



AMERICAN-MARSH PUMPS

“DURABILITY BY DESIGN SINCE 1873”

490 Series NOVO Centrifugal & Diaphragm Self-Priming Pumps

**Flows to: 5,000 GPM
Heads to: 200 Feet
Temperatures to: 180° F**

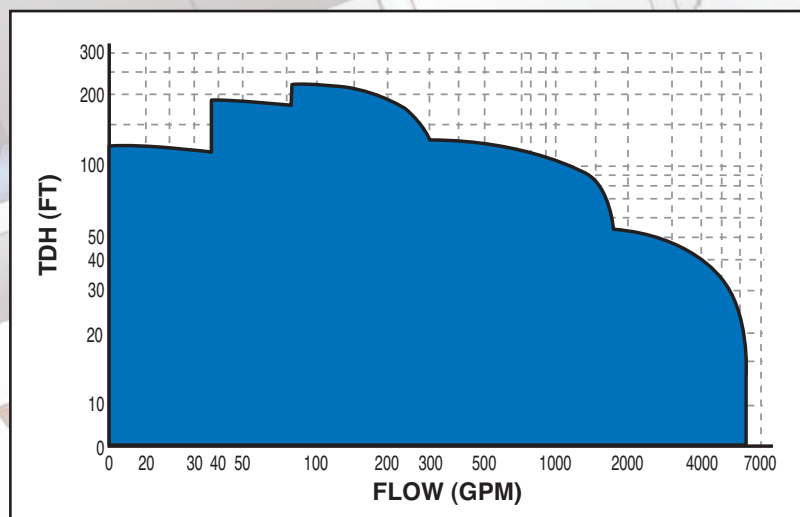
135 Years of Pump Manufacturing

American-Marsh Pumps, one of the oldest pump lines in America, are pump products steeped in heritage. Since 1873, the American-Marsh line of pumps has withstood the test of time. During the last 135 years, over 100 varieties of pumps have been designed and built. From steam pumps to centrifugal pumps, American-Marsh pumps have been built to meet the ever changing requirements of society. Over the last century through continuous product development, more American-Marsh models have been retired than most other pump manufacturers have ever produced. Hundreds of thousands of pumps have been made, all designed for longevity, allowing many of them to continue servicing customers over 50 years.

All of our pumps have three superior characteristics; Design, Performance, and Durability. Our engineering department, which includes an in-house pattern shop, designs each pump so that installation and maintenance is easy. Our performances are engineered to meet or beat the competition in each category. For 135

years, American-Marsh Pumps products have provided cost effective solutions by building pumps to last. Durability by design is always the most cost effective solution. From engineering and design to final assembly, experienced people control each step of the manufacturing process with quality control inspections performed at each step. All pumps shafts are heat straightened. All impellers are computer balanced. Pump testing is done in our new state of the art test facility. All of these factors ensure you receive consistent quality product every time.

American-Marsh Pumps has provided quality pump products for over 135 years. At American-Marsh Pumps, we know that long life and superior performance are the keys to satisfied customers. By understanding your needs, we can design products that meet those needs. Our product family reflects years of customer input, product upgrades, redesign and new product development, all focused on meeting and exceeding your expectations.





Specifications

SST, SSU, LS & AD Series

Casing:

SST & SSU Models: The casing is of high tensile cast iron or other specified material. It is of the self-primer, volute type with top discharge and large capacity priming chamber. Ports are provided for filling and draining of the casing. The power frame assembly can be removed from the rear of the casing (back pull-out) without disturbing suction or discharge piping and has jack screws to aid in removal. The casing has an impeller inspection cover that permits rapid access to the impeller to remove obstructions. On the top of the casing is an oversized fill port to allow quick filling of the casing with pumped fluid. An oversized cleanout plate is located on the front of the casing for service and inspection. The impeller, wear plate, mechanical seal and suction check valve can be serviced through this cover plate without the need to disturb suction and discharge connections. Oversized fill ports as well as vent and drain openings are provided. To protect the pump and system piping, a standard pressure relief valve is located on the cleanout plate. Running clearances can be re-adjusted with adjustment screws to dial back to factory running tolerances and efficiencies easily and effortlessly.

LS Models: The casing is of high tensile cast iron or other specified material. It is of the self-primer, volute type with top discharge and large capacity priming chamber. Ports are provided for filling and draining of the casing. The power frame assembly can be removed from the rear of the casing (back pull-out) without disturbing suction or discharge piping.

AD Models: The pump body is of high tensile cast iron or other specified material. It is of the self-primer type with side suction and discharge ports. Ports are provided for draining and clean-out. A clean-out port is supplied on the discharge side to permit the rapid access under the diaphragm to remove obstructions. The power frame and 30:1 gear housing are independently lubricated.

Impellers – ALL Models: The impeller is of the semi-open, solids handling type, casted in one piece of cast iron or other specified material. All impellers are dynamically balanced prior to assembly and all impellers are designed to pump large spherical solids. Impellers have back pump out vanes standard on the back side of the impeller to reduce material from

building up behind the impeller. AD models feature a replaceable diaphragm in Buna or other specified material.

Mechanical Seal:

SST & SSU Models: The seal chamber is sized for a heavy-duty, front loading cartridge mechanical seal. The cartridge mechanical seal is constructed of a tungsten carbide rotary face, a tungsten carbide stationary face and viton elastomers standard. Other mechanical seal types are available upon request. The entire seal assembly is oil lubricated to ensure long life and durability.

LS Models: The mechanical seal is constructed of abrasion resistant materials for use in dirty applications. The mechanical seal is lubricated with grease and can run dry on high vacuum even when pumping highly abrasive liquids for approximately two minutes.

WearPlate – SST & SSU Models: The casing is fitted with a renewable wear plate. The plate is constructed of heavy duty cast iron and held in place by capscrews. This wear plate can be replaced when worn to bring the pump back up to factory tolerances and efficiencies.

