranex coated sleeve covers

EMERGENCY EQUIPMENT

Spill Response Kits with Drum

Drum containing personal protective equipment, spill pillows, and diking tubes.



PART NUMBER	DESCRIPTION
SAF 6GAL/KIT	6 Gallon drum
SAF 20GAL/KIT	20 Gallon drum
SAF 30GAL/KIT	30 Gallon drum

Spill Kit with Duffle Bag



PART NUMBER	DESCRIPTION
SAF SPILL/KIT	Spill response kit with Chemsorb pillows and diking tubes to handle up to 6 gallons.

Decontamination Kit



PART NUMBER	DESCRIPTION
SAF DECON/KIT	Lightweight yellow bag containing the necessary items for effective, safe, and legal decontamination from commercial pesticide use.

SAFETY EQUIPMENT (CONT.)

CLEANERS

Stain Remover



PART NUMBER	DESCRIPTION
BAP XENIT	12-10oz Aerosol cans of Xenit Cleaner & Remover. Removes agricultural chemical stains from surfaces.

Hand Cleaners



PART NUMBER	DESCRIPTION
BAP HANDCLEAN	12-16oz Tubes of heavy duty hand cleaner
BAP EQCLEAN	6-1 Gallon Bottles of heavy duty hand cleaner. Can also be used with pressure washers.
BAP SCRUBS	6 Containers of Scrubs the All-In-One Towels.

Equipment Cleaner



PART NUMBER	DESCRIPTION
BAP EQCLEAN	6-1 Gallon Bottles of heavy duty cleaner. Can also be used as a hand cleaner

WASH STATIONS

Eye Wash Station (Plumbed)



PART NUMBER	DESCRIPTION
SAF EYEWASH/ST	Wall mount eyewash station (requires plumbing)

Eye Wash Station



PART NUMBER	DESCRIPTION
SAF EYEWASH	Wall mount eyewash station with 32oz bottle of sterile isotonic bottled solution

Shower & Eyewash



PART NUMBER	DESCRIPTION
GES G-1902	Emergency shower with 10" shower head and stainless steel eyewash bowl. Floor flange and galvanized fittings included



DEF HANDLING EQUIPMENT

No matter the industry, Murray Equipment has the equipment you need to store and dispense DEF.

COMMERCIAL SYSTEMS

Murray Equipment offers a series of solutions to help growers store and dispense DEF into their diesel equipment.

INSULATED & HEATED MEDIUM VOLUME SYSTEMS (CONT.)

Commercial 1000 Gallon Fueling Island-Friendly Mini-Bulk System

This 1000 gallon island-friendly turn-key system is designed to withstand the most extreme temperatures. Like the 400 gallon unit, the industrial grade dispenser, can be equipped with a spring-rewind hose for ease-of-use and a pulse-output for improved tracking of DEF usage.



SBD KB2070 Standard Cabinet



SBD KB2070-HR Extended Cabinet

PART NUMBER	DESCRIPTION
SBD KB2070	Tank: <ul style="list-style-type: none"> • 1000 Gallon Fueling Island-Friendly Tank • US Patent No: US 9,669,991 B1 • Certified to CSA C22.2 & UL 508 • Single Wall Tank in Double Wall Outer Shell • UV-Protected Virgin HDLPE Polyethylene • R-16 Insulation - Bottom, Sides & Top • 450 Watt Redundant Heating System • Submersible Pump • Primary & Secondary Tank Vents • Local Digital Readout Tank Gauge • Mechanical Overfill Protection • Anchor Kit Dispenser: <ul style="list-style-type: none"> • Aluminum Cabinet • Insulated with 400 Watt Heater • Polypropylene Filter with 1 Micron Cartridge • Commercial Digital Flow Meter • 12' DEF Hose with Female BSPP 1" End • On/Off Timer • Optional Pulse Output (Up to 100:1) • Optional Hannay Spring-Rewind Hose Reel & 25' or 50' Hose
SBD KB2070-HR	1000 Gallon with KB1060-HR Dispenser Includes 25' Hose Reel
SBD KB2070-PO	1000 Gallon with KB1060-PO Dispenser Includes Pulse Output
SBD KB2070-POHR	1000 Gallon with KB1060-POHR Dispenser Includes Hose Reel & Pulse Output Dimensions without reel: 44" width x 155" length x 106" height Dimensions with reel: 44" width x 171" length x 106" height

ABOUT KLEERBLUE

KleerBlue is a premiere supplier of DEF-handling equipment in North America. They offer the industry's widest selection of DEF equipment solutions. From pumps to turn-key dispensing systems, from transfer skids to blending facilities, KleerBlue is leading the way companies receive, blend, store, and dispense DEF.

KleerBlue™

www.KleerBlueSolutions.com

FLEET SYSTEMS

Manage large fleets? Murray Equipment has a wide range of DEF storage & dispensing solutions.

FLEET STORAGE & DISPENSING SYSTEM

Fleet 1000 Gallon Fueling Island-Friendly Mini-Bulk System

This medium-volume island-friendly turn-key system is designed to withstand the most extreme temperatures. This system includes a fleet dispenser that will send a pulse signal to your fleet management software. It is preassembled and fully tested, providing for a quick and easy on-site installation.



SBD KB2050-R

PART NUMBER	DESCRIPTION
SBD KB2050	<p>Tank:</p> <ul style="list-style-type: none">• 1000 Gallon Fueling Island-Friendly Tank• US Patent No: US 9,669,991 B1• Certified to CSA C22.2 & UL 508• Single Wall Tank in Double Wall Outer Shell• UV-Protected Virgin HDLPE Polyethylene• R-16 Insulation - Bottom, Sides & Top• 450 Watt Redundant Heating System• Submersible Pump• Primary & Secondary Tank Vents• Local Digital Readout Tank Gauge• Mechanical Overfill Protection• Island or Lane-Oriented Dispenser Stand• Anchor Kit <p>APEX Dispenser:</p> <ul style="list-style-type: none">• Certified to CSA C22.2 & UL 508• DEF Fleet Software Electronics• Pulse Output• Powder Coated Cabinet• Stainless Steel Side & Door• Insulated with Dual 800 Watt Heaters• Stainless Steel Filter with 1 Micron Cartridge• Spring-Rewind Hose Reel• 25' DEF Hose with Female BSPP 1" End <p>Dimensions: 44" width x 172" length x 106" height</p>
SBD KB2050-L	Left-Hand Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height
SBD KB2050-R	Right-Hand Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height
SBD KB2050-D	Dual Sided Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height



DEF HANDLING EQUIPMENT

RETAIL SYSTEMS

Want to resell DEF? Murray Equipment has a wide range of DEF storage & dispensing solutions.

RETAIL STORAGE & DISPENSING SYSTEM

Retail 1000 Gallon Fueling Island-Friendly Mini-Bulk System

This medium-volume island-friendly turn-key system is designed to withstand the most extreme temperatures. This system includes a weights and measures approved dispenser that can emulate standard dispenser protocols and work with most major site controllers and POS systems. It is preassembled and fully tested, providing for a quick and easy on-site installation.



SBD KB2020-L

PART NUMBER	DESCRIPTION
SBD KB2020	<p>Tank:</p> <ul style="list-style-type: none">• 1000 Gallon Fueling Island-Friendly Tank• US Patent No: US 9,669,991 B1• Certified to CSA C22.2 & UL 508• Single Wall Tank in Double Wall Outer Shell• UV-Protected Virgin HDLPE Polyethylene• R-16 Insulation - Bottom, Sides & Top• 450 Watt Redundant Heating System• Submersible Pump• Primary & Secondary Tank Vents• Local Digital Readout Tank Gauge• Mechanical Overfill Protection• Island or Lane-Oriented Dispenser Stand• Anchor Kit <p>APEX Dispenser:</p> <ul style="list-style-type: none">• NTEP & Weights & Measures-Approved• Certified to CSA C22.2 & UL 508• DEF Retail Software Electronics• Pulse Output• Powder Coated Cabinet• Stainless Steel Side & Door• Insulated with Dual 800 Watt Heaters• Stainless Steel Filter with 1 Micron Cartridge• Hannay Spring-Rewind Hose Reel• 18' DEF Hose with Female BSPP 1" End <p>Dimensions: 44" width x 172" length x 106" height</p>
SBD KB2020-L	Left-Hand Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height
SBD KB2020-R	Right-Hand Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height
SBD KB2020-D	Dual Sided Lane Oriented/P Frame Dimensions: 44" width x 190" length x 106" height

KLEERBLUE SITE COMPATIBILITY



KleeBlue dispenser electronics can integrate seamlessly into your operations. The retail dispenser is engineered to emulate standard dispenser protocols and work with most major site controllers and POS systems.

The fleet dispenser includes a pulse output signal that can send information to your fleet management software for mileage tracking.

STORAGE SYSTEMS

Murray Equipment offers a series of solutions to help store and dispense DEF into their diesel equipment.

BULK SYSTEMS

Warm Climate or Inside Only Systems

Take advantage of economies of scale while enjoying greater storage space. These larger systems can improve DEF margins. Additionally they are compatible with both local and remote dispensing set-ups allowing for expansion as needed.

- HDLPE Polyethylene Single Wall Flat-Bottom
- Built to ASTM D-1998 or Commercial Specs
- 3/4 HP Submersible Pump
- Tank Vent & Manway
- 2" Stainless Steel Ball Valve Fill Port
- Waist High Fill Access Stand for Top Fill Line
- Mechanical Overfill Protection
- Tank Top Fill Line with Check Valve & Lockable Ball Valve
- Extra 2" Opening on Top of Tank
- Tank Wrap for Shipping. Onsite Assembly Required. Instructions included.



ASTM-D PART NUMBER	COMMERCIAL PART NUMBER	DESCRIPTION	DIMENSIONS
SBD 850SWPKGA	KBS 850SWPKGA	850 Gallons	48" d x 117" h
SBD 1100SWPKGA	KBS 1100SWPKGA	1,100 Gallons	64" d x 90" h
SBD 2000SWPKGA	KBS 2000SWPKGA	2,000 Gallons	90" d x 88" h
SBD 3000SWPKGA	KBS 3000SWPKGA	3,000 Gallons	90" d x 127" h
SBD 6500SWPKGL	KBS 6500SWPKGL	6,500 Gallons	120" d x 153" h
N/A	KBS 8500SWPKGL	8,500 Gallons	120" d x 194" h
SBD 8750SWPKGL	N/A	8,750 Gallons	142" d x 146" h
SBD 10500SWPKGL	KBS 10500SWPKL	10,500 Gallons	142" d x 169" h
SBD 12500WPKGL	KBS 12500SWPKL	12,500 Gallons	142" d x 198" h

Insulated & Heated Systems

Take advantage of economies of scale while enjoying greater storage space. These factory-insulated large storage systems can improve DEF margins. Additionally they are compatible with both local and remote dispensing set-ups allowing for expansion as needed.

- HDLPE Polyethylene Single Wall Flat-Bottom
- Built to ASTM D-1998 Spec
- Factory-Installed Delta T-50 Heat System
- Factory-Installed 2" Polyfoam Insulation
- 3/4 HP Submersible Pump
- Pressure Relief Components
- Tank Vent & Manway
- Waist High Fill Access Stand for Top Fill Line
- Insulated & Heated Tank Top Fill Line with Check Valve & Lockable Ball Valve
- 2" Stainless Steel Ball Valve Fill Port
- Mechanical Overfill Protection
- Extra 2" Opening on Top of Tank
- Tank Wrap for Shipping. Onsite Assembly Required. Instructions included.



ASTM-D PART NUMBER	DESCRIPTION	DIMENSIONS
SBD 850CCPKGH	850 Gallons	52" d x 119" h
SBD 1100CCPKGH	1,100 Gallons	68" d x 92" h
SBD 2000CCPKGH	2,000 Gallons	94" d x 90" h
SBD 3000CCPKGH	3,000 Gallons	94" d x 129" h
SBD 6500CCPKGH	6,500 Gallons	124" d x 155" h
SBD 8750CCPKGH	8,750 Gallons	146" d x 148" h
SBD 10500CCPKGH	10,500 Gallons	146" d x 171" h
SBD 12500CCPKGH	12,500 Gallons	146" d x 200" h



STORAGE SYSTEMS (CONT.)

Murray Equipment offers a series of solutions to help store and dispense DEF into their diesel equipment.

NON-INSULATED MEDIUM VOLUME SYSTEMS

Horizontal Single Wall Poly Tank System (Inside or Warm Climate Only)

Where cold temperatures and secondary containment are not of concern, these 1025 and 2000 gallon systems offer an economical solution for storing and dispensing DEF.



Tote Pump Shown

PART NUMBER	DESCRIPTION
SBD 1025HZ-PKY	Tank: <ul style="list-style-type: none">1025 gallon HDLPE single wall polyethylene tank16" manway, tank hold down hoops2" fill line, lockable ball valve with stainless steel bung2" pressure vacuum ventRSV extractor valve with withdraw couplerUnit can be filled through Micro Matic extractor valve or top fill ball valve Tote Pump: <ul style="list-style-type: none">110v pump package with meter20' discharge hoseStainless steel automatic nozzle. Dimensions: 48" diameter x 139" length x 50" height
SBD 2000HZ-PKY	2000 Gallon with Tote Pump Dimensions: 62" diameter x 160" length x 70" height
SBD 1025HZ-S	Tank: <ul style="list-style-type: none">SBD 1025HZ-PKY tank Submersible Pump for Supplying Remote Dispenser: <ul style="list-style-type: none">3/4 HP Submersible Pump110 VoltStainless Steel Pump Discharge Line to Top of Tank12' of 3/4" Discharge Hose Dimensions: 48" diameter x 139" length x 50" height
SBD 2000HZ-S	2000 Gallon with Submersible Pump Dimensions: 62" diameter x 160" length x 70" height

INSULATED & HEATED TOTE ENCLOSURES

Single & Dual Ultra Tote Enclosures (Totes & Pumps are Sold Separately)

These secure storage cabinets ensure you can dispense DEF from 330 gallon totes even in extreme climates.



SBD 330TSU-D



SBD 660TSU-D

PART NUMBER	DESCRIPTION
SBD 330TSU-D	<ul style="list-style-type: none">High-Performance Smooth Surface White Aluminum Composite Exterior PanelsPowder Coated Steel Base Frame with InsulationR10 Insulated Top & SidesEasy-to-Clean FRP Interior SurfacesForced Air Heating SystemThermostatically-Controlled Exhaust FanVisual & Audible Low Temperature AlarmLED LightElectrical Control PanelFill & Service Access DoorDispensing Access DoorPreassembled on Metal SkidForklift Access Points Dimensions: 48" width x 66" length x 85" total height x 76" side wall
SBD 660TSU-D	660 Gallon Dual Tote Enclosure Dimensions: 48" width x 132" length x 85" total height x 76" side wall

DRUM & TOTE SYSTEMS

Murray Equipment offers a series of solutions to help store and dispense DEF into their diesel equipment.

LOW VOLUME SYSTEMS - 55 GALLON CLOSED DRUM

Electric Pumps & Dispensing Systems

Extract DEF from 55 gallon drums. These systems are 'closed' ensuring that DEF leaving the drum does not encounter contaminants prior to entering diesel equipment.



PART NUMBER	DESCRIPTION
SBD PPDM-1-110	<ul style="list-style-type: none">• 110 Volt• Self-Priming Membrane Pump• 8 GPM Capability• Energy-Saving Built-in Timer• Optional Meter• 20' Delivery Hose• Stainless Steel Automatic Shut-Off Nozzle with Swivel End• Suction Hose• Drum Top-Mounted Bracket• Stainless Steel Micro Matic RSV Dispense Coupler for Quick Connection and Drybreak Release
SBD PPDM-2-110	110 Volt Pump without Meter
SBD PPDM-1-12	12 Volt Pump with Meter
SBD PPDM-2-12	12 Volt Pump without Meter

High Volume Hand Pump Dispensing System

For extremely low-volume applications, a hand pump might suffice. These high quality hand-pumps are 'closed' systems ensuring that DEF leaving the drum does not encounter contaminants prior to entering diesel equipment.



PART NUMBER	DESCRIPTION
SBD HP-HV-MMP	Rotary Hand Pump with Meter: <ul style="list-style-type: none">• 1 Gallon per 10 Revolutions• RSV Compatible Coupler• 12' of 3/4" Hose• Polyethylene Ball Valve with Spout• Meter
SBD HP-HV-MM	Rotary Hand Pump without Meter
SBD HP-HV-MMSS	Rotary Hand Pump without Meter but with Stainless Steel Coupler
SBD T-HP-MM1	Piston Hand Pump without Meter: <ul style="list-style-type: none">• 1 Gallon per 11 Down-Stroke• RSV Compatible Coupler• Hose• Dispense Valve

LOW VOLUME SYSTEMS - DRUM TROLLEY

4-Wheel Drum Trolley



PART NUMBER	DESCRIPTION
SBD 148-4W	<ul style="list-style-type: none">• Towable, steerable 4-wheel trolley• Parking break• Adjustable mounting clamp to secure the container in place• Specially designed nozzle holder• Pump is not included
SBD 148-4W-R	SBD 148-4W, but with reel. Reel comes complete with a DEF compatible spring rewind hose reel with a 25' DEF hose assembly. Note that hand pumps are NOT suitable for use in conjunction with the hose reel.
SBD KF-KIT	Kit allows for filling drum on trolley. Mounts into drum opening.



DEF HANDLING EQUIPMENT

DRUM & TOTE SYSTEMS (CONT.)

Murray Equipment offers a series of solutions to help store and dispense DEF into their diesel equipment.

LOW VOLUME SYSTEMS - 275/330 GALLON CLOSED TOTE/IBC

Electric Pumps & Dispensing Systems

Extract DEF from 275 and 330 gallon totes. These systems are 'closed' ensuring that DEF leaving the tote does not encounter contaminants prior to entering diesel equipment.



PART NUMBER	DESCRIPTION
SBD PPTM-1-110	<ul style="list-style-type: none">• 110 Volt• Self-Priming Membrane Pump• 8 GPM Capability• Energy-Saving Built-in Timer• Optional Meter• 20' Delivery Hose• Stainless Steel Automatic Shut-Off Nozzle with Swivel End• Suction Hose• Tote Side-Mounted Bracket• Stainless Steel Micro Matic RSV Dispense Coupler for Quick Connection and Drybreak Release
SBD PPTM-2-110	110 Volt Pump without Meter
SBD PPTM-1-12	12 Volt Pump with Meter
SBD PPTM-2-12	12 Volt Pump without Meter

Air-Driven Pump & Dispensing System

Instead of using electricity, achieve a 'closed' DEF pumping solution with air. This pump can extract DEF from 275 and 330 gallon totes at up to 17.5 gallons per minute.



PART NUMBER	DESCRIPTION
SBD T-SP100-1	<ul style="list-style-type: none">• Non-Metallic Polypropylene Pump• Double Diaphragm• 17.5 GPM Capability• 100 PSI Operating Pressure• Top-Mounted Bed Plate• Meter• Micro Matic-Type Coupler• Suction and Discharge Hose• Stainless Steel Automatic Nozzle• Air-Regulator (Not Included) is Required for Safe and Satisfactory Service.

DEF BLENDING FACILITIES



KleerBlue designs and manufacturers fully automated DEF blending facilities for terminals and distributors. It combines our liquid manufacturing knowledge with our understanding of DEF. Based on your supply chain, current and anticipated sales volumes, infrastructure, and budget requirements, our engineering team can design a system to help you maximize your DEF margins.

Learn more at www.KleerBlueSolutions.com

PORTABLE SYSTEMS

Murray Equipment offers a series of solutions to help store and dispense DEF into their diesel equipment.

PORTABLE SYSTEMS

Truck Bed Tank & Dispenser System

The truck bed tank & dispenser system offers a portable and affordable DEF dispensing solution for filling off-road and on-road equipment. It was engineered for placement in a pickup truck bed or on a trailer. The portable unit can be powered with included battery cable and clamps or permanently wired to the truck.



230 Gallon Unit



100 Gallon Unit



50 Gallon Unit

PART NUMBER	DESCRIPTION
SBD 230PTDSMM	<ul style="list-style-type: none">• 230 Gallon Poly Tank• Powder-Coated Steel Frame with Fork Lift Slots• 12 Volt Diaphragm Pump• 20' of 3/4" Discharge Hose• Closed Systems: Micro Matic Stainless Steel RV Dispense Coupler• Open Systems: Camlock Fill Opening• Resettable Meter• Polypropylene Filter with 1 Micron Cartridge• Stainless Steel Automatic Nozzle with Swivel• Dust and Weather Proof Nozzle Storage Box <p>Dimensions: 48" diameter x 60" width overall (60" base) x 51" height</p>
SBD 100PTDSMM	100 Gallon Portable Tank Dispensing system with Micro Matic Fill <p>Dimensions: 26" width x 56" width overall (48" base) x 39" height</p>
SBD 100PTDS	100 Gallon Portable Tank Dispensing System with Camlock Fill <p>Dimensions: 26" width x 56" width overall (48" base) x 39" height</p>
SBD 50PTDSMM	50 Gallon Portable Tank Dispensing system with Micro Matic Fill <p>Dimensions: 26" width x 56" width overall (48" base) x 35" height</p>
SBD 50PTDS	50 Gallon Portable Tank Dispensing system with Camlock Fill <p>Dimensions: 26" width x 56" width overall (48" base) x 35" height</p>



100 Gallon Unit:
SBD 100PTDS



DEF HANDLING EQUIPMENT



SYSTEM COMPONENTS

*All of our systems are customizable to your exact needs and liquid handling requirements.
That's why we offer an expansive inventory to meet your new and replacement system
requirements.*

CUSTODY TRANSFER METERS

TCS 682 POSITIVE DISPLACEMENT PISTON METERS

The robust TCS 682 meter is built to last and withstand harsh environments. Complete with a 10 year manufacturer's warranty, these meters offer low pressure drop and high accuracy and repeatability across a wide flow range (0.5-50 GPM). This means that even in low flow rate systems, you can be certain you are measuring accurately.

Cast Iron

Engineered for compatible fertilizers, ag chemicals, micronutrients, and liquid feed.



Register includes choice of units: liters, gallons, quarts, etc.

PART NUMBER	SIZE	FLOW RATE	REGISTER	PULSER	AIR ELIMINATION	PRESET, VALVE, & LINKAGE
682 15AF2AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	-	-
682 15AF2AT2	1.5" NPT Flanged	0.5-50 GPM	Mechanical	10:1	-	-
682 15AF4AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	Air Eliminator/Strainer	-
682 15AF8AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	-	Mechanical

304 Stainless Steel

Engineered for fertilizers, chemicals, micronutrients, and other low pH liquids.



Register includes choice of units: liters, gallons, quarts, etc.

PART NUMBER	SIZE	FLOW RATE	REGISTER	PULSER	AIR ELIMINATION	PRESET, VALVE, & LINKAGE
682 15SS2ATM	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	-	-
682 15SS2AT2M	1.5" NPT Flanged	0.5-50 GPM	Mechanical	10:1	-	-

316 Stainless Steel

Engineered for acidic/low pH liquids including some feeds.



Register includes choice of units: liters, gallons, quarts, etc.

PART NUMBER	SIZE	FLOW RATE	REGISTER	PULSER	AIR ELIMINATION	PRESET, VALVE, & LINKAGE
682 15SS2AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	-	-
682 15SS2AT2	1.5" NPT Flanged	0.5-50 GPM	Mechanical	10:1	-	-
682 15SS4AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	Air Eliminator/Strainer	-
682 15SS8AT	1.5" NPT Flanged	0.5-50 GPM	Mechanical	-	-	Mechanical

ABOUT TOTAL CONTROL SYSTEMS (TCS)

Total Control Systems (TCS) is the metering division of Murray Equipment. Learn more at www.TCSmeters.com.



SYSTEM COMPONENTS -
METERS & METER PARTS

CUSTODY TRANSFER METERS (CONT.)

ELECTROMAGNETIC

Electromagnetic Meter

These **NTEP-approved** highly accurate meters with wide flow ranges can meter products with up to 50% solids, or any liquid that has a defined minimum electrical conductivity of 6 micro siemens.



PART NUMBER	METER	SIZE	FLOW METER	APPLICATIONS
EHM MAG53CT2	PTFE-Lined Electromagnetic Meter	2" ANSI Flanged	32-500 GPM	Conductive liquids such as water, plant food, and micronutrients (NTEP-approved for "Agricultural Liquids")
EHM MAG53CT3	PTFE-Lined Electromagnetic Meter	3" ANSI Flanged	65-650 GPM	Conductive liquids such as water, plant food, and micronutrients (NTEP-approved for "Agricultural Liquids")
EHM MAG53CT4	PTFE-Lined Electromagnetic Meter	4" ANSI Flanged	130-1300 GPM	Conductive liquids such as water, plant food, and micronutrients (NTEP-approved for "Agricultural Liquids")
EHM MAG53CT6	PTFE Electromagnetic Meter	6" Flanged	260-2600 GPM	Conductive liquids such as water, plant food, and micronutrients (NTEP-approved for "Agricultural Liquids")

CORIOLIS MASS FLOW

316 Stainless Steel MicroMotion Meter & 2700 Transmitter

The **NTEP-approved** MicroMotion coriolis meter offer a wide flow range with exceptional accuracy, repeatability, and no moving parts to wear even in harsh process environments. The sensors measure mass and volume flow rate, density, and temperature all from the same device.



PART NUMBER	METER	SIZE	FLOW METER	APPLICATIONS
MMI CMF200-2C	316 stainless steel MicroMotion & 2700 Transmitter	2" ANSI Flanged	190-3250 lb/min	Agricultural liquids with 0.6-1.45 specific gravity
MMI CMF300-3C	316 stainless steel MicroMotion & 2700 Transmitter	3" ANSI Flanged	450-7500 lb/min	Agricultural liquids with 0.6-1.45 specific gravity
MMI CMF400-4C	316 stainless steel MicroMotion & 2700 Transmitter	4" ANSI Flanged	1800-15,000 lb/min	Agricultural liquids with 0.6-1.45 specific gravity

NON-CUSTODY TRANSFER METERS

POSITIVE DISPLACEMENT – ROTARY

TCS Cast Iron Rotary Meter

The TCS 700 series Rotary Positive Displacement Cast Iron meter is designed for fertilizers, chemicals, an micronutrients. It offers high accuracy and repeatability at higher flow rates. With no metal-to-metal internal contact, the 700 meter offers long service life.



PART NUMBER	METER	SIZE	FLOW METER	PULSER
700 20AF2AT2	TCS 700 Cast Iron	2" NPT Flanged	10- 100 GPM	10:1
700 30AF2AT2	TCS 700 Cast Iron	3" NPT Flanged	20-200 GPM	10:1

TCS 316 Stainless Steel Rotary Meter

The TCS 700 series Rotary Positive Displacement Stainless Steel meter is designed for 28% fertilizers and agri-chemicals. It offers high accuracy and repeatability at higher flow rates. With no metal-to-metal internal contact, the 700 meter offers long service life.



PART NUMBER	METER	SIZE	FLOW METER	PULSER
700 20SS2AT2	TCS 700 316 Stainless Steel	2" NPT Flanged	10- 100 GPM	10:1

ELECTROMAGNETIC

Electromagnetic Meter

These highly accurate meters with wide flow ranges can meter products with up to 50% solids, or any liquid that has a defined minimum electrical conductivity of 6 micro siemens.



PART NUMBER	METER	SIZE	FLOW METER	APPLICATIONS
EHM PROMAG-1.5	PTFE-Lined Electromatic Meter	1.5" Flanged	7-150 GPM	Conductive liquids such as water and agri-chemicals
EHM PRO50MAG-2	PTFE-Lined Electromatic Meter	2" Flanged	10-300 GPM	Conductive liquids such as water and agri-chemicals
EHM PRO50MAG-3	PTFE-Lined Electromatic Meter	3" Flanged	24-800 GPM	Conductive liquids such as water and agri-chemicals
EHM PRO50MAG-4	PTFE-Lined Electromatic Meter	4" Flanged	40-1250 GPM	Conductive liquids such as water and agri-chemicals

NOTE: 1/2" to 24" sizes available - Please call for pricing.

SYSTEM COMPONENTS - METERS & METER PARTS

NON-CUSTODY TRANSFER METERS (CONT.)

TURBINE

TCS 316 Stainless Steel Turbine Flow Meter

TCS 316 stainless steel turbine flow meter has an efficient design consisting of body with flow straighteners, rotor, and a magnetic pickup. These rugged meters offer outstanding accuracy at low cost. For clear liquids only.



PART NUMBER	METER	SIZE	FLOW METER	APPLICATIONS
TCS TM10XNPT	TCS 316 Stainless Steel Turbine Meter	1" NPT	4-60 GPM	Water and clear fertilizers only
TCS TM15XNPT	TCS 316 Stainless Steel Turbine Meter	1.5" NPT	8-130 GPM	Water and clear fertilizers only
TCS TM20XNPT	TCS 316 Stainless Steel Turbine Meter	2" NPT	15-225 GPM	Water and clear fertilizers only
TCS TM30XNPT	TCS 316 Stainless Steel Turbine Meter	3" NPT	40-650 GPM	Water and clear fertilizers only
TCS TM40XFLG	TCS 316 Stainless Steel Turbine Meter	4" Flanged	75-1250 GPM	Water and clear fertilizers only

TCS 316 Stainless Steel Turbine Flow Meter Assemblies

The assemblies come complete with a large display digital totalizer that features a 5 digit total and 13 digit totalizer display. The display also shows flow rates and creates a pulse output. Lithium battery or 9-30 volt DC powered. 115 Volt Available.



PART NUMBER	MATERIAL	SIZE	FLOW RATE	REGISTER	PULSER
TCS TM10ZNPTEK	TCS 316 Stainless Steel Turbine Meter	1" NPT	4-60 GPM	Digital Totalizer	Upon Request
TCS TM15ZNPTEK	TCS 316 Stainless Steel Turbine Meter	1.5" NPT	8-130 GPM	Digital Totalizer	Upon Request
TCS TM20ZNPTEK	TCS 316 Stainless Steel Turbine Meter	2" NPT (Flanged available)	15-225 GPM	Digital Totalizer	Upon Request
TCS TM30ZNPTEK	TCS 316 Stainless Steel Turbine Meter	3" NPT (Flanged available)	40-650 GPM	Digital Totalizer	Upon Request
TCS TM40ZFLGEK	TCS 316 Stainless Steel Turbine Meter	4" Flanged	75-1250 GPM	Digital Totalizer	Upon Request

MINI-BULK METERS

MINIBULK - POLYPROPYLENE

Flowserve Digital Meter

This large 20mm display meter offers one-touch operation. The battery can be replaced without removing the meter, risking chemical exposure.



PART NUMBER	METER	SIZE	FLOW METER
SCI SEM-10FTP	Digital Polypropylene Meter with EPDM Gaskets. Accuracy: +/- .5%	1" NPT	2-20 GPM
SCI SEM-10	Digital Nylon Meter with FKM gaskets. Accuracy: +/- 1%	1" NPT	2-20 GPM

Dura Digital Meter

Designed for easy calibration, this meter comes with calibration settings for commonly-used chemicals. It is also powered by common AA batteries for portability and convenience.



PART NUMBER	METER	SIZE	FLOW METER
DPI DURAMETER	Dura Digital Polypropylene Meter Accuracy: +/- 1%	1" NPT	2-20 GPM

Sotera Digital Meter

This one-step calibrated meter is ideal for end of hose use, in line or mounted to a Sotera pump. It is able to store and display the current flow amount (total) or the cumulative flow amount (totalizer) in any of six user-specified units.



PART NUMBER	METER	SIZE	FLOW METER
SOT 825	Sotera Digital Polypropylene Meter with FKM Gaskets. Accuracy: +/- 2%	1" NPT	2-20 GPM

SYSTEM COMPONENTS -
METERS & METER PARTS

METER ACCESSORIES

DISPLAYS

MEI ICS Totalizer Box



PART NUMBER	DESCRIPTION
ICS TOTALBOX	Read and reset total from remote meter. All components are prewired and mounted in a 30" x 24" x 12" NEMA 4x fiberglass electrical enclosure. Optional NTEP Approved version available.

