AMERICAN-MARSH PUMPS

"DURABILITY BY DESIGN SINCE 1873"

330 Series Sump & Sewage Pumps

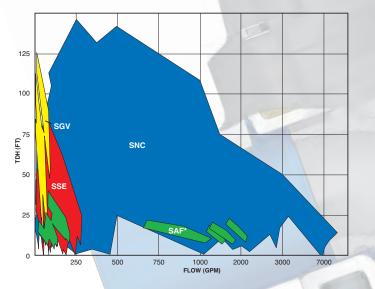
Flows to: 20,000 GPM Heads to: 135 Feet Temperatures to: 140° F

140 Years of Pump & Motor Manufacturing

American-Marsh Pumps, one of the oldest pump lines in America, are pump and motorproducts steeped in heritage. Since 1873, the American-Marsh line of pumps and motors have withstood the test of time. During the last 140 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 and motors have three superior characteristics; Design, Performance, and Durability. Our engineering department, which includes an in-house pattern shop, designs each pump and motor so that installation and maintenance is easy. Our performances are engineered to meet or beat the competition in each category. For 140 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 and motor products for over 140 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 330 Series - Sump & Sewage

SGV, SSE, SNC & SAF Submersible Pumps

Casing: The casing is constructed of epoxy coated, high tensile cast iron. It is of the volute type, carefully and accurately proportioned to permit smooth flow and to convert high velocity energy of the fluid as it leaves the impeller into pressure. Suction and discharge nozzles are cast integral with the volute. SGV, SSE and SNC casings feature a centerline discharge. SAF models feature a diffuser casing.

Impeller:

SGV Grinder: The impeller is of the semi-open, end suction type, casted in one piece of cast iron material. A cutter & cutter ring assembly is designed to cut through stringy solids in the pump fluid prior to it entering the casing assembly. Semi-open style impellers create a vortex within the casing minimizing wear on the impeller leading to increased life.

SSE Sewage Ejector: The impeller is of the single vane cutter or semi-open type, casted in one piece of cast iron material. Single vane cutter style impellers feature a Tungsten-Carbide leading edge and radially grooved wear plate designed to cut through stringy solids in the pump fluid. Semi-open style impellers create a vortex within the casing minimizing wear on the impeller leading to increased life.

SNC Submersible Non-Clog: The impeller is of the single vane cutter, semi-open or enclosed end suction type, casted in one piece of cast iron material. Single vane cutter style impellers feature a Tungsten-Carbide leading edge and radially grooved wear plate designed to cut through stringy solids in the pump fluid. Semi-open style impellers create a vortex within the casing minimizing wear on the impeller leading to increased life. Enclosed impellers feature large solids passing design and high efficiency.

SAF Submersible Axial Flow: The axial impeller is casted in one piece of bronze material. The axial flow impellers feature large solids passing design and high efficiency.

All impellers are hydraulically and dynamically balanced prior to assembly and most impellers have pump out vanes standard on the back side of the impeller to reduce material from building up near the seal chamber.

SGF Cutter Ring Assembly: The cutter & cutter ring assembly are constructed out of corrosion resistant material and are designed to maserate solids as they enter the hydraulic chamber. The SGF Quadra-Cutter design features one large cutter and three small cutters designed to cut through even the most aggressive solids. Due to the aggressive duty required while in service, the entire assembly is heat treated and hardened to 55-60 Rockwell C, ensuring long life.

SNC Case Wear Ring: Standard enclosed impellers are designed with an integral case wear ring accurately turned to provide close running fits in the casing. The diameters of these rings are such as to reduce end thrust to a minimum.

Shaft: The shaft is of high strength 420 stainless steel, ground to accurate dimensions and polished to a smooth surface. It is designed for extra stiffness to avoid all critical speeds in operation.