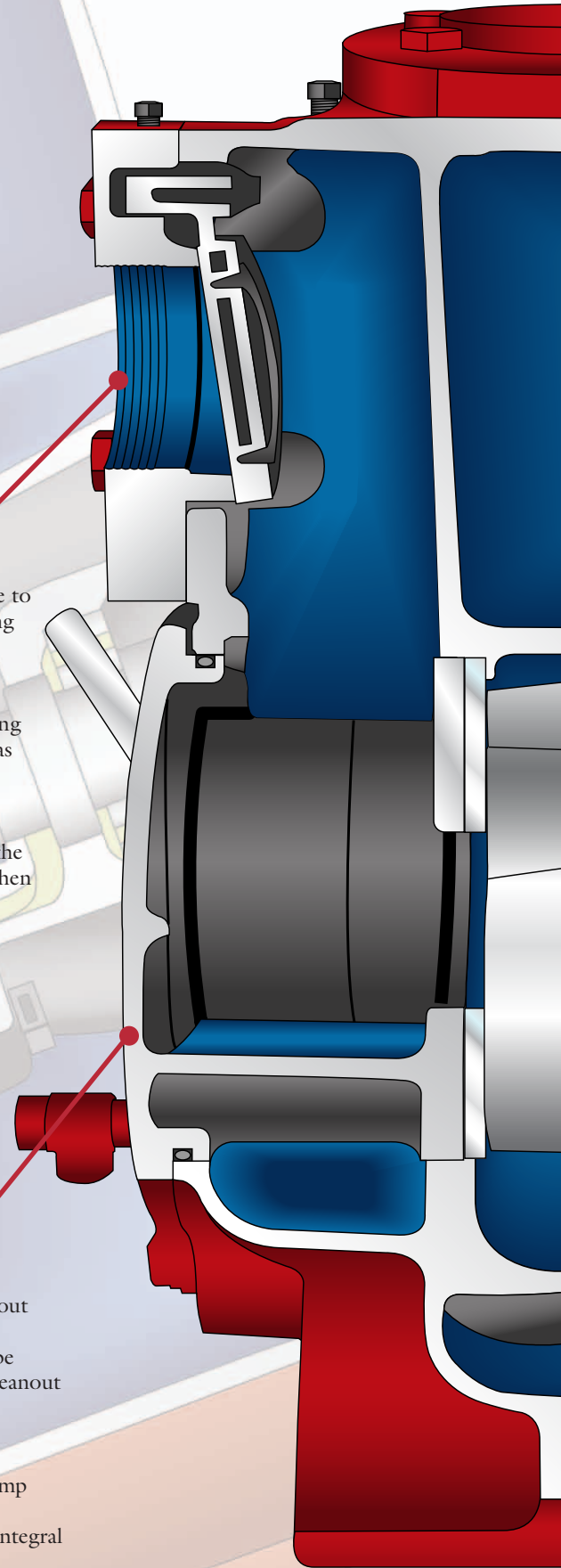
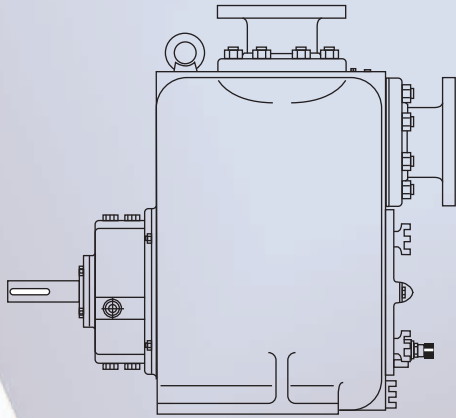
Shaft – All Models: The shaft is of stainless steel, ground and polished to a smooth surface. It is designed for extra stiffness to avoid all critical speeds in operation.

Shaft Sleeve – SST & SSU Models: A stainless steel shaft sleeve is provided for protection of the shaft. This shaft sleeve can be easily removed and replaced as needed.

Power Frame:

SST, SSU, LS & AD Models: The power frame is constructed of high tensile cast iron or other specified material and provides support for the inboard and outboard bearings. Each bearing is designed to carry all thrust and radial loads encountered by the pump. The outboard bearing is oversized standard for use with belt drive systems. SST, SSU & AD power frames have an integral oil sump that provides oil for lubrication to each bearing and an oil level eye is provided standard on the power frame to visually indicate the oil level. LS power frames are designed for grease lubrication and are supplied with zerk fittings.

Model SST Pump



Flows To: 5,000 GPM
Heads To: 120 Feet
Solids To: 3" Diameter
Temps To: 180° F

Markets:

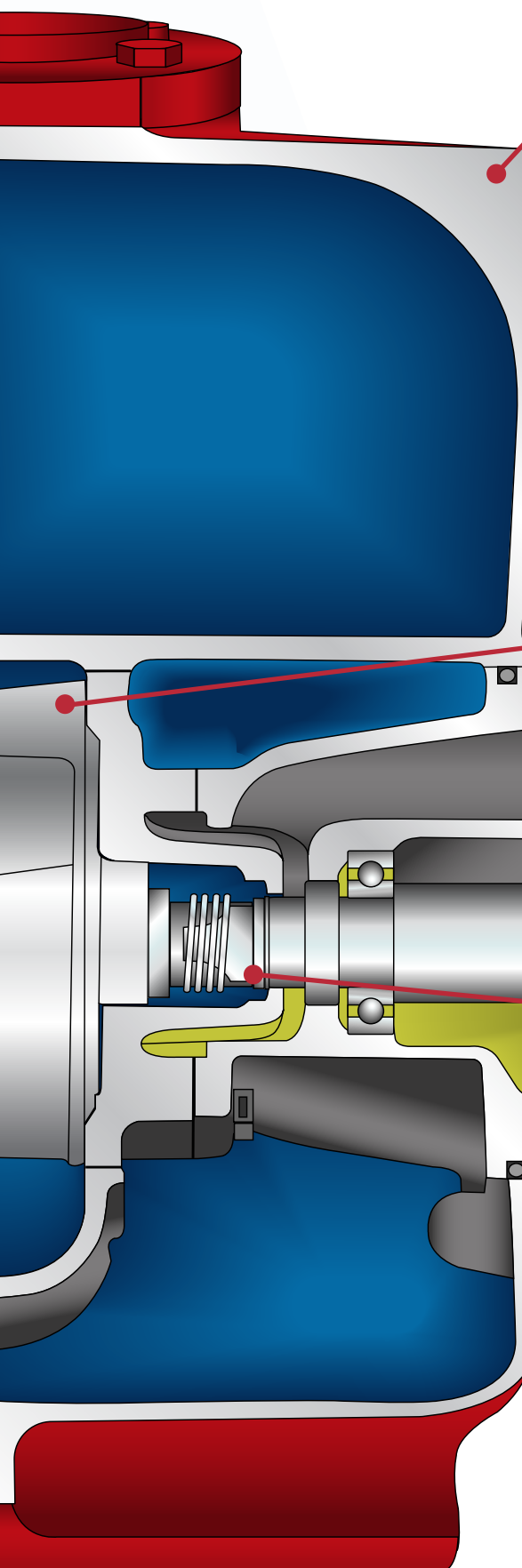
-  Chemical
-  Construction
-  General Industry
-  Marine
-  Mining & Aggregate
-  OEM
-  Power Generation
-  Petro-Chemical
-  Pulp & Paper
-  Water & Wastewater

