

WARMAN®
Centrifugal Slurry Pumps

Horizontal Slurry Pumps

Excellent
Minerals
Solutions



Specialists in delivering and supporting slurry and dewatering equipment solutions for global mining and mineral processing, the power sector, and general industry.

Weir Minerals Division

Weir Minerals is a world leader in the design and manufacture of pumps, mill liners, hydrocyclones, slurry valves, screens, and rubber products for the mining and minerals processing, dewatering, sulfur, chemical and general industries. Based on advanced, and often patented, materials and designs, our products are designed to add value to virtually any aggressive, corrosive process.

Superior wear life, low cost of operation

In slurry pumping, processing and control applications - where the cost of ownership often outweighs capital cost as a priority - we help our customers address issues such as longevity, capacity, efficiency of operation, and maintenance.

Product strength lies in the superiority of our advanced hydraulic designs and our high performing wear and corrosion resistant materials. Our leading research and materials scientists, plus our state of the art material production facilities, support our world class products and materials with a focus on superior wear life and low cost of operation.

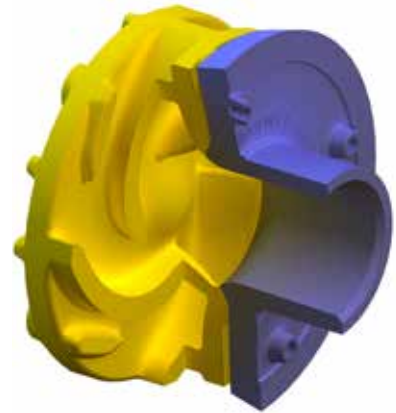
Weir Minerals North America

Located in Madison WI, Weir Minerals North America is one of the many Weir Minerals facilities around the world. These facilities include foundries, rubber molding shops, and machining centers.



1: World class manufacturing facilities are part of Weir Minerals on six continents of the world

2: Fixture capabilities over 20 ton enable Weir Minerals to produce the largest slurry pumps in the world



New 4-vane Warman® WRT® impeller and matching throatbush is designed to improve wear performance, and assist our customers in reducing total ownership cost



1: A state-of-the-art hydraulic test laboratory is located in Madison, Wisconsin

2: A Warman® 600 HTP pump being prepared for hydraulic testing. The massive rib reinforced casing and 102,000 lb (46,260 kg) bare weight illustrate the robust design and inherent safety of this 580 psi (4,000 kPa) rated pump

A diverse range of horizontal slurry pumps designed for the toughest duties

Weir Minerals horizontal pumps deliver exceptional performance

The Warman® and Galigher® horizontal slurry pump range is one of the world's most comprehensive range of centrifugal slurry pumps for use in mining, chemical and industrial applications. These horizontal slurry pumps are designed for ultra heavy duty applications such as mill discharge, process plant and tailings, high pressure pipelines, as well as other specialty applications.

Typical applications and pump models most suitable for these applications are shown below. For special applications not listed, contact Weir Minerals North America or your local Weir Minerals representative. Since particle size, concentration and abrasivity may affect your final selection, please consult Weir Minerals for final pump selection.