TCS 3000 Electronic Register/Flow Computer



PART NUMBER	DESCRIPTION
TCS 3000	NTEP certified electronic register that can be mounted directly to the TCS 682 and 700 meters at 75 or 90 angle, mounted remotely, and/or daisy chained for ease of use. Single or multiple products. Wireless communication available. Compatible with: TCS 682, TCS 700, and many other meters

TCS Digital Totalizer



PART NUMBER	DESCRIPTION
PDC 6830-BM0-0	Die-cast aluminum explosion-proof digital totalizer that can be configured to display total and accumulated total in gallons, BBLs, liters, pounds or kilograms with its backlit 5 digit display. Can be wall or meter mounted and powered with a lithium battery or 12-24V DC. Compatible with: TCS TM Turbine Meter
PDC 6730-BM0-0	PDC 6730-BMO-0, but encased in a plastic NEMA 4X enclosure.

TCS 7887 Mechanical Register



PART NUMBER	DESCRIPTION
V/R 788700-071	NTEP certified mechanical register totalizes and displays high speed deliveries and transactions in large easy-to-read figures. Displays a 5 digit resettable totalizer and 8 digit non-resettable totalizer. Compatible with: TCS 682, TCS 700, TCS 7888 Ticket Printer, TCS 7889 Preset Counter, Veeder Root Pulse Output

TCS 7888 Ticket Printer



PART NUMBER	DESCRIPTION
V/R 788810-001	1/1 US Gallons Printer & Cover. NTEP certified. Compatible with: TCS 682, TCS 700, TCS 7887 Mechanical Register
V/R 788810-004	1/10 US Gallons Printer & Cover
V/R 788810-013	1/1 Liter Printer & Cover

METER ACCESSORIES (CONT.)

AIR ELIMINATION/STRAINER

TCS Air Eliminator



PART NUMBER	DESCRIPTION
TCS 74020SS	2" Flanged stainless steel air eliminator to be mounted on the inlet side of a 2" TCS 682 or 700 meter
TCS 74020AF	2" Flanged cast iron air eliminator to be mounted on the inlet side of a 2" SS TCS 682 or 700700

BULK AIR ELIMINATION

TCS Stainless Steel Bulk Air Eliminator



PART NUMBER	DESCRIPTION
700 747-40SS	4" ANSI Flanged bulk stainless steel air eliminator for air elimination in custody transfer scenarios. Features dual air eliminated heads to handle flow rates of up to 750 GPM. Compatible with: Bulk Systems

PULSE OUTPUT FOR MECHANICAL REGISTERS

Register Mount – Veeder Root 1:1, 10:1, 100:1

Connect your meter's mechanical register with MEI Controls or other electronic software.

Compatible with: TCS 7887 mechanical register, MEI ICS 120, MEI ICS 360



PART NUMBER	DESCRIPTION
V/R 312020-905	10:1 Pulse Output and Register Mount Kit
V/R 312020-908	100:1 Pulse Output and Register Mount Kit

Direct Meter Mount – TCS 100:1



PART NUMBER	DESCRIPTION
TCS DMP100	Connect your meter with MEI Controls or other electronic software. 100:1 Ratio Compatible with: TCS 682 & 700 Meters

TEST PROVER

Test Cans



PART NUMBER	DESCRIPTION
ELL 5GALTEST	Certified 5 gallon stainless steel test can for calibration of a custody transfer meter.
GPI 116000-1	Non-certified plastic 5 gallon test can for calibration of a non-custody transfer meter.



SYSTEM COMPONENTS -
METERS & METER PARTS

SELF-PRIMING CENTRIFUGAL PUMP ASSEMBLIES

ELECTRIC POWERED

Long Coupled MP FLOMAX Electric Motor Pump Assemblies

Long-coupled for easy maintenance, FLOMAX self-priming centrifugal pumps are capable of creating vacuum sufficient to lift liquids from heights up to 25 feet above the source. Once primed, the pump's built in flapper valve will maintain a full column of liquid in the suction line.



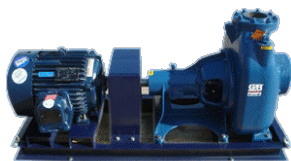
PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP MP-7D	FLOMAX 8 Cast Iron Double Seal	2" x 1.5" NPT	Up to 140 GPM	Up to 80'	5 HP, 1 Phase
FEP MP-7	FLOMAX 8 Cast Iron	2" NPT	Up to 140 GPM	Up to 100'	5 HP, 1 Phase
FEP MP-9D	FLOMAX 8 Cast Iron Double Seal	2" x 1.5" NPT	Up to 140 GPM	Up to 80'	5 HP, 3 Phase
FEP MP-9	FLOMAX 8 Cast Iron	2" NPT	Up to 140 GPM	Up to 100'	5 HP, 3 Phase
FEP MP-9-SS	FLOMAX 8 Stainless Steel	2" NPT	Up to 140 GPM	Up to 100'	5 HP, 3 Phase
FEP MP-19	FLOMAX 15 Cast Iron	3" NPT	Up to 280 GPM	Up to 145'	10 HP, 3 Phase
FEP MP19-SS	FLOMAX 15 Stainless Steel	3" NPT	Up to 280 GPM	Up to 145'	10 HP, 3 Phase
FEP MP19/5B-10	FLOMAX 15 Cast Iron with 5 Blade Stainless Steel Impeller	3" NPT	Up to 350 GPM	Up to 135'	10 HP, 3 Phase
FEP MP19/5B-15	FLOMAX 15 Cast Iron with 5 Blade Stainless Steel Impeller	3" NPT	Up to 350 GPM	Up to 135'	15 HP, 3 Phase
FEP MP19/D-10	FLOMAX 15 Cast Iron with 5 Blade Iron Impeller and Double Seal	3" NPT	Up to 350 GPM	Up to 130'	10 HP, 3 Phase
FEP MP19/D-15	FLOMAX 15 Cast Iron with 5 Blade Iron Impeller and Double Seal	3" NPT	Up to 350 GPM	Up to 130'	15 HP, 3 Phase
FEP MP19-SS-15	FLOMAX 15 Stainless Steel with 5 Blade Impeller	3" NPT	Up to 350 GPM	Up to 135'	15 HP, 3 Phase
FEP MP15SSDS10	FLOMAX 15 Stainless Steel with Double Grease Seal	3" NPT	Up to 350 GPM	Up to 135'	10 HP, 3 Phase
FEP MP15SSDS15	FLOMAX 15 Stainless Steel with Double Grease Seal	3" NPT	Up to 350 GPM	Up to 135'	15 HP, 3 Phase

SELF-PRIMING CENTRIFUGAL PUMP ASSEMBLIES (CONT.)

ELECTRIC POWERED (CONT.)

Long Coupled Gorman-Rupp Series 10 Trash Pump Electric Motor Pump Assembly

Gorman-Rupp 10 Series cast iron pumps are specifically designed for handling solids, corrosive liquids and slurries. They have few moving parts, so maintenance is minimal. If a clog occurs, it can be removed easily through the cover plate opening without the use of any special tools.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP GORMAN-4	13C2B Trash Pump	3" NPT	Up to 350 GPM	Up to 50'	10 HP, 3 Phase, 1750 RPM
FEP GORMAN-11	14C2B Trash Pump	4" NPT	Up to 650 GPM	Up to 65'	20 HP, 3 Phase, 1750 RPM

Long Coupled Gorman-Rupp Series 80 Electric Motor Pump Assembly

The straight-in-suction design of these efficient pumps guarantees quick, positive self-priming and allows them to operate at higher suction levels than most other self-priming centrifugal pumps.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP GORMAN-14	84 A2B	4" NPT	Up to 750 GPM	Up to 125'	25 HP, 3 Phase, 1750 RPM



SYSTEM COMPONENTS -
PUMP ASSEMBLIES

SPECIALTY PARTS REPAIR SERVICES



Murray Equipment offers the parts and in-house repair services to support Murray, TCS, KleerBlue and other industrial systems.

We regularly repair and provide replacement parts for pumps, meters, controls, tanks, control valves and other liquid handling accessories. This allows us to extend the life of your products while improving the overall ROI.

Call us at (260) 484-0382 to find out if your pump, meter, or other specialty part can be repaired by our highly knowledgeable staff.

SELF-PRIMING CENTRIFUGAL PUMP ASSEMBLIES (CONT.)

ELECTRIC-POWERED (CONT.)

Close Coupled MP FLOMAX Electric Motor Pump Assemblies

Close coupled for a compact design, FLOMAX self-priming centrifugal pumps are capable of creating vacuum sufficient to lift liquids from heights up to 20 feet above the source. Once primed, the pump's built in flapper valve will maintain a full column of liquid in the suction line.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP MP-20	FLOMAX 5 Cast Iron	2" x 1 1/2" NPT	Up to 60 GPM	Up to 60'	2 HP, 1 Phase
FEP MP-21	FLOMAX 5 Cast Iron	2" x 1 1/2" NPT	Up to 60 GPM	Up to 60'	2 HP, 3 Phase
FEP MP-531	FLOMAX 5 Cast Iron	2" x 1 1/2" NPT	Up to 60 GPM	Up to 60'	3 HP, 1 Phase
FEP MP-533	FLOMAX 5 Cast Iron	2" x 1 1/2" NPT	Up to 60 GPM	Up to 60'	3 HP, 3 Phase

GASOLINE POWERED

Close Coupled MP FLOMAX Gasoline Engine Pump Assemblies

Gasoline powered for portability, these self-priming centrifugal pumps are capable of creating vacuum sufficient to lift liquids from heights up to 20 feet above the source. Once primed, the pump's built in flapper valve will maintain a full column of liquid in the suction line.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	ENGINE/ HORSE POWER
FEP MPF8HNE5H	FLOMAX 8 Cast Iron	2" NPT	Up to 120 GPM	Up to 80'	5.5 HP Honda with Electric Starter
FEP MPF8W/5HND	FLOMAX 8 Cast Iron	2" NPT	Up to 120 GPM	Up to 80'	5.5 HP Honda
FEP MP8SS5H-E	FLOMAX 8 Stainless Steel - EPDM	2" NPT	Up to 120 GPM	Up to 80'	5.5 HP Honda
FEP MP8SS5HNDE	FLOMAX 8 Stainless Steel	2" NPT	Up to 120 GPM	Up to 80'	5.5 HP Honda with Electric Starter
FEP MPF158HN	FLOMAX 15 Cast Iron	3" NPT	Up to 240 GPM	Up to 130'	8 HP Honda
FEP MPF1513HN	FLOMAX 15 Cast Iron	3" NPT	Up to 240 GPM	Up to 130'	13 HP Honda with Electric Starter

Close Coupled Banjo 200 Polypropylene Pump

This lightweight precision molded poly pump is designed for portability and corrosion resistance.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	ENGINE/ HORSE POWER
BAN 200P-3	Banjo 2" Poly Pump	2" NPT	Up to 100 GPM	Up to 60'	3.5 HP Briggs & Stratton
BAN 200PI6PRO	Banjo 2" Poly Pump	2" NPT	Up to 120 GPM	Up to 70'	6.5 HP Briggs & Stratton

GASOLINE POWERED – FOR FLAMMABLE LIQUIDS

Gasoline Engine Portable Transfer Pump for Flammable Liquids (UL Listed)



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	ENGINE/ HORSE POWER
GRP 82D1-EX13X	Gorman-Rupp	2" x 2" NPT	Up to 100 GPM	Up to 80'	5 HP Subaru Engine

STRAIGHT CENTRIFUGAL PUMP ASSEMBLIES

For flooded suction applications.

MP

Long Coupled MP Centrifugal Electric Motor Pump Assemblies

Long-coupled for easy maintenance, these straight centrifugal pump assemblies can be used in a wide variety of agri-chemical applications.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP MP120-51	MP Series 120 Cast Iron	2" x 1 1/2" NPT	Up to 160 GPM	Up to 140'	5 HP, 1 Phase
FEP MP120-53	MP Series 120 Cast Iron	2" x 1 1/2" NPT	Up to 160 GPM	Up to 140'	5 HP, 3 Phase
FEP MPCFL5-1	CHEMFLO 5 316 Stainless Steel	2" x 1 1/2" ANSI Flanged	Up to 160 GPM	Up to 75'	5 HP, 1 phase
FEP MPCFL5-3	CHEMFLO 5 316 Stainless Steel	2" x 1 1/2" ANSI Flanged	Up to 160 GPM	Up to 75'	5 HP, 3 phase
FEP MP-300-20	MP Series 300 Cast Iron	3" x 2 1/2" ANSI Flanged	Up to 400 GPM	Up to 130'	20 HP, 3 phase
FEP MP-700-25	MP Series 700 Cast Iron with 10" Impeller	4" x 3" ANSI Flanged	Up to 500 GPM	Up to 95'	25 HP, 3 phase

Close Coupled MP Centrifugal Electric Motor Pump Assemblies

Close-coupled for efficiency and compact design, and constructed of 316 stainless steel, these high quality pumps can be used in the widest variety of agri-chemical applications.

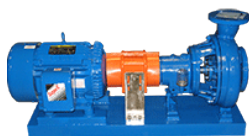


PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
MPP 34740	CFX50 316 Stainless Steel Pump	1/2" x 1/2" NPT	Up to 12 GPM	Up to 16'	1/10 HP, 1 Phase
FEP MPCFL1.5-1	CHEMFLO 3 316 Stainless Steel	2" x 1 1/2" NPT	Up to 60 GPM	Up to 25'	1.5 HP, 1 phase
FEP MPCFL1.5-3	CHEMFLO 3 316 Stainless Steel	2" x 1 1/2" NPT	Up to 60 GPM	Up to 25'	1.5 HP, 3 phase

LABOUR

Long Coupled LaBour Centrifugal Electric Motor Pump Assemblies

These highly efficient straight centrifugal pumps are designed in conformance with A.N.S.I. dimensional standards. They are ideal for mix plants, loadout, multi-rail car unloading, and all-process applications. Pumps with BorgWarner seals.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
LBR A70DI-3K	A70 Ductile Iron	4" x 3" ANSI Flanged	Up to 400 GPM	Up to 95'	15 HP, 3 Phase
LBR A40DI-3K	A40 Ductile Iron	4" x 3" ANSI Flanged	Up to 550 GPM	Up to 110'	25 HP, 3 Phase
LBR A80DI-3K	A80 Ductile Iron	6" x 4" ANSI Flanged	Up to 1000 GPM	Up to 95'	40 HP, 3 Phase
LBR A-70SS-3K	A70 Stainless Steel	4" x 3" ANSI Flanged	Up to 400 GPM	Up to 95'	15 HP, 3 Phase
LBR A-40SS-3K	A40 Stainless Steel	4" x 3" ANSI Flanged	Up to 550 GPM	Up to 110'	25 HP, 3 Phase
LBR A-80SS-3K	A80 Stainless Steel	6" x 4" ANSI Flanged	Up to 1000 GPM	Up to 95'	40 HP, 3 Phase



SYSTEM COMPONENTS -
PUMP ASSEMBLIES

STRAIGHT CENTRIFUGAL PUMP ASSEMBLIES (CONT.)

For flooded suction applications.

DEMING

Long Coupled Deming Centrifugal Electric Motor Pump Assemblies

Deming centrifugal pumps offer volume pumping at competitive pricing. Non-ANSI.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
FEP 4021-3M-15	4021-3M Cast Iron with 9 ½" Impeller	4" x 3" Flanged	Up to 400 GPM	Up to 95'	15 HP, 3 Phase
FEP 4021-3M-20	4021-3M Cast Iron with 10" Impeller	4" x 3" Flanged	Up to 450 GPM	Up to 110'	20 HP, 3 Phase
FEP 4021-4M-25	4021-4M Cast Iron with 10" Impeller	5" x 4" Flanged	Up to 800 GPM	Up to 105'	25 HP, 3 Phase
FEP 4021-5M-40	4021-5M Cast Iron with 10" Impeller	6" x 5" Flanged	Up to 1000 GPM	Up to 100'	40 HP, 3 Phase
FEP 4021-6M-40	4021-6M Cast Iron with 10" Impeller	6" x 6" Flanged	Up to 1400 GPM	Up to 85'	40 HP, 3 Phase

ON-HAND INVENTORY



Murray Equipment keeps a large inventory of parts on-hand including brands like Deming, Gorman-Rupp, Labour, and MP to ship on demand. We understand our customers' businesses require minimal downtime. So, not only do we ensure each system part is designed to withstand chemical and environmental wear, we also keep our shelves stocked with replacement parts.

Your success is our success. That's why a good portion of our 100,000 square foot facility is dedicated to housing inventory.

POSITIVE DISPLACEMENT PUMP ASSEMBLIES

NONCORROSIVE & PETROLEUM

Blackmer Positive Displacement Pump Assemblies w/Explosion-Proof Motors

Blackmer Positive Displacement Pump assemblies are an excellent choice for clean, non-corrosive industrial liquids and petroleum products. Typical applications include fuel oils, lube oils, jet fuels, gasoline, diesel, edible oils, alcohols, solvents, and glycols.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
PEP GNX2-1	GX Series Sliding Vane Cast Iron with 3.75 Gearbox 467 RPM	2" Flanged	Up to 42 GPM	Up to 115'	3 HP, 3 Phase - Explosion Proof
PEP GNX2-2	GX Series Sliding Vane Cast Iron with 2.65 Gearbox 660 RPM	2" Flanged	Up to 63 GPM	Up to 115'	5 HP, 3 Phase - Explosion Proof
PEP GNX21/2-1	GX Series Sliding Vane Cast Iron with 3.38 Gearbox 518 RPM	2 ½" Flanged	Up to 90 GPM	Up to 115'	5 HP, 3 Phase - Explosion Proof
PEP GNX21/2-2	GX Series Sliding Vane Cast Iron with 2.65 Gearbox 660 RPM	2 ½" Flanged	Up to 122 GPM	Up to 115'	7 ½ HP, 3 Phase - Explosion Proof
PEP GX3-1	GX Series Sliding Vane Cast Iron with 4.19 Gearbox 420 RPM	3" Flanged	Up to 176 GPM	Up to 115'	7 ½ HP, 3 Phase - Explosion Proof
PEP GX3-2	GX Series Sliding Vane Cast Iron with 3.4 Gearbox 520 RPM	3" Flanged	Up to 218 GPM	Up to 115'	10 HP, 3 Phase - Explosion Proof
PEP GX3-3	GX Series Sliding Vane Cast Iron with 2.76 Gearbox 640 RPM	3" Flanged	Up to 250 GPM	Up to 115'	10 HP, 3 Phase - Explosion Proof
PEP GX3-4	GX Series Sliding Vane Cast Iron with 2.76 Gearbox (Bigger Motor for heavier liquids) 640 RPM	3" Flanged	Up to 250 GPM	Up to 115'	15 HP, 3 Phase - Explosion Proof
PEP GX4-1	GX Series Sliding Vane Cast Iron with 5.77 Gearbox 300 RPM	4" Flanged	Up to 300 GPM	Up to 115'	15 HP, 3 Phase - Explosion Proof
PEP GX4-2	GX Series Sliding Vane Cast Iron with 4.36 Gearbox 400 RPM	4" Flanged	Up to 400 GPM	Up to 115'	20 HP, 3 Phase - Explosion Proof
PEP GX4-3	GX Series Sliding Vane Cast Iron with 3.52 Gearbox 500 RPM	4" Flanged	Up to 500 GPM	Up to 115'	25 HP, 3 Phase - Explosion Proof



SYSTEM COMPONENTS -
PUMP ASSEMBLIES

MINI-BULK PUMP ASSEMBLIES

ELECTRIC CADDY

Flowserve CT6 Mini-Bulk Caddy Diaphragm Pumps

Ideal for dispensing liquids from mini-bulk tanks or drums, the portable CT6 is designed to handle both lower and higher viscosity liquids.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SCI CADCT6-414	CT6 Pump with 1" Polyethylene-Lined 8' Suction & 12' Delivery Hoses with 1" male NPT ends installed & SEM10 Poly Meter	1" NPT	Up to 10 GPM	Up to 55'	12 Volt Electric
SCI CADCT6EPDM	CT6 Pump with 1" EPDM 8' Suction & 12' Delivery Hoses 1" male NPT ends installed & SEM10 Poly Meter	1" NPT	Up to 10 GPM	Up to 55'	12 Volt Electric
SCI CT6110-414	CT6 Pump with 1" Polyethylene-Lined 8' Suction & 12' Delivery Hoses 1" male NPT ends installed & SEM10 Poly Meter	1" NPT	Up to 10 GPM	Up to 55'	110 Volt Electric
SCI CT6110EPDM	CT6 Pump with 1" EPDM 8' Suction & 12' Delivery Hoses 1" male NPT ends installed & SEM10 Poly Meter	1" NPT	Up to 10 GPM	Up to 55'	110 Volt Electric

Sotera 400 Series Mini-Bulk Caddy Diaphragm Pumps

Ideal for dispensing liquids from mini-bulk tanks or drums, the portable Sotera 400 is ideal for both dispensing and recirculating high viscosity products.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SOT SS435-414	Sotera 400 Series with 1" Polyethylene-Lined 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	1" NPT	Up to 13 GPM	Up to 35'	12 Volt Electric
SOT SS435-EPDM	Sotera 400 Series with 1" EPDM 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	1" NPT	Up to 13 GPM	Up to 35'	12 Volt Electric
SOT SS465-414	Sotera 400 Series with 1" Polyethylene-Lined 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	1" NPT	Up to 13 GPM	Up to 35'	110 Volt Electric
SOT SS465-EPDM	Sotera 400 Series with 1" EPDM 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	1" NPT	Up to 13 GPM	Up to 35'	110 Volt Electric

MINI-BULK PUMP ASSEMBLIES (CONT.)

ELECTRIC SIDE MOUNTED PUMP

Flowserve CT6 Mini-Bulk Side-Mounted Diaphragm Pumps

Ideal for dispensing liquids from caged IBCs/mini-bulk tanks, the CT6 is designed to handle both lower and higher viscosity liquids. It is mounted on a steel hanger to be hung on a caged IBC/mini-bulk tank



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SCI SIDECT6EPDM	CT6 Pump with 1" EPDM 8' Suction & 12' Delivery Hoses 1" male NPT ends installed and SEM10 Poly Meter	1" NPT	Up to 10 GPM	Up to 55'	12 Volt Electric

TOP MOUNT

Flowserve CT6 Mini-Bulk Top Mount Diaphragm Pumps

The CT6 diaphragm transfer pump is engineered for use with low and high viscosity fluids. Designed to fit virtually any container, the CT6 is the standard for many ag-chem mini-bulk systems.



PART NUMBER	PUMP	DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
BAP CT6GEM-S	CT6 Pump with 1" Polyethylene-Lined 8' Suction & 12' Delivery Hoses 1" male NPT ends installed & SEM10 Poly Meter. Includes Cap	1" NPT	Up to 10 GPM	Up to 55'	12 Volt Electric
BAP CT6GEM-E	CT6 Pump with 1" EPDM 8' Suction & 12' Delivery Hoses 1" male NPT ends installed & SEM10 Poly Meter. Includes Cap.	1" NPT	Up to 10 GPM	Up to 55'	12 Volt Electric

MINI-BULK PUMP ASSEMBLIES (CONT.)

TOP MOUNT (CONT.)

Sotera 400 Series Mini-Bulk Top Mount Diaphragm Pumps

Ideal for dispensing liquids from mini-bulk tanks, the top mounted Sotera 400 is ideal for both dispensing and recirculating high viscosity products.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SOT SS445-414	Sotera 400 Series with 1" Polyethylene-Lined 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	2" x 1" NPT	Up to 13 GPM	Up to 35'	12 Volt Electric
SOT SS445-EPDM	Sotera 400 Series with 1" EPDM 8' Suction and 12' Discharge Hoses 1" male NPT ends installed & Sotera 825 Poly Meter	2" x 1" NPT	Up to 13 GPM	Up to 35'	12 Volt Electric

Flowserve AP-30 Air Operated Pump

With no motor to burn out and with minimal moving parts, AP-30 is extremely reliable and requires little maintenance. Its construction resists corrosion from most agricultural and industrial chemicals. The pump is built with no metal-to-metal contact to reduce wear.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SCI AIRPUMPCOM	Aluminum Air Piston Pump 1" x 12' EPDM delivery hose, nozzle & suction tube.	1" x 1" FNPT	Up to 30 GPM	Up to 60'	Up to 100 PSI

LOOKING FOR DIESEL EXHAUST FLUID (DEF) PUMPS?



Check out our special DEF handling pumps on page 43.

MEI distributes a full line of KleeBlue DEF handling equipment solutions. This includes drum and tote pumps as well as large storage tanks and dispensers.

For a more portable solution, consider our Truck Bed Tank & Dispenser system that can be fitted to a pickup truck to fill diesel equipment on location.

MINI-BULK PUMPS

ELECTRIC PUMPS

Flowserve CT6

Replacement pumps for Flowserve CT6 assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET	MOTOR
SCI CT6	CT6 Nylon Diaphragm Pump	2" x 1" NPT	Up to 10 GPM	Up to 57'	Integrated 12 Volt Electric

Flowserve DD-6 Accessories



PART NUMBER	DESCRIPTION
SCI DD6 MOTOR	12 Volt Power Head with cables

AIR PUMPS

Flowserve AP-30 Air Operated Pump

Replacement pumps for Flowserve AP-30 assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE
SCI AIRPUMP	Aluminum Air Piston Pump	1" x 1" NPT	Up to 30 GPM
SCI AP30KIT	Flowserve AP-30 Repair Kit		

HAND PUMPS

Tuthill Piston Hand Pump



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE
SOT FRHP32V	Hand Lever Piston Polypropylene Pump	2" NPT	Up to 11 ounces per stroke



SELF-PRIMING CENTRIFUGAL PUMPS

PUMPS ONLY

MP FLOWMAX Pumps (PumPAK)

Replacement pumps for MP FLOWMAX self-priming centrifugal pump close coupled assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
MPP 21327	FLOMAX 8 Cast Iron	2" NPT	Up to 140 GPM	Up to 100'
MPP 37147	FLOMAX 8 Stainless Steel	2" ANSI Flanged	Up to 140 GPM	Up to 100'
MPP 21372	FLOMAX 15 Cast Iron	3" NPT	Up to 280 GPM	Up to 145'
MPP 35491	FLOMAX 15 Stainless Steel	3" ANSI Flanged	Up to 280 GPM	Up to 145'

MP FLOMAX Pedestal Pumps for Long Coupling

Replacement pumps for MP FLOMAX self-priming centrifugal pump long coupled assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
MPP 21312	FLOMAX 5 Cast Iron	1 1/2" NPT	Up to 110 GPM	Up to 100'
MPP 33631	FLOMAX 8 Double Seal Cast Iron	2" NPT	Up to 140 GPM	Up to 100'
MPP 21339	FLOMAX 8 Cast Iron	2" NPT	Up to 140 GPM	Up to 100'
MPP 28399	FLOMAX 8 Stainless Steel	2" ANSI Flanged	Up to 140 GPM	Up to 100'
MPP 21381	FLOMAX 15 Cast Iron	3" NPT	Up to 280 GPM	Up to 145'
MPP 34793	FLOMAX 15 Stainless Steel for 10 HP	3" NPT	Up to 280 GPM	Up to 145'
MPP 38433	FLOMAX 15 Stainless Steel for 15 HP	3" NPT	Up to 300 GPM	Up to 145'
MPP 33301	FLOMAX 15 Double Seal 5 Blade 5" Stainless Steel Impeller for 10 HP	3" NPT	Up to 280 GPM	Up to 145'
MPP 31840	FLOMAX 15 Double Seal 5 Blade 6" Stainless Steel Impeller for 15 HP	3" NPT	Up to 280 GPM	Up to 145'
MPP 29649	FLOMAX 15 Cast Iron with 5 Blade 5.5" Stainless Steel Impeller for 10 HP	3" NPT	Up to 280 GPM	Up to 145'
MPP 29648	FLOMAX 15 Cast Iron with 5 Blade 6" Stainless Steel Impeller for 15 HP	3" NPT	Up to 300 GPM	Up to 145'
MPP 50015	FLOMAX 15 Stainless Steel Double Grease Seal with 5" Impeller for 10 HP	3" NPT	Up to 280 GPM	Up to 145'
MPP 50048	FLOMAX 15 Stainless Steel Double Grease Seal with 6" Impeller for 15 HP	3" NPT	Up to 300 GPM	Up to 145'

Gorman Series 80 Pedestal Pumps for Long Coupling

Replacement pumps for Gorman Series 80 self-priming centrifugal pump long coupled assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
GRP 83C2BPUMP	Series 80 Cast Iron	3" NPT	Up to 250 GPM	Up to 45'
GRP 84A2B	Series 80 Cast Iron	4" NPT	Up to 550 GPM	Up to 90'

HYDRAULIC DRIVEN PUMPS

MP FLOMAX Hydraulic Driven Pump with Mechanical Seal

These self-priming centrifugal pumps are ideal for transport trucks.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE
MPP 36588	FLOMAX 8 Cast Iron	2" NPT	Up to 140 GPM
MPP 28553	FLOMAX 15 Cast Iron	3" NPT	Up to 280 GPM
MPP 38119	FLOMAX 15 Stainless Steel	3" ANSI Flanged	Up to 250 GPM

STRAIGHT CENTRIFUGAL PUMPS

MP

MP Straight Centrifugal Pumps

Replacement pumps for MP straight centrifugal pump assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
MPP 33297	MP Series 120 Cast Iron	2" x 1 1/2" NPT	Up to 100 GPM	Up to 130'
MPP 27005	MP Series 300 Cast Iron	3" x 2 1/2" ANSI Flanged	Up to 400 GPM	Up to 190'
MPP 33678	MP Series 700 Cast Iron with 10" Impeller	4" x 3" ANSI Flanged	Up to 500 GPM	Up to 90'

MP 300 Series Hydraulic Driven Pump

These straight centrifugal pumps are ideal for transport trucks.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
MPP 27010	MP Series 300 Cast Iron	3" x 2 1/2" ANSI Flanged	Up to 400 GPM	Up to 170'



SYSTEM COMPONENTS -
PUMPS & PUMP PARTS

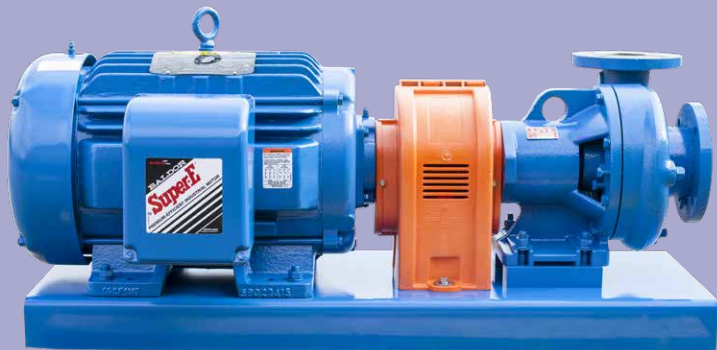


We Don't Just Go With The Flow, We Create It!®

MEI is a master distributor of MP Pumps. This distinction allows us to supply 1,000s of products and parts to our customers at preferred pricing.

MP Pumps are made right here in the USA.

Visit www.MPPumps.com for more information.



STRAIGHT CENTRIFUGAL PUMPS (CONT.)