Rear Cover: The rear cover is constructed of cast iron or other specified material. The rear cover houses the double mechanical seal which has a Carbon/Cermanic motor side and Silicon-Carbide/Silicon-Carbide pump side face arrangement. Both mechanical seals are of the oil lubricated type to provide excellent lubricating fluid for the seal faces. All models feature an integral seal moisture probe which indicates outboard seal failure. All seal hardware is located in the oil lubricated seal housing, eliminating potential issues with foreign matter clogging the mechanical seal spring. An oil lip seal is located outside of the seal chamber housing, adding a third seal to the pump assembly, which eliminates large solid matter from contacting and collecting near the outside seal face assembly.

Motor: The motor housing frame is constructed of epoxy coated, high tensile cast iron and provides support for the windings, shaft and bearing housing. All American-Marsh submersible motors are air filled for ease in servicing, lower running temperatures and feature Class F insulation. Air filled motors have the advantage of being easier to service due to the fact that the large volume of oil required for operation is not present. Larger motor horsepowers feature a cooling jacket on the motor housing, which lowers operating temperatures and extends motor life. All motors feature an Auto-Cut motor overload design that protects the motor from high amperage draw, locked impeller and high temperature issues within the motor assembly. The cable base of the motor has a compression fitting, an epoxy sealed housing, stripped back motor leads (to prevent wicking of moisture) and o-ring construction to prohibit moisture from entering the motor housing. On larger horsepower frame sizes, a moisture leakage detector is included standard for ultimate protection.

SGV, SSE & SNC Models

Easy Lift GRS (Guide Rail System): American-Marsh's Easy Lift GRS (Guide Rail System) allows the user to easily and efficiently remove and re-install an SGF, SSE and/or SNC submersible sewage Pump. The Easy Lift GRS consists of a discharge elbow, pump discharge coupling, two rails (not supplied) and a stainless steel lifting chain. The Easy Lift GRS is a must for quickly servicing the pump and motor assembly.

Model SGV Grinder Pump





 Sizes:
 1-1/4" to 2"

 Flows:
 80 GPM

 Heads:
 120 Feet

 Temp:
 140° F

Services:

Building Trades

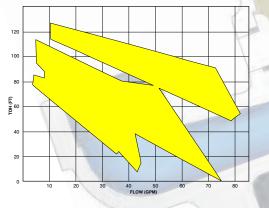
UChemical

Construction

- Food & Beverage
- Ceneral Industry
- ┢ Marine
- Mining & Aggregate
- 褲 Oil & Gas
- Power Generation
- 🎥 Petro-Chemical
- 🌆 Pharmaceutical
- 🚰 Pulp & Paper
- 🌺 Water & Wastewater

Seal Chamber

- Double mechanical seal with Si-C/Si-C outboard and Carbon/Ceramic inboard face construction standard
- Integral seal moisture probe standard to indicate seal failure
- Oil lip seal mounted outside of the seal chamber stops large solids from gathering around the seal faces and stops stringy solids from adhering to mechanical seal





Motor Windings

- Air filled motor design for maximum life and lower operating temperatures
- Heavier duty class F insulation
- Motors available in single or three phase, 50 or 60 cycle and a variety of voltages
- Integral "Auto-Cut" overload protection that protects the motor from high amperage draw, locked impeller and/or high motor temperatures
- Single row outboard and double row inboard bearing for minimal shaft deflection and maximum mechanical seal life
- Optional moisture sensor in winding cavity for ultimate protection

Cable Base

- Integral compression fitting creating a secure mount to the motor frame
- Epoxy sealed to resist moisture from entering the motor

Stripped back leads to prevent wicking of moisture into the motor

Motor Housing

- Constructed out of high tensile cast iron for maximum protection
- Epoxy coated to prevent corrosion and allow for maximum housing life
- O-ring joints with machined registers to prevent the entrance of moisture
- Integral handle on top of motor to allow for easy installation

Casing, Impeller & Cutter Ring Assembly

- High tensile, heavy wall cast iron casing designed for long life
- High tensile cast iron, semi-open impeller designed to pass sewage slurry efficiency and effectively
- Unique "Quadra-Cutter" cutter ring assembly has four cutters designed to macerate sewage or other solids
- The cutter ring assembly is hardened to 55-60 Rockwell C ensuring long life