Suction Inlet

- Heavy duty check valve to keep liquid in the casing when the pump stops
- Check valve can be removed without disturbing suction piping
- Oil resistant with canvas reinforcement for durability
- Heavy, integral valve weight to ensure that the valve remains closed when the pump is off

Removable Cleanout Plate

- Quick access to the interior of the pump without disturbing suction or discharge piping
- The impeller, wear plate and check valve can be inspected and/or replaced by removing the cleanout plate
- Clogs can be removed easily
- Integral and replaceable front wear plate
- Integral pressure relief valve to protect the pump and casing from over pressurizing
- Running clearances can be adjusted by using integral hardware on the power frame



Casing

- Standard ASTM A48 close grained cast iron
- Can be supplied in Novolloy abrasion resistant material, all bronze or all 316 stainless steel
- Heavy wall thickness to provide generous corrosion allowance
- Large priming chamber for quick prime times and large solids passing
- Oversized filling port for quick filling of the casing
- Bolt on suction and discharge spool pieces to meet jobsite requirements
- Large, oversized cleanout plate
- All ports with handles which can be opened without special tools
- Provisions for casing heater for use in cold weather applications
- All bolted connections utilize casing studs for ease in maintenance

Impeller

- Standard ASTM A48 close grained cast iron
- Can be supplied in Novolloy abrasion resistant material, bronze or 316 stainless steel
- Two vane, balanced, semi-open, large diameter spherical solids handling
- Back pump out vanes to keep material from building up behind the impeller

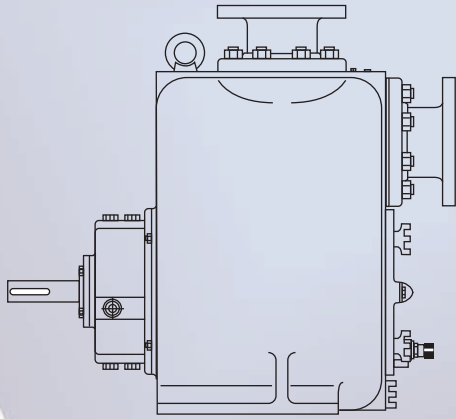
Mechanical Seal

- Tungsten Carbide vs. Tungsten Carbide face arrangement
- Oil bath lubrication
- Can run dry temporarily on high vacuum even when pumping highly abrasive liquids
- Integral stainless steel shaft sleeve

Power Frame

- Standard ASTM A48 close grained cast iron
- Back pull out feature allows for ease in service without disturbing suction or discharge piping
- Two independent oil reservoirs, one for the bearings & one for the mechanical seal
- Integral oil eyes for oil level in the bearing housing
- Heavy duty, oil lubricated, oversized bearings for direct drive or V-belt applications
- Heavy duty shaft bored and tapped to facilitate assembly of couplings or pulleys

Model SSU Pump



Flows To: 1,400 GPM
Heads To: 200 Feet
Solids To: 1.25" Diameter
Temps To: 180° F

Markets:

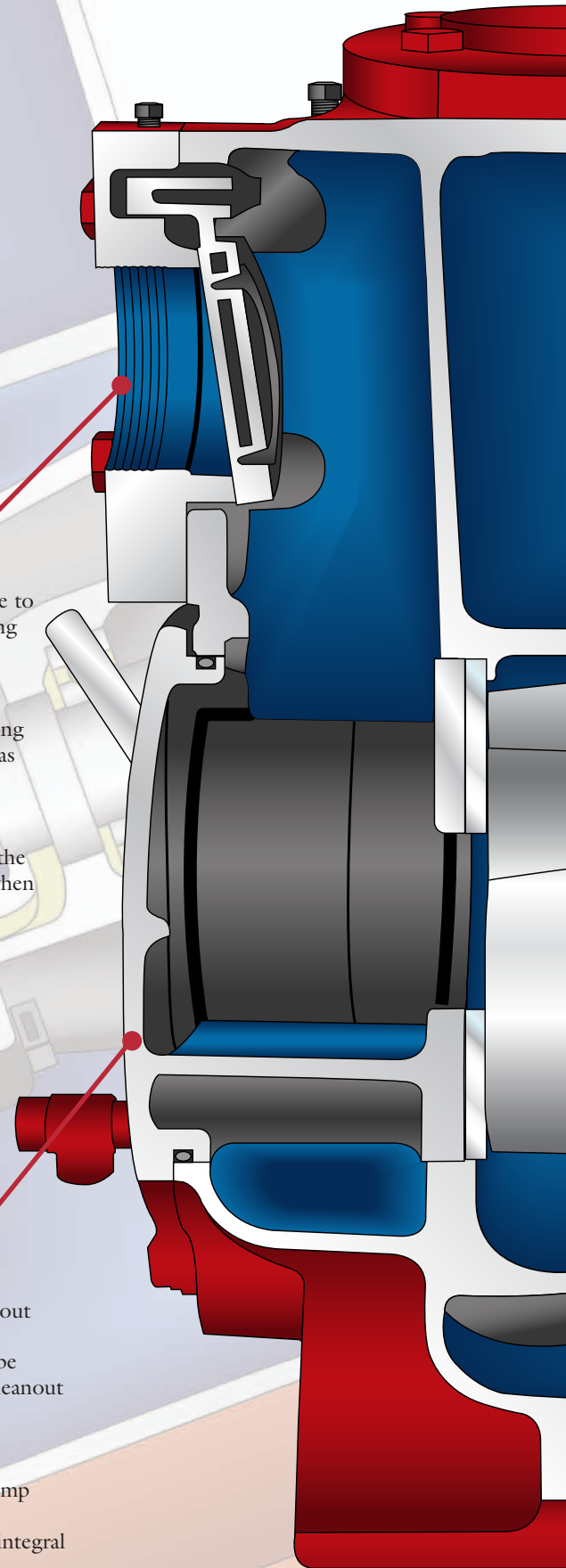
-  Chemical
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-  Mining & Aggregate
-  OEM
-  Power Generation
-  Petro-Chemical
-  Pulp & Paper
-  Water & Wastewater