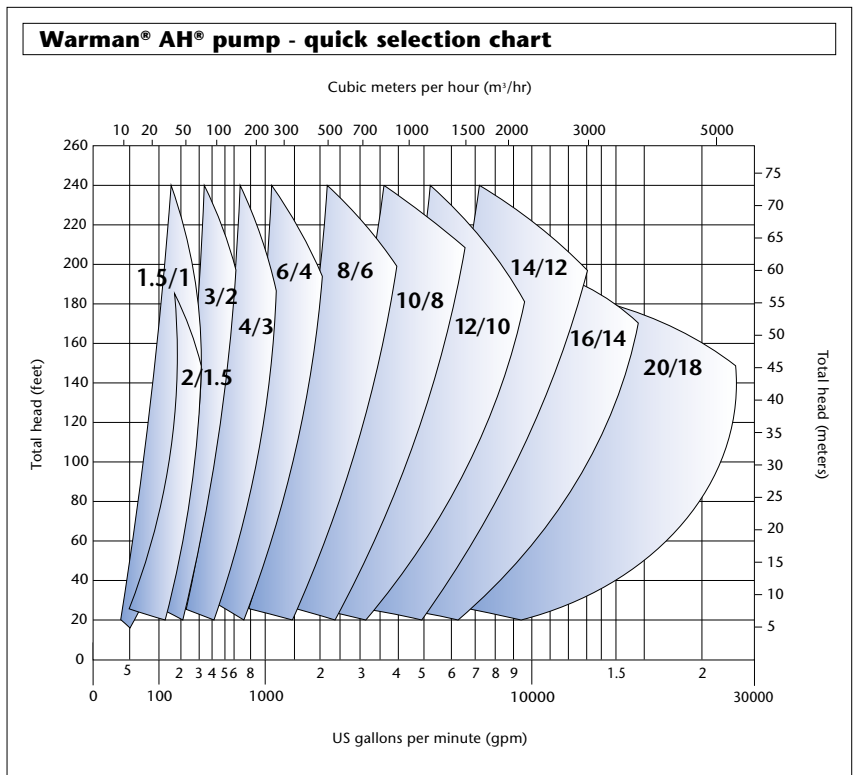
Warman® AHP pump

Warman® and Galigher® Horizontal Pump Models												
	AH®	WBH®	MCR® MCR-M MCU®	HTP	AHP AHPP	XU	AHF LF MF	Galigher® 1000	HH H HRM	L	GSL	WGR™
	page 4	page 5	page 6	page 7	page 8	page 9	page 10	page 11	page 12	page 13	page 14	page 15
wet crushers	■	■	■									
SAG mill discharge	■	■	■									
ball mill discharge	■	■	■						■	■		
rod mill discharge	■	■	■					■	■	■		
Ni acid slurry	■	■	■					■		■		
coarse sand	■	■	■	■	■	■		■	■	■		■
coarse tailings	■	■	■	■	■	■		■	■	■		
phosphate matrix	■	■	■	■	■	■				■		
minerals concentrate	■	■	■	■	■	■	■	■	■	■		
heavy media	■	■	■			■			■	■		
dredging	■	■	■			■						
bottom/fly ash, lime grinding	■	■	■	■	■	■		■	■	■		
oil sands	■	■	■	■	■	■	■		■	■		■
mineral sands	■	■	■	■	■	■	■	■	■	■		■
fine tailings	■	■		■	■	■	■	■	■	■		
phosphoric acid	■	■		■	■			■	■	■		
coal	■	■	■		■	■			■	■		
flotation	■	■				■	■	■	■	■		
sugar beets						■						
process chemical	■	■						■		■		
pulp and paper	■	■				■		■		■		
FGD	■	■				■		■		■	■	
waste water						■		■	■	■	■	

Heavy duty pump range for continuous pumping of highly abrasive/dense slurries in processes from cyclone feed to regrind, flotation and tailings

Since the introduction of the first AH® pump model more than half a century ago, the comments, concerns and challenges faced by our customers and engineers have given us the opportunity to make innovative design upgrades and improvements over the years. Considering important issues including wear life, component arrangement, material composition and slurry abrasiveness, our slurry pump range continues to increase and our designs continue to evolve.

size range (discharge) 1" to 18" (25 mm to 450 mm)	capacities to 22,000 gpm (5,000 m ³ /hr)	heads to 240 ft (73 m)	pressures to 300 psi (2,020 kPa)
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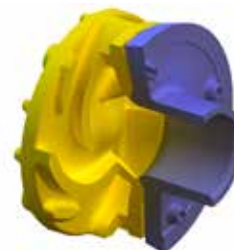


Note: High pressure designs, AHP and AHPP are available and shown on page 8.

- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Ductile iron fully lined casing provides durability, strength, safety, and long service life
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages designed to reduce internal velocities, maximize wear life and lower operating costs
- Thick elastomer or alloy bolt-in liners provide superior corrosion resistance plus offer ease of liner change-out and interchangeability to reduce overall maintenance costs and maximize wear life
- Minimal shaft/impeller overhang reduces shaft deflection and increases packing life
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life
- Grease or oil lubrication bearing assembly options offer ease of maintenance and reduced downtime
- Optional dry running shaft seal reduces or eliminates flush water requirements
- Effective expeller prolongs packing life while reducing or eliminating flush water requirement
- Now featuring the Warman® WRT® throatbush and impeller combination designed to enhance efficiency and improve wear performance
- Interchangeability of seal arrangements – full flush, low flow, centrifugal, or mechanical seals may be fitted to any sized pump



Warman® AH®



The new Warman® WRT® throatbush and impeller combination is a superior upgrade for your existing pump, and is designed to enhance efficiency and improve wear performance

Warman® WRT®

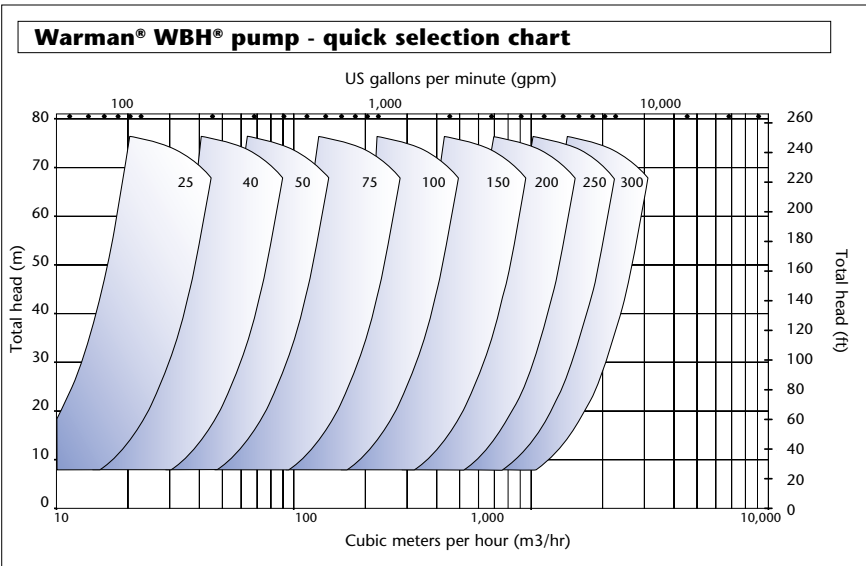
Warman® WBH®

Heavy duty slurry pumps for a range of mill duties, from dirty water to the most difficult water flushed crusher services

The Warman® WBH® slurry pump range offers more than 20 enhancements to the already state-of-the-art Warman® AH® slurry pumping technology, including a fully adjustable and rotatable throatbush to more evenly spread the wear and maintain the pump in tip-top performance for longer periods.

Boasting a revolutionary one-piece frame for correct alignment of bearings, seal and impeller to front liner; as well as easier access for impeller adjustments, the WBH® pump was built with enhanced efficiency and operational savings in mind.

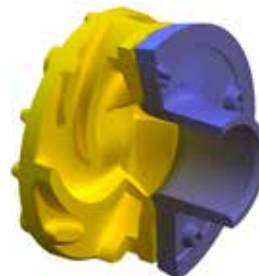
size range (discharge) 1" to 12" (25 mm to 300 mm)	capacities to 12,000 gpm (2,725 m ³ /hr)	heads to 250 ft (76m)	pressures to 300 psi (2,020 kPa)
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- One-point adjustment allows for adjusting the throatbush both rotationally and axially while the pump is in operation, overcoming localized wear
- One-piece bearing frame design ensures correct alignment of bearings, seal and impeller
- New hydraulics were shown to increase efficiency and lower energy consumption by up to 12% in the pump trials at CSA, Australia, compared with Warman® AH® pump in same duty
- Large diameter expeller seals against high intake pressures without the need for gland seal water
- Quick and easy impeller gap adjustments to maximize performance without shutdown
- Fully lined design minimizes the risk of catastrophic failure with safety features including standard leak detection, optional vibration, temperature and wear monitoring, and the ability to add pressure relief and thermal cut-out devices
- Warman® Wear Reduction Technology (WRT®) throatbush and four-vane impeller design with vanelets for extended wear life and reduced NPSH requirements
- Large diameter shaft with short overhang combined with a robust and rigid one-piece bearing frame keeps the bearings aligned, which minimizes shaft deflection and vibration, as well as distortion from external piping loads
- The one-piece bearing frame ensures good component alignment and concentricity through the seal area to reduce wear and extend seal life