Model SSE

Sump/Sewage Pump

 Sizes:
 2" to 3"

 Flows:
 300 GPM

 Heads:
 90 Feet

 Temp:
 140° F



Motor Windings

- Air filled motor design for maximum life and lower operating temperatures
- Heavier duty class F insulation
- Motors available in single or three phase, 50 or 60 cycle and a variety of voltages
- Integral "Auto-Cut" overload protection that protects the motor from high amperage draw, locked impeller and/or high motor temperatures
- Single row outboard and single row inboard bearing for minimal shaft deflection and maximum mechanical seal life
- Optional moisture sensor in winding cavity for ultimate protection

Cable Base

- Integral compression fitting creating a secure mount to the motor frame
- Epoxy sealed to resist moisture from entering the motor
- Stripped back leads to prevent wicking of moisture into the motor

Motor Housing

steel for

maximum

protection

O-ring joints

registers to

prevent the

entrance of

moisture

with machined

Integral handle on top of motor to allow for easy installation

Constructed out

of 300 stainless

Chemical

Construction

Food & Beverage

Building Trades

Ceneral Industry

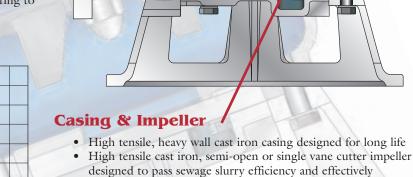
Marine

Services:

迹 Mining & Aggregate

Oil & Gas

- Power Generation
- Petro-Chemical
- Pharmaceutical
- Pulp & Paper
- Nater & Wastewater



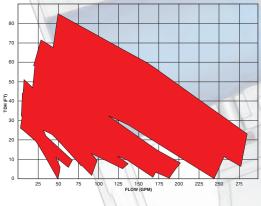
- Impellers are available in semi-open and single vane cutter geometries
- Integral air release valve for venting air from the casing

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Seal Chamber

- Double mechanical seal with Si-C/Si-C outboard and Carbon/Ceramic inboard face construction standard
- Oil lip seal mounted outside of the seal chamber stops large solids from gathering around the seal faces and stops stringy solids from adhering to mechanical seal spring hardware.
- Oil lubricated for maximum protection.



Model SNC Non-Clog Sump Pump





Sizes: 2" to 16" 6,200 GPM Flows: Heads: 135 Feet 140° F Temp:

Services:

Building Trades

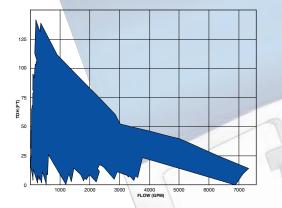
🖉 Chemical

Construction

- Food & Beverage
- 🐚 General Industry
 - Marine
- Mining & Aggregate
- Oil & Gas
- **Power Generation**
- Petro-Chemical
- Pharmaceutical
- Pulp & Paper
- 🔆 Water & Wastewater

Casing & Impeller

- · High tensile, heavy wall cast iron casing designed for long life
- Integral air release valve for venting air from the casing
- High tensile cast iron impeller designed to pass sewage slurry efficiency and effectively
- Impellers are available in semi-open, single vane cutter and enclosed geometries



Cable Base

- Integral compression fitting creating a secure mount to the motor frame
- Epoxy sealed to resist moisture from entering the motor
- Stripped back leads to prevent wicking of moisture into the motor

Motor Housing

- Constructed out of high tensile cast iron for maximum protection
- Epoxy coated to prevent corrosion and allow for maximum housing life
- O-ring joints with machined registers to prevent the entrance of moisture
- Integral handle on top of motor to allow for easy installation

Seal Chamber

- Double mechanical seal with Si-C/Si-C outboard and Carbon/Ceramic inboard face construction standard
 - Integral seal moisture probe standard to indicate seal failure
- Oil lip seal mounted outside of the seal chamber stops large solids from gathering around the seal faces and stops stringy solids from adhering to mechanical seal spring hardware
- · Oil lubricated for maximum protection