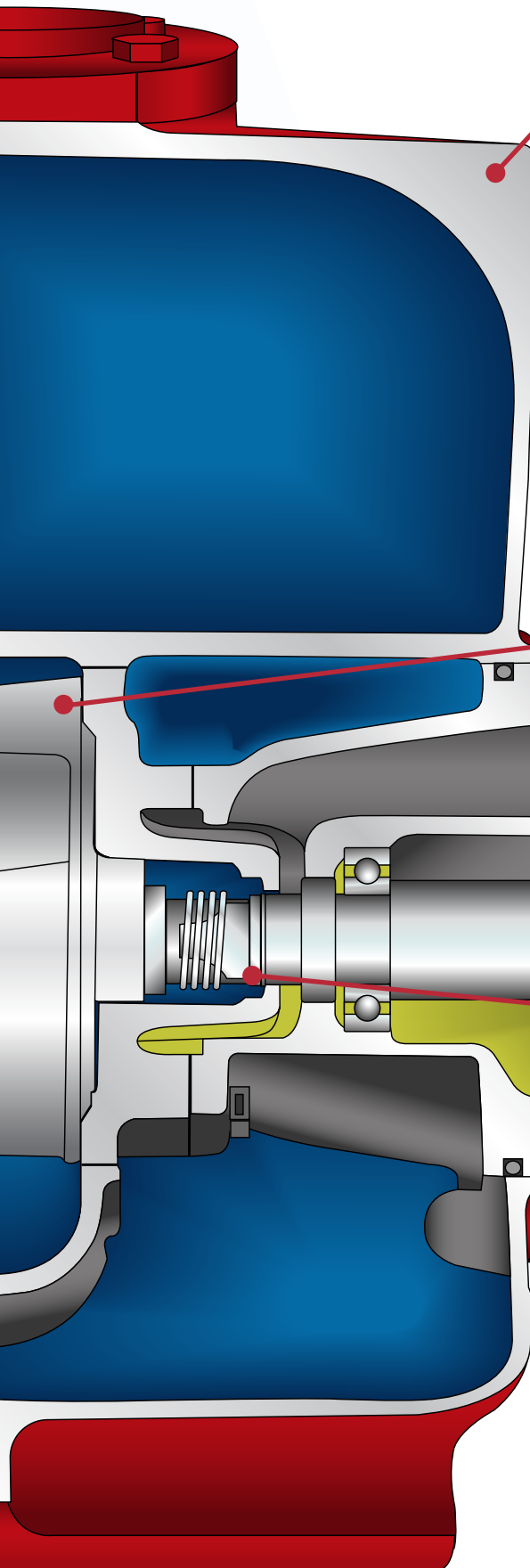
Suction Inlet

- Heavy duty check valve to keep liquid in the casing when the pump stops
- Check valve can be removed without disturbing suction piping
- Oil resistant with canvas reinforcement for durability
- Heavy, integral valve weight to ensure that the valve remains closed when the pump is off

Removable Cleanout Plate

- Quick access to the interior of the pump without disturbing suction or discharge piping
- The impeller, wear plate and check valve can be inspected and/or replaced by removing the cleanout plate
- Clogs can be removed easily
- Integral and replaceable front wear plate
- Integral pressure relief valve to protect the pump and casing from over pressurizing
- Running clearances can be adjusted by using integral hardware on the power frame





Casing

- Standard ASTM A48 close grained cast iron
- Can be supplied in Novolloy abrasion resistant material, all bronze or all 316 stainless steel
- Heavy wall thickness to provide generous corrosion allowance
- Large priming chamber for quick prime times and large solids passing
- Oversized filling port for quick filling of the casing
- Bolt on suction and discharge spool pieces to meet jobsite requirements
- Large, oversized cleanout plate
- All ports with handles which can be opened without special tools
- Provisions for casing heater for use in cold weather applications
- All bolted connections utilize casing studs for ease in maintenance

Impeller

- Standard ASTM A48 close grained cast iron
- Can be supplied in Novolloy abrasion resistant material, bronze or 316 stainless steel
- Multi-vane, balanced, semi-open, large diameter spherical solids handling
- Back pump out vanes to keep material from building up behind the impeller

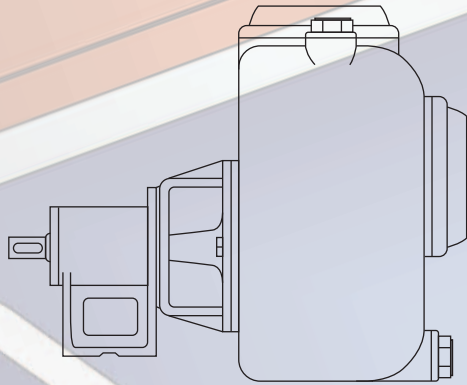
Mechanical Seal

- Tungsten Carbide vs. Tungsten Carbide face arrangement
- Oil bath lubrication
- Can run dry temporarily on high vacuum even when pumping highly abrasive liquids
- Integral stainless steel shaft sleeve