Warman® WBH®



Warman® WRT®

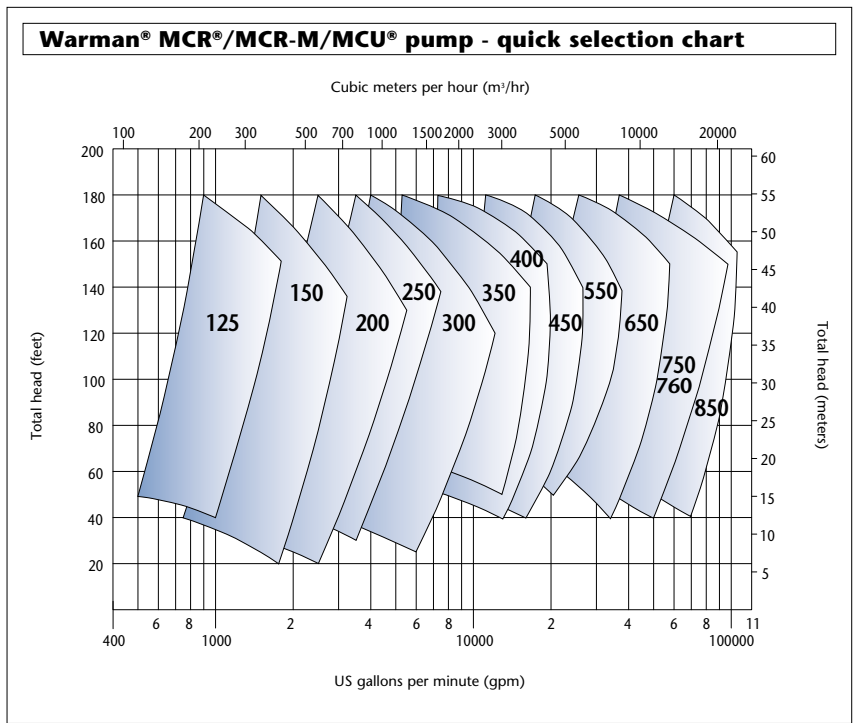
The new Warman® WRT® throatbush and impeller combination is a superior upgrade for your existing pump and is designed to enhance efficiency and improve wear performance

Warman® MCR®/MCR-M/ MCU®

Severe duty lined pump designed for the most aggressive duties and provide excellent wear life and reliability

The Warman® mill circuit pump series easily manages large size particles in dense abrasive slurries and offers the right combination of ruggedness, durability, hydraulics and materials. From the most difficult mill discharge to water flushed crusher, the Warman® mill circuit pump series is the best choice.

size range (discharge) 5" to 34" (125 mm to 850 mm)	capacities to 100,000 gpm (22,700 m ³ /hr)	heads to 180 ft (55 m)	pressures to 130 psi (900 kPa)
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- Thick elastomer liners with alloy impellers provide superior wear life on the most difficult cyclone feed and screen feed services
- Adjustable side liner maintains efficiency and extends service life (adjustable while running)
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages designed to reduce internal velocities, maximize wear life and lower operating costs
- Unique, easily centered stuffing box reduces gland seal maintenance and extends packing life
- Quick wet end exchange minimizes downtime
- Interchangeable elastomer and alloy bolt-in liner offer ease of liner change-out and reduced maintenance costs
- Ductile iron fully lined outer casing provides durability, strength, safety, and long service life
- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Minimal shaft/impeller overhang reduces shaft deflection and increases packing life
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life



Warman® MCR®/MCR-M/MCU®

Warman® Throatbushes with Pre-Swirl Vanes

Warman® throatbushes featuring Pre-Swirl vanes take wear life and reliability to the next level. The innovative patent-pending throatbush design was developed to improve wear life of the impeller eye and reduce the re-circulative wear at the impeller-throatbush interface. This is accomplished through a series of guide vanes in the pump inlet which induce a rotational velocity in the slurry.