LABOUR

LaBour Straight Centrifugal Pedestal Pumps

Replacement pumps for LaBour Straight Centrifugal ANSI Pump Assemblies. Pumps with Flowserve cartridge seals.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
LBR AB8SS-1J	AB8 Ductile Iron with 6" stainless steel impeller	3" x 1 1/2" ANSI Flanged	Up to 30 GPM	Up to 40'
LBR A40DI-1K	A40 Ductile Iron with 10" stainless steel impeller	4" x 3" ANSI Flanged	Up to 500 GPM	Up to 100'
LBR A40SS-1K	A40 Stainless Steel with 10" stainless steel impeller	4" x 3" ANSI Flanged	Up to 500 GPM	Up to 100'
LBR A70DI-1K	A70 Ductile Iron with 10" stainless steel impeller	4" x 3" ANSI Flanged	Up to 400 GPM	Up to 100'
LBR A70SS-1K	A70 Stainless Steel with 10" stainless steel impeller	4" x 3" ANSI Flanged	Up to 400 GPM	Up to 100'
LBR A80DI-1K	A80 Ductile Iron with 10" stainless steel impeller	6" x 4" ANSI Flanged	Up to 1000 GPM	Up to 90'
LBR A80SS-1K	A80 Stainless Steel with 10" stainless steel impeller	6" x 4" ANSI Flanged	Up to 1000 GPM	Up to 90'

DEMING

Deming Straight Centrifugal Pedestal Pumps

Replacement pumps for Deming straight centrifugal pump assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
DEM 402185/8PO	4021-3M Cast Iron with 8 5/8" Impeller	4" x 3" ANSI Flanged	Up to 400 GPM	Up to 80'
DEM 402191/2PO	4021-3M Cast Iron with 9 1/2" Impeller	4" x 3" ANSI Flanged	Up to 450 GPM	Up to 95'
DEM 402110PO	4021-3M Cast Iron with 10" Impeller	4" x 3" ANSI Flanged	Up to 500 GPM	Up to 110'
DEM 4021-4M	4021-4M Cast Iron with 10" Impeller	5" x 4" ANSI Flanged	Up to 800 GPM	Up to 100'
DEM 4021-5M	4021-5M Cast Iron with 10" Impeller	6" x 5" ANSI Flanged	Up to 1100 GPM	Up to 100'
DEM 4021-6M	4021-6M Cast Iron with 10" Impeller	6" x 6" ANSI Flanged	Up to 1600 GPM	Up to 85'

VERTIFLO

Vertiflo Straight Centrifugal Pedestal Pumps

Replacement Vertiflo straight centrifugal pumps.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
VER 4X3X8	1424 Series Cast Iron Liquid-filled Double Seal with 8" Impeller	4" x 3" ANSI Flanged	Up to 350 GPM	Up to 55'
VER 1424-4X3	1424 Series Cast Iron Single Seal with 10" Impeller	4" x 3" ANSI Flanged	Up to 600 GPM	Up to 110'
VER 4X3X10	1424 Series Cast Iron Single Seal with 10" Impeller	4" x 3" ANSI Flanged	Up to 600 GPM	Up to 110'

POSITIVE DISPLACEMENT PUMPS

SLIDING VANE PUMPS

Blackmer Positive Displacement NH3 Vane Pumps

Replacement pumps for Blackmer positive displacement vane pump assemblies.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	PSI
BLK LGL2ONLY	LGL Series Ductile Iron	2" NPT Flanged	Up to 60-80 GPM	Up to 150 PSI
BLK LGL3ONLY	LGL Series Ductile Iron	3" NPT Flanged	Up to 100-120 GPM	Up to 150 PSI

Blackmer Positive Displacement Vane Pumps and Gear Box

Replacement pumps for Blackmer positive displacement vane pump assemblies. For refined fuels and light oils.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	HEAD FEET
BLK GNXR03.75	GX Series Cast Iron with 3.75 Gearbox	2" NPT Flanged	Up to 44 GPM	Up to 115'
BLK GNX2R02.65	GX Series Cast Iron with 2.65 Gearbox	2" NPT Flanged	Up to 70 GPM	Up to 115'
BLK GNX2.5R338	GX Series Cast Iron with 3.38 Gearbox	2 1/2" NPT Flanged	Up to 97 GPM	Up to 115'
BLK GNX2.5R265	GX Series Cast Iron with 2.65 Gearbox	2 1/2" NPT Flanged	Up to 122 GPM	Up to 115'
BLK GX3EHRA4.1	GX Series Cast Iron with 4.19 Gearbox	3" NPT Flanged	Up to 176 GPM	Up to 115'
BLK GX3EHRA340	GX Series Cast Iron with 3.40 Gearbox	3" NPT Flanged	Up to 210 GPM	Up to 115'
BLK GX4BHRB5.7	GX Series Cast Iron with 5.77 Gearbox	4" NPT Flanged	Up to 280 GPM	Up to 115'
BLK GX4BHRB4.3	GX Series Cast Iron with 4.36 Gearbox	4" NPT Flanged	Up to 400 GPM	Up to 115'
BLK GX4BHRB3.5	GX Series Cast Iron with 3.52 Gearbox	4" NPT Flanged	Up to 500 GPM	Up to 115'



SYSTEM COMPONENTS -
PUMPS & PUMP PARTS

POSITIVE DISPLACEMENT PUMPS (CONT.)

GEAR PUMPS

Ranger Positive Displacement Gear Pumps

Replacement pumps for Ranger positive displacement gear pump assemblies. For oils and liquid feed.



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	PSI
RAN 3611HBRVBR	Ranger 119 Bronze Bushings Packed	2" NPT Flanged	Up to 77 GPM	Up to 125 PSI
RAN 3611HBRVCB	Ranger 119 Carbon Bushings Packed	2" NPT Flanged	Up to 77 GPM	Up to 125 PSI
RAN 3617HBRVBR	Ranger 179 Bronze Bushings Packed	2" NPT Flanged	Up to 118 GPM	Up to 125 PSI
RAN 3617HBRVCB	Ranger 179 Carbon Bushings Packed	2" NPT Flanged	Up to 118 GPM	Up to 125 PSI
RAN 3622HBRVBR	Ranger 229 Bronze Bushings Packed	3" NPT Flanged	Up to 154 GPM	Up to 125 PSI
RAN 3622HBRVCB	Ranger 229 Carbon Bushings Packed	3" NPT Flanged	Up to 154 GPM	Up to 125 PSI

Roper Gear Pump

Replacement pumps for Roper 2835 pump assemblies



PART NUMBER	PUMP	SUCTION & DISCHARGE	FLOW RATE	PSI
ROP 2835P	Roper 2835 Cast Iron Pump with Iron Bearings	1 ½" NPT	Up to 11 GPM	Up to 75 PSI

CUSTOM PUMP ASSEMBLIES



Don't see the pump assembly you need? MEI can create a custom assembly to meet the requirements of your application.

Call us today at (260) 484-0382 to speak to one of our pump experts. We can provide a timeframe and pricing.

PUMP MOTORS

LONG COUPLED

Long Coupled Single Phase Motors - Totally Enclosed Fan Cooled (TEFC)

Replacement motors for long coupled pump assemblies where single phase is required.



PART NUMBER	HORSE POWER	PHASE	SPEED	FRAME	HOUSING
MOT 3H1P3600	3 HP	1 Phase	3600 RPM	182T	Steel
MOT 5H1P1725	5 HP	1 Phase	1725 RPM	184T	Steel
MOT 5H1P3600	5 HP	1 Phase	3600 RPM	184T	Steel
MOT 7.5H1P3600	7.5 HP	1 Phase	3600 RPM	213T	Steel
MOT 10H1P1725	10 HP	1 Phase	1725 RPM	215T	Steel
MOT 10H1P3600	10 HP	1 Phase	3600 RPM	215T	Steel

Long Coupled Three Phase Motors - Totally Enclosed Fan Cooled (TEFC)

Replacement motors for long coupled pump assemblies where three phase efficiency is desired.



PART NUMBER	HORSE POWER	PHASE	SPEED	FRAME	HOUSING
MOT 3H3P3600	3 HP	3 Phase	3600 RPM	182T	Steel
MOT 5H3P1725	5 HP	3 Phase	1725 RPM	184T	Steel
MOT 5H3P3600	5 HP	3 Phase	3600 RPM	184T	Steel
MOT 7.5H3P1725	7.5 HP	3 Phase	1725 RPM	213T	Steel
MOT 7.5H3P3600	7.5 HP	3 Phase	3600 RPM	213T	Steel
MOT 10H3P1725	10 HP	3 Phase	1725 RPM	215T	Cast Iron
MOT 10H3P3600	10 HP	3 Phase	3600 RPM	215T	Cast Iron
MOT 15H3P1725	15 HP	3 Phase	1725 RPM	254T	Cast Iron
MOT 20H3P1725	20 HP	3 Phase	1725 RPM	256T	Cast Iron
MOT 20H3P3600	20 HP	3 Phase	3600 RPM	256T	Cast Iron
MOT 25H3P1725	25 HP	3 Phase	1725 RPM	284T	Cast Iron
MOT 25H3P3600	25 HP	3 Phase	3600 RPM	284T	Cast Iron
MOT 30H3P1725	30 HP	3 Phase	1725 RPM	286T	Cast Iron
MOT 40H3P1725	40 HP	3 Phase	1725 RPM	324T	Cast Iron



SYSTEM COMPONENTS -
PUMPS & PUMP PARTS

BALDOR
A MEMBER OF THE ABB GROUP

Murray Equipment believes in providing the most value to our customers. That's why we supply Baldor super high efficiency pump motors.

Baldor motors provide the highest cost savings without sacrificing reliability or lifespan.



PUMP MOTORS (CONT.)

CLOSE COUPLED

Close Coupled Single Phase Motors - Totally Enclosed Fan Cooled (TEFC)

Replacement motors for closed coupled pump assemblies where single phase is required.



PART NUMBER	HORSE POWER	PHASE	SPEED	FRAME	HOUSING
MOT 2H1P3600	2 HP	1 Phase	3600 RPM	56C	Steel
MOT 3H1P3600C	3 HP	1 Phase	3600 RPM	182TC	Steel

Close Coupled Three Phase Motors - Totally Enclosed Fan Cooled (TEFC)

Replacement motors for closed coupled pump assemblies where three phase efficiency is required.



PART NUMBER	HORSE POWER	PHASE	SPEED	FRAME	HOUSING
MOT 2H3P3600	2 HP	3 Phase	3600 RPM	56C	Steel
MOT 3H3P3600C	3 HP	3 Phase	3600 RPM	145TC	Steel

LONG COUPLED –EXPLOSION PROOF

Long Coupled Three Phase Motors

Replacement motors for long coupled pump assemblies where three phase is required and flammable liquids are being handled.



PART NUMBER	HORSE POWER	PHASE	SPEED	FRAME	HOUSING
MOT 3H3P1725XP	3 HP	3 Phase	1725 RPM	182T	Steel
MOT 3H3P3600XP	3 HP	3 Phase	3600 RPM	182T	Steel
MOT 5H3P3600XP	5 HP	3 Phase	3600 RPM	184T	Steel
MOT 7.5H1725X	7.5 HP	3 Phase	1725 RPM	213T	Steel
MOT 10H3P1725X	10 HP	3 Phase	1725 RPM	215T	Cast Iron
MOT 10H3P3600X	10 HP	3 Phase	3600 RPM	215T	Cast Iron
MOT 15H3P1725X	15 HP	3 Phase	1725 RPM	254T	Cast Iron
MOT 20H3P1725X	20 HP	3 Phase	1725 RPM	256T	Cast Iron
MOT 25H3P1725X	25 HP	3 Phase	1725 RPM	284T	Cast Iron
MOT 30H3P1725X	30 HP	3 Phase	1725 RPM	324T	Cast Iron
MOT 40H3P1750X	40 HP	3 Phase	1725 RPM	324T	Cast Iron

EDUCTORS

LIQUID ONLY

Low Volume Pump Eductor

Introduce hand-add liquid products into your mixes using your existing pumping system.



PART NUMBER	DESCRIPTION
MIX 3LIQSSCOMP	This 3" eductor includes a 15 gallon 316 stainless steel funnel, and induction venturi assembly. Requires a compatible high head pump as eductor works via the venturi effect.
MIX 3LIQ-SSED	MIX 3LIQSSCOMP, except without the funnel and removable stainless steel foot pads.

LIQUID & DRY

MEI Eductor with Funnel

Introduce hand-add liquid or dry products into your mixes using your existing pumping system.



PART NUMBER	DESCRIPTION
MIX 3EDUCTSSCO	This 3" eductor includes a 15 gallon stainless steel funnel, and induction venturi assembly. Requires a compatible high head pump as eductor works via the venturi effect.
MIX 4EDUCTSSCO	MIX 3EDUCTSSCO, except 4" and 400-500 GPM range.



SYSTEM COMPONENTS -
EDUCTORS

FLAT BOTTOM TANKS

High-volume tank selection varies depending on products to be stored. Please call for recommendations for your specific application.

MILD STEEL FLAT BOTTOM

Low Carbon Mild Steel Tank Painted with Tank Outlets and Rust Resistant Primer

Value large volume storage tanks.



PART NUMBER	DESCRIPTION	DIMENSIONS
TNK 6000CS	6,000 Gallon	8' Diameter x 16' Tall
TNK 10000CS	10,000 Gallon	11' Diameter x 14' Tall
TNK 12000CS	12,000 Gallon	11' Diameter x 17' Tall
TNK 15000CS	15,000 Gallon	11' Diameter x 21' Tall
TNK 19000CS	19,000 Gallon	11' Diameter x 27' Tall
TNK 25000CS	25,000 Gallon	12' Diameter x 29' Tall
TNK 30000CS	30,000 Gallon	12' Diameter x 35' Tall
TNK 35000CS	35,000 Gallon	12' Diameter x 42' Tall

FIBERGLASS FLAT BOTTOM

Fiberglass Vertical

Highly corrosion-resistant large volume storage tanks.



PART NUMBER	DESCRIPTION	DIMENSIONS
TNK 10000	10,000 Gallon	11' Diameter x 14' Tall
TNK 12000	12,000 Gallon	11' Diameter x 17' Tall
TNK 15000	15,000 Gallon	11' Diameter x 21' Tall
TNK 19000	20,000 Gallon	11' Diameter x 27' Tall
TNK 30000	30,000 Gallon	12' Diameter x 35' Tall

POLYETHYLENE FLAT BOTTOM

Warm Climate or Inside Only Systems

HDLPE Polyethylene Single wall flat bottom tanks built to ASTM D-1998 specifications. Includes 3" FNTF stainless steel tank outlet, 2" stainless steel full port lockable valve, 3" tank vent, 18" access manway, and 2 extra 2" openings on top of tank.



PART NUMBER	DESCRIPTION	DIMENSIONS
SBD 6500SWD	6,500 Gallons	120" d x 153" h
SBD 8750SWD	8,750 Gallons	142" d x 146" h
SBD 10500SWD	10,500 Gallons	142" d x 169" h
SBD 12500SWD	12,500 Gallons	142" d x 198" h
SBD 15000SWD	15,000 Gallons	142" d x 234" h

CONE BOTTOM TANKS

Industry-standard tanks designed for complete draining. Tank selection varies depending on products to be stored. Please call for recommendations for your specific application.

304 STAINLESS STEEL CONE BOTTOM

304 Stainless Steel Tanks with Dual In-Tank Eductors



PART NUMBER	DESCRIPTION	DIMENSIONS
TNK 1100D23	1,100 Gallon	58" Diameter x 120" Tall
TNK 1600D23	1,600 Gallon	70" Diameter x 120" Tall
TNK 2200D23	2,200 Gallon	82" Diameter x 120" Tall
TNK 2400D23	2,400 Gallon	70" Diameter x 168" Tall
TNK 3000D23	3,000 Gallon	70" Diameter x 204" Tall
TNK 4300D23	4,300 Gallon	94" Diameter x 168" Tall
TNK 5100D23	5,100 Gallon	94" Diameter x 192" Tall
TNK 6100D23	6,100 Gallon	94" Diameter x 228" Tall
TNK 10000D23	10,000 Gallon	140" Diameter x 168" Tall

POLYETHYLENE CONE BOTTOM

High Density Linear Polyethylene



PART NUMBER	DESCRIPTION	DIMENSIONS
NOR CB1600PKG	1,650 Gallon Tank & Stand	86" Diameter x 104" Tall
NOR CB2500PKG	2,500 Gallon Tank & Stand	90" Diameter x 140" Tall

Crosslinked Polyethylene



PART NUMBER	DESCRIPTION	DIMENSIONS
PPC CB1400XLP	1,400 Gallon Tank & Stand	95" Diameter x 86" Tall
PPC CB2300XLP	2,300 Gallon Tank & Stand	95" Diameter x 117" Tall
PPC CB5350XLP	5,350 Gallon Tank & Stand	110" Diameter x 203" Tall



SYSTEM COMPONENTS -
BULK TANKS

TANK MONITORING

ELECTRONIC LEVEL DISPLAYS & SENSORS

MEI Sensor Local & Remote Display

See page 9 for more details.

Pressure Transmitter

This economical, versatile sensor is designed not only for measurement of process or differential pressure, but also level, volume, or density. It can be mounted to the bottom of the tank or used in plumbing. Level measurement is dependent on the specific gravity of the product.



PART NUMBER	DESCRIPTION
VEG XXGN5EHKNAX	VEGABAR 52 pressure transmitter. An Indicating/Adjustment Module is integrated into the sensor housing.

Radar Sensor

This highly accurate sensor is mainly used on larger tanks up to 60' tall. It mounts to the top of the tank and can be used indoors or outdoors as it is not affected by temperature or humidity. It can also be used with conductive liquids.



PART NUMBER	DESCRIPTION
VEG XXANPHKNAX	1 1/2" NPT VEGA PULS61 radar sensor.
VEG XXBFKHKKNAX	4" Flanged VEGA PULS61 radar sensor. An Indicating/Adjustment Module is integrated into the sensor housing.

Indicating/Adjustment Module for VEGA Level Sensors



PART NUMBER	DESCRIPTION
VEG PLICSCOMXB	This display and adjustment module is used for measured value indication, adjustment, and diagnosis of VEGA sensors. The unit is integrated into the respective sensor housing.

MECHANICAL LEVEL DISPLAYS

Morrison Tank Gauge

PART NUMBER	DESCRIPTION
MOR 818	Manual tank gauge that mounts to the top of the tank. Uses float to read in feet and inches up to 12 feet.

TANK MONITORING (CONT.)

FLOAT SWITCHES

Bronze Float Valve

Used for water service. Sized and weighted to assure leak-proof shut off.



PART NUMBER	DESCRIPTION
GAD ACF-1	1" Bronze Angle Float Valve
GAD ACF-1 1/2	1 1/2" Bronze Angle Float Valve
GAD ACF-2	2" Bronze Angle Float Valve

Stainless Steel Float Switches



PART NUMBER	DESCRIPTION
GEM SSFLTSWT	1/4" Stainless Steel liquid level switch. Mounts vertically. Normally open or normally closed contact.

Digital 316 Pressure Gauge

Monitor tank pressure both locally and remotely. Has a standard stem length and a 1/4" NPT process connection. Produces 4-20 mA output.



PART NUMBER	DESCRIPTION
ABE 836P-PRESS	Compact 316 pressure gauge with rotatable housing and head. IP67 enclosure rating. Reads pressures up to 8,000 PSI/551 BAR.

TEMPERATURE PROBES

Digital 316 Stainless Steel Temperature Gauge

Monitor tank temperature digitally remotely. Produces 4-20 mA output.



PART NUMBER	DESCRIPTION
PYR 4TEMP-3/4	316 stainless steel 6" digital thermocouple and 3/4" thermowell.
PYR 4TEMP-1/2	316 stainless steel 4" digital thermocouple and 1/2" thermowell.

Digital 316 Stainless Steel Temperature Gauge

Monitor tank temperature locally and remotely. Has a standard stem length and a 1/4" NPT process connection. Produces 4-20 mA output.



PART NUMBER	DESCRIPTION
ABE 837E-TEMP	Compact 316 temperature gauge with rotatable housing. IP66 enclosure rating. Measure temperatures up to 302°F.

Dial Thermometer

Tank dial thermometer with a 3" dial face reading. Has a standard stem length and a 1/2" NPT back connection. Reads 0° to 240° F or -17° to 110° C.



PART NUMBER	DESCRIPTION
WES 4S-20-240	4" stem length
WES 6S-20-240	6" stem length



TANK ACCESS

MANWAYS

With Fill Opening

Quick opening non-pressure manway with 10" fill opening and internal vent, for industrial or agricultural tanks.



PART NUMBER	DESCRIPTION	SIZE	MATERIAL
CBM 2097-16-SS	Access manway with 10" flip lid	16"	304 Stainless Steel
CBM 2097-16-CS	Access manway with 10" flip lid	16"	Carbon Steel
CBM 2097-16-AL	Access manway with 10" flip lid	16"	Aluminum
CBM 2097-20-SS	Access manway with 10" flip lid	20"	304 Stainless Steel
CBM 2097-20-CS	Access manway with 10" flip lid	20"	Carbon Steel
CBM 2097-20-AL	Access manway with 10" flip lid	20"	Aluminum

Without Fill Opening

Inexpensive, lightweight non-pressure manway for where a fill opening is not required.



PART NUMBER	DESCRIPTION	SIZE	MATERIAL
CBM 109-16-SS	Access manway	16"	304 Stainless Steel
CBM 109-16-CS	Access manway	16"	Carbon Steel
CBM 109-16-AL	Access manway	16"	Aluminum
CBM 109-20-SS	Access manway	20"	304 Stainless Steel
CBM 109-20-CS	Access manway	20"	Carbon Steel
CBM 109-20-AL	Access manway	20"	Aluminum

BULKHEAD FITTINGS

304 Stainless Steel Bungs with Viton Gaskets for Polypropylene Tanks

Connect fittings to poly tanks.



PART NUMBER	DESCRIPTION	BOLT CENTERS	OUTER DIAMETER
TNK 2SSBUNG-HV	2" NPT	3 3/4"	5"
TNK 3SSBUNG-HV	3" NPT	4 7/8"	6 1/4"
TNK 4SSBUNG-HV	4" NPT	5 7/8"	7 1/4"

Polypropylene Double-Tap Bungs with EPDM Gaskets

Connect fittings to nurse tanks and smaller applicator equipment. Two-piece design is for easy installation.



PART NUMBER	DESCRIPTION	HOLE NEEDED	OUTER DIAMETER
TNK 3/4BUNG	3/4" FNPT	2"	3 1/2"
TNK 1BUNG	1" FNPT	2 1/4"	3 1/2"
TNK 1 1/4BUNG	1 1/4" FNPT	2 1/4"	3 1/2"
TNK 1 1/2BUNG	1 1/2" FNPT	2 1/4"	3 1/2"
TNK 2BUNG	2" FNPT	2 3/4"	4"
TNK 3BUNG	3" FNPT	4 1/4"	6"

OTHER TANK ACCESSORIES

VENTS

Conservation Vent

Reduces evaporation of product and allows for storage tanks to 'breathe' during filling and discharge.



PART NUMBER	DESCRIPTION
MOR 148ALT1	2" Morrison Conservation Vent. Vents only when there is 1lb of pressure or 1oz of vacuum. For use with stationary tanks.

Vent Baffle

Reduces possibility of product splashing through the vent nipple into the pressure/vacuum vent.



PART NUMBER	DESCRIPTION
MOR VENTBAFFLE	2" x 6" vent baffle.

TANK RECIRCULATION - EDUCTORS

Mix liquids in open or enclosed tanks. Eductors are normally located low on the tank inside wall to remain immersed. They produce a mixing action with the liquid being pumped and normal 4:1 recirculation.

Polypropylene Tank Eductors



PART NUMBER	DESCRIPTION
PEN 3/4POLY	¾" MNPT polypropylene eductor
PEN 1 1/2POLY	1 ½" MNPT polypropylene eductor

Cast Iron Tank Eductors



PART NUMBER	DESCRIPTION
PEN 2CI	2" FNPT cast iron eductor

SUMP PUMPS

Sump Pumps

Pump water collected in dike areas into holding tanks for cleaning, disposal, and/or application.



PART NUMBER	PUMP	DISCHARGE	FLOW RATE	HEAD FEET	HORSE POWER/ PHASE
EBR EPPD-3	Ebara EPPD-3 Poly Pump	1 ¼" FNPT	Up to 40 GPM	Up to 16'	½ HP, 1 Phase
GPC AP-12	Grundfos Boss AP-12 Stainless Steel Pump	1 ½" FNPT	Up to 72 GPM	Up to 22'	½ HP, 1 Phase



MINI-BULK TANKS

U.N. Certification for Packing Groups 2 & 3

STAINLESS STEEL

Standard Cylinder Tanks

These 304 stainless steel tanks feature a 16" stainless steel manway with 10" fill opening, pressure vacuum vent, 2" stainless steel opening in top (for top mounted pump) and 2" bottom outlet with valve.



PART NUMBER	DESCRIPTION	DIMENSIONS	TARE WEIGHT
TNK MB250STD	250 Gallon	44" Diameter x 60" Tall	460 lbs.

N-Serve

These UL 142 rated 304 stainless steel tanks feature a 16" stainless steel manway with 10" fill opening, pressure vacuum vent, 2" stainless steel opening in top (for top mounted pump) and 2" bottom outlet with valve and dry break installed.



PART NUMBER	DESCRIPTION	DIMENSIONS	TARE WEIGHT
TNK NS-MP-250	250 Gallon N-Serve	44" Diameter x 60" Tall	460 lbs.

POLYETHYLENE

Mauser IBC (Top or Bottom Withdrawal)

These HDPE Poly tank feature a rugged tubular steel cage on a sloped, 4-way entry polyethylene pallet. Bottom discharge is available through polypropylene ball valve. Top withdrawal is available through a 6" fill opening with pressure/vacuum vent.



PART NUMBER	DESCRIPTION	DIMENSIONS	TARE WEIGHT
HOV SM275-WV	275 Gallon	47" Length x 39" Width x 46" Height	132.5 lbs

MINI-BULK TANK FITTINGS

CHECK VALVES & SPIGOTS

Banjo Check Valve

1" polypropylene check valve to prevent filling through the valve.



PART NUMBER	DESCRIPTION
BAN CV100MT	1" FNPT x 1" MNPT polypropylene check valve

Snyder Check Valve

2" polypropylene ball valve with check valve to prevent filling through the valve.



PART NUMBER	DESCRIPTION
SNY 35400267	For EPA-compliant Snyder refillable containers

Spigots

Drum bottom withdrawal spigots.



PART NUMBER	DESCRIPTION
W/D COM4449	¾" NPT Spigot, polypropylene
TCF SP-1	1" NPT Spigot, polypropylene



SYSTEM COMPONENTS -
MINI-BULK TANK FITTINGS

MINI-BULK TANK FITTINGS (CONT.)

TANK FILL ADAPTERS/DRYBREAK COUPLERS

MEI offers a full array of couplers and adapters for filling and extraction. Below are the most commonly requested units.

Parker Drybreaks - Stainless Steel



PART NUMBER	DESCRIPTION
PHC 2SSCOUPLER	2" 303 Stainless Steel Female Drybreak Coupler with FNPT
PHC 2SSNIP-BUT	2" 303 Stainless Steel Male Drybreak Adapter with 2" Male Buttress Thread
PHC 2SSNIP-NPT	2" 303 Stainless Steel Male Drybreak Adapter with 2" MNPT
PHC 2SSNIP-DC	Drybreak Stainless Steel 2" Adapter Dust Cap

Parker Drybreaks - Polypropylene



PART NUMBER	DESCRIPTION
PHC PF100232MB	2" Male Buttress Thread Bung Type
PHC PF100232MP	2" Male Drybreak NPT Bung Type
PHC PF-1001	1" Female Coupler FNPT
PHC PF-1002	1" Male Drybreak MNPT

TODD Stainless Steel Drybreaks



PART NUMBER	DESCRIPTION
SBD TODO2CPL	TODD Drybreak 316 Stainless Steel 2" Coupler
SBD TODO2M-NIP	TODD Drybreak 316 Stainless Steel 2" Adapter with Cap
SBD TODODPCPL	TODD Dust Plug for Coupler

OPW Kamvalock Drybreak



PART NUMBER	DESCRIPTION
SBD OPW1672-2	OPW 1672 2" NPT 316 Stainless Steel Male Kamvalok Adapter with Viton seals
SBD OPW1772-2	OPW 1772 2" NPT 316 Stainless Steel Female Kamvalok Coupler with Viton seals

Micro Matic RSV Couplers & Extract Valves - Diesel Exhaust Fluid



PART NUMBER	DESCRIPTION
MMG 744-026	4-pin RSV vapor recovery fill head coupler for filling containers through RSV. 1" NPT liquid inlet, 1/4" FNPT vapor recovery outlet. Viton seals
MMG 744-048	4-pin RSV basic dispense coupler. Horizontal with 3/4" barbed outlet. Viton seals
MMG 743-097	4-pin RSV 2.5"x5 buttress thread container extractor valve. EPDM seals
MMG 743-016	4-pin RSV 2" BSP thread container extractor valve. Viton seals
MMG 2682	4-pin RSV 2" buttress extractor valve. Polypropylene/EPDM seals

Micro Matic RSV Couplers & Extract Valves - Chemicals



PART NUMBER	DESCRIPTION
MMG 744-003	3-pin RSV basic dispense coupler. 1" BSPP Female liquid outlet. Self venting. Viton seals
MMG 743-087	3-pin RSV 2"x5 buttress thread container extractor valve. Viton seals

MINI-BULK TANK FITTINGS (CONT.)

CAPS

Snyder 8" GEM Caps

Mounting caps for Snyder mini-bulk tanks.



PART NUMBER	DESCRIPTION
SNY GEMCAP-2	GEM Cap without Gasket with 2" FNTF
SNY GEMCAP-2BT	GEM Cap without Gasket with 2" Female Buttress Thread
SNY GEMCAP-SLD	Solid Gem Cap
SNY GEMCAP-DD6	GEM Cap for Mounting DD6 Pump
SNY 33100154	Gasket for GEM Cap with 2" NPT or 2" Buttress Thread
SNY 33100157	Gasket for GEM Cap for DD6 Pump

Micro Matic RSV Caps

Mini-bulk caps to create a closed system.



PART NUMBER	DESCRIPTION
MMG 102-081	RSV red shipping cap for extractor valves
MMG 749-326	Blue 6" 275/330 gallon tote/IBC cap/lid with 1 2" buttress opening
MMG 5792	Blue 6" cap/lid with dual 2" buttress openings

Other Fittings

General use mini-bulk fittings.



PART NUMBER	DESCRIPTION
TCF BE-VENT	2" Buttress plug with 3/4" manual vent
TCF NE-VENT	2" NPT plug with 3/4" manual vent
TCF A-CHB-1	2" Buttress x 1" FNPT with check valve
TCF B-ADNMP3/4	2" NPT plug with 3/4" knockout

TOOLS

Bung Wrench



PART NUMBER	DESCRIPTION
NSP W-169	Bung Wrench
MMG 741-084	RSV extractor valve install/removal tool – for use by installers only

DOWN TUBE ASSEMBLIES

MicroMatic

For use with Micromatic couplers and adapters.



PART NUMBER	DESCRIPTION
MMG 7432361065	RSV down tube assembly for center mount 275 gallon tote/IBC with bellows on top
MMG 7432361245	RSV down tube assembly for center mount 330 gallon tote/IBC with bellows on top
MMG 743203975	RSV down tube assembly for top edge mount 275 gallon tote/IBC with bellows on bottom
MMG 7432031155	RSV down tube assembly for top edge mount 330 gallon tote/IBC with bellows on bottom

Other Down Tube

For use with mini-bulk pumps with 1" NPT connections.



PART NUMBER	DESCRIPTION
SCI XTUBE-E	1" FNPT adjustable suction tube



CHECK VALVES

316 STAINLESS STEEL

316 SS Centerline Wafer Style Check Valve

316 Stainless steel wafer style check valve. Iron body, EPDM liner, and 316 stainless steel disc shaft

Opening Pressure: 1 PSI

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
CLV 3CVSS	3" Flanged
CLV 4CVSS	4" Flanged
CLV 6CVSS	6" Flanged

316 SS Check-All Poppet Check Valve

316 Stainless steel poppet check valve with Viton O-ring seat.

Opening Pressure: ½ PSI

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
CKA CON100SS-V	1" MNPT

304 STAINLESS STEEL

304 SS Inline Poppet Check Valve

304 Stainless steel poppet check valve with Viton O-ring seat.

Opening Pressure: ½ PSI

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
INL CVSE50	½" FNPT
INL CVSE75	¾" FNPT
INL CVSE100	1" FNPT
INL CVSE125	1 ¼" FNPT
INL CVSE150	1 ½" FNPT
INL CVSE200	2" FNPT
INL CVSE300	3" FNPT
INL CVSE400	4" FNPT

304 SS Hamilton Poppet Check Valve

304 Stainless steel poppet check valve with Viton O-ring seat.

Opening Pressure: 3 PSI

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
HAM 3/8	¾" FNPT
HAM 3/4	¾" FNPT

PVC

PVC Poppet Check Valve

PVC poppet check valve with EPDM O-ring seat.