Power Frame

- Standard ASTM A48 close grained cast iron
- Back pull out feature allows for ease in service without disturbing suction or discharge piping
- Two independent oil reservoirs, one for the bearings & one for the mechanical seal
- Integral oil eyes for oil level in the bearing housing
- Heavy duty, oil lubricated, oversized bearings for direct drive or V-belt applications
- Heavy duty shaft bored and tapped to facilitate assembly of couplings or pulleys

Model LS Pump



Flows To: 450 GPM
Heads To: 140 Feet
Solids To: 1.5" Diameter
Temps To: 180° F

Markets:

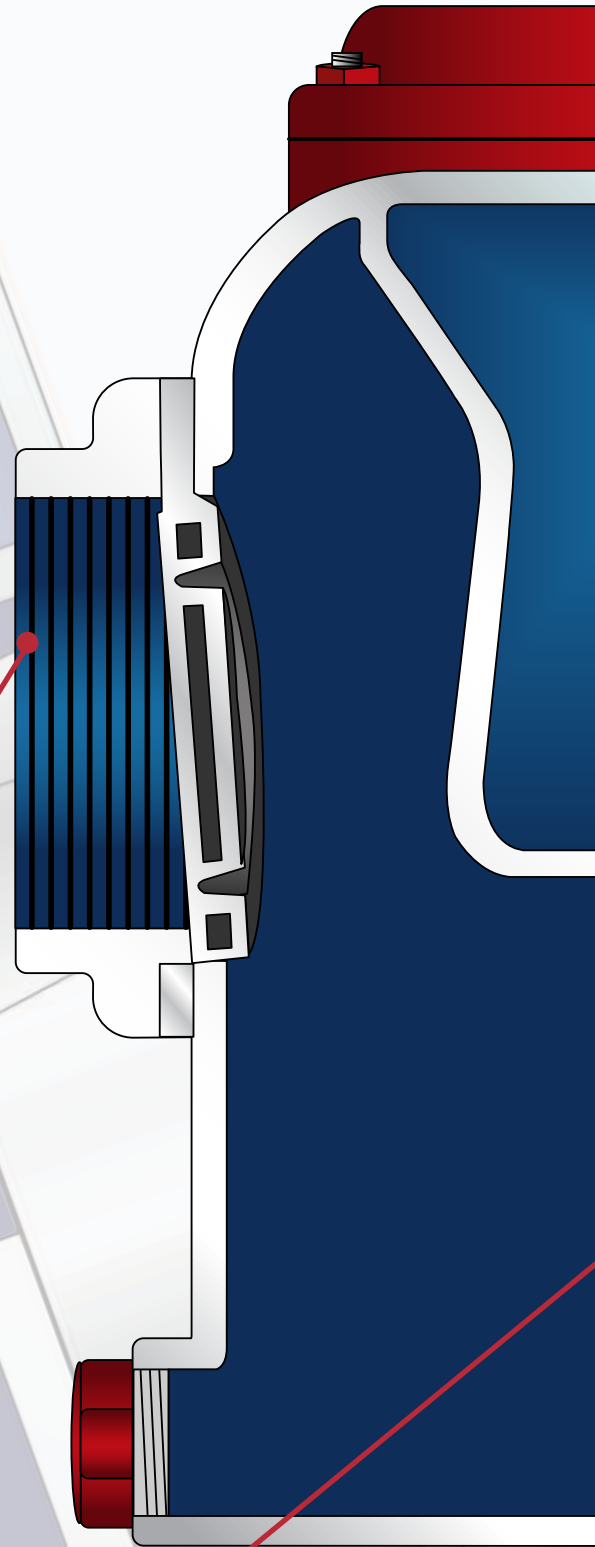
-  Chemical
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-  Power Generation
-  Petro-Chemical
-  Pulp & Paper
-  Water & Wastewater