Motor Windings

insulation

voltages

• Air filled motor design for

operating temperatures

Heavier duty class F

maximum life and lower

Motors available in single

or three phase, 50 or 60

overload protection that

protects the motor from

locked impeller and/or

high motor temperatures

Single row outboard and double row inboard

bearing for minimal shaft deflection and maximum

mechanical seal life

ultimate protection

• Optional moisture sensor in winding cavity for

cycle and a variety of

Integral "Auto-Cut"

high amperage draw,

Model SAF Axial Flow Pump



 Sizes:
 6" to 28"

 Flows:
 20,000 GPM

 Heads:
 32 Feet

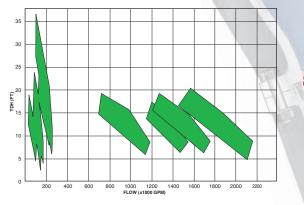
 Temp:
 140° F

Services:

- Building Trades
- Chemical
- Construction
- 摮 Food & Beverage
- 🌇 General Industry
- ┢ Marine
- 🄄 Mining & Aggregate
- 🍎 Oil & Gas
- Power Generation
- 찰 Petro-Chemical
- Pharmaceutical
- 沟 Pulp & Paper

Impeller

- High quality cast bronze axial flow impeller designed for high efficiency
- Replaceable bronze liner for maximum life
- High efficiency, flanger diffuser



Motor Windings

- Air filled motor design for maximum life and lower operating temperatures
- Heavier duty class F insulation
- Motors available in single or three phase, 50 or 60 cycle and a variety of voltages
- Integral "Auto-Cut" overload protection that protects the motor from high amperage draw, locked impeller and/or high motor temperatures
- Single row outboard and double row inboard bearing for minimal shaft deflection and maximum mechanical seal life
- Optional moisture sensor in winding cavity for ultimate protection

Motor Housing

- Constructed out of high tensile cast iron for maximum protection
- Epoxy coated to prevent corrosion and allow for maximum housing life
- O-ring joints with machined registers to prevent the entrance of moisture
- Integral handle on top of motor to allow for easy installation

Seal Chamber

• Double mechanical seal with Si-C/Si-C outboard and Carbon/Ceramic inboard face construction standard

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- Integral seal moisture probe standard to indicate seal failure
- Oil lip seal mounted outside of the seal chamber stops large solids from gathering around the seal faces and stops stringy solids from adhering to mechanical seal spring hardware
- Oil lubricated for maximum protection

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

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Cable Base

- Integral compression fitting creating a secure mount to the motor frame
- Epoxy sealed to resist moisture from entering the motor
- Stripped back leads to prevent wicking of moisture into the motor

Seal Chamber

- Double mechanical seal with Si-C/Si-C outboard and Carbon/Ceramic inboard face construction standard
- Integral seal moisture probe standard to indicate seal failure
- Oil lip seal mounted outside of the seal chamber stops large solids from gathering around the seal faces and stops stringy solids from adhering to mechanical seal spring hardware
- Oil lubricated for maximum protection

lower operating temperatures Heavier duty class F insulation Integral "Auto-Cut" overload protection that protects the motor from high amperage draw, locked impeller and/or high motor temperatures Single row outboard and double row inboard bearing for minimal shaft deflection and maximum mechanical seal life Optional moisture sensor in winding cavity for ultimate protection

Impeller & Cutter Ring – Assembly

Motor Windings

• Air filled motor design

for maximum life and

- High tensile cast iron, semi-open impeller designed to pass sewage slurry efficiency and effectively
- Unique "Quadra-Cutter" cutter ring assembly has four cutters designed to macerate sewage or other solids
- The cutter ring assembly is hardened to 55-60 Rockwell C ensuring long life

OTHER PUMP PRODUCTS

SPLIT CASE To 32+" Discharge 30,000+ GPM, 550' VERTICAL TURBINE To 42+" Bowl 85,000+ GPM, 2500+' SELF PRIMER To 12" Discharge 6400 GPM, 200' ANSI To 8" Discharge 7400 GPM, Heads to 985' END SUCTION To 12" Discharge 9000 GPM, 450'

American-Marsh Pumps

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