Opening Pressure: ½ PSI

Operating Pressure: 125 PSI



PART NUMBER	DESCRIPTION
FLC 1001-15	1 ½" FNPT
FLC 1002-202	2" FNPT

PVC Swing Check Valve

PVC swing check valve with Buna-N rubber swing flapper.

Opening Pressure: ½ PSI

Operating Pressure: 125 PSI



PART NUMBER	DESCRIPTION
FLC 1520-15	1 ½" Slip
FLC 1520-20	2" Slip
FLC 1520-30	3" Slip
FLC 1520-40	4" Slip

DELTRIN

Delrin Poppet Check Valve

Delrin poppet check valve with Viton O-Ring seat.

Opening Pressure: ½ PSI

Operating Pressure: 125 PSI



PART NUMBER	DESCRIPTION
BRD 3/4	¾" FNPT
BRD 1	1" FNPT
BRD 11/4	1 ¼" FNPT
BRD 11/2	1 ½" FNPT

BALL VALVES

STAINLESS STEEL - THREADED

Inline 316 Stainless Steel Threaded Ball Valves

316 Stainless steel ball valves with locking handle. PTFE seats and stem seals. Full port.

Operating Pressure: 1000 PSI



PART NUMBER	DESCRIPTION
INL 1/4SSL	¼" FNPT
INL 3/8SSL	⅜" FNPT
INL 1/2SSL	½" FNPT
INL 3/4SSL	¾" FNPT
INL 1SSL	1" FNPT
INL 1 1/4SSL	1 ¼" FNPT
INL 1 1/2SSL	1 ½" FNPT
INL 2SSL	2" FNPT
INL 3SSL	3" FNPT

Inline 316 Stainless Steel Threaded Ball Valves - 3 Piece

316 Stainless steel 3-piece ball valves with locking handle. PTFE seats and stem seals. Full port.

Operating Pressure: 1000 PSI



PART NUMBER	DESCRIPTION
INL SSFP1.5LL-3	1 ½" FNPT
INL SSFP2LL-3	2" FNPT
INL SSFP3LL-3	3" FNPT

Inline 316 Stainless Steel Threaded Ball Valves - Spring Return

316 Stainless steel ball valve with spring return handle, PTFE seats. Full port.

Operating Pressure: 1000 PSI



PART NUMBER	DESCRIPTION
INL DEADMAN1/2	½" FNPT
INL DEADMAN3/4	¾" FNPT
INL DEADMAN1	1" FNPT

*** Recommended for all Sight Gauge Hose Applications ***

STAINLESS STEEL - FLANGED

Inline 316 Stainless Steel Flanged Ball Valves

316 Stainless steel ball valves with PTFE seats. Full port.

Operating Pressure: 275 PSI



PART NUMBER	DESCRIPTION
INL 209F-1 1/2"	1 ½" Flanged
INL 209F-2"	2" Flanged
INL 209F-3"	3" Flanged
INL 209F-4"	4" Flanged
INL 209F-6"	6" Flanged

Inline 316 Stainless Steel Ball Valves with Weld Ends - 3 Piece

316 Stainless steel 3-piece ball valves with locking handle. PTFE seats and stem seals. Full port.

Operating Pressure: 1000 PSI



PART NUMBER	DESCRIPTION
INL SSFP1.5L3S	1 ½" Weld Ends
INL SSFP2LL-3S	2" Weld Ends

POLYPROPYLENE

Full Port Poly Ball Valves

Polypropylene ball valves with Viton O-ring seat. Full port

Operating Pressure: 125 PSI



PART NUMBER	DESCRIPTION
BAN V050	½" FNPT, 4 Bolts
BAN V075	¾" FNPT, 4 Bolts
BAN V100FP	1" FNPT, 4 Bolts
BAN V150	1 ½" FNPT, 4 Bolts
BAN V200FP	2" FNPT, 6 Bolts
BAN V300FP	3" FNPT, 6 Bolts

Standard Port Poly Ball Valves

Polypropylene ball valves with Viton O-ring seat. Standard port.

Operating Pressure: 125 PSI



PART NUMBER	DESCRIPTION
BAN V100	1" FNPT, 4 Bolts
BAN V125	1 ¼" FNPT, 4 Bolts
BAN V200	2" FNPT, 4 Bolts
BAN V300	3" FNPT, 6 Bolts
BAN V400	4" FNPT, 6 Bolts



SYSTEM COMPONENTS -
VALVES

SPECIALTY BALL VALVES

NOZZLE BALL VALVES

90° Full Port Polypropylene Nozzle Ball Valves

High flow bulk chemical and fertilizer dispensing nozzles.



PART NUMBER	DESCRIPTION
BAN VA150	1 ½" FNPT Polypropylene Full Port Valve with 90° Nozzle Outlet and Tube
BAN VA200FP	2" FNPT Polypropylene Full Port Valve with 90° Nozzle Outlet and Tube

90° Standard Port Polypropylene Nozzle Ball Valves

Standard flow bulk chemical and fertilizer dispensing nozzles.



PART NUMBER	DESCRIPTION
BAN VA200/150	2" FNPT Polypropylene standard port valve with 90° 1 ½" nozzle outlet and tube
BAN VA200	2" FNPT Polypropylene standard port valve with 90° 2" nozzle outlet and tube

45° Full Port Polypropylene Nozzle Ball Valve

High flow mini-bulk chemical and fertilizer dispensing nozzles.



PART NUMBER	DESCRIPTION
BAN VA100	1" FNPT Polypropylene Full Port Valve with 45° Nozzle Outlet
BAN V10161	1" Polypropylene Nozzle Replacement

3-WAY BALL VALVES

Bottom Load 3-Way Polypropylene Ball Valves

Right or left directional flow valves. Valves can be turned off to stop flow. 100 PSI max.



PART NUMBER	DESCRIPTION
BAN V100BL	1" FNPT Bottom Load 3-Way Polypropylene Ball Valve
BAN V150BL	1 ½" FNPT Bottom Load 3-Way Polypropylene Ball Valve

Side Load 3-Way Polypropylene Ball Valves

Right or left directional flow valves. Valve CANNOT be turned off. 100 PSI max.



PART NUMBER	DESCRIPTION
BAN V100SL	1" FNPT bottom load 3-way polypropylene ball valve
BAN V150SL	1 ½" FNPT bottom load 3-way polypropylene ball valve

BUTTERFLY VALVES

BUTTERFLY VALVES

Centerline Butterfly Valves

Cast iron body, 316 Stainless Steel disc, 316 Stainless Steel shaft, and EPDM seat. (PTFE & FKM seats available upon request.)
Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
CLV 2VALVE-B	2" resilient seated butterfly valve
CLV 3VALVE-B	3" resilient seated butterfly valve
CLV 4VALVE-B	4" resilient seated butterfly valve
CLV 6VALVE-B	6" resilient seated butterfly valve
CLV 8VALVE-B	8" resilient seated butterfly valve
CLV 10VALVE-B	10" resilient seated butterfly valve
CLV 12VALVE-B	12" resilient seated butterfly valve

Centerline Butterfly Lug Valves

Cast iron body, 316 Stainless Steel disc, 316 Stainless Steel shaft, and EPDM seat. (PTFE & FKM seats available upon request.)
Operating Pressure: 200 PSI



PART NUMBER	DESCRIPTION
CLV 2VALVE-LUG	2" resilient seated butterfly lug valve
CLV 3VALVE-LUG	3" resilient seated butterfly lug valve
CLV 4VALVE-LUG	4" resilient seated butterfly lug valve
CLV 6VALVE-LUG	6" resilient seated butterfly lug valve
CLV 8VALVE-LUG	8" resilient seated butterfly lug valve

HANDLES

Locking Handles for Centerline Butterfly Valves (Standard Handles Available)

Allow for locking with a padlock. Both standard and locking handles 'lock' in place.



PART NUMBER	DESCRIPTION
CLV 2-3LKHANDL	For 2" and 3" valves
CLV 4LKHANDLE	For 4" valves
CLV 6LKHANDLE	For 6" valves
CLV 8LKHANDLE	For 8" valves
CLV 10LKHANDLE	For 10" valves



GATE VALVES

HEAVY DUTY GATE VALVES

Cast Steel with CR13 Trim Gate Valves

Cast steel with CR13 trim gate valves for large capacity storage tanks. Meets API 653 standards. CR13 trim comprises Stainless Steel rising stem and seat.

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
ALY 3CSGATE	3" ANSI Flanged Cast Steel gate valve
ALY 4CSGATE	4" ANSI Flanged Cast Steel gate valve
ALY 6CSGATE	6" ANSI Flanged Cast Steel gate valve
ALY 8CSGATE	8" ANSI Flanged Cast Steel gate valve

Stainless Steel Gate Valves

304 stainless steel gate valves for large capacity storage tanks. Meets API 653 Standards.

Operating Pressure: 150 PSI



PART NUMBER	DESCRIPTION
ALY 3SSGATE	3" ANSI Flanged 304 Stainless Steel gate valve
ALY 4SSGATE	4" ANSI Flanged 304 Stainless Steel gate valve
ALY 6SSGATE	6" ANSI Flanged 304 Stainless Steel gate valve
ALY 8SSGATE	8" ANSI Flanged 304 Stainless Steel gate valve

FACILITY LAYOUT AND DESIGN



Wanting to build a new fertilizer mix plant, agri-chemical retail facility, and/or tank farm? MEI has a team of expert engineers on staff who have helped agri-businesses across North America do just that.

Our team understands what it takes to manufacture fertilizer and handle crop chemicals. We are happy to sit down with your team and discuss your goals, requirements, restrictions, and growth plans to design a solution unique to your business and backed by proven technology.

ACTUATED VALVES

ELECTRIC ACTUATED VALVES

Centerline Electric Actuated Stainless Steel Butterfly Valves

Spring-return butterfly valve with a 110 volt actuator mounted directly on top of the valve. Cast iron body, 316 stainless steel disc and shaft, and EPDM seat.

Operating Pressure: 150 PSI



PART NUMBER	SIZE	CYCLE TIME
CLV 3ELECTRIC	3"	13 sec
CLV 4ELECTRIC	4"	25 sec

Inline Electric Actuated Stainless Steel Ball Valves

Spring-return Inline stainless steel full port ball valve with a 110 volt actuator mounted directly to valve. 316 stainless steel, ball, stem and PTFE seats and stem seals.

Operating Pressure: 1000 PSI



PART NUMBER	SIZE	CYCLE TIME
INL 1SSEA	1" FNPT	5 sec
INL 11/2SSEA	1 1/2" FNPT	5 sec

Gould Electric Actuated Stainless Steel Solenoid Valves

Stainless steel poppet solenoid valve with 110 Volt actuator. 304 stainless steel with PTFE discs and piston rings.

Operating Pressure: 5-300 PSI



PART NUMBER	SIZE	CYCLE TIME
GLD TYPEK2-3/4	3/4" FNPT	Fast acting
GLD TYPEK2-1	1" FNPT	Fast acting

ELECTRIC ACTUATORS

Centerline Electric Actuator

110 Volt electric actuator for mounting on Centerline Butterfly Valves



PART NUMBER	SIZE	CYCLE TIME
CLV 44005-05A	3"	13 sec
CLV 44200-10A	4"	25 sec
CLV 44300-20A	6"	25 sec

AIR ACTUATED VALVES

Centerline Air Actuated Stainless Steel Butterfly Valves

Butterfly valve with a dual-acting air actuator mounted directly on top of the valve. Cast iron body, 316 stainless steel disc and shaft, and EPDM seat.

Operating Pressure: 150 PSI



PART NUMBER	SIZE	CYCLE TIME
CLV 2VALVEAA	2" Flanged	Fast acting
CLV 3VALVEAA	3" Flanged	Fast acting
CLV 4VALVEAA	4" Flanged	Fast acting
CLV 6VALVEAA	6" Flanged	Fast acting
CLV 8VALVEAA	8" Flanged	Fast acting

Inline Air Actuated Stainless Steel Ball Valves

Inline stainless steel ball valve with a dual-acting actuator mounted directly to valve. 316 stainless steel body, ball, stem and PTFE seats and stem seals.

Operating Pressure: 1000 PSI



PART NUMBER	SIZE	CYCLE TIME
INL 1/2SSAA	1/2" FNPT	Fast acting
INL 3/4SSAA	3/4" FNPT	Fast acting
INL 1SSAA	1" FNPT	Fast acting
INL 11/2SSAA	1 1/2" FNPT	Fast acting
INL 2SSAA	2" FNPT	Fast acting

LIMIT SWITCH FOR AIR ACTUATOR

Crane CCA Series Limit Switch

Limit switch assembly to mount atop Centerline Air Actuated Butterfly Valves.



PART NUMBER	DESCRIPTION
ELM CCAF01200E	Local and remote indication of whether valve is open or closed. UL/CUL Approved. NEMA 4 & NEMA 4X Rated.

CONTROL VALVES & ACCESSORIES

BOSCH AIR CONTROL & ACCESSORIES

Bosch Electric Air Control Valve

Direct air pressure to air actuated process valves from a remote location with this electric-over-air control valve.



PART NUMBER	DESCRIPTION
BRV 0820038119	110 Volt Bosch control valve

Bosch Electric Air Control Valves & Manifold Assemblies

110 Volt Bosch control valve & manifold assembly



PART NUMBER	DESCRIPTION
BRV 4TC08-ASY	For controlling 4 air valves
BRV 6TC08-ASY	For controlling 6 air valves
BRV 8TC08-ASY	For controlling 8 air valves
BRV 10TC08-ASY	For controlling 10 air valves

HUMPHREY AIR CONTROL ACCESSORIES

Humphrey Electric Air Control Valve

Direct air pressure to air actuated process valves from a remote location with this electric-over-air control valve.



PART NUMBER	DESCRIPTION
HUM M410-70	110 Volt Humphrey adjustable control valve

MAC AIR CONTROL VALVES & ACCESSORIES

Electric Air Control Valve

Direct air pressure to air actuated process valves from a remote location with this electric-over-air control valve.



PART NUMBER	DESCRIPTION
NEF MAC-ELECT	110 Volt electric air control valve for MAC Air Valve Manifold

Manual Air Control Valves

Direct air pressure to air actuated process valves from a remote location with this manual air control valve.



PART NUMBER	DESCRIPTION
NEF MACVALVE	Manual air control valve for MAC Air Valve Manifold
NEF CO42503	Manual throttling valve for NEF MACVALVE

Manifolds

If your system requires numerous air actuated valves, MAC air control valves can be manifolded together, simplifying pneumatic connections.



PART NUMBER	DESCRIPTION
NEF MANIFOLD10	MAC Air Valve Manifold for 10 Valves
NEF MANIFOLD20	MAC Air Valve Manifold for 20 Valves

Manifold Fittings

Additional fittings for the MAC Manifold

PART NUMBER	DESCRIPTION
NEF 17113-01	BUNA O-rings to seal the connection of the MAC valves
NEF 35249	Mounting bolt to secure valves to manifold
NEF M-08008	Blanking plate to block off extra manifold openings

CONTROL VALVES & ACCESSORIES (CONT.)

AIR LINE FITTINGS & TUBING

These fittings are made of food-grad acetal tubing and offer tight connections, easy no tool assembly, and easy disassembly.

NPT Coupler



PART NUMBER	DESCRIPTION
AIR MC53218	1/8" NPT x 5/32" Tube Coupler
AIR MC14018	1/8" NPT x 1/4" Tube Coupler
AIR MC53214	1/4" NPT x 5/32" Tube Coupler
AIR MC14014	1/4" NPT x 1/4" Tube Coupler

NPT 90° Elbow Coupler



PART NUMBER	DESCRIPTION
AIR ME14018	1/8" NPT x 1/4" Tube Coupler 90° Elbow
AIR ME14014	1/4" NPT x 1/4" Tube Coupler 90° Elbow

Union Coupler



PART NUMBER	DESCRIPTION
AIR UC532	5/32" Tube Coupler x 5/32" Tube Coupler
AIR UC140	1/4" Tube Coupler x 1/4" Tube Coupler

Union 90° Elbow Coupler



PART NUMBER	DESCRIPTION
AIR ULC532	5/32" Tube Coupler x 5/32" Tube Coupler 90° Elbow
AIR ULC140	1/4" Tube Coupler x 1/4" Tube Coupler 90° Elbow
AIR ULC380	3/8" Tube Coupler x 3/8" Tube Coupler 90° Elbow
AIR ULC120	1/2" Tube Coupler x 1/2" Tube Coupler 90° Elbow

Union Tee Coupler



PART NUMBER	DESCRIPTION
AIR UTC532	5/32" Tube Coupler x 5/32" Tube Coupler Tee
AIR UTC140	1/4" Tube Coupler x 1/4" Tube Coupler Tee
AIR UTC380	3/8" Tube Coupler x 3/8" Tube Coupler Tee
AIR UTC120	1/2" Tube Coupler x 1/2" Tube Coupler Tee

NPT Tube



PART NUMBER	DESCRIPTION
AIR MT14018	1/8" NPT x 1/4" Tube
AIR MT53218	1/8" NPT x 5/32" Tube
AIR MT53214	1/4" NPT x 5/32" Tube
AIR MT14014	1/4" NPT x 1/4" Tube

Coupler Plug



PART NUMBER	DESCRIPTION
AIR TP532	Plug for 5/32" Tube Coupler
AIR TP140	Plug for 1/4" Tube Coupler
AIR TP380	Plug for 3/8" Tube Coupler



CONTROL VALVES & ACCESSORIES (CONT.)

AIR LINE FITTINGS & TUBING (CONT.)

Tube Bulkhead Union



PART NUMBER	DESCRIPTION
AIR BUC140140	¼" NPT x ¼" Tube

Tube Adjuster



PART NUMBER	DESCRIPTION
AIR 1/4ADJUST	¼" NPT x ¼" Tube Air Flow Adjuster
AIR 1/4ADJ-UN	¼" Union Air Flow Adjuster

Single Air Tubing



PART NUMBER	DESCRIPTION
AIR TUBINGX500	5/32" Tubing per foot
AIR 1/4TUBINGB	¼" Tubing per foot

Double Air Tubing



PART NUMBER	DESCRIPTION
AIR 2MP14-1000	¼" x 1000' Roll of Double Air Tubing
AIR 2MP14-500	¼" x 500' Roll of Double Air Tubing

FILTERS

RTI Eliminator



PART NUMBER	DESCRIPTION
RTI ELIMINIZER	¼" FNPT Air filter and water separator with auto drain and bracket. Removes water and dirt to 1 micron.
AIR 1/4RTISYST	RTI ELIMINIZER with ¼" air regulator, ¼" Stainless Steel valve, and air connection fittings.

Filter-Regulator-Lubricator Kits

Filter/Regulator/Lubricator. Includes 40 micron filter, pressure gauge, and lubricator.



PART NUMBER	DESCRIPTION
AIR 1/4FRL-WLK	¼" FNPT and lubricator includes adjustable drip control
AIR 3/8FRL-WLK	⅜" FNPT and lubricator includes adjustable drip control
AIR 1/2FRL-WLK	½" FNPT and lubricator includes adjustable drip control

LOADING SYSTEMS - SWIVEL JOINTS

OPW 3800 SERIES

Style 20 – Straight Single Rotation Plane

Ductile iron swivel joint with Buna seals.



PART NUMBER	DESCRIPTION
OPW 3820-2	2" FNPT
OPW 3820-3	3" FNPT

Style 30 – 90° Single Rotation Plane

Ductile iron swivel joint with Buna seals.



PART NUMBER	DESCRIPTION
OPW 3830-2	2" FNPT
OPW 3830-3	3" FNPT
OPW 3830-4	4" FNPT

Style 40 – 180° Single Rotation Plane

Ductile iron swivel joint with Buna seals.



PART NUMBER	DESCRIPTION
OPW 3840-2	2" FNPT
OPW 3840-3	3" FNPT
OPW 3840-4	4" FNPT

Style 50 – 180° 2 Rotation Planes

Ductile iron swivel joint with Buna seals.



PART NUMBER	DESCRIPTION
OPW 3850-2	2" FNPT
OPW 3850-3	3" FNPT

Style 60 – 90° 2 Rotation Planes

Ductile iron swivel joint with Buna seals.



PART NUMBER	DESCRIPTION
OPW 3860-2	2" FNPT
OPW 3860-3	3" FNPT



SYSTEM COMPONENTS -
LOADING SYSTEMS

LOADING SYSTEMS - TRUCK & RAIL CAR

TRUCK - OVERHEAD LOADOUT

Telescoping Loadout System

This telescoping loadout system connects to overhead loadout plumbing. It telescopes from 5' 5" to 13' 11". It is designed to adapt to many different loading positions.



PART NUMBER	DESCRIPTION
MLS 430-4	4" Telescoping top feed assembly (5' 5" to 13' 11" telescope)

Overhead Loadout System

Loading swivel with 82" 304 stainless steel loading arm that swivels horizontally and vertically locking in 3 separate positions.



PART NUMBER	DESCRIPTION
OPW 58-3RH	3" Upfeed right-hand assembly
OPW 56-3LH	3" Upfeed left-hand assembly
OPW 58-4RH	4" Upfeed right-hand assembly
OPW 56-4LH	4" Upfeed left-hand assembly

Top feed and bottom feed swivels are available. Call for details.

RAIL CAR

Ductile Iron Tank Adapters



PART NUMBER	SIZE	MATERIAL
MOR 2075X3	5" Swivel nut x 3" NPT	Ductile Iron

Aluminum & Stainless Steel Tank Car Adapters



PART NUMBER	SIZE	MATERIAL
DIX ATCT30	5" Swivel nut x 3" NPT	Aluminum
DIX ATCT40	5" Swivel nut x 4" NPT	Aluminum
DIX RTCA30	5" Swivel nut x 3" NPT	316 Stainless Steel
DIX RTCA40	5" Swivel nut x 4" Male Camlock	316 Stainless Steel

Wrench for Tank Car Adapters



PART NUMBER	DESCRIPTION
MOR 207-WRENCH	Wrench for ductile iron tank adapters
DIX G10	Wrench for aluminum tank adapters
DIX LHW	Tank car handle/long wrench for stainless steel tank adapters

Air Eliminator



PART NUMBER	DESCRIPTION
CHM AE-ASSY	3/4" FNPT air eliminator

SCALES & SCALE ACCESSORIES

FLOOR SCALES

4' x 4' Rice Lake Rough Deck Floor Scales

4' x 4' Calibrated 5,000 lbs NTEP-Approved Platform Scale with 480 Indicator. The all stainless steel NEMA 4x/IP66 wash down enclosure ensures longevity in harsh environments. Factory-calibrated, this scale provides easy installation and setup.



PART NUMBER	DESCRIPTION
RLS 155666-1	With a printer
RLS 155666	Without a printer

5' x 5' Rice Lake Rough Deck Floor Scales

5' x 5' Calibrated 5,000 lbs NTEP-Approved Platform Scale with 480 Indicator. The all stainless steel NEMA 4x/IP66 wash down enclosure ensures longevity in harsh environments. Factory-calibrated, this scale provides easy installation and setup.



PART NUMBER	DESCRIPTION
RLS 76310-1480	With a printer
RLS 76310-480	Without a printer

5' x 7' Rice Lake Rough Deck Floor Scales

5' x 7' Calibrated 10,000 lbs NTEP-Approved Platform Scale with 480 Indicator. The all Stainless Steel NEMA 4x/IP66 wash down enclosure ensures longevity in harsh environments. Factory-calibrated, this scale provides easy installation and setup.



PART NUMBER	DESCRIPTION
RLS 76310-1480	With a printer
RLS 76310-480	Without a printer

INDICATORS

Rice Lake 480 Indicator

This cost-effective indicator is compatible with Rice Lake scales. It features a extra-large display for convenience and to reduce operator error.



PART NUMBER	DESCRIPTION
RLS 126564	Rice Lake 480 6-Digit LED Scale Indicator

PRINTERS

Epson Printers

Print loading tickets with these proven printers.



PART NUMBER	DESCRIPTION
ICS EPSON-SLIP	Epson slip printer for load tickets
ICS EPSON-ROLL	Epson roll printer for load tickets

PRINTER ROLLS & TICKETS

Thermal Roll Paper

Compatibilities: Rice Lake Thermal Roll Printer (RLS 66642)



PART NUMBER	DESCRIPTION
RLS 66653	Thermal paper rolls for roll printers

Carbon Copy Forms

Carbon copy forms for Veeder Root mechanical printers. 200 per pack. 2 ply.



PART NUMBER	DESCRIPTION
TCS 1-310215	Displays gallons
TCS 1-310215L	Displays liters





PIPE FITTINGS & ACCESSORIES

Need replacement parts or additional accessories? Murray keeps the parts you need onhand to ensure you continue to get the most out of your investment.

PIPE

*To get part number of fitting: replace *** with desired fitting size. For example, PVC P*** could be PVC P2.

20' & 40' PIPE



*PART NUMBER	MATERIAL	SIZES	LENGTH
S4P IPE ***SCH10	304 Stainless Steel Schedule 10 Pipe	2" – 6"	20'
S4P IPE ***SCH40	304 Stainless Steel Schedule 40 Pipe	2" – 6"	20'
S6P IPE***SCH10	316L Stainless Steel Schedule 10 Pipe	2" – 6"	20'
S6P IPE ***SCH40	316L Stainless Steel Schedule 40 Pipe	2" – 6"	20'
PVC ***INPVPIPE	PVC Schedule 80 Pipe	2" – 6"	20'
DPP ***	HDPE SDR11 Pipe	2" – 6"	40'
DPP ***	HDPE SDR11 Double Wall Pipe	4" x 8" – 8" x 12"	40'

HDPE SDR11 PIPE FUSION MACHINE*



PART NUMBER	DESCRIPTION
DPR 14MACHKIT	Machine fuses HDPE SDR11 pipe. Machine includes 2", 3", and 4" dies
DPR 16MACHKIT	DPR 14MACHKIT, but also includes 6" dies.

*Rental Machines Available

BENEFITS OF HDPE SDR11 PIPE



HDPE SDR11 is the ideal pipe for chemical and fertilizer transfer. This polyethylene pipe is lightweight, flexible, and chemical and abrasion resistant. It will not rust, rot, or corrode. It is resistant to agriculture chemicals and acid. And, it saves greatly in labor costs versus welded steel pipe.

Heat fusion coupling design provides years of leak-free service. Heat fusion produces a fused joint stronger than the pipe itself. The fusion is done with a special machine that can be purchased separately. This design also enables you to easily add new lines or fittings.

To learn more about HDPE SDR11 pipe and the benefits to your specific operations, call us today. (260) 484-0382.

HDPE SDR11 FITTINGS

*To get part number of fitting: replace *** with desired fitting size. For example, DPF L*** could be DPF L2.

90° Elbow – Short Radius



*PART NUMBER	MATERIAL	SIZES
DPF L***	HDPE SDR11	2" - 6"

45° Elbow



*PART NUMBER	MATERIAL	SIZES
DPF L***45	HDPE SDR11	2" - 6"

Tee



*PART NUMBER	MATERIAL	SIZES
DPF T***	HDPE SDR11	2" - 6"

Transition Fitting (Pipe to MNPT)



*PART NUMBER	MATERIAL	SIZES
DPF TF***	HDPE SDR11	2" - 6"

Transition Fitting (Pipe to Hose Barb)



*PART NUMBER	MATERIAL	SIZES
DPF TF***HB	HDPE SDR11	2" - 4"

Concentric Reducer



*PART NUMBER	MATERIAL	SIZES
DPF R***	HDPE SDR11	3" x 2" - 6" x 4"

Flange Adapters



*PART NUMBER	MATERIAL	SIZES
DPF FA***	HDPE SDR11	2" - 6"

Iron Backup Ring



*PART NUMBER	MATERIAL	SIZES
DPF BR***	HDPE SDR11	2" - 6"

45 Degree Wye



*PART NUMBER	MATERIAL	SIZES
DPF Y***	HDPE SDR11	3" - 4"

DON'T SEE WHAT YOU NEED?



If you don't see what you need, call us. All material and sizes of fittings are available. If they are made, we can source them.

Call us at (260) 484-0382 with your request, and we'd be happy to supply them to you.

Our catalog lists the most commonly requested fittings that we actively stock on our shelves. However, our full availability of fittings is much more extensive.

METAL & POLY THREADED PIPE FITTINGS

*To get part number of fitting: replace *** with desired fitting size. For example, S4L *** could be S4L 2.

90° Elbow



*PART NUMBER	MATERIAL	SIZES
S4L ***	304 Stainless Steel	¼" - 4"
S6L ***	316 Stainless Steel	¼" - 4"
PLY L***	Polypropylene	½" - 3"
ALL ***	Aluminum	½" - 3"

45° Elbow



*PART NUMBER	MATERIAL	SIZES
S4L ***X45	304 Stainless Steel	¼" - 4"
S6L ***X45	316 Stainless Steel	¼" - 4"
ALL ***X45	Aluminum	½" - 2"

90° Street Elbow



*PART NUMBER	MATERIAL	SIZES
S4L S***	304 Stainless Steel	¼" - 4"
S6L S***	316 Stainless Steel	¼" - 4"
PLY LS***	Polypropylene	¾" - 3"

Tee



*PART NUMBER	MATERIAL	SIZES
S4T ***	304 Stainless Steel	¼" - 4"
S6T ***	316 Stainless Steel	¼" - 4"
ALT ***	Aluminum	½" - 3"

Coupling



*PART NUMBER	MATERIAL	SIZES
S4C ***	304 Stainless Steel	1/8" - 4"
S6C ***	316 Stainless Steel	1/8" - 4"
PLY C***	Polypropylene	½" - 3"
ALC ***	Aluminum	¼" - 4"

Forged steel fittings rated at 2000 PSI, all others at 150 PSI.

Union



*PART NUMBER	MATERIAL	SIZES
S4U ***	304 Stainless Steel	¼" - 4"
S6U ***	316 Stainless Steel	¼" - 4"

Cap



*PART NUMBER	MATERIAL	SIZES
S4C AP***	304 Stainless Steel	⅛" - 4"
S6C AP***	316 Stainless Steel	⅛" - 4"
PLY CAP***	Polypropylene	¾" - 3"

Plug



*PART NUMBER	MATERIAL	SIZES
S4P ***	304 Stainless Steel	⅛" - 4"
S6P ***	316 Stainless Steel	⅛" - 4"
PLY P***	Polypropylene	½" - 3"

Cross



*PART NUMBER	MATERIAL	SIZES
S4C ROS***	304 Stainless Steel	¼" - 4"
S6C ROS***	316 Stainless Steel	¼" - 4"
PLY CROS***	Polypropylene	¾" - 2"

Reducing Coupling



*PART NUMBER	MATERIAL	SIZES
S4C R***	304 Stainless Steel	¼" x ⅛" - 4" x 1"
S6C R***	316 Stainless Steel	¼" x ⅛" - 4" x 1"
PLY CR***	Polypropylene	1" x ¾" - 3" x 2"

METAL & POLY THREADED PIPE FITTINGS (CONT.)

*To get part number of fitting: replace *** with desired fitting size. For example, S4F*** could be S4F 2.