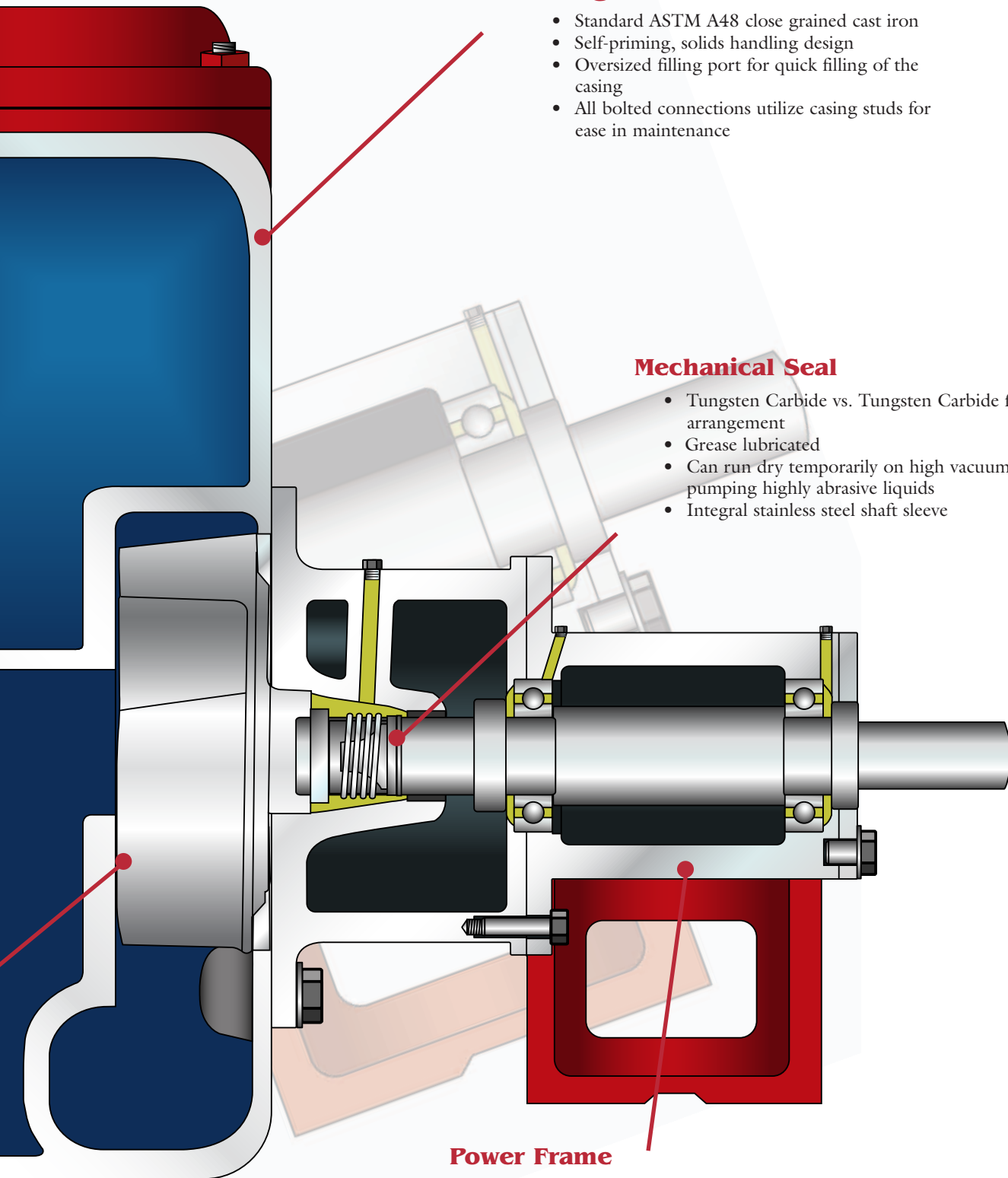
Suction Inlet

- Heavy duty check valve to keep liquid in the casing when the pump stops
- Oil resistant with canvas reinforcement for durability
- Heavy, integral valve weights to ensure that the valve remains closed when the pump is off

Impeller

- Standard ASTM A48 close grained cast iron
- Multi-vane, balanced, semi-open, large diameter spherical solids handling





Casing

- Standard ASTM A48 close grained cast iron
- Self-priming, solids handling design
- Oversized filling port for quick filling of the casing
- All bolted connections utilize casing studs for ease in maintenance

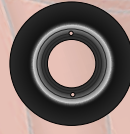
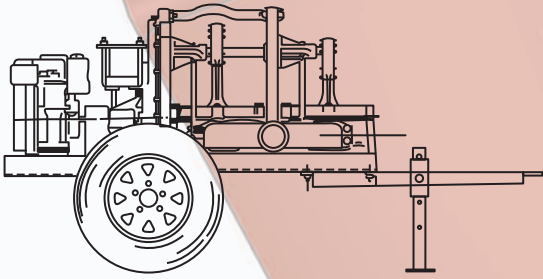
Mechanical Seal

- Tungsten Carbide vs. Tungsten Carbide face arrangement
- Grease lubricated
- Can run dry temporarily on high vacuum even when pumping highly abrasive liquids
- Integral stainless steel shaft sleeve

Power Frame

- Standard ASTM A48 close grained cast iron
- Back pull out feature allows for ease in service without disturbing suction or discharge piping
- Heavy duty, grease lubricated, oversized bearings for direct drive or V-belt applications
- Heavy duty shaft bored and tapped to facilitate assembly of couplings or pulleys

Model AD Pump



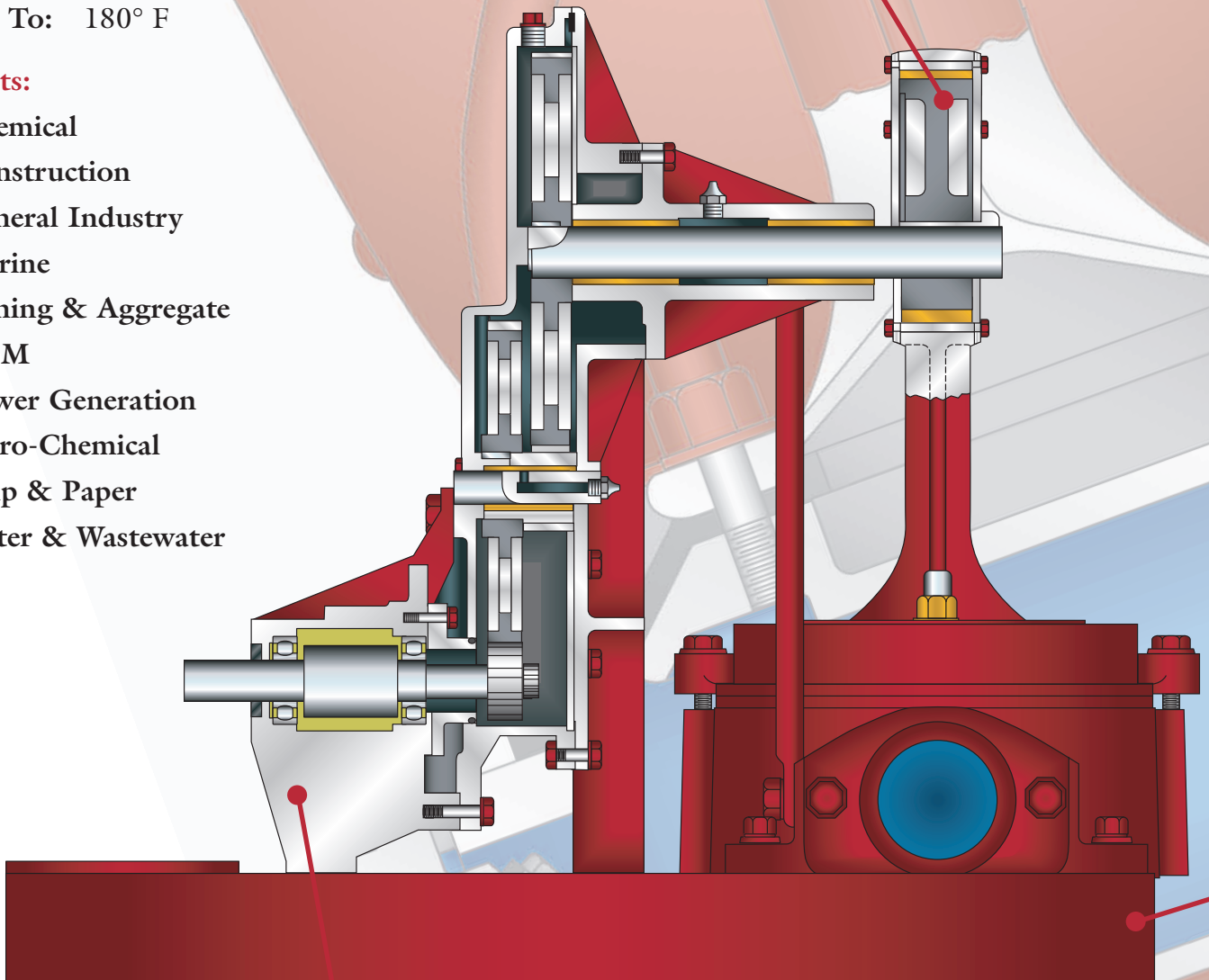
Flows To: 280 GPM
Heads To: 50 Feet
Solids To: 3" Diameter
Temps To: 180° F