Bushing



*PART NUMBER	MATERIAL	SIZES
S4B ***	304 Stainless Steel	¼" x ⅛" - 4" x 1"
S6B X***	316 Stainless Steel	¼" x ⅛" - 4" x 1"
PLY B***	Polypropylene	½" x ¼" - 4" x 3"
ALB ***	Aluminum	¾" x ½" - 4" x 3"



*PART NUMBER	MATERIAL	SIZES
S4F ***B	304 Stainless Steel	1 ½" - 6"
S6F ***B	316 Stainless Steel	1 ½" - 8"

Reducing Flange



*PART NUMBER	MATERIAL	SIZES
S4F R***	304 Stainless Steel	2 x 1 ½" - 4" x 3"

Nipple



*PART NUMBER	MATERIAL	SIZES
S4N ***	304 Stainless Steel	¼" x Close - 6" x Close
S6N ***	316 Stainless Steel	¼" x Close - 6" x Close
PLY N***	Polypropylene	½" x Close - 3" x 6"
ALN ***	Aluminum	½" x Close - 4" x 6"

Lap Joint



*PART NUMBER	MATERIAL	SIZES
S4F LAPJOINT***	304 Stainless Steel	1" - 8"
S6F LAPJOINT***	316 Stainless Steel	6"

Flange



*PART NUMBER	MATERIAL	SIZES
S4F ***	304 Stainless Steel	1 ½" - 6"
S6F ***	316 Stainless Steel	¾" - 4"
PLY F***	Polypropylene	1 ½" - 4"
ALF ***	Aluminum	1 ½" - 3"

Blind Flange

ON-HAND INVENTORY



Murray Equipment keeps a large inventory of parts on-hand to ship on demand. We understand our customers' businesses require minimal downtime. So, not only do we ensure each system part is designed to withstand chemical and environmental wear, we also keep our shelves stocked with replacement parts.

Your success is our success. That's why a good portion of our 100,000 square foot facility is dedicated to housing inventory.

PIPE SEALERS

MULTI-PURPOSE

Rectorseal No. 5

Multi-purpose pipe thread compound for lines carrying liquids and gasses such as petroleum herbicides, NH₃, and nitrogen. Slow drying and soft set. Not for use with concentrated acids.



PART NUMBER	DESCRIPTION
REC 5-1/4PT	¼ pint
REC 5-1PT	1 pint

Rectorseal T Plus 2 PTFE Paste

Multi-purpose non-setting pipe thread sealer for use on threaded Iron, Aluminum, Stainless Steel, Polyethylene, and PVC.



PART NUMBER	DESCRIPTION
REC TPLUS2-1PT	1 pint

PTFE Thread Tape Pipe Joint Sealer

Multi-purpose PTFE thread tape. Handles most chemicals. Roll contains 520 inches.



PART NUMBER	DESCRIPTION
REC TEFTAPE1/2	½" wide
REC TEFTAPE3/4	¾" wide
REC TEFTAPE1	1" wide

STAINLESS STEEL

Loctite 567

Multi-purpose thread sealant. Recommended for Stainless Steel threads.



PART NUMBER	DESCRIPTION
REC LOCTITE50	1.69 oz.
REC LOCTITE	8.45 oz.

Loctite 7649

Primer spray to be used with Loctite 567 to reduce cure time.



PART NUMBER	DESCRIPTION
SBD DEF-PRIMER	.88 oz.

NH₃

PLS 2 Thread Seal

Pipe thread and gasket sealer designed for use with pipes carrying liquid and gaseous ammonia (NH₃).



PART NUMBER	DESCRIPTION
JCS 21LB	¼ pint

FASTENERS

Rectorseal Moly-Rich Anti-Seize

Anti-seizing compound that prevents seizing and galling of threads. Will not squeeze out of threads, gum up, or wash off. It permits fast, easy disassembly, even after lengthy service under severe conditions.



PART NUMBER	DESCRIPTION
REC ANTISEIZE	1 pint

PVC

Rectorseal Primer/Cleaner

Primer/cleaner that prepares PVC connections for glue joint.



PART NUMBER	DESCRIPTION
REC 1PTPRIMER	1 pint
REC 1QTPRIMER	1 quart

Rectorseal Cement

Slow-setting PVC cement. For use on PVC pipe up to 12".



PART NUMBER	DESCRIPTION
REC 1/2PTGLUE	½ pint
REC 1PTGLUE	1 pint
REC 1QTGLUE	1 quart

WELD FITTINGS

*To get part number of fitting: replace *** with desired fitting size. For example, S4 LWELDELLR*** could be S4 LWELDELLR3.

90° Elbow – Short Radius



PART NUMBER	MATERIAL	SIZES
S4L WELD***10SR	304 Stainless Steel Schedule 10	3"

90° Elbow – Long Radius



PART NUMBER	MATERIAL	SIZES
TLF WELDELLR***	Carbon Steel Schedule 40	3" - 6"
S4L WELD***SCH10	304 Stainless Steel Schedule 10	1 ½" - 8"
S4L WELD***SCH40	304 Stainless Steel Schedule 40	1 ½" - 4"
S6L WELD***SCH10	316 Stainless Steel Schedule 10	1" - 8"
S6L WELD***SCH40	316 Stainless Steel Schedule 40	1 ½" - 4"

45° Elbow



PART NUMBER	MATERIAL	SIZES
TLF WL***X45S80	Carbon Steel Schedule 40	3"
S4L WLD***X45-10	304 Stainless Steel Schedule 10	1" - 8"
S6 WLD***X45-10	316 Stainless Steel Schedule 10	2" - 4"
S6 WLD***X45-40	316 Stainless Steel Schedule 40	4"

Tee



PART NUMBER	MATERIAL	SIZES
TLF WELDTTEE***	Carbon Steel Schedule 40	3" - 6"
S4T WELD***SCH10	304 Stainless Steel Schedule 10	1 ½" - 8"
S4T WELD***SCH40	304 Stainless Steel Schedule 40	2" - 4"
S6T WELD***S10	316 Stainless Steel Schedule 10	1 ½" - 8"
S6T WELD***S40	316 Stainless Steel Schedule 40	2" - 4"

Cap



PART NUMBER	MATERIAL	SIZES
TLF WELDCAP***	Carbon Steel Schedule 40	3" - 6"
S4C APWELD***S10	304 Stainless Steel Schedule 10	3"

Eccentric Reducer



PART NUMBER	MATERIAL	SIZES
TLF ER***	Carbon Steel Schedule 40	4" x 3" - 6" x 4"
S4C RWEL***ECC	304 Stainless Steel Schedule 40	6" x 4"
S6C RWEL***ECC	316 Stainless Steel Schedule 10	4" x 3" - 6" x 4"

Concentric Reducer



PART NUMBER	MATERIAL	SIZES
TLF CONR***	Carbon Steel Schedule 40	3" x 2" - 8" x 6"
S4C RWEL***-10	304 Stainless Steel Schedule 10	2" x 1" - 6" x 4"
S4C RWEL***-40	304 Stainless Steel Schedule 40	3" x 2" - 4" x 3"
S6C RWEL***-10	316 Stainless Steel Schedule 10	1 ½" x 1" - 8" x 6"
S6C RWEL***-40	316 Stainless Steel Schedule 40	1 ½" x 1" - 4" x 2"

Slip On Flange



PART NUMBER	MATERIAL	SIZES
FSF ***S	Carbon Steel Schedule 40	2" - 6"
S4F ***S	304 Stainless Steel	1" - 8"
S6F ***S	316 Stainless Steel	1 ½" - 8"

Stub End



PART NUMBER	MATERIAL	SIZES
S4S TUB***SCH10	304 Stainless Steel	1" - 8"
S6S TUB***SCH10	316 Stainless Steel	3" - 6"

Hose Barb/King Nipple Plain End



PART NUMBER	MATERIAL	SIZES
DIX HBS-***P	316 Stainless Steel	½" - 8"

CAMLOCKS

To get part number of fitting:** replace *** with desired fitting size as stated in 100s. For example, CAM B-ALS could be CAM B-ALS-075 (3/4") or CAM B-ALS-150 (1 1/2") or CAM B-ALS-200 (2"), etc.

Style A: Male Adaptor/FNPT



*PART NUMBER	MATERIAL	SIZES
BAN ***-A	Polypropylene	¼" – 3"
BAN 400-A	Polypropylene	4"
CAM A-AL-***	Aluminum	1" – 6"
CAM A-SS-***	Stainless Steel	1" – 4"

Style A-90: Male Adaptor/FNPT 90° Elbow



*PART NUMBER	MATERIAL	SIZES
BAN 150A-90	Polypropylene	1 ½"
BAN 200A-90	Polypropylene	2"

Style B: NPT/Female Coupler



*PART NUMBER	MATERIAL	SIZES
BAN ***-B	Polypropylene	¾" – 3"
BAN 400-B	Polypropylene	4"
CAM B-ALS-***	Aluminum	¾" – 4"
CAM B-SS-***	Stainless Steel	¾" – 4"

Style C: Female Coupler/Hose Barb



*PART NUMBER	MATERIAL	SIZES
BAN ***-C	Polypropylene	1" – 3"
BAN 075-C	Polypropylene	¾"
BAN 400-C	Polypropylene	4"
CAM C-ALS-***	Aluminum	¾" – 4"
CAM C-SS-***	Stainless Steel	¾" – 4"

Style C-90: Female Coupler/Hose Barb 90° Elbow



*PART NUMBER	MATERIAL	SIZES
BAN 150C-90	Polypropylene	1 ½"
BAN 200C-90	Polypropylene	2"

Style D: Female Coupler/FNPT



*PART NUMBER	MATERIAL	SIZES
BAN ***-D	Polypropylene	¾" – 3"
BAN 400-D	Polypropylene	4"
CAM D-ALS-***	Aluminum	¾" – 4"
CAM D-SS-***	Stainless Steel	1" – 4"

Style D-90: Female Coupler/FNPT 90° Elbow



*PART NUMBER	MATERIAL	SIZES
BAN 150D-90	Polypropylene	1 ½"
BAN 200D-90	Polypropylene	2"

Style E: Male Adapter/Hose Barb



*PART NUMBER	MATERIAL	SIZES
BAN ***-F	Polypropylene	¾" – 3"
BAN 400-E	Polypropylene	4"
CAM E-AL-***	Aluminum	1" – 4"
CAM E-SS-***	Stainless Steel	¾" – 4"

Style F: Male Adapter/NPT



*PART NUMBER	MATERIAL	SIZES
BAN ***-F	Polypropylene	¾" – 3"
BAN 400-F	Polypropylene	4"
CAM F-AL-***	Aluminum	1" – 4"
CAM F-SS-***	Stainless Steel	1" – 4"

Style F-90: Male Adaptor/NPT 90° Elbow



*PART NUMBER	MATERIAL	SIZES
BAN 150F-90	Polypropylene	1 ½"
BAN 200F-90	Polypropylene	2"

Style DP: Male Adapter Dust Plug



*PART NUMBER	MATERIAL	SIZES
BAN ***-PL	Polypropylene	¾" – 3"
BAN 400-PL	Polypropylene	4"
CAM DP-AL-***	Aluminum	1" – 4"
CAM DP-SS-***	Stainless Steel	1" – 4"

Style DC: Male Adapter Dust Cap



*PART NUMBER	MATERIAL	SIZES
BAN ***-CAP	Polypropylene	1" – 3"
BAN 075-CAP BAN 400-CAP	Polypropylene	¾" & 4"
CAM DC-ALS-***	Aluminum	¾" – 4"
CAM DC-SS-***	Stainless Steel	2" – 4"

BULK SUCTION & DISCHARGE HOSE

EPDM

Series 300 (Green)

Green EPDM rubber suction/discharge hose with polyethylene helix exterior. 50 PSI & 150° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Most fertilizers & Chemicals. Not compatible with petroleum and trifuralin based fluids.



PART NUMBER	DESCRIPTION
HOS 300EPDM-2	2"
HOS 300EPDM-3	3"

Series 390 (Black)

Black EPDM rubber suction/discharge hose with a polyethylene helix exterior and synthetic interior braiding. 100 PSI & 158° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Most fertilizers & Chemicals. Not compatible with petroleum and trifuralin based fluids.



PART NUMBER	DESCRIPTION
HOS 390SDBK-2	2"
HOS 390SDBK-3	3"

Series 2612

EPDM suction/discharge hose with 4 textile spirals and helical wire. 125 PSI & 180° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Most fertilizers & Chemicals. Not compatible with petroleum and trifuralin based fluids.



PART NUMBER	DESCRIPTION
HOS WSD1	1"
HOS EWSD11/2	1 1/2"
HOS WSD2	2"
HOS WSD3	3"
HOS WSD4	4"

PVC

Clear PVC Hose

Flexible PVC suction/discharge hose with rigid white spiral PVC helix & smooth bore inside and outside. 186 PSI & 158° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Most agricultural fertilizers and certain acids. Not recommended for agricultural chemicals. Capable of pulling full vacuum.



PART NUMBER	DESCRIPTION
HOS PVC3/4	3/4"
HOS PVC1	1"
HOS PVC11/4	1 1/4"
HOS PVC11/2	1 1/2"
HOS PVC2	2"
HOS PVC3	3"
HOS PVC4	4"

RUBBER/POLYETHYLENE

All Chemical Hose

Green synthetic rubber suction/discharge hose with cross linked polyethylene liner and reinforced with double wire helix. 200 PSI & 250° F max temperature. Priced by foot with maximum 100' rolls.



PART NUMBER	DESCRIPTION
HOS XLPE1	1"
HOS XLPE11/4	1 1/4"
HOS XLPE11/2	1 1/2"
HOS XLPE2	2"
HOS XLPE3	3"
HOS XLPE4	4"

MISCELLANEOUS BULK HOSE

DISCHARGE ONLY

EPDM

EPDM hose with woven textile spiral yarn-woven interior. 150 PSI & 150° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Most fertilizers & Chemicals. Not compatible with petroleum and trifluralin based fluids. Not for use on the suction side of a pump.



PART NUMBER	DESCRIPTION
HOS ED1/4	¼"
HOS ED3/8	⅜"
HOS ED1/2	½"
HOS ED3/4	¾"
HOS ED1	1"
HOS ED11/4	1 ¼"
HOS ED11/2	1 ½"
HOS ED2	2" and 100 PSI
HOS ED3	3" and 100 PSI
HOS ED4	4" and 100 PSI

Lay-Flat PVC

Collapsible braided blue vinyl PVC hose that can be easily rolled up for storage. 85 PSI & 158° F max temperature. Priced by foot with maximum 100' rolls.

Applications: Water or fertilizer discharge



PART NUMBER	DESCRIPTION
HOS PVCD11/2	1 ½"
HOS PVCD2	2"
HOS PVCD3	3"
HOS PVCD4	4"
HOS PVCD6	6"

SIGHT GAUGE

Clear PVC Tubing

Clear tubing. -13° to 158° F. Working pressure of 50 PSI and burst pressure of 155 PSI at 72° F. Priced by foot with maximum 100' rolls.

Applications: Site gauges for applicators & bulk tanks. Not recommended for bulk crop protection product storage tanks.



PART NUMBER	DESCRIPTION
HOS SG3/8X5/8	⅜"
HOS SG1/2X3/4	½"
HOS SG3/4X1	¾"
HOS SG1X11/4	1"
HOS SG11/4X11/2	1 ¼" maximum 50' rolls.
HOS SG11/2X2	1 ½" maximum 50' rolls.

EVA TUBING

NH3 & Liquid Fertilizer

EVA tubing. 300 max PSI & 140° F max temperature. Priced by foot with maximum 500' rolls.

Applications: NH3 & Liquid Fertilizer



PART NUMBER	DESCRIPTION
HOS EVA3/8C	⅜"

DEF HOSE

DEF Discharge Hose

Bulk DEF Hose. Priced by foot with maximum 100' rolls.

Applications: DEF use only.



PART NUMBER	DESCRIPTION
SBD DEF3/4BULK	¾"
SBD DEFID-HOSE	1"
SBD DEF11/2HOS	1 ½"

PRE-COUPLED HOSE

AGRICULTURE

EPDM

EPDM Delivery Hose

Applications: Delivery of most fertilizers & Chemicals. Not compatible with petroleum and trifuralin based fluids.



PART NUMBER	DESCRIPTION
HOS ED-1X12P	1" x 12' EPDM delivery hose with poly NPT ends. 150 PSI & 190° F max.

Solvent

Solvent Delivery Hose

Applications: Delivery of most fertilizers & Chemicals. Not compatible with petroleum and trifuralin based fluids.



PART NUMBER	DESCRIPTION
HOS 414-1X12P	1" x 12' Solvent delivery hose with poly NPT ends. 150 PSI & 190° F max.

DEF

Coupled Delivery Hose – DEF

DEF discharge hose

Applications: DEF use only.



PART NUMBER	DESCRIPTION
SBD D3/4X25S	25', 3/4" Stainless Steel MNPT both ends
SBD D3/4X15SPP	15', 3/4" Stainless Steel MNPT and 1" female BSPP
SBD D3/4X18SPP	18', 3/4" Stainless Steel MNPT and 1" female BSPP
SBD D3/4X25SPP	25', 3/4" Stainless Steel MNPT and 1" female BSPP

SHOCK & VIBRATION ABSORPTION

Steel Flanged Flex Hose

304 Stainless Steel flex hose with forged steel flanges. 150 PSI & 180°F.

Applications: Installation in fluid line to absorb shock and vibration.



PART NUMBER	DESCRIPTION
GSI FSFLEX2X18	2" ANSI flanged x 18"
GSI FSFLEX3X18	3" ANSI flanged x 18"
GSI FSFLEX4X18	4" ANSI flanged x 18"
GSI FSFLEX6X24	6" ANSI flanged x 24"
GSI FSFLEX8X24	8" ANSI flanged x 24"

Stainless Steel Flanged Flex Hose

304 Stainless Steel flex hose with Stainless Steel flanges. 150 PSI & 180°F.

Applications: Installation in fluid line to absorb shock and vibration.



PART NUMBER	DESCRIPTION
GSI SSFLEX2X18	2" ANSI flanged x 18"
GSI SSFLEX3X18	3" ANSI flanged x 18"
GSI SSFLEX4X18	4" ANSI flanged x 18"
GSI SSFLEX4X24	4" ANSI flanged x 24"
GSI SSFLEX6X24	6" ANSI flanged x 24"
GSI SSFLEX8X24	8" ANSI flanged x 24"

Coupled Delivery Hose with Spring-Rewind Reel

Spring rewind reel with 25' of hose.

Applications: DEF use only.



PART NUMBER	DESCRIPTION
SBD REEL-25	3/4" NPT Stainless Steel ends
SBD REEL-25BSP	1" Female BSPP ends

HOSE ACCESSORIES

DEF NOZZLES

Polypropylene (Mini-Bulk Only)



PART NUMBER	DESCRIPTION
SBD POLYNOZZLE	Polypropylene 1" NPT trigger nozzle (Drum and tote/IBC only)

Stainless Steel



PART NUMBER	DESCRIPTION
SBD SSNOZZLE	Stainless Steel automatic nozzle with swivel and 3/4" hose barb. (Drum and tote/IBC only)
SBD SSNOZ-3/4N	Stainless Steel automatic nozzle and 3/4" NPT
SBD OPWSSNOZZLE	OPW 21 GU-0500 Stainless Steel automatic nozzle with mis-filling prevention operation, 21 GU-SSB reconnectable breakaway and swivel combo. 1" BSPP mail threads.
SBD OPWSTDNOZ	SBD OPWSSNOZZLE, but without mis-filling prevention operation

DEF NOZZLE ACCESSORIES

Swivels & Breakaways



PART NUMBER	DESCRIPTION
SBD SSNOZ-7545	Stainless Steel 45 degree swivel and 3/4" NPT
SBD SSNOZ-75B	Stainless Steel swivel, breakaway, and 3/4" NPT. One time use.

Misfilling Prevention



PART NUMBER	DESCRIPTION
SBD OPWMFPD	DEF mis-filling prevention magnet.



ACCESSORIES -
HOSE ACCESSORIES

HOSE CLAMPS

SCREW CLAMPS

Series 60 - High Torque Stainless Steel

Stainless steel hex head with stainless steel 5/8" Band. 10 to a box.



PART NUMBER	HOSE OUTER DIAMETER
SCC 60200	1 1/4" - 2 1/8"
SCC 60250	1 3/4" - 2 5/8"
SCC 60300	2 1/4" - 3 1/8"
SCC 60350	2 3/4" - 3 5/8"
SCC 60400	3 1/4" - 4 1/8"
SCC 60450	3 3/4" - 4 5/8"
SCC 60500	4 1/4" - 5 1/8"

Series 67 Stainless Steel

Stainless steel hex head with stainless steel 1/2" band. 10 to a box.



PART NUMBER	HOSE OUTER DIAMETER
SCC U5	5/16" - 5/8"
SCC M8	7/16" - 7/8"
SCC 6	7/16" - 25/32"
SCC 8	1/2" - 29/32"
SCC 10	7/16" - 1 1/16"
SCC 12	1 1/16" - 1 1/4"
SCC 16	1 3/16" - 1 1/2"
SCC 20	1 3/16" - 1 3/4"
SCC 24	1 1/16" - 2"
SCC 28	1 5/6" - 2 1/4"
SCC 32	1 9/16" - 2 1/2"
SCC 36	1 13/16" - 2 3/4"
SCC 40	2 1/16" - 3"
SCC 48	2 9/16" - 3 1/2"
SCC 56	3 1/16" - 4"
SCC 72	4 1/8" - 5"
SCC 96	5 1/2" - 6 1/2"
SCC 104	6 1/8" - 7"

BOLT CLAMPS

Dixon T-Bolt 301 Stainless Steel Clamps



PART NUMBER	HOSE OUTER DIAMETER
DIX TBC150	1 9/32" - 1 19/32"
DIX TBC175	1 17/32" - 1 27/32"
DIX TBC188	1 21/32" - 1 31/32"
DIX TBC200	1 25/32" - 2 3/32"
DIX TBC238	2 5/32" - 2 15/32"
DIX TBC250	2 9/32" - 2 19/32"
DIX TBC256	2 11/32" - 2 21/32"
DIX TBC288	2 21/32" - 2 31/32"
DIX TBC300	2 25/32" - 3 3/32"
DIX TBC350	3 9/32" - 3 19/32"
DIX TBC375	3 17/32" - 3 27/32"
DIX TBC400	3 25/32" - 4 3/32"
DIX TBC450	4 9/32" - 4 19/32"
DIX TBC475	4 17/32" - 4 27/32"

Dixon 2 Bolt Malleable Iron Clamps



PART NUMBER	HOSE OUTER DIAMETER
DIX 400	3 1/2" - 3 13/16"
DIX 463	4 1/32" - 4 9/32"
DIX 525	4 1/4" - 4 15/16"
DIX 675	5 5/16" - 6 1/2"
DIX 769	6 1/2" - 7 9/16"

PUNCHLOCK CLAMPS

Punchlock Stainless Steel Clamps



PART NUMBER	HOSE OUTER DIAMETER
PLC 8S	2"
PLC 10S	2 1/2"
PLC 12S	3"
PLC 16S	4"
PLC 20S	5"
PLC 24S	6"
PLC 32S	8"

T-300 Center Punch



PART NUMBER	HOSE OUTER DIAMETER
BND T300	Center Punch Tool for all Punchlock Clamps

HOSE BARB/KING NIPPLES

90° HOSE BARB

Nylon Threaded King Nipples 90° Elbow



SIZE		MATERIAL/PART NUMBER
HOSE	NPT	TUFF-LITE NYLON
3/8"	1/4"	DIX TLS32
3/8"	3/8"	DIX TLS33
3/8"	1/2"	DIX TLS34
3/8"	3/4"	DIX TLS36
1/2"	1/4"	DIX TLS42
1/2"	3/8"	DIX TLS43
1/2"	1/2"	DIX TLS44
1/2"	3/4"	DIX TLS46
1/2"	1"	DIX TLS48
3/4"	3/8"	DIX TLS63
3/4"	1/2"	DIX TLS64
3/4"	3/4"	DIX TLS66
3/4"	1"	DIX TLS68
1"	3/4"	DIX TLS86
1"	1"	DIX TLS88

STRAIGHT HOSE BARB

Threaded King Nipples



SIZE		MATERIAL/PART NUMBER				
HOSE	NPT	TUFF-LITE NYLON	IRON	STAINLESS STEEL	POLYPROPYLENE	NYGLASS
1/4"	1/4"	DIX TN22				
3/8"	1/2"	DIX TN34				
1/2"	1/2"	DIX TN44	DIX HBI-1/2T	DIX HBS-1/2T		
1/2"	1/4"	DIX TN46				
3/4"	1/2"	DIX TN64				
3/4"	3/4"	DIX TN66	DIX HBI-3/4T	DIX HBS-3/4T		
3/4"	1"	DIX TN68				
1"	3/4"	DIX TN86				
1"	1"	DIX TN88	DIX HBI-1T	DIX HBS-1T	BAN HB-100	FLO 1KNG
1 1/4"	1"	DIX TN158				
1 1/4"	1 1/4"	DIX TN150	DIX HBI-11/4T	DIX HBS-11/4T		
1 1/4"	1 1/2"	DIX TN1520				
1 1/2"	1 1/4"	DIX TN2015				
1 1/2"	1 1/2"	DIX TN200	DIX HBI-11/2T	DIX HBS-11/2T	BAN HB-150	FLO 11/2KNG
2"	2"	DIX TN250	DIX HBI-2T	DIX HBS-2T	BAN HB-200	FLO 2KNG
2 1/2"	2 1/2"		DIX HBI-21/2T	DIX HBS-21/2T		
3"	3"		DIX HBI-3T	DIX HBS-3T	BAN HB-300	FLO 3KNG
4"	4"		DIX HBI-4T	DIX HBS-4T	FLO 4KNGPOLY	FLO 4KNG
6"	6"		DIX HBI-6T	DIX HBS-6T		



ACCESSORIES -
HOSE ACCESSORIES

MANIFOLDS

LIQUID FERTILIZER MANIFOLDS

3" Flanged Manifolds with 2" Flanged Product Inlets



PART NUMBER	DESCRIPTION
MAN 03546A-1	1 Product 304 Stainless Steel Manifold
MAN 03546A-2	2 Product 304 Stainless Steel Manifold
MAN 03546A-3	3 Product 304 Stainless Steel Manifold
MAN 03546A-4	4 Product 304 Stainless Steel Manifold

4" Flanged Manifolds with 3" Flanged Product Inlets



PART NUMBER	DESCRIPTION
MAN 03546B-1	1 Product 304 Stainless Steel Manifold
MAN 03546B-2	2 Product 304 Stainless Steel Manifold
MAN 03546B-3	3 Product 304 Stainless Steel Manifold
MAN 03546B-4	4 Product 304 Stainless Steel Manifold

6" Flanged Manifolds with 4" Flanged Product Inlets



PART NUMBER	DESCRIPTION
MAN 03546C-1	1 Product 304 Stainless Steel Manifold
MAN 03546C-2	2 Product 304 Stainless Steel Manifold
MAN 03546C-3	3 Product 304 Stainless Steel Manifold
MAN 03546C-4	4 Product 304 Stainless Steel Manifold

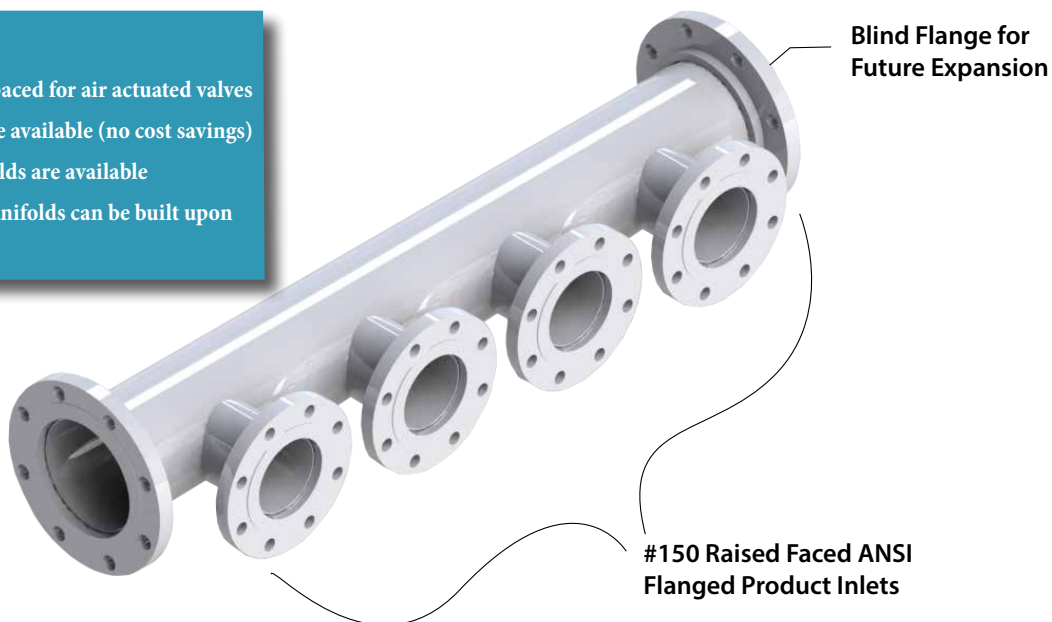
8" Flanged Manifolds with 6" Flanged Product Inlets



PART NUMBER	DESCRIPTION
MAN 03546D-1	1 Product 304 Stainless Steel Manifold
MAN 03546D-2	2 Product 304 Stainless Steel Manifold
MAN 03546D-3	3 Product 304 Stainless Steel Manifold
MAN 03546D-4	4 Product 304 Stainless Steel Manifold

NOTES:

1. Standard manifolds are spaced for air actuated valves
2. Forged Steel manifolds are available (no cost savings)
3. 316 Stainless Steel manifolds are available
4. Custom manufactured manifolds can be built upon request. Call for details.



MANIFOLDS (CONT.)

CHEMICAL INJECTION MANIFOLDS

3" Flanged Manifolds with 1" NPT Product Inlets



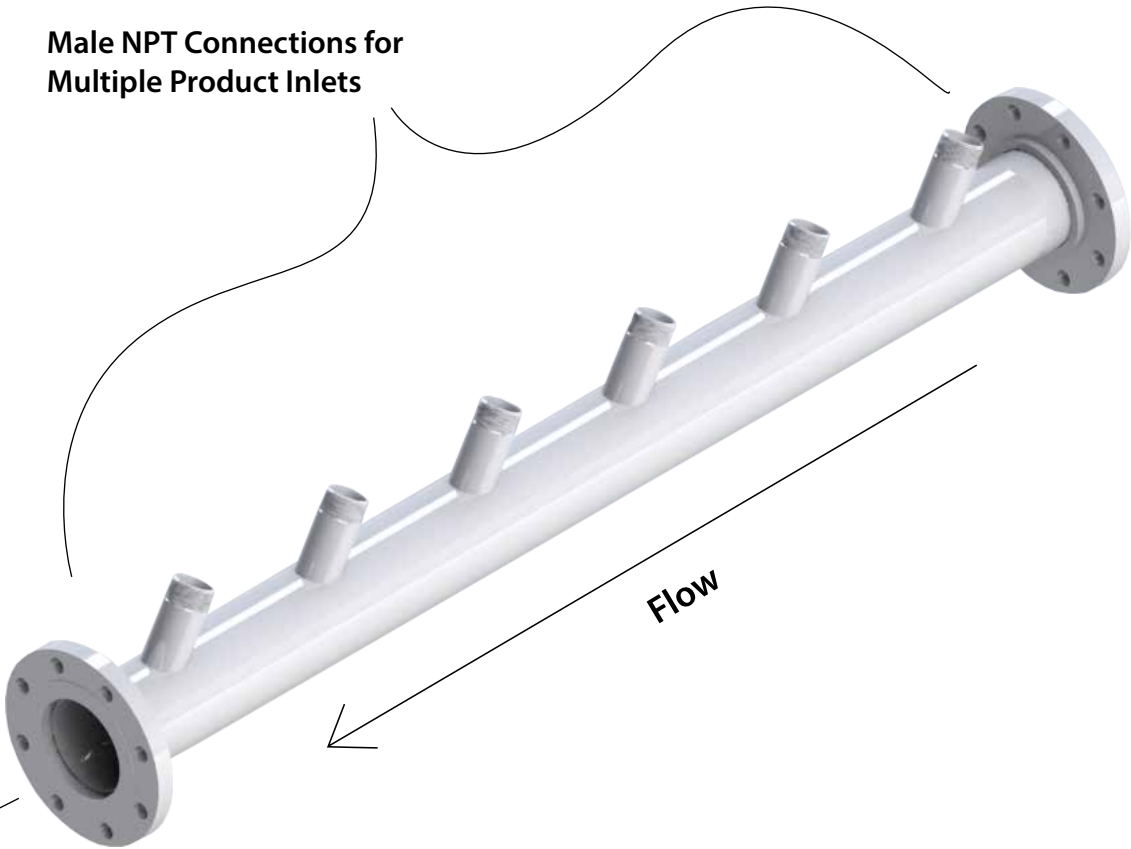
PART NUMBER	DESCRIPTION
MAN 03546E-4	4 Product 304 Stainless Steel Manifold
MAN 03546E-6	6 Product 304 Stainless Steel Manifold

4" Flanged Manifolds with 1 1/2" NPT Product Inlets



PART NUMBER	DESCRIPTION
MAN 03546F-4	4 Product 304 Stainless Steel Manifold
MAN 03546F-6	6 Product 304 Stainless Steel Manifold

Male NPT Connections for
Multiple Product Inlets



#150 Raised Faced ANSI
Flanged Connection



ACCESSORIES -
MANIFOLDS

LINE STRAINERS

HIGH CAPACITY LINE STRAINERS

Hayward Cast Iron Basket Strainer



PART NUMBER	DESCRIPTION
HAY 4LS-3	4" ANSI Flanged strainer
HAY 6LS-3	6" ANSI Flanged strainer

Thompson High Capacity Stainless Steel Strainer

Includes internal 304 Stainless Steel elbow.



PART NUMBER	DESCRIPTION
MLI MLI3-50-D	3" ANSI Flanged 200 GPM self-cleaning strainer
MLI MLI4B-50-2	4" ANSI Flanged 350 GPM self-cleaning strainer
MLI MLI6-30-2	6" ANSI Flanged 750 GPM self-cleaning strainer
MLI MLI8-30-2	8" ANSI Flanged 1300 GPM self-cleaning strainer

Proline 100 Series Bag Filter* Vessel

304 Stainless Steel



PART NUMBER	DESCRIPTION
LSC PROLINE-3	3" ANSI Flanged
LSC PROLINE-4	4" ANSI Flanged 400 GPM
LSC PROLINE-6	6" ANSI Flanged 900 GPM

316 Stainless Steel Filters



PART NUMBER	DESCRIPTION
FSI VB428709S	4" Flanged
FSI VB428713S	6" Flanged

MEI High Capacity Stainless Steel Strainer

Strainer with easy clean out bottom flush line



PART NUMBER	DESCRIPTION
MIX SPECSTR3-2	3" ANSI Flanged Strainer with .050" Perforation
MIX SPECSTR3-3	3" ANSI Flanged Strainer with 1/8" Perforation
MIX SPECSTR3-4	3" ANSI Flanged Strainer with 3/16" Perforation
MIX SPECSTR4-2	4" ANSI Flanged Strainer with .050" Perforation
MIX SPECSTR4-3	4" ANSI Flanged Strainer with 1/8" Perforation
MIX SPECSTR4-3	4" ANSI Flanged Strainer with 3/16" Perforation

Poly Filter Housing for *Poly Bags



PART NUMBER	DESCRIPTION
FSI 416014B	2" FNPT FSI X100 Filter Housing for up to 80 GPM
FSI 36017	Leg Assembly for FSI X100

*See Replacement Screens for Options

LINE STRAINERS (CONT.)

Y-LINE STRAINER

Inline 316 Stainless Steel Strainer

Strainer with 1/8" 304 Stainless Steel perforated screen



PART NUMBER	DESCRIPTION
INL 11/2SS-STR	1 1/2" FNPT strainer
INL 2SS-STR-3	2" FNPT strainer

Banjo Stainless Steel Strainer *Replaceable Stainless Steel Screens

Screens sold separately



PART NUMBER	DESCRIPTION
BAN LSS300-BE	3" FNPT strainer

Morrison 285 Cast Iron Strainer with *Replaceable 20 Mesh Stainless Steel Screen



PART NUMBER	DESCRIPTION
MOR 285-1.5-20	1 1/2" FNPT strainer
MOR 285-2	2" FNPT strainer
MOR 285-3-20	3" FNPT strainer

Banjo Polypropylene Strainer with *Replaceable 20 Mesh Stainless Steel Screen



PART NUMBER	DESCRIPTION
BAN LS-050	1/2" FNPT strainer
BAN LS-075	3/4" FNPT strainer
BAN LS-100	1" FNPT strainer
BAN LS-125	1 1/4" FNPT strainer
BAN LS-150-20	1 1/2" FNPT strainer
BAN LS-200-20	2" FNPT strainer
BAN LSM300-20	3" FNPT strainer

Banjo Polypropylene Strainer with Camlock Cap & *Replaceable 20 Mesh Stainless Steel Screen



PART NUMBER	DESCRIPTION
BAN LSQ-150-20	1 1/2" FNPT strainer
BAN LSQ-200-20	2" FNPT strainer

*See Replacement Screens for Options

OTHER STRAINERS & FILTERS



REPLACEMENT STRAINER SCREENS

Stainless Steel High Capacity Loadout Screen



PART NUMBER	DESCRIPTION
MES 2600-2	2" FNPT Loadout Screen with .05" Perforation & 4" x 2" NPT PVC Bushing
MES 2600-3	2" FNPT Loadout Screen with 1/8" Perforation & 4" x 2" NPT PVC Bushing
MES 2600-4	2" FNPT Loadout Screen with 3/16" Perforation & 4" x 2" NPT PVC Bushing

Stainless Steel Standard Loadout Screen



PART NUMBER	DESCRIPTION
MES 900-20-2	2" FNPT x 16" Screen with .05" Perforation & 4" x 2" NPT PVC Bushing
MES 900-30-2	3" FNPT x 22" Screen with .05" Perforation & 4" x 2" NPT PVC Bushing
MES 900-40-3	4" FNPT x 22" Screen with 1/8" Perforation & 4" x 2" NPT PVC Bushing
MES 900-60-3	6" FNPT x 28" Screen with 1/8" Perforation & 6" x 4" NPT PVC Bushing

TANK STRAINER

Manway Basket Strainer (304 Stainless Steel)



PART NUMBER	DESCRIPTION
MES BASK9X14S3	10" Manway Basket Strainer with 1/8" Perforation Screen. 9" Diameter x 14" Depth. 10" Seating Ring.

DEF FILTERS

DEF Stainless Steel Filter



PART NUMBER	DESCRIPTION
SBD POLYFILTER	Polypropylene 3/4" NPT filter with 1 micron cartridge

DEF Poly Filter



PART NUMBER	DESCRIPTION
SBD SSFILTER	Stainless Steel 1" NPT filter with 1 micron cartridge

REPLACEMENT SCREENS & FILTERS

BANJO

Banjo Stainless Steel Replacement Screens for Polypropylene Y-Line Strainers



PART NUMBER	DESCRIPTION
BAN LS-720	20 Mesh Stainless Steel Replacement Screen for ½" & ¾" NPT Strainers
BAN LS-120	20 Mesh Stainless Steel Replacement Screen for 1" & 1 ¼" NPT Strainers
BAN LS-220	20 Mesh Stainless Steel Replacement Screen for 1 ½" & 2" NPT Strainers
BAN LS-320	20 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer

Banjo Stainless Steel Replacement Screens for Stainless Steel Y-Line Strainers



PART NUMBER	DESCRIPTION
BAN LSS312	12 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer
BAN LSS320	20 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer
BAN LSS350	50 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer

DEF

DEF Filter Replacement Cartridge

1 Micron Filter Cartridge



PART NUMBER	DESCRIPTION
SBD 1MICRON	10"
SBD SSC1MIC20	20"
SBD SSC1MCRON	30"

Morrison 285 Y-Line Stainless Steel Replacement Screens



PART NUMBER	DESCRIPTION
MOR 285-6-1.5	6 Mesh Stainless Steel Replacement Screen for 1 ½" NPT Strainer
MOR 285-6-2	6 Mesh Stainless Steel Replacement Screen for 2" NPT Strainer
MOR 285-6-3	6 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer
MOR 285-20-1.5	20 Mesh Stainless Steel Replacement Screen for 1 ½" NPT Strainer
MOR 285-20-2	20 Mesh Stainless Steel Replacement Screen for 2" NPT Strainer
MOR 285-20-3	20 Mesh Stainless Steel Replacement Screen for 3" NPT Strainer

POLY FILTER BAGS

Poly Vessel Replacement Filter Bags



PART NUMBER	DESCRIPTION
FSI BPONG1X01	1 Micron Filter Bag
FSI BPONG10X01	10 Micron Filter Bag
FSI BPONG50X01	50 Micron Filter Bag
FSI BPONG100X0	100 Micron Filter Bag
FSI BPM0300X01	300 Micron Filter Bag

Proline Poly Vessel Replacement Filter Bags



PART NUMBER	DESCRIPTION
FSI PONG5P2P	5 Micron Filter Bag
FSI PONG10P2P	10 Micron Filter Bag
FSI PONG50P2P	50 Micron Filter Bag

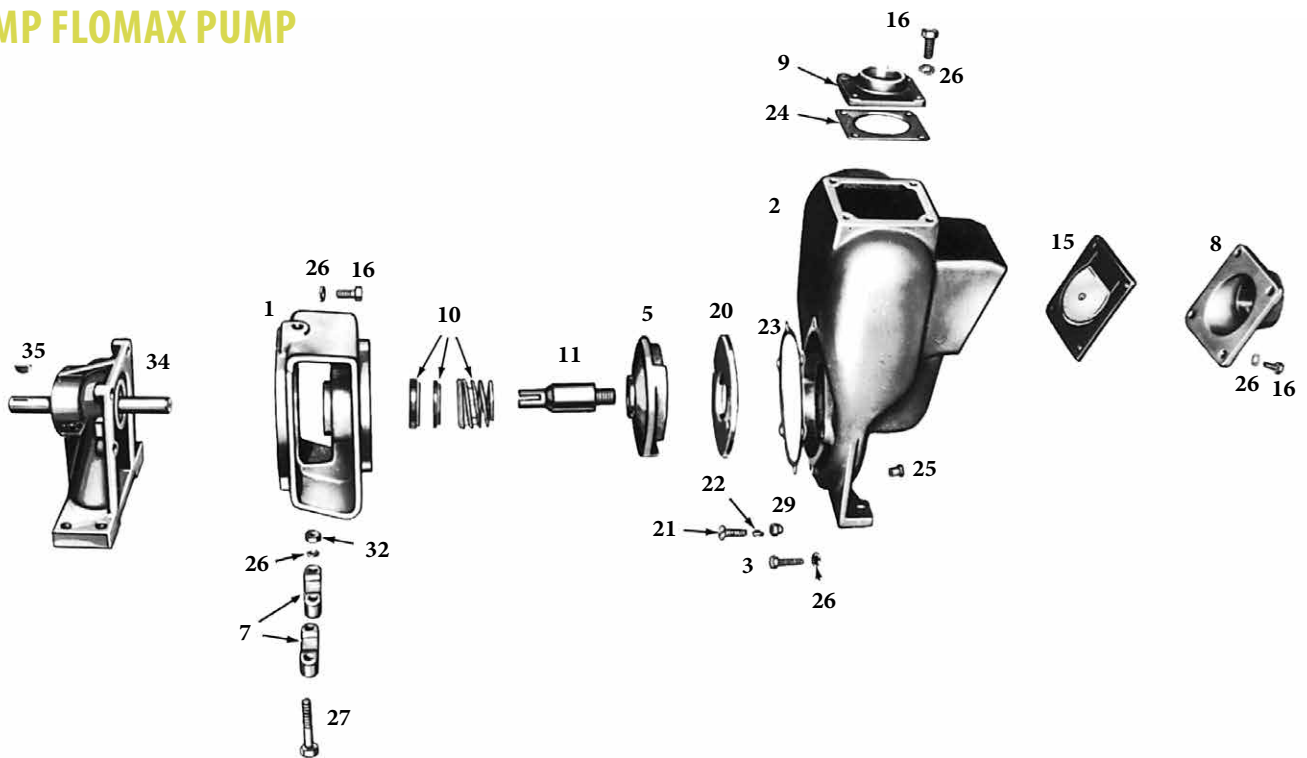


CHARTS & DIAGRAMS

Here are some handy tables, charts, and diagrams to help you figure out exactly what you need.

PUMP DIAGRAMS

MP FLOMAX PUMP



ITEM	PART NO. FLOMAX 5 & 8	PART NO. FLOMAX 10 & 15	DESCRIPTION
1	MPP 22247	MPP 22348	Adapter Cast Iron
2	MPP 23021		Housing Assembly Cast Iron
3	MPP 21243		Stud
+5	MPP 22293		Impeller
7	MPP 23002		Impeller Clamp Assembly
8	MPP 22263		Inlet Flange 1 1/2"
	MPP 22387		Inlet Flange 2"
		MPP 22369	Inlet Flange 2"
		MPP 22468	Inlet Flange 3"
9	MPP 22266		Outlet 1 1/2"
	MPP 22311		Outlet 2"
		MPP 22372	Outlet 2"
		MPP 22471	Outlet 3"
+10	MPP 22272	MPP 22361	Seal Assembly Self Lubricated
	MPP 26460	MPP 26461	Severe Service Seal
+11	MPP 22286	*	Drive Sleeve
15	MPP 23022	MPP 23040	Flapper Assy Nitrile (BUNA)
	MPP 26097	MPP 26100	Flapper EPDM
16	MPP 21242	MPP 21291	Capscrew
+20	MPP 23024	MPP 22376	Wear Plate Assembly
21	MPP 21249	MPP 21262	Flat Head Screw

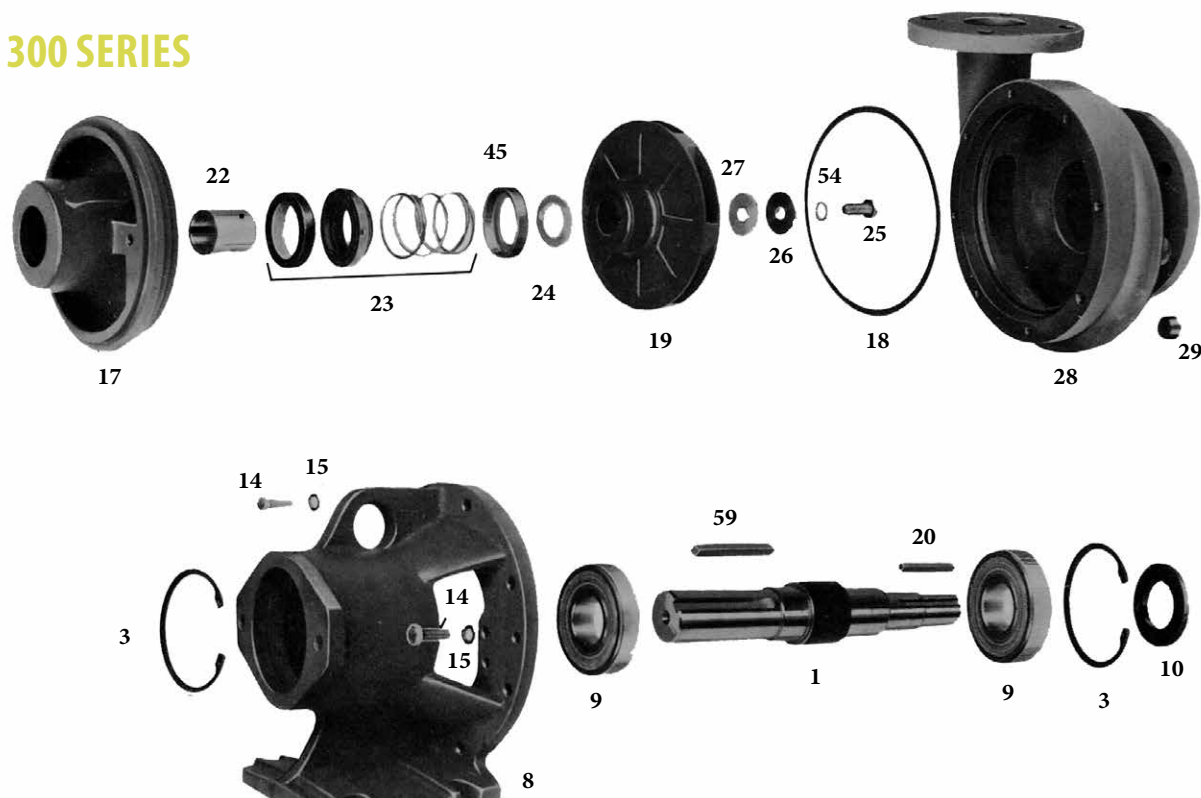
ITEM	PART NO. FLOMAX 5 & 8	PART NO. FLOMAX 10 & 15	DESCRIPTION
22	MPP 21248	MPP 21271	Annular Gasket
+23	MPP 22255	MPP 22240	Gasket
24	MPP 22256	MPP 22358	Gasket Outlet Nitrile (BUNA)
	MPP 25933	MPP 26101	Gasket Outlet EPDM
25	MPP 21267	MPP 21267	Pipe Plug
26	MPP 21238	MPP 21266	Lock Washer
27	MPP 21264	MPP 21269	Capscrew
29	MPP 21237	MPP 21263	Acorn Nut
32	MPP 21284	MPP 21268	Hex Nut
34	MPP 26142	MPP 26164	Pedestal Assembly
35	MPP 22321	MPP 22425	Woodruff Key
	MPP 22564	MPP 22566	Complete Overhaul Kit for Pedestal Pump

ITEM	PART NO. FLOMAX CC 2HP	PART NO. FLOMAX CC 3HP	DESCRIPTION
1	MPP 25904	MPP 25904	Adapter
5	MPP 27642	MPP 26780	Impeller
7	MPP 23002	MPP 23003	Clamp Assembly
1	MPP 22253 5/8" Bore	MPP 25664 7/8" Bore	Drive Sleeve

PUMP DIAGRAMS (CONT.)

MP 300 SERIES

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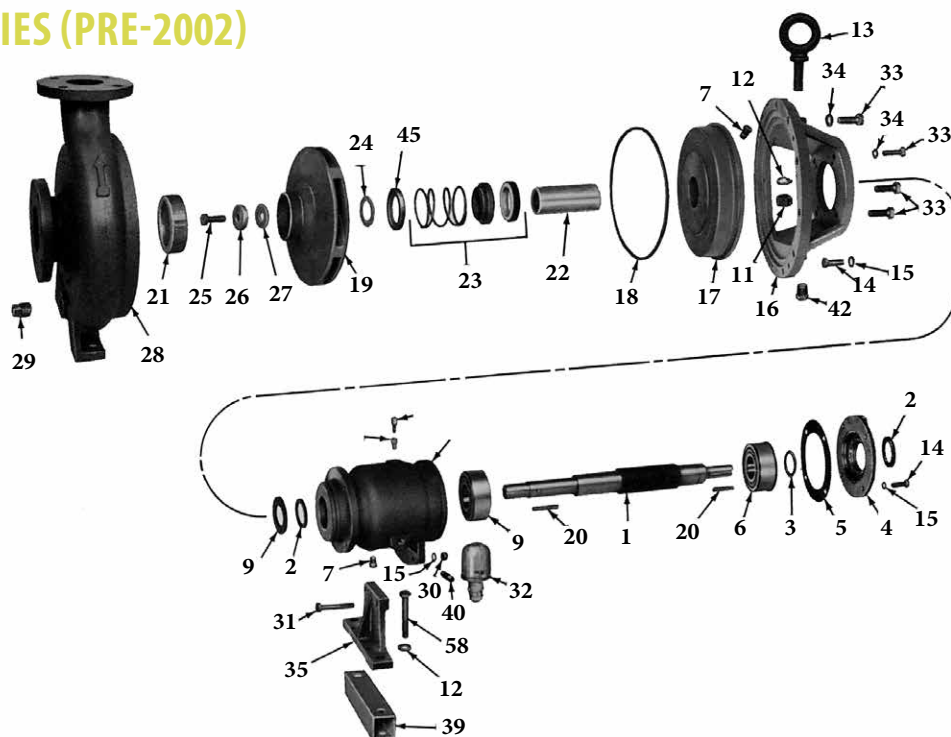


ITEM	PART NO.	DESCRIPTION
1	MPP 26999	Shaft- Key Way - Steel
3	MPP 26998	Snap Ring
8	MPP 26994	Pedestal Body - Cast Iron
9	MPP 26997	Ball Bearing
10	MPP 26680	Slinger Neoprene
14	MPP 21274	3/8" Cap Screw - Stainless Steel
15	MPP 21266	3/8" Lock Washer - Stainless Steel
17	MPP 26737	Adapter - Cast Iron
18	MPP 26744	Gasket
19	MPP 26788	7.0" Impeller - Ductile Iron
	MPP 27015	6.62" Impeller - Ductile Iron (Optional)
	MPP 27014	6.38" Impeller - Ductile Iron (Optional)
	MPP 27013	5.70" Impeller - Ductile Iron (Optional)
20	MPP 26796	1/4" Square Key - Stainless Steel
22	MPP 26996	Shaft Sleeve - Stainless Steel
23	MPP 26685	Seal Assembly Self-Lubricated
	MPP 26752	Sever Service Seal Self-Lubricated (Optional)
24	MPP 26684	Gasket - PTFE
25	MPP 26671	1/2" Bolt - Stainless Steel
26	MPP 26675	Washer - Stainless Steel
27	MPP 26676	Gasket - PTFE

ITEM	PART NO.	DESCRIPTION
28	MPP 26733	Housing Cast Iron
29	MPP 22656	1/2" Pipe Plug - Stainless Steel
45	MPP 26972	Spring Keeper - Stainless Steel
54	MPP 27045	O-Ring (Included with Item 25)
59	MPP 27002	1/4" Square Key - Stainless Steel
N/S	MPP 27106	Major Service Kit - Includes Items: 20, 24, 25, 26, 27, Loctite 271, & Never-SEEZ
N/S	MPP 27240	Minor Service Kit Includes Items: 24, 27, 54, & Loctite 271

PUMP DIAGRAMS (CONT.)

MP 700 SERIES (PRE-2002)

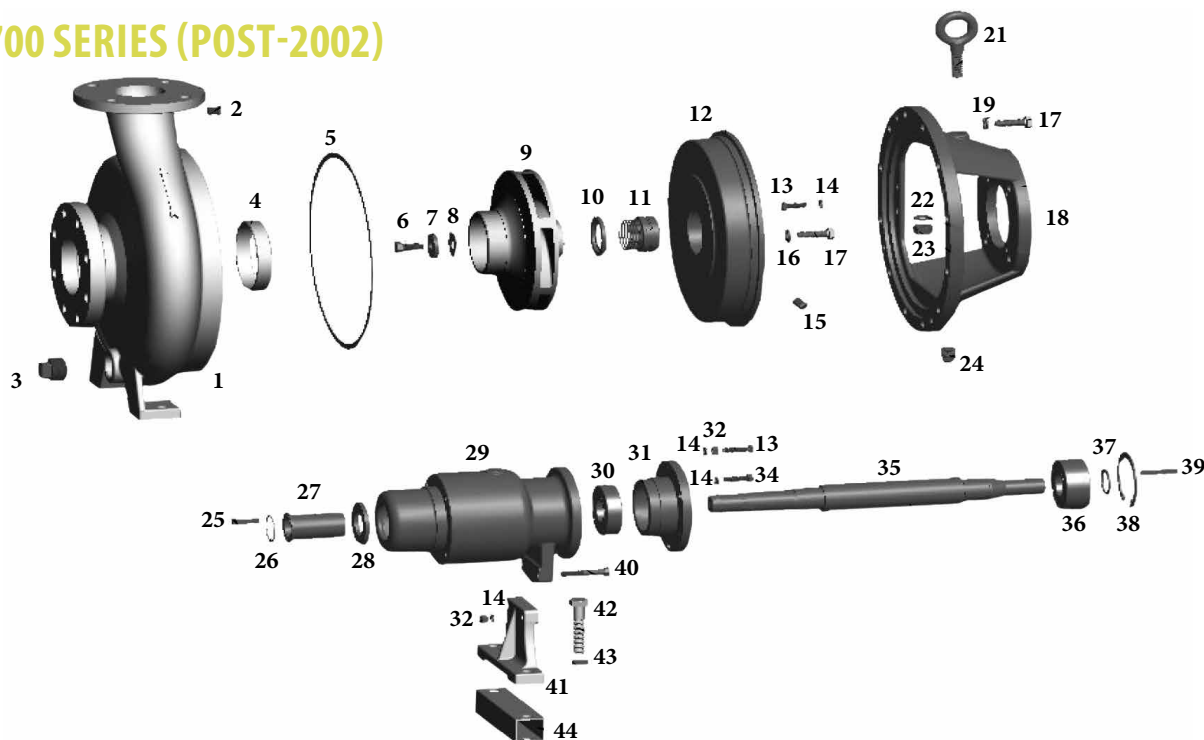


ITEM	PART NO.	DESCRIPTION
1	MPP 26677	Shaft - Steel
2	MPP 26687	Oil Seal
3	MPP 26690	Snap Ring
4	MPP 26665	Bearing Retainer - Cast Iron
5	MPP 26691	Gasket
6	MPP 26630	Ball Bearing (Includes Snap Ring)
7	MPP 21267	1/4" NPT Pipe Plug - Stainless Steel
8	MPP 26663	Bearing Housing - Cast Iron
9	MPP 26629	Ball Bearing
10	MPP 26680	Slinger - Neoprene
11	MPP 22461	5/8" Hex Nut - Steel
12	MPP 26258	5/8" Lock Washer - Steel
13	MPP 26686	Eye Bolt - Steel
14	MPP 21274	3/8" Cap Screw - Stainless Steel
15	MPP 21266	3/8" Lock Washer - Stainless Steel
16	MPP 27134	Adapter - Cast Iron
17	MPP 27155	Adapter - Ductile Iron
18	MPP 27146	Gasket
19	MPP 27144	10.0" Impeller - Ductile Iron
	MPP 27143	11.0" Impeller - Ductile Iron
	MPP 27141	12.0" Impeller - Ductile Iron
	MPP 27140	13.0" Impeller - Ductile Iron
20	MPP 26796	1/4" Square Key - Stainless Steel

ITEM	PART NO.	DESCRIPTION
21	MPP 26673	Wear Ring - Steel
22	MPP 26678	Shaft Sleeve - Stainless Steel
23	MPP 26685	Seal Assembly - Self-Lubricated
	MPP 26752	Severe Service Seal Self-Lubricated
24	MPP 27404	Gasket - Rulon - LD
25	MPP 26674	1/2" Steel Bolt - Stainless Steel
26	MPP 26675	Washer - Stainless Steel
27	MPP 27403	Gasket - Rulon - LD
28	MPP 33486	Housing - Ductile Iron
29	MPP 27205	1/4" Pipe Plug
30	MPP 21265	3/8" Hex Nut - Stainless Steel
31	MPP 21275	3/8" Cap Screw - Stainless Steel
32	MPP 26688	Constant Level Oiler
33	MPP 27147	1/2" Cap Screw - Stainless Steel
34	MPP 21254	1/2" Lock Washer - Stainless Steel
35	MPP 26667	Bearing Housing Support - Cast Iron
36	MPP 26689	Breather Tube
39	MPP 27157	Spacer (Bearing Housing Support)
40	MPP 26693	1/4" NPT Pipe Nipple
41	MPP 26692	1/8" x 1/4" Reducer Bushing
42	MPP 22656	1/2" NPT Pipe Slug - Stainless Steel
45	MPP 26972	Spring Keeper - Stainless Steel
46	MPP 27248	5/8" Cap Screw - Steel

PUMP DIAGRAMS (CONT.)

MP 700 SERIES (POST-2002)

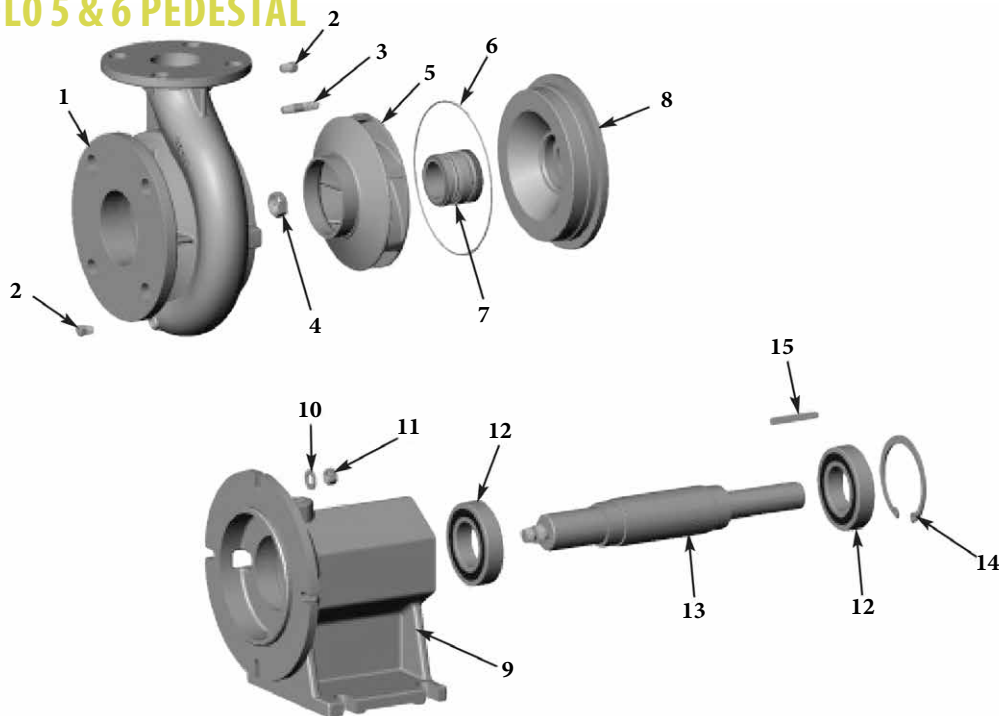


ITEM	PART NO.	DESCRIPTION
1	MPP 27159	Housing Assembly
2	MPP 41475	Drain Plug 1/4"
3	MPP 27205	Drain Plug 1 1/4"
4	MPP 26673	Wear Ring
5	MPP 27146	Gasket - Housing
6	MPP 26674	Seelbolt
7	MPP 26675	Washer - Impeller
8	MPP 27403	Gasket - Rulon
9	MPP 27140	Impeller 13"
9	MPP 27141	Impeller 12"
9	MPP 27143	Impeller 11"
9	MPP 27144	Impeller 10"
10	MPP 26972	Spring Holder
11	MPP 26685	Seal - Carbon/Ceramic/Viton
11	MPP 26752	Seal - Severe Service
12	MPP 34179	Seal Housing
13	MPP 21274	Capscrew 3/8-16 x 1 1/4"
14	MPP 21266	Washer 1/8 x 3/8"
15	MPP 41475	Drain Plug
16	MPP 21254	Washer
17	MPP 27147	Capscrew 1/2-13 x 1 3/4"
18	MPP 27134	Adaptor
19	MPP 21254	Lock washer 1/2 x 7/8"

ITEM	PART NO.	DESCRIPTION
21	MPP 26686	Eye Bolt
22	MPP 26258	Washer
23	MPP 22461	Nut 5/8-11
24	MPP 41479	Drain Plug 1/2"
25	MPP 25299	Key 1/4 Sq. x 1 1/2"
26	MPP 33472	O-Ring
27	MPP 33059	Shaft Sleeve
28	MPP 26680	Slinger
29	MPP 33056	Bearing Body
30	MPP 33053	Ball Bearing - Single
31	MPP 33051	Retainer - Bearing
32	MPP 21268	Hexnut 3/8-16
34	MPP 43926	Capscrew 3/8-16 x 1 1/2"
35	MPP 33052	Shaft
36	MPP 33054	Ball Bearing - Double
37	MPP 33057	Snap Ring 1.43 x .109
38	MPP 33058	Snap Ring 3.936 x .109
39	MPP 26796	Key 1/4 x 1/4 x 2 1/8"
40	MPP 21275	Capscrew 3/8-16 x 2 1/2"
41	MPP 26667	Support - Bearing Housing
42	MPP 27248	Capscrew 5/8-18
43	MPP 27258	Washer 5/8"
44	MPP 27157	Spacer

PUMP DIAGRAMS (CONT.)