Markets:

-  Chemical
-  Construction
-  General Industry
-  Marine
-  Mining & Aggregate
-  OEM
-  Power Generation
-  Petro-Chemical
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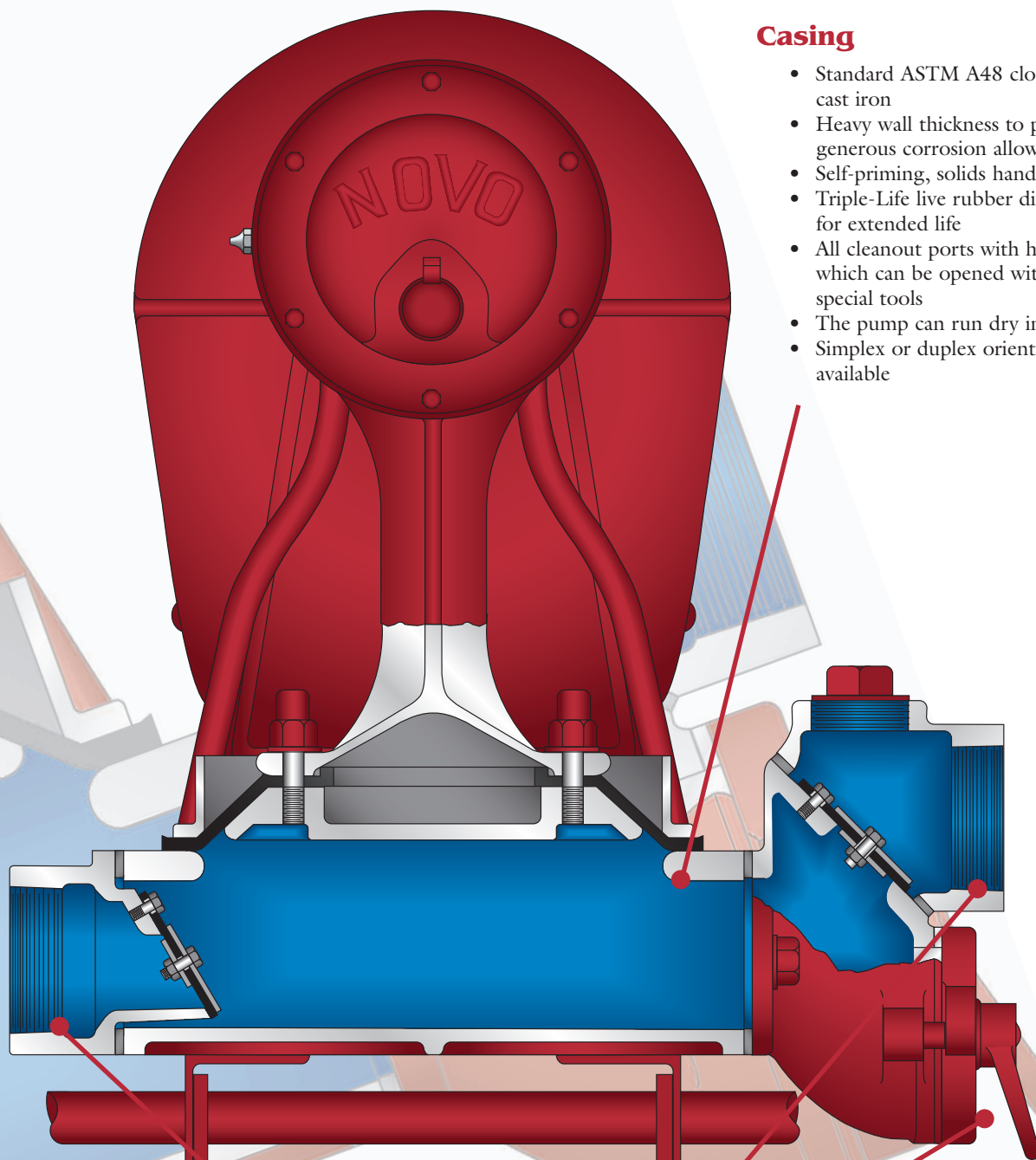
Eccentric