MP CHEMFLO 5 & 6 PEDESTAL



ITEM	PART NO.	QTY.	DESCRIPTION
1	MPP 31098	1	2 x 1.5 Volute - Stainless Steel (CHEM 5)
	MPP 31469	1	3 x 2 Volute - Stainless Steel (CHEM 6)
2	MPP 21255	2	1/8" NPT Pipe Plug - Stainless Steel
3	MPP 33161	3	3/8-16 x 2" Stud - Stainless Steel
4	MPP 29194	1	5/8 - 18" Hex Jam Nut - Stainless Steel
5	MPP 31461	1	4.75" Impeller - Stainless Steel
	MPP 31096	1	6.18" Impeller - Stainless Steel (CHEM 5)
	MPP 31467	1	6.18" Impeller - Stainless Steel (CHEM 6)
6	MPP 31234	1	O-Ring - PTFE
	MPP 31233	1	O-Ring - Viton
7	MPP 26565	1	1.5" Mechanical Seal - T-2100
8	MPP 31093	1	Seal Housing - Stainless Steel
9	MPP 31656	1	Bearing Housing
10	MPP 28053	4	3/8" Washer - Stainless Steel
11	MPP 21268	4	3/8-16 Hex Nut - Stainless Steel
12	MPP 31804	2	Ball Bearing
13	MPP 31802	1	Drive Shaft - Stainless Steel
14	MPP 31803	1	Snap Ring
15	MPP 33232	1	1/4" Square Key - Stainless Steel

REFERENCE CHARTS

STANDARD PIPE DATA

NOMINAL DIAMETER INCHES	ACTUAL OUTSIDE DIAMETER INCHES	ACTUAL INSIDE DIAMETER INCHES	INSIDE AREA SQUARE INCHES	WEIGHT PER FOOT POUNDS	LENGTH IN FEET CONTAINING ONE U.S. GALLONS	LENGTH IN FEET CONTAINING 1 CUBIC FOOT	U.S. GAL IN 1 LINEAL FOOT	LBS OF WATER IN 1 LINEAL FOOT
1/2	0.840	0.622	0.304	0.846	63.322	473.910	0.0158	0.1316
3/4	1.050	0.824	0.533	1.119	36.116	270.030	0.0277	0.2309
1	1.315	1.049	0.864	1.660	22.280	166.620	0.0449	0.3742
1 1/4	1.660	1.380	1.496	2.244	12.867	96.275	0.0777	0.6477
1 1/2	1.900	1.610	2.036	2.684	9.454	70.733	0.1058	0.8816
2	2.375	2.067	3.356	3.609	5.736	42.913	0.1743	1.4530
2 1/2	2.875	2.469	4.788	5.725	4.020	30.077	0.2487	2.0732
3	3.500	3.068	7.393	7.486	2.593	19.479	0.3840	3.2012
3 1/2	4.000	3.548	9.887	9.001	1.947	14.565	0.5136	4.2812
4	4.500	4.026	12.730	10.665	1.512	11.312	0.6613	5.5125
4 1/2	5.000	4.506	15.947	12.392	1.207	9.030	0.8284	6.9053
5	5.563	5.047	20.006	14.448	0.962	7.198	1.0398	8.6629
6	6.625	6.065	28.890	18.755	0.666	4.984	1.5008	12.5101
7	7.625	7.023	38.738	23.271	0.497	3.717	2.0124	16.7743
8	8.625	7.981	50.027	28.221	0.384	2.878	2.5988	21.6627

PRESSURE LOSS (POUNDS) PRESS PER 100 FEED OF SMOOTH BORE RUBBER HOSE

Multiply pounds pressure by 2.31 to obtain friction loss in feet

U.S. GAL / MIN	ACTUAL INSIDE DIAMETER IN INCHES							
	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
15	30.0	8.9	2.5	1.1	0.4	0.1		
20	53.0	14.0	4.3	1.8	0.7	0.2		
25	79.0	22.0	6.5	2.9	1.0	0.3		
30	112.0	31.0	9.2	4.0	1.4	0.4	.01	
40		53.0	15.0	6.7	2.4	0.6	.03	
50			24.0	10.0	3.6	1.0	0.05	
60			35.0	14.0	5.1	1.4	0.6	
70			45	19.0	6.6	1.8	0.8	
80			58.0	24.0	8.6	2.3	1.1	
90			71.0	30.0	11.0	3.0	1.4	0.3
100			88.0	37.0	12.5	3.5	1.7	0.4
125			132.0	55.0	20.0	5.1	2.5	0.6
150			183.0	78.0	27.0	6.6	3.5	0.7
175				100.0	37.0	8.6	4.6	1.1
200				133.0	46.0	11.0	5.9	1.4

U.S. GAL / MIN	ACTUAL INSIDE DIAMETER IN INCHES							
	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
250					70.0	12.5	9.1	2.1
300					95.0	20.0	12.0	2.9
350					126.0	27.0	17.0	4.0
400						37.0	21.0	5.1
500						46.0	32.0	7.4
600						70.0	46.0	10.0
700						95.0	62.0	13.0
800						126.0	79.0	17.0
900							97.0	22.0
1000							116.0	27.0
1250							170.0	43.0
1500								61.0
1750								80.0
2000								100.0



REFERENCE CHARTS (CONT.)

GALLONS IN ROUND VERTICAL TANKS - FOR 1 FT IN DEPTH

DIA. OF TANKS		# OF U.S. GALS.	CU. FT. & AREA IN FT ²
FT	IN		
1	0	5.87	0.785
1	1	6.89	0.922
1	2	8.00	1.069
1	3	9.18	1.227
1	4	10.44	1.396
1	5	11.79	1.576
1	6	13.22	1.767
1	7	14.73	1.969
1	8	16.32	2.182
1	9	17.99	2.405
1	10	19.75	2.640
1	11	21.58	2.885
2	0	23.50	3.142
2	1	25.50	3.409
2	2	27.58	3.687
2	3	29.74	3.876
2	4	31.99	4.276
2	5	34.31	4.587
2	6	36.72	4.909
2	7	39.21	5.241
2	8	41.78	5.585
2	9	44.48	5.940
2	10	47.16	6.305
2	11	49.98	6.681
3	0	52.88	7.069
3	1	55.86	7.467
3	2	58.92	7.876
3	3	62.06	8.296
3	4	65.28	8.727
3	5	68.58	9.168
3	6	71.97	9.621
3	7	75.44	10.085
3	8	78.99	10.559
3	9	82.62	11.045
3	10	86.33	11.541
3	11	90.13	12.048
4	0	94.00	12.566
4	1	97.96	13.095
4	2	102.00	13.635
4	3	106.12	14.186
4	4	110.32	14.748

DIA. OF TANKS		# OF U.S. GALS.	CU. FT. & AREA IN FT ²
FT	IN		
4	5	114.61	15.321
4	6	118.97	15.90
4	7	123.42	16.50
4	8	127.95	17.10
4	9	132.56	17.72
4	10	137.25	18.35
4	11	142.02	18.99
5	0	146.88	19.63
5	1	151.82	20.29
5	2	156.83	20.97
5	3	161.93	21.65
5	4	167.12	22.34
5	5	172.38	23.04
5	6	177.72	23.76
5	7	183.15	24.48
5	8	188.66	25.22
5	9	194.25	25.97
5	10	199.92	26.73
5	11	205.67	27.49
6	0	211.51	28.27
6	3	229.50	30.68
6	6	248.23	33.18
6	9	267.69	35.78
7	0	287.88	38.48
7	3	308.81	41.28
7	6	330.48	44.18
7	9	352.88	47.17
8	0	376.01	50.27
8	3	399.88	53.46
8	6	424.48	56.75
8	9	449.82	60.13
9	0	475.89	63.62
9	3	502.70	67.20
9	6	530.24	70.88
9	9	558.51	74.66
10	0	587.52	78.54
10	3	617.26	82.52
10	6	647.74	86.59
10	9	678.95	90.76
11	0	710.90	95.03
11	3	743.58	99.40
11	6	776.99	103.87
11	9	811.14	108.43

DIA. OF TANKS		# OF U.S. GALS.	CU. FT. & AREA IN FT ²
FT	IN		
12	0	846.03	113.10
12	3	881.65	117.86
12	6	918.00	122.72
12	9	955.09	127.68
13	0	992.91	132.73
13	3	1031.50	137.89
13	6	1070.80	143.14
13	9	1110.80	148.49
14	0	1151.50	153.94
14	3	1193.00	159.48
14	6	1235.30	165.13
14	9	1278.20	170.67
15	0	1321.90	176.71
15	3	1366.40	182.65
15	6	1411.50	188.69
15	9	1457.40	194.83
16	0	1504.10	201.06
16	3	1551.40	207.39
16	6	1599.50	213.82
16	9	1648.40	220.35
17	0	1697.90	226.98
17	3	1748.20	233.71
17	6	1799.30	240.53
17	9	1851.10	247.45
18	0	1903.60	254.47
18	3	1956.80	261.59
18	6	2010.80	268.80
18	9	2065.50	276.12
19	0	2120.90	283.53
19	3	2177.10	281.04
19	6	2234.00	298.64
19	9	2291.70	306.35
20	0	2350.10	314.16
20	3	2409.20	322.06
20	6	2469.10	330.06
20	9	2529.60	338.16
21	0	2591.00	346.36
21	3	2653.00	354.66
21	6	2715.80	363.05
21	9	2779.30	371.54
22	0	2843.60	380.13
22	3	2908.60	388.82

DIA. OF TANKS		# OF U.S. GALS.	CU. FT. & AREA IN FT ²
FT	IN		
22	6	2974.30	397.61
22	9	3040.80	406.49
23	0	3108.00	415.48
23	3	3175.90	424.56
23	6	3244.60	433.74
23	9	3314.00	443.01
24	0	3384.10	452.39
24	3	3455.00	461.86
24	6	3526.60	471.44
24	9	3598.90	481.11
25	0	3672.00	490.87
25	3	3745.80	500.74
25	6	3820.30	510.71
25	9	3895.60	520.77
26	0	3971.60	580.93
26	3	4048.40	541.19
26	6	4125.90	551.55
26	9	4204.10	562.00
27	0	4283.00	572.66
27	3	4362.70	583.21
27	6	4443.10	593.96
27	9	4524.30	604.81
28	0	4606.20	615.75
28	3	4688.80	626.80
28	6	4772.10	637.94
28	9	4856.20	649.18
29	0	4941.00	660.52
29	3	5026.60	671.96
29	6	5112.90	683.49
29	9	5199.90	695.13
30	0	5287.70	706.86
30	3	5376.20	718.69
30	6	5465.40	730.62
30	9	5555.40	742.64
31	0	5646.10	754.77
31	3	5737.50	766.99
31	6	5829.70	779.31
31	9	5922.60	791.73
32	0	6016.20	804.25
32	3	6110.60	816.86
32	6	6205.70	829.58
32	9	6301.50	842.39

FORMULAS



PIPE

	FORMULA	FORMULA DESCRIPTION
Pipe diameter to capacity	$2D=4C$	Doubling the diameter of a pipe, increases its capacity by 4

PUMPS

	FORMULA	FORMULA DESCRIPTION
Lbs of pressure to ft of head	1 lb of pressure = 2.31 ft of head	Multiply pounds of pressure by 2.31 for feet of head, or divide feet of head by 2.31 for pounds of pressure

WATER

	FORMULA	FORMULA DESCRIPTION
Pressure in lbs/in ² of a column of water	$cH \times .434$	Multiply column height by .434
Gallons to lbs & in ³	1 gal = 8.33lbs = 231 in ³ @ 67° F	At 67° Fahrenheit, 1 gallon of water weighs 8 1/3 lbs and is 231 cubic inches
Ft ³ to lbs, in ³ , & gal	1 ft ³ = 62.33lbs = 7.48 gal = 1,728 in ³ @ 67° F	At 67° Fahrenheit, 1 cubic foot of water weighs 62 1/3 lbs, is 7.48 gallons, and is 1,728 cubic inches

GALLONS TO BARRELS

	FORMULA	FORMULA DESCRIPTION
Water	31.5 gal = 1 barrel	31 1/2 gallons of water equals one barrel
Crude oil	42 gal = 1 barrel	42 gallons of crude oil equals one barrel
Refined oil	50 gal = 1 barrel	50 gallons of refined oil equals one barrel

TANK CAPACITIES

	FORMULA	FORMULA DESCRIPTION
Rectangular tank capacity in US gal (dimensions in inches)	$(L \times W \times H)/231$	Multiply length by width by height and divide answer by 231
Cylinder tank capacity in US gal (dimensions in inches)	$D^2 \times L \times .0034$	Square the diameter and multiply by the length and .0034
US gal per foot in depth (dimensions in inches)	$D^2 \times .0408$	Square the diameter and multiply by .0408
US gal per foot in depth (dimensions in feet)	$D^2 \times 5.875$	Square the diameter and multiply by 5.875

CIRCLES

	FORMULA	FORMULA DESCRIPTION
Area of a circle	$D \times .7854$	Multiply diameter by .7854
Circumference of a circle	$D \times 3.1416$	Multiply the diameter by 3.1416 (π)
Diameter of a circle	$C \times .31831$	Multiply the circumference by .31831

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682 15AF2AT2	47	BAN 075-C	102	BAN V400	83	CBM 109-20-SS	76	CLV 12VALVE-B	85
682 15AF4AT	47	BAN 075-CAP	102	BAN V10161	84	CBM 2097-16-AL	76	CLV 44005-05A	87
682 15AF8AT	47	BAN 150A-90	102	BAN VA100	84	CBM 2097-16-CS	76	CLV 44200-10A	87
682 15SS2AT	47	BAN 150C-90	102	BAN VA150	84	CBM 2097-16-SS	76	CLV 44300-20A	87
682 15SS2AT2	47	BAN 150D-90	102	BAN VA200	84	CBM 2097-20-AL	76	DEM 4021-4M	66
682 15SS2AT2M	47	BAN 150F-90	102	BAN VA200/150	84	CBM 2097-20-CS	76	DEM 4021-5M	66
682 15SS2ATM	47	BAN 200A-90	102	BAN VA200FP	84	CBM 2097-20-SS	76	DEM 4021-6M	66
682 15SS4AT	47	BAN 200C-90	102	BAN VSFMT200	79	CHM 682/51-2	26	DEM 402110PO	66
682 15SS8AT	47	BAN 200D-90	102	BAN VSF203MR	79	CHM 682/53-2	26	DEM 402185/8PO	66
700 20AF2AT2	49	BAN 200F-90	102	BAP CT6GEM-E	61	CHM 682/CF51SE	27	DEM 402191/2PO	66
700 20SS2AT2	49	BAN 200P-3	56	BAP CT6GEM-S	61	CHM 682CF51SEM	27	DIX 400	107
700 30AF2AT2	49	BAN 200PI6PRO	56	BAP EQCLEAN	36	CHM 682/CF51SS	27	DIX 463	107
700 747-40SS	53	BAN 400-A	102	BAP EQCLEAN	36	CHM 682CF51SSM	27	DIX 525	107
ABE 836P-PRESS	75	BAN 400-B	102	BAP HANDCLEAN	36	CHM 682/CF53SE	27	DIX 675	107
ABE 837E-TEMP	75	BAN 400-C	102	BAP SCRUBS	36	CHM 682CF53SEM	27	DIX 769	107
AIR 1/2FRL-WLK	90	BAN 400-CAP	102	BAP XENIT	36	CHM 682/CF53SS	27	DIX ATCT30	92
AIR 1/4ADJ-UN	90	BAN 400-D	102	BLK GNX2.5R265	67	CHM 682CF53SSM	27	DIX ATCT40	92
AIR 1/4ADJUST	90	BAN 400-E	102	BLK GNX2.5R338	67	CHM 2400SSSTANK	25	DIX G10	92
AIR 1/4FRL-WLK	90	BAN 400-F	102	BLK GNX2RO2.65	67	CHM 4300SSSTANK	25	DIX HBI-1/2T	108
AIR 1/4RTISYST	90	BAN 400-PL	102	BLK GNXRO3.75	67	CHM 5100SSSTANK	25	DIX HBI-1T	108
AIR 1/4TUBINGB	90	BAN ***-A	102	BLK GX3EHRA4.1	67	CHM10000SSSTANK	25	DIX HBI-2T	108
AIR 2MP14-500	90	BAN ***-B	102	BLK GX3EHRA340	67	CHM 12000SSSTANK	25	DIX HBI-3/4T	108
AIR 2MP14-1000	90	BAN ***-C	102	BLK GX4BHRB3.5	67	CHM ADD3PHASE	26	DIX HBI-3T	108
AIR 3/8FRL-WLK	90	BAN ***-CAP	102	BLK GX4BHRB4.3	67	CHM ADD304	26	DIX HBI-4T	108
AIR BUC140140	90	BAN CV100MT	79	BLK GX4BHRB5.7	67	CHM ADD316	26	DIX HBI-6T	108
AIR MC14014	89	BAN ***-D	102	BLK LB161B	29	CHM ADDAIRVALVE	26	DIX HBI-11/2T	108
AIR MC14018	89	BAN ***-F	102	BLK LB361B	29	CHM AE-ASSY	92	DIX HBI-11/4T	108
AIR MC53214	89	BAN ***-F	102	BLK LGL2-53	29	CHM IMP2	26	DIX HBI-21/2T	108
AIR MC53218	89	BAN HB-100	108	BLK LGL2ONLY	29	CHM IMP4	26	DIX HBS-1/2T	108
AIR ME14014	89	BAN HB-150	108	BLK LGL2ONLY	67	CHM SS-SYS-1	25	DIX HBS-1T	108
AIR ME14018	89	BAN HB-200	108	BLK LGL3-103	29	CHM SS-SYS-3	25	DIX HBS-2T	108
AIR MT14014	89	BAN HB-300	108	BLK LGL3ONLY	29	CHM SS-SYSPUMP-1	25	DIX HBS-3/4T	108
AIR MT14018	89	BAN LS-050	112	BLK LGL3ONLY	67	CHM SS-SYSPUMP-3	25	DIX HBS-3T	108
AIR MT53214	89	BAN LS-075	112	BND T300	107	CHM SYS-1	25	DIX HBS-4T	108
AIR MT53218	89	BAN LS-100	112	BRD 1	82	CHM SYS-3	25	DIX HBS-6T	108
AIR TP140	89	BAN LS-120	114	BRD 3/4	82	CHM SYSPUMP-1	25	DIX HBS-11/2T	108
AIR TP380	89	BAN LS-125	112	BRD 11/2	82	CHM SYSPUMP-3	25	DIX HBS-11/4T	108
AIR TP532	89	BAN LS-150-20	112	BRD 11/4	82	CKA CON100SS-V	82	DIX HBS-21/2T	108
AIR TUBINGX500	90	BAN LS-200-20	112	BRV 4TC08-ASY	88	CLV 2-3LKHANDL	85	DIX HBS-***P	101
AIR UC140	89	BAN LS-220	114	BRV 6TC08-ASY	88	CLV 2VALVEAA	87	DIX LHW	92
AIR UC532	89	BAN LS-320	114	BRV 8TC08-ASY	88	CLV 2VALVE-B	85	DIX RTCA30	92
AIR ULC120	89	BAN LS-720	114	BRV 10TC08-ASY	88	CLV 2VALVE-LUG	85	DIX RTCA40	92
AIR ULC140	89	BAN LSM300-20	112	BRV 0820038119	88	CLV 3CVSS	82	DIX TBC150	107
AIR ULC380	89	BAN LSQ-150-20	112	CAM A-AL-***	102	CLV 3ELECTRIC	87	DIX TBC175	107
AIR ULC532	89	BAN LSQ-200-20	112	CAM A-SS-***	102	CLV 3VALVEAA	87	DIX TBC188	107
AIR UTC120	89	BAN LSS300-BE	112	CAM B-ALS-***	102	CLV 3VALVE-B	85	DIX TBC200	107
AIR UTC140	89	BAN LSS312	114	CAM B-SS-***	102	CLV 3VALVE-LUG	85	DIX TBC238	107
AIR UTC380	89	BAN LSS320	114	CAM C-ALS-***	102	CLV 4CVSS	82	DIX TBC250	107
AIR UTC532	89	BAN LSS350	114	CAM C-SS-***	102	CLV 4ELECTRIC	87	DIX TBC256	107
ALB ***	98	BAN ***-PL	102	CAM D-ALS-***	102	CLV 4LKHANDLE	85	DIX TBC288	107
ALC ***	97	BAN V050	83	CAM DC-ALS-***	102	CLV 4VALVEAA	87	DIX TBC300	107
ALF ***	98	BAN V075	83	CAM DC-SS-***	102	CLV 4VALVE-B	85	DIX TBC350	107
ALL ***	97	BAN V100	83	CAM DP-AL-***	102	CLV 4VALVE-LUG	85	DIX TBC375	107
ALL ***X45	97	BAN V100BL	84	CAM DP-SS-***	102	CLV 6CVSS	82	DIX TBC400	107
ALN ***	98	BAN V100FP	83	CAM D-SS-***	102	CLV 6LKHANDLE	85	DIX TBC450	107
ALT ***	97	BAN V100SL	84	CAM E-AL-***	102	CLV 6VALVEAA	87	DIX TBC475	107
ALY 3CSGATE	86	BAN V125	83	CAM E-SS-***	102	CLV 6VALVE-B	85	DIX TLS32	108
ALY 3SSGATE	86	BAN V150	83	CAM F-AL-***	102	CLV 6VALVE-LUG	85	DIX TLS33	108
ALY 4CSGATE	86	BAN V150BL	84	CAM F-SS-***	102	CLV 8LKHANDLE	85	DIX TLS34	108
ALY 4SSGATE	86	BAN V150SL	84	CBM 109-16-AL	76	CLV 8VALVEAA	87	DIX TLS36	108
ALY 6CSGATE	86	BAN V200	83	CBM 109-16-CS	76	CLV 8VALVE-B	85	DIX TLS42	108
ALY 6SSGATE	86	BAN V200FP	83	CBM 109-16-SS	76	CLV 8VALVE-LUG	85	DIX TLS43	108
ALY 8CSGATE	86	BAN V300	83	CBM 109-20-AL	76	CLV 10LKHANDLE	85	DIX TLS44	108

DIX TLS46	108	FEP GORMAN-4	55	FSI VB428713S	111	HOS SG1X11/4	104	INL 209F-6	83
DIX TLS48	108	FEP GORMAN-11	55	FSL ***	97	HOS SG3/4X1	104	INL 209F-11/2"	83
DIX TLS63	108	FEP GORMAN-14	55	FSL S***	97	HOS SG3/8X5/8	104	INL CVSE50	82
DIX TLS64	108	FEP MP-7	54	FSL ***X45	97	HOS SG11/2X2	104	INL CVSE75	82
DIX TLS66	108	FEP MP-7D	54	FSN ***	98	HOS SG11/4X11/2	104	INL CVSE100	82
DIX TLS68	108	FEP MP8SS5H-E	56	FSP ***	97	HOS WSD1	103	INL CVSE125	82
DIX TLS86	108	FEP MP8SS5HNDE	56	FST ***	97	HOS WSD2	103	INL CVSE150	82
DIX TLS88	108	FEP MP-9	54	FSU ***	97	HOS WSD3	103	INL CVSE200	82
DIX TN22	108	FEP MP-9D	54	GAD ACF-1	75	HOS WSD4	103	INL CVSE300	82
DIX TN34	108	FEP MP-9-SS	54	GAD ACF-2	75	HOS XLPE1	103	INL CVSE400	82
DIX TN44	108	FEP MP15SSDS10	54	GAD ACF-11/2	75	HOS XLPE2	103	INL DEADMAN1	83
DIX TN46	108	FEP MP15SSDS15	54	GEM SSFLTSWT	75	HOS XLPE3	103	INL DEADMAN1/2	83
DIX TN64	108	FEP MP-19	54	GES G-1902	36	HOS XLPE4	103	INL DEADMAN3/4	83
DIX TN66	108	FEP MP19/5B-10	54	GLD TYPEK2-1	87	HOS XLPE11/2	103	INL SSFP1.5L3S	83
DIX TN68	108	FEP MP19/5B-15	54	GLD TYPEK2-3/4	87	HOS XLPE11/4	103	INL SSFP1.5LL-3	83
DIX TN86	108	FEP MP19/D-10	54	GPC AP-12	77	HOV SM275-WV	78	INL SSFP2LL-3	83
DIX TN88	108	FEP MP19/D-15	54	GPI 116000-1	53	HUM M410-70	88	INL SSFP2LL-3S	83
DIX TN150	108	FEP MP19-SS	54	GRP 82D1-EX13X	56	ICS 12TANK	9	INL SSFP3LL-3	83
DIX TN158	108	FEP MP19-SS-15	54	GRP 83C2BPUMP	64	ICS 24-7-GATE	7	JCS 21LB	100
DIX TN200	108	FEP MP-20	56	GRP 84A2B	64	ICS 24-7-PRINT	7	KBS 850SWPKGA	41
DIX TN250	108	FEP MP-21	56	GSI FSFLEX2X18	105	ICS 24-7-SIGN	7	KBS 1100SWPKGA	41
DIX TN1520	108	FEP MP120-51	57	GSI FSFLEX3X18	105	ICS 24-7-START	7	KBS 2000SWPKGA	41
DIX TN2015	108	FEP MP120-53	57	GSI FSFLEX4X18	105	ICS 24-7-VALVE	7	KBS 3000SWPKGA	41
DOU 1005	36	FEP MP-300-20	57	GSI FSFLEX6X24	105	ICS DHS-D1	12	KBS 6500SWPKGL	41
DOU 1203	36	FEP MP-531	56	GSI FSFLEX8X24	105	ICS DHS-D2	12	KBS 8500SWPKGL	41
DOU CA-C	36	FEP MP-533	56	GSI SSFLEX2X18	105	ICS DHS-D3	12	KBS 10500SWPKL	41
DOU CA-S	36	FEP MP-700-25	57	GSI SSFLEX3X18	105	ICS DTS0-8	11	KBS 12500SWPKL	41
DOU F-823Y	36	FEP MPCFL1.5-1	57	GSI SSFLEX4X18	105	ICS DTS9-16	11	LBR A40DI-1K	66
DOU F-831	36	FEP MPCFL1.5-3	57	GSI SSFLEX4X24	105	ICS DTSAW0-8	11	LBR A40DI-3K	57
DOU F-831RED	36	FEP MPCFL5-1	57	GSI SSFLEX6X24	105	ICS DTSAW9-16	11	LBR A40SS-1K	66
DOU F-834	36	FEP MPCFL5-3	57	GSI SSFLEX8X24	105	ICS DTSRECPT	11	LBR A-40SS-3K	57
DOU F-834RED	36	FEP MPF8HNES5H	56	HAM 3/4	82	ICS DTSTABLET	11	LBR A70DI-1K	66
DOU F-835	36	FEP MPF8W/5HND	56	HAM 3/8	82	ICS EPSON-ROLL	93	LBR A70DI-3K	57
DOU F-936	36	FEP MPF158HN	56	HAY 4LS-3	111	ICS EPSON-SLIP	93	LBR A70SS-1K	66
DOU S-933	36	FEP MPF1513HN	56	HAY 6LS-3	111	ICS HIGHALARM1	9	LBR A-70SS-3K	57
DOU V-3B	36	FLC 1001-15	82	HOS 300EPDM-2	103	ICS HIGHALARM2	9	LBR A80DI-1K	66
DOU V-6B	36	FLC 1002-202	82	HOS 300EPDM-3	103	ICS MACBOX10	10	LBR A80DI-3K	57
DPF BR***	96	FLC 1520-15	82	HOS 390EPDM-3	103	ICS MACBOX20	10	LBR A80SS-1K	66
DPF FA***	96	FLC 1520-20	82	HOS 390SDBK-2	103	ICS PRE-150-8	8	LBR A-80SS-3K	57
DPF L***	96	FLC 1520-30	82	HOS 414-1X12P	105	ICS TOTALBOX	52	LBR AB8SS-1J	66
DPF L***45	96	FLC 1520-40	82	HOS ED1	104	ICS VALVEBOX4	10	LCS EDUCT-SYS	71
DPF R***	96	FLO 1KNG	108	HOS ED1/2	104	ICS VALVEBOX6	10	LSC PROLINE-3	111
DPF T***	96	FLO 2KNG	108	HOS ED1/4	104	ICS VALVEBOX8	10	LSC PROLINE-4	111
DPF TF***	96	FLO 3KNG	108	HOS ED-1X12P	105	ICS VALVEBOX10	10	LSC PROLINE-6	111
DPF TF***HB	96	FLO 4KNG	108	HOS ED2	104	ICS VALVEBOX12	10	LSS 12194PL	35
DPF Y***	96	FLO 4KNGPOLY	108	HOS ED3	104	ICS VALVEBOX16	10	MAN 03546A-1	109
DPI DURAMETER	51	FLO 11/2KNG	108	HOS ED3/4	104	INL 1/2SSAA	87	MAN 03546A-2	109
DPP ***	95	FSB ***	98	HOS ED3/8	104	INL 1/2SSLL	83	MAN 03546A-3	109
DPP ***	95	FSC ***	97	HOS ED4	104	INL 1/4SSLL	83	MAN 03546A-4	109
DPR 14MACHKIT	95	FSC AP***	97	HOS ED11/2	104	INL 1SSAA	87	MAN 03546B-1	109
DPR 16MACHKIT	95	FSC R***	97	HOS ED11/4	104	INL 1SSEA	87	MAN 03546B-2	109
EBR EPPD-3	77	FSC ROS***	97	HOS EVA3/8C	104	INL 1SSLL	83	MAN 03546B-3	109
EHM MAG53CT2	48	FSF ***	98	HOS EVA3/8R	34	INL 2SSAA	87	MAN 03546B-4	109
EHM MAG53CT3	48	FSF ***B	98	HOS EWSD11/2	103	INL 2SSLL	83	MAN 03546C-1	109
EHM MAG53CT4	48	FSF R***	98	HOS PVC1	103	INL 2SS-STR-3	112	MAN 03546C-2	109
EHM MAG53CT6	48	FSF ***S	101	HOS PVC2	103	INL 3/4SSAA	87	MAN 03546C-3	109
EHM PRO50MAG-2	49	FSI 36017	111	HOS PVC3	103	INL 3/4SSLL	83	MAN 03546C-4	109
EHM PRO50MAG-3	49	FSI 416014B	111	HOS PVC3/4	103	INL 3/8SSLL	83	MAN 03546D-1	109
EHM PRO50MAG-4	49	FSI BPM0300X01	114	HOS PVC4	103	INL 3SSLL	83	MAN 03546D-2	109
EHM PROMAG-1.5	49	FSI BPONG1X01	114	HOS PVC11/2	103	INL 11/2SSAA	87	MAN 03546D-3	109
ELL 5GALTEST	53	FSI BPONG10X01	114	HOS PVC11/4	103	INL 11/2SSEA	87	MAN 03546D-4	109
ELM CCAF01200E	87	FSI BPONG50X01	114	HOS PVCD2	104	INL 11/2SSLL	83	MAN 03546E-4	110
FEP 4021-3M-15	58	FSI BPONG100X0	114	HOS PVCD3	104	INL 11/2SS-STR	112	MAN 03546E-6	110
FEP 4021-3M-20	58	FSI PONG5P2P	114	HOS PVCD4	104	INL 11/4SSLL	83	MAN 03546F-4	110
FEP 4021-4M-25	58	FSI PONG10P2P	114	HOS PVCD6	104	INL 209F-2"	83	MAN 03546F-6	110
FEP 4021-5M-40	58	FSI PONG50P2P	114	HOS PVCD11/2	104	INL 209F-3"	83	MES 900-20-2	113
FEP 4021-6M-40	58	FSI VB428709S	111	HOS SG1/2X3/4	104	INL 209F-4"	83	MES 900-30-2	113

MES 900-40-3	113	MIX SPECSTR4-3	111	MOT 10H3P1725X	70	MPP 22361	116	MPP 26692	118
MES 900-60-3	113	MIX SPECSTR4-3	111	MOT 10H3P3600	69	MPP 22369	116	MPP 26693	118
MES 2600-2	113	MLI MLI3-50-D	111	MOT 10H3P3600X	70	MPP 22372	116	MPP 26733	117
MES 2600-3	113	MLI MLI4B-50-2	111	MOT 15H3P1725	69	MPP 22376	116	MPP 26737	117
MES 2600-4	113	MLI MLI6-30-2	111	MOT 15H3P1725X	70	MPP 22387	116	MPP 26744	117
MES BASK9X14S3	113	MLI MLI8-30-2	111	MOT 20H3P1725	69	MPP 22425	116	MPP 26752	117
MIX 3EDUCTSSCO	21	MLS 250MAG	14	MOT 20H3P1725X	70	MPP 22461	118	MPP 26752	118
MIX 3EDUCTSSCO	71	MLS 250MASS	14	MOT 20H3P3600	69	MPP 22461	119	MPP 26752	119
MIX 3LIQSSCOMP	21	MLS 350MAG	14	MOT 25H3P1725	69	MPP 22468	116	MPP 26780	116
MIX 3LIQSSCOMP	71	MLS 350MASS	14	MOT 25H3P1725X	70	MPP 22471	116	MPP 26788	117
MIX 3LIQ-SSSED	71	MLS 430-4	92	MOT 25H3P3600	69	MPP 22564	116	MPP 26796	117
MIX 4EDUCTSSCO	21	MLS 450MAG	14	MOT 30H3P1725	69	MPP 22566	116	MPP 26796	118
MIX 4EDUCTSSCO	71	MLS 450MASS	14	MOT 30H3P1725X	70	MPP 22656	117	MPP 26796	119
MIX 4EDUCTSSON	21	MLS 650MAG	14	MOT 40H3P1725	69	MPP 22656	118	MPP 26972	117
MIX 35GMPMIX1P	23	MLS 650MASS	14	MOT 40H3P1750X	70	MPP 23002	116	MPP 26972	118
MIX 35GMPMIX3P	23	MMG 102-081	81	MPP 21237	116	MPP 23002	116	MPP 26972	119
MIX 304FRAME10	19	MMG 741-084	81	MPP 21238	116	MPP 23003	116	MPP 26994	117
MIX 304FRAME15	19	MMG 743-016	80	MPP 21242	116	MPP 23021	116	MPP 26996	117
MIX 304FRAME25	19	MMG 743-087	80	MPP 21243	116	MPP 23022	116	MPP 26997	117
MIX 304OH4	20	MMG 743-097	80	MPP 21248	116	MPP 23024	116	MPP 26998	117
MIX 304OH6	20	MMG 744-003	80	MPP 21249	116	MPP 23040	116	MPP 26999	117
MIX 304OH8	20	MMG 744-026	80	MPP 21254	118	MPP 25299	119	MPP 27002	117
MIX 304SM4	19	MMG 744-048	80	MPP 21254	119	MPP 25664	116	MPP 27005	65
MIX 304SM6	19	MMG 749-326	81	MPP 21254	119	MPP 25904	116	MPP 27010	65
MIX 304SM8	19	MMG 2682	80	MPP 21255	120	MPP 25904	116	MPP 27013	117
MIX 316OH4	20	MMG 5792	81	MPP 21262	116	MPP 25933	116	MPP 27014	117
MIX 316OH6	20	MMG 743203975	81	MPP 21263	116	MPP 26097	116	MPP 27015	117
MIX 316OH8	20	MMG 7432031155	81	MPP 21264	116	MPP 26100	116	MPP 27045	117
MIX 316SM4	19	MMG 7432361065	81	MPP 21265	118	MPP 26101	116	MPP 27106	117
MIX 316SM6	19	MMG 7432361245	81	MPP 21266	116	MPP 26142	116	MPP 27134	118
MIX 316SM8	19	MMI CMF200-2C	48	MPP 21266	117	MPP 26164	116	MPP 27134	119
MIX 316TANK10	21	MMI CMF300-3C	48	MPP 21266	118	MPP 26258	118	MPP 27140	118
MIX 316TANK15	21	MMI CMF400-4C	48	MPP 21266	119	MPP 26258	119	MPP 27140	119
MIX 316TANK25	21	MOR 148ALT1	77	MPP 21267	116	MPP 26460	116	MPP 27141	118
MIX AGKIT10	19	MOR 207-WRENCH	92	MPP 21267	116	MPP 26461	116	MPP 27141	119
MIX AGKIT15	19	MOR 285-1.5-20	112	MPP 21267	118	MPP 26565	120	MPP 27143	118
MIX AGKIT25	19	MOR 285-2	112	MPP 21268	116	MPP 26629	118	MPP 27143	119
MIX AUGER	20	MOR 285-3-20	112	MPP 21268	119	MPP 26630	118	MPP 27144	118
MIX BELTVEYOR	20	MOR 285-6-1.5	114	MPP 21268	120	MPP 26663	118	MPP 27144	119
MIX CGKIT10	19	MOR 285-6-2	114	MPP 21269	116	MPP 26665	118	MPP 27146	118
MIX CGKIT15	19	MOR 285-6-3	114	MPP 21271	116	MPP 26667	118	MPP 27146	119
MIX CGKIT25	19	MOR 285-20-1.5	114	MPP 21274	117	MPP 26667	119	MPP 27147	118
MIX DIGITEMP	21	MOR 285-20-2	114	MPP 21274	118	MPP 26671	117	MPP 27147	119
MIX DRAGCHAIN	20	MOR 285-20-3	114	MPP 21274	119	MPP 26673	118	MPP 27155	118
MIX HOP5TON	20	MOR 818	74	MPP 21275	118	MPP 26673	119	MPP 27157	118
MIX HOP5TON-DW	20	MOR 2075X3	92	MPP 21275	119	MPP 26674	118	MPP 27157	119
MIX HOP8TON	20	MOR VENTBAFFLE	77	MPP 21284	116	MPP 26674	119	MPP 27159	119
MIX HOP8TON-DW	20	MOT 2H1P3600	70	MPP 21291	116	MPP 26675	117	MPP 27205	118
MIX HOP10TON	20	MOT 2H3P3600	70	MPP 21312	64	MPP 26675	118	MPP 27205	119
MIX HOP10TON-DW	20	MOT 3H1P3600	69	MPP 21327	64	MPP 26675	119	MPP 27240	117
MIX PMT1208	23	MOT 3H1P3600C	70	MPP 21339	64	MPP 26676	117	MPP 27248	118
MIX PMT1508	23	MOT 3H3P1725XP	70	MPP 21372	64	MPP 26677	118	MPP 27248	119
MIX PMT2008	23	MOT 3H3P3600	69	MPP 21381	64	MPP 26678	118	MPP 27258	119
MIX PMT12084x4	23	MOT 3H3P3600C	70	MPP 22240	116	MPP 26680	117	MPP 27403	118
MIX PMT15084x4	23	MOT 3H3P3600XP	70	MPP 22247	116	MPP 26680	118	MPP 27403	119
MIX PMT20084x4	23	MOT 5H1P1725	69	MPP 22253	116	MPP 26680	119	MPP 27404	118
MIX PMT25084x4	23	MOT 5H1P3600	69	MPP 22255	116	MPP 26684	117	MPP 27642	116
MIX SGKIT	19	MOT 5H3P1725	69	MPP 22256	116	MPP 26685	117	MPP 28053	120
MIX SGKIT15	19	MOT 5H3P3600	69	MPP 22263	116	MPP 26685	118	MPP 28399	64
MIX SGKIT25	19	MOT 5H3P3600XP	70	MPP 22266	116	MPP 26685	119	MPP 28553	64
MIX SMP-10	18	MOT 7.5H1P3600	69	MPP 22272	116	MPP 26686	118	MPP 29194	120
MIX SMP-15	18	MOT 7.5H3P1725	69	MPP 22286	116	MPP 26686	119	MPP 29648	64
MIX SMP-25	18	MOT 7.5H3P3600	69	MPP 22293	116	MPP 26687	118	MPP 29649	64
MIX SPECSTR3-2	111	MOT 7.5H1725X	70	MPP 22311	116	MPP 26688	118	MPP 31093	120
MIX SPECSTR3-3	111	MOT 10H1P1725	69	MPP 22321	116	MPP 26689	118	MPP 31096	120
MIX SPECSTR3-4	111	MOT 10H1P3600	69	MPP 22348	116	MPP 26690	118	MPP 31098	120
MIX SPECSTR4-2	111	MOT 10H3P1725	69	MPP 22358	116	MPP 26691	118	MPP 31233	120

MPP 31234	120	OPW 56-4LH	92	PVC C***TXT	99	S4C RWEL***ECC	101	SBD 148-4W-R	43
MPP 31461	120	OPW 58-3RH	92	PVC F***	99	S4F ***	98	SBD 230PTDSMM	45
MPP 31467	120	OPW 58-4RH	92	PVC F***B	99	S4F ***B	98	SBD 330TSU-D	42
MPP 31469	120	OPW 3820-2	91	PVC F***S	99	S4F LAPJOINT***	98	SBD 660TSU-D	42
MPP 31656	120	OPW 3820-3	91	PVC ***INVPPIPE	95	S4F R***	98	SBD 850CCPKGH	41
MPP 31802	120	OPW 3830-2	91	PVC L45***SXS	99	S4F ***S	101	SBD 850SWPKGA	41
MPP 31803	120	OPW 3830-3	91	PVC L45***TXT	99	S4L ***	97	SBD 1025HZ-PKY	42
MPP 31804	120	OPW 3830-4	91	PVC L***TXT	99	S4L S***	97	SBD 1025HZ-S	42
MPP 31840	64	OPW 3840-2	91	PVC N***	99	S4L WELD***10SR	101	SBD 1100CCPKGH	41
MPP 33051	119	OPW 3840-3	91	PVC P***	99	S4L WELD***SCH10	101	SBD 1100SWPKGA	41
MPP 33052	119	OPW 3840-4	91	PVC ***SXS	99	S4L WELD***SCH40	101	SBD 2000CCPKGH	41
MPP 33053	119	OPW 3850-2	91	PVC T***SXSXS	99	S4L WLD***X45-10	101	SBD 2000HZ-PKY	42
MPP 33054	119	OPW 3850-3	91	PVC T***TXTXT	99	S4L ***X45	97	SBD 2000HZ-S	42
MPP 33056	119	OPW 3860-2	91	PVC U***SXS	99	S4N ***	98	SBD 2000SWPKGA	41
MPP 33057	119	OPW 3860-3	91	PVC U***TXT	99	S4P ***	97	SBD 3000CCPKGH	41
MPP 33058	119	PDC 6730-BM0-0	52	PYR 4TEMP-1/2	75	S4P IPE ***SCH10	95	SBD 3000SWPKGA	41
MPP 33059	119	PDC 6830-BM0-0	52	PYR 4TEMP-3/4	75	S4P IPE ***SCH40	95	SBD 6500CCPKGH	41
MPP 33161	120	PEN 2CI	77	RAN 3611HBRVBR	68	S4S TUB***SCH10	101	SBD 6500SWD	72
MPP 33232	120	PEN 3/4POLY	77	RAN 3611HBRVCB	68	S4T ***	97	SBD 6500SWPKGL	41
MPP 33297	65	PEN 11/2-CI	77	RAN 3617HBRVBR	68	S4T WELD***SCH10	101	SBD 8750CCPKGH	41
MPP 33301	64	PEN 11/2POLY	77	RAN 3617HBRVCB	68	S4T WELD***SCH40	101	SBD 8750SWD	72
MPP 33472	119	PEP GNX2-1	59	RAN 3622HBRVBR	68	S4U ***	97	SBD 8750SWPKGL	41
MPP 33486	118	PEP GNX2-2	59	RAN 3622HBRVCB	68	S6B X***	98	SBD 10500CCPKGH	41
MPP 33631	64	PEP GNX21/2-1	59	RCS 2RAILCAR	16	S6C ***	97	SBD 10500SWD	72
MPP 33678	65	PEP GNX21/2-2	59	RCS 4RAILCAR	16	S6C AP***	97	SBD 10500SWPKGL	41
MPP 34179	119	PEP GX3-1	59	RCS 4RAILHOSE	16	S6C R***	97	SBD 12500CCPKGH	41
MPP 34740	57	PEP GX3-2	59	RCS 6HDPE-2-10	16	S6C ROS***	97	SBD 12500SWD	72
MPP 34793	64	PEP GX3-3	59	RCS 6RAILCAR	16	S6C RWEL***-10	101	SBD 12500WPKGL	41
MPP 35491	64	PEP GX3-4	59	RCS 8HDPE-6-8	16	S6C RWEL***-40	101	SBD 15000SWD	72
MPP 36588	64	PEP GX4-1	59	RCS 8RAILCAR	16	S6C RWEL***ECC	101	SBD D3/4X15SPP	105
MPP 37147	64	PEP GX4-2	59	RCS 10RAILCAR	16	S6F ***	98	SBD D3/4X18SPP	105
MPP 38119	64	PEP GX4-3	59	RCS SIDE	16	S6F ***B	98	SBD D3/4X25S	105
MPP 38433	64	P/H 55558	35	REC 1/2PTGLUE	100	S6F LAPJOINT***	98	SBD D3/4X25SPP	105
MPP 41475	119	PHC 2SSCOUPLER	80	REC 1PTGLUE	100	S6F ***S	101	SBD DEF3/4BULK	104
MPP 41475	119	PHC 2SSNIP-BUT	80	REC 1PTPRIMER	100	S6L ***	97	SBD DEF11/2HOS	104
MPP 41479	119	PHC 2SSNIP-DC	80	REC 1QTGLUE	100	S6L S***	97	SBD DEFID-HOSE	104
MPP 43926	119	PHC 2SSNIP-NPT	80	REC 1QTPRIMER	100	S6L WELD***SCH10	101	SBD DEF-PRIMER	100
MPP 50015	64	PHC PF-1001	80	REC 5-1/4PT	100	S6L WELD***SCH40	101	SBD HP-HV-MM	43
MPP 50048	64	PHC PF-1002	80	REC 5-1PT	100	S6L ***X45	97	SBD HP-HV-MMP	43
MSA 791226	35	PHC PF100232MB	80	REC ANTISEIZE	100	S6N ***	98	SBD HP-HV-MMSS	43
MSA 791245	35	PHC PF100232MP	80	REC LOCTITE	100	S6P ***	97	SBD KB2020	40
MSA GLOVES	35	P/H WATERTANK	35	REC LOCTITE50	100	S6P IPE***ScH10	95	SBD KB2020-D	40
MSA PVCGLOVES	35	P/H WATERTOPMT	35	REC TEFTAPE1	100	S6P IPE ***SCH40	95	SBD KB2020-L	40
NEF 17113-01	88	PLC 8S	107	REC TEFTAPE1/2	100	S6S TUB***SCH10	101	SBD KB2020-R	40
NEF 35249	88	PLC 10S	107	REC TEFTAPE3/4	100	S6T ***	97	SBD KB2050	39
NEF CO42503	88	PLC 12S	107	REC TPLUS2-1PT	100	S6T WELD***S10	101	SBD KB2050-D	39
NEF M-08008	88	PLC 16S	107	REG A7794	33	S6T WELD***S40	101	SBD KB2050-L	39
NEF MAC-ELECT	88	PLC 20S	107	REG A7796	33	S6U ***	97	SBD KB2050-R	39
NEF MACVALVE	88	PLC 24S	107	REG TSS3169	30	S6 WLD***X45-10	101	SBD KB2070	38
NEF MANIFOLD10	88	PLC 32S	107	RLS 66653	93	S6 WLD***X45-40	101	SBD KB2070-HR	38
NEF MANIFOLD20	88	PLY B***	98	RLS 76310-480	93	SAF 6GAL/KIT	35	SBD KB2070-PO	38
NH3 NY1X3	34	PLY C***	97	RLS 76310-480	93	SAF 20GAL/KIT	35	SBD KB2070-POHR	38
NH3 NY1X12	34	PLY CAP***	97	RLS 76310-1480	93	SAF 30GAL/KIT	35	SBD KF-KIT	43
NH3 NY1X15	34	PLY CR***	97	RLS 76310-1480	93	SAF DECON/KIT	35	SBD OPW1672-2	80
NH3 NY2X18	34	PLY CROS***	97	RLS 126564	93	SAF EARPLUG	35	SBD OPW1772-2	80
NH3 NY11/4X12	34	PLY F***	98	RLS 155666	93	SAF EYEWASH	36	SBD OPWMFPD	106
NH3 NY11/4X15	34	PLY L***	97	RLS 155666-1	93	SAF EYEWASH/ST	36	SBD OPWSSNOZZLE	106
NH3 SS1X3	34	PLY LS***	97	ROP 2835P	68	SAF FACESHIELD	35	SBD OPWSTDNOZ	106
NH3 SS1X12	34	PLY N***	98	RTI ELIMINIZER	90	SAF RESPIRATOR	35	SBD POLYFILTER	113
NH3 SS1X15	34	PLY P***	97	S4B ***	98	SAF SLEEVE	35	SBD POLYNOZZLE	106
NH3 SS2X18	34	PPC CB1400XLP	73	S4C ***	97	SAF SPILL/KIT	35	SBD PPD-1-12	43
NH3 SS11/4X12	34	PPC CB2300XLP	73	S4C AP***	97	SBD 1MICRON	114	SBD PPD-1-110	43
NH3 SS11/4X15	34	PPC CB5350XLP	73	S4C APWELD***S10	101	SBD 50PTDS	45	SBD PPD-2-12	43
NOR CB1600PKG	73	PVC B***	99	S4C R***	97	SBD 50PTDSMM	45	SBD PPD-2-110	43
NOR CB2500PKG	73	PVC CAP***S	99	S4C ROS***	97	SBD 100PTDS	45	SBD PPTM-1-12	44
NSP W-169	81	PVC CAP***T	99	S4C RWEL***-10	101	SBD 100PTDSMM	45	SBD PPTM-1-110	44
OPW 56-3LH	92	PVC C***SXS	99	S4C RWEL***-40	101	SBD 148-4W	43	SBD PPTM-2-12	44

SBD PPTM-2-110	44	SOT 825	51	SQT AL477EP	31	TNK 15000	72
SBD REEL-25	105	SOT FRHP32V	63	SQT N550-10	30	TNK 15000CS	72
SBD REEL-25BSP	105	SOT SS435-414	60	SQT N550-16	30	TNK 19000	72
SBD SSC1MCRON	114	SOT SS435-EPDM	60	SQT N550-24	30	TNK 19000CS	72
SBD SSC1MIC20	114	SOT SS445-414	62	SQT P145	32	TNK 25000CS	72
SBD SSFILTER	113	SOT SS445-EPDM	62	SQT SSFLEX1X18	34	TNK 30000	72
SBD SSNOZ-3/4N	106	SOT SS465-414	60	SQT SSFLEX2X18	34	TNK 30000CS	72
SBD SSNOZ-75B	106	SOT SS465-EPDM	60	SQT SSFLEX3X18	34	TNK 35000CS	72
SBD SSNOZ-7545	106	SQT 1E8126	32	SQT SSFLEX11/4	34	TNK MB250STD	78
SBD SSNOZZLE	106	SQT 1E8128	32	SQT TP-6-1000	32	TNK NS-MP-250	78
SBD T-HP-MM1	43	SQT 1102A-16	32	SQT TP-7-1000	32	VEG PLICSCOMXB	74
SBD TODO2CPL	80	SQT 5520-2	33	TAL KC1000	30	VEG XXANPHKNAX	74
SBD TODO2M-NIP	80	SQT 5520-3	33	TAL KC2000	30	VEG XXBFKHKHNA	74
SBD TODODPCPL	80	SQT A330	31	TAL VK1000	30	VEG XXGN5EHKNA	74
SBD T-SP100-1	44	SQT A331	31	TCF A-CHB-1	81	VER 4X3X8	66
SCC 6	107	SQT A490R-95	31	TCF B-ADNMP3/4	81	VER 4X3X10	66
SCC 8	107	SQT A520R	31	TCF BE-VENT	81	VER 1424-4X3	66
SCC 10	107	SQT A525P	31	TCF NE-VENT	81	V/R 312020-905	53
SCC 12	107	SQT A1131F	32	TCF SP-1	79	V/R 312020-908	53
SCC 16	107	SQT A1151F	32	TCS 1-310215	93	V/R 788700-071	52
SCC 20	107	SQT A1157FS	32	TCS 1-310215L	93	V/R 788810-001	52
SCC 24	107	SQT A1176CS	32	TCS 3000	52	V/R 788810-004	52
SCC 28	107	SQT A1301A	30	TCS 74020AF	53	V/R 788810-013	52
SCC 32	107	SQT A1310A	30	TCS 74020SS	53	W/D COM4449	79
SCC 36	107	SQT A1327	30	TCS DMP100	53	WES 4S-20-240	75
SCC 40	107	SQT A1416-A	30	TCS TM10XNPT	50	WES 6S-20-240	75
SCC 48	107	SQT A1525	31	TCS TM10ZNPTEK	50	YAR H-CCONTROL	27
SCC 56	107	SQT A1527	31	TCS TM15XNPT	50	YAR HYDRA-CAL	27
SCC 72	107	SQT A1705-50	30	TCS TM15ZNPTEK	50	YAR HYDRA-CELL	27
SCC 96	107	SQT A1710-95	30	TCS TM20XNPT	50	YAR PLUMBING	27
SCC 104	107	SQT A1711-95	30	TCS TM20ZNPTEK	50	YAR PLUMBING	27
SCC 60200	107	SQT A1713-165	30	TCS TM30XNPT	50	YAR SCALE-W	27
SCC 60250	107	SQT A1713-225	30	TCS TM30ZNPTEK	50	YAR TOTE-SYST	27
SCC 60300	107	SQT A1727	30	TCS TM40XFLG	50	YAR TOTE-SYST	27
SCC 60350	107	SQT A1728	30	TCS TM40ZFLGEK	50	YAR WILDEN	27
SCC 60400	107	SQT A1729	30	TLF CONR***	101		
SCC 60450	107	SQT A1733	30	TLF ER***	101		
SCC 60500	107	SQT A1911	30	TLF WELDCAP***	101		
SCC M8	107	SQT A2002	32	TLF WELDELLR***	101		
SCC U5	107	SQT A2005S	32	TLF WELDTEE***	101		
SCI AIRPUMP	63	SQT A2007S	32	TLF WL***X45S80	101		
SCI AIRPUMPCOM	62	SQT A2013S	32	TNK 1.5SSBUNGV	76		
SCI AP30KIT	63	SQT A2060S	32	TNK 1BUNG	76		
SCI CADCT6-414	60	SQT A2063S	32	TNK 2BUNG	76		
SCI CADCT6EPDM	60	SQT A2065S	32	TNK 2SSBUNG-HV	76		
SCI CT6	63	SQT A2080C	32	TNK 3/4BUNG	76		
SCI CT6110-414	60	SQT AA214E	33	TNK 3BUNG	76		
SCI CT6110EPDM	60	SQT AA240E	33	TNK 3SSBUNG-HV	76		
SCI DD6 MOTOR	63	SQT AA3160-60	33	TNK 3X2SSBUNGV	76		
SCI DD6PLY-414	61	SQT AA3160-160	33	TNK 4SSBUNG-HV	76		
SCI DD6PLY-E	61	SQT AA3160-400	33	TNK 4X2SSBUNGV	76		
SCI DD6PUMP-P	63	SQT AL109	32	TNK 11/2BUNG	76		
SCI KD-23-01	63	SQT AL111	32	TNK 11/4BUNG	76		
SCI SEM-10	51	SQT AL308P	30	TNK 1100D23	73		
SCI SEM-10FTP	51	SQT AL309P	30	TNK 1600D23	73		
SCI SIDECT6EPDM	61	SQT AL310P	30	TNK 2200D23	73		
SCI XTUBE-E	81	SQT AL311P	30	TNK 2400D23	73		
SNY 120SQ-B	78	SQT AL312P	30	TNK 3000D23	73		
SNY 220SQ-2B	78	SQT AL313P	30	TNK 4300D23	73		
SNY 330SQ-2B	78	SQT AL314P	30	TNK 5100D23	73		
SNY 33100154	81	SQT AL315P	30	TNK 6000CS	72		
SNY 33100157	81	SQT AL316P	30	TNK 6100D23	73		
SNY 35400267	79	SQT AL317P	30	TNK 10000	72		
SNY GEMCAP-2	81	SQT AL320P	30	TNK 10000CS	72		
SNY GEMCAP-2BT	81	SQT AL321P	30	TNK 10000D23	73		
SNY GEMCAP-DD6	81	SQT AL343	31	TNK 12000	72		
SNY GEMCAP-SLD	81	SQT AL345P	31	TNK 12000CS	72		



ORDER FORM

BILL TO:

Business Name _____

Contact _____

Address _____

City _____ State _____ Zip _____

Phone _____

Purchase Order No. _____

SHIP TO: (IF DIFFERENT FROM BILLING ADDRESS)

Business Name _____

Contact _____

Address _____

City _____ State _____ Zip _____

Phone _____

Delivery Requirement Date _____

QTY	VENDOR CODE (OPTIONAL)	PART NO	ITEM DESCRIPTION

☐  ☐  ☐  ☐ C.O.D ☐ Open Order

Card Holder's Name _____

Credit Card No. _____

Expiration Date (MM/YYYY) _____

Signed _____ Date _____

TO ORDER: FAX FORM TO (260) 484-9230 OR EMAIL SALES@MURRAYEQUIPMENT.COM

TERMS & CONDITIONS

All products are sold and all quotations are subject to the following terms and conditions:

1. Buyer's order is accepted on the condition that the following terms and conditions, or any special attachments, shall apply and shall constitute the entire agreement between the parties. The terms and conditions may not be varied, and no modification or addition to them shall be of any force or effect, unless made by or specifically accepted by MEI in writing. Acceptance of Buyer's orders, which contain additional or different conditions of purchase printed on the order form, shall not be binding upon MEI unless specifically agreed to in writing by an authorized representative of MEI (If any conflict exist between the terms and conditions as set forth herein, and those terms and conditions as contained on Buyer's order form, these terms and conditions shall supersede and govern.)
2. All quotations or agreements are contingent upon strikes, lockout, work-stoppages, war, riot, availability of materials, fire, accident or any other cause beyond MEI's control. MEI shall have no liability for any delay, failure to deliver, loss or damage, or any consequential damages arising therefrom.
3. Time for delivery shall not be of the essence of the agreement. MEI will make its best efforts to meet the stated shipment or delivery dates, but it shall not be liable for any loss or damages, including consequential damages, resulting from any delay.
4. All orders are subject to a minimum net invoice billing of \$5.00 exclusive of non-product charges such as postage, freight or taxes, etc., unless stated to the contrary on the face of this agreement. Payment terms are net 15 days from the invoice date. Any invoices paid after the due date on the invoice, shall accrue interest at the rate of 1 and 1/2 percent per month, 18 percent per year.
5. Invoices are billed at prices in effect at time of shipment. Prices and discounts are subject to change without notice.
6. Title and risk of loss or damage to the equipment shall pass to the purchaser upon tender or delivery F.O.B. manufacturing facility unless otherwise agreed upon by the parties.
7. Typographical or mathematical errors made by MEI in quotations, acknowledgments or invoices are subject to correction. To be allowable, any claim of error in quantity shipped shall be made by the Buyer in writing, within 10 days after receipt of the goods.
8. No goods may be returned without MEI's written permission. If authorized for return, transportation charges must be prepaid by Buyer unless otherwise agreed to by MEI in writing in the authorization to return goods. All goods authorized for return are subject to inspection and acceptance. A handling charge equal to 15 percent of the purchase of the goods will be assessed on items not returned within 90 days, unless waived by MEI, in writing, in the authorization to return goods. No credits are issued without the original invoice number.
9. No cancellation, suspension or variation of an order accepted by MEI shall be valid unless agreed to by MEI in writing. MEI reserves the right to assess cancellation or other charges to indemnify against all loss, including the profit on any part of an order that is cancelled.
10. Buyer agrees to, and does, indemnify and hold harmless MEI against any and all loss or liability either direct or indirect, including reasonable attorney fees for or on account of any claims, demands or suits for any actual or alleged infringement of any letters, patents, copyrights or trademarks, either domestic or foreign arising from the manufacture or sale of goods in accordance with patterns, designs, specifications, drawings, directions, technical information, or data furnished to MEI by Buyer.
11. All quotations and all of the terms and conditions set forth above, and any agreement or sale arising between Buyer and MEI shall be governed and construed in accordance with the laws of the State of Indiana. Exclusive jurisdiction and venue for any and all claims arising out of any quotation or sale between Buyer and MEI shall be in the courts located in Allen County, Indiana.
12. Sale of all original equipment manufacturer ("O.E.M.") products are subject to the O.E.M.'s limited warranty and limitations of liability. Under no circumstances shall MEI be liable for indirect, consequential, incidental or special damages, including but not limited to, loss of profit, loss of product, or any cleanup costs associated with loss of product.

13. MEI certifies that the products furnished pursuant to this agreement have been or will be produced in compliance with the Fair Labor Standards Act as amended and regulations and orders of the United States Department of Labor. MEI agrees that this statement may be considered as the written assurance contemplated by said Act.

14. Unless otherwise expressly provided, MEI shall retain title to and possession of any models, patterns, dyes, molds, jigs, fixtures, and tools made for or obtained for the furnishing of this order.

15. Buyer's acceptance of any order based on this agreement shall evidence the acceptance by the Buyer of the terms and conditions on the face and reverse side of this agreement. By accepting the goods, Buyer agrees to be bound by these terms and conditions, notwithstanding any adverse or conflicting terms or conditions on Buyer's purchase order. Any exceptions or charges must be in writing and signed by an authorized representative of MEI

Warranty

New machines, equipment or components of Murray Equipment, Inc. ("MEI") manufacturing or fabrication with which this warranty is enclosed, are warranted by MEI to the original purchaser only for a period of ninety (90) days from the date of shipment, to be free, under normal use and service, from defects in material workmanship. For defects occurring within state warranty period, MEI will repair or replace at MEI's option; provided that parts are returned to MEI transportation charges prepaid, and that MEI's examination discloses the part or parts or workmanship to have been defective upon delivery to the purchaser.

Exclusions

Warranty does not cover any parts and equipment not manufactured by MEI, but these items may be covered by the separate warranties of their manufacturers. This warranty does not extend to any equipment which has been subjected to misuse, negligence, or accident, or if operated in any manner other than in accordance with MEI's operating instructions and specifications. This warranty applies only to MEI products sold in the United States; any MEI products sold elsewhere are warranted by the affiliated marketing company.

Claim Procedures

In order to obtain performance by MEI of its obligations under this warranty, the original purchaser must return the defective machine, piece of equipment, or component covered by this warranty, with transportation charges prepaid, to MEI at 2515 Charleston Place, Fort Wayne, IN 46808, together with a written statement setting forth the nature of defect and proof of purchase from MEI.

Limitations

There are no other warranties of any kind express or implied. MEI specifically disclaims any warrant of merchantability or of fitness for any particular purpose. MEI's sole obligation which shall represent the buyer's sole and exclusive remedy, shall be to repair or at MEI's option to replace any product or part determined to be defective. In no event shall MEI be liable for any special, direct, indirect, incidental, consequential or other damages of similar nature incurred, nor any liability to be assumed except as expressly provided herein; there is no other express or implied warranty.

Repair Warranty

All work is warranted for thirty (30) days from the date of shipment to customer. Some parts may be warranted for longer periods by the original equipment manufacturer.

Design & Equipment

Any changes in design or improvements added shall not create any obligation to install same on equipment previously sold or ordered.

NOTES

[illegible]



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