- Easily replaceable, annealed bronze bearings
- Grease lubricated for long life



Power Frame & Gear Housing

- Standard ASTM A48 close grained cast iron
- Independent oil reservoir for lubricating gear train and power frame roller bearings
- Heavy duty, oil lubricated, oversized bearings for direct drive or V-belt applications
- Heavy duty shaft bored and tapped to facilitate assembly of couplings or pulleys
- 30:1 gear drive ratio reduces engine input speed from 1800 RPM down to 60 RPM
- Drivers include electric motor, diesel or gasoline engine and PTO



Casing

- Standard ASTM A48 close grained cast iron
- Heavy wall thickness to provide generous corrosion allowance
- Self-priming, solids handling design
- Triple-Life live rubber diaphragm for extended life
- All cleanout ports with handles which can be opened without special tools
- The pump can run dry indefinitely
- Simplex or duplex orientation available

Base Assembly

- Stationary base standard
- Hand cart base optional
- High speed trailer optional

Removable Cleanout Plate

- Quick access to the interior of the pump without disturbing suction or discharge piping
- No special tools required for disassembly
- Clogs can be removed easily

Suction & Discharge Ports

- Heavy duty check valves ensure quick priming times and large solids handling capability
- Oil resistant with canvas reinforcement for durability
- Heavy, integral valve weights to ensure that the valve remains closed when the pump is off
- Optional pulsation damper on discharge port

Our long tradition of quality pump manufacturing began in 1873 making us one of the first pump manufacturers in this country. **American-Marsh Pumps** provides the user dependability and durability. Durability by design is always the most cost effective solution.

Nearly all designs are available in alternate metallurgy constructions

SUCTION INLET

Heavy duty check valve keeps liquid in the casing when the pump stops. Also has heavy, integral valve weights to ensure that the valve remains closed when the pump is off.

HEAVY DUTY CASING

Casing is ASTM A48 close grained cast iron and provided with extra thick casing walls. Rugged design resists external forces and vibration. Large priming chamber for quick prime times and large solids passing.

MECHANICAL SEAL

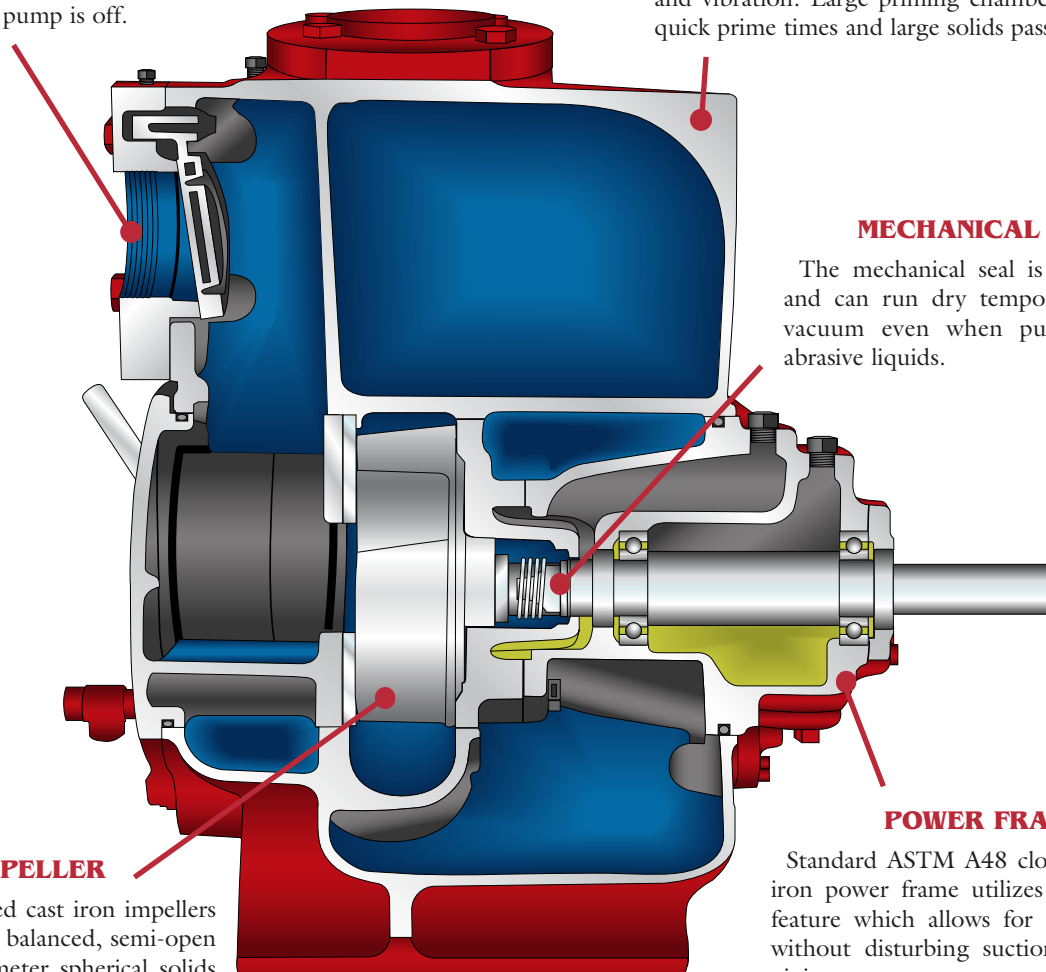
The mechanical seal is oil lubricated and can run dry temporarily on high vacuum even when pumping highly abrasive liquids.

IMPELLER

Close grained cast iron impellers are two-vane, balanced, semi-open for large diameter spherical solids handling.

POWER FRAME

Standard ASTM A48 close grained cast iron power frame utilizes back pull out feature which allows for ease in service without disturbing suction or discharge piping.



OTHER PUMP PRODUCTS

MULTI-STAGE	END SUCTION	VERTICAL SUMP	SPLIT CASE	ANSI
To 8" Discharge 4800 GPM, 2100'	To 12" Discharge 9000 GPM, 450'	To: 12" discharge 9000 GPM, 450'	To 30" Discharge 30,000+ GPM, Heads to 550'	To 8" Discharge 7400 GPM, Heads to 985'

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Louisiana: 1626 Walker Road, Scott, LA 70583 (800)506-7167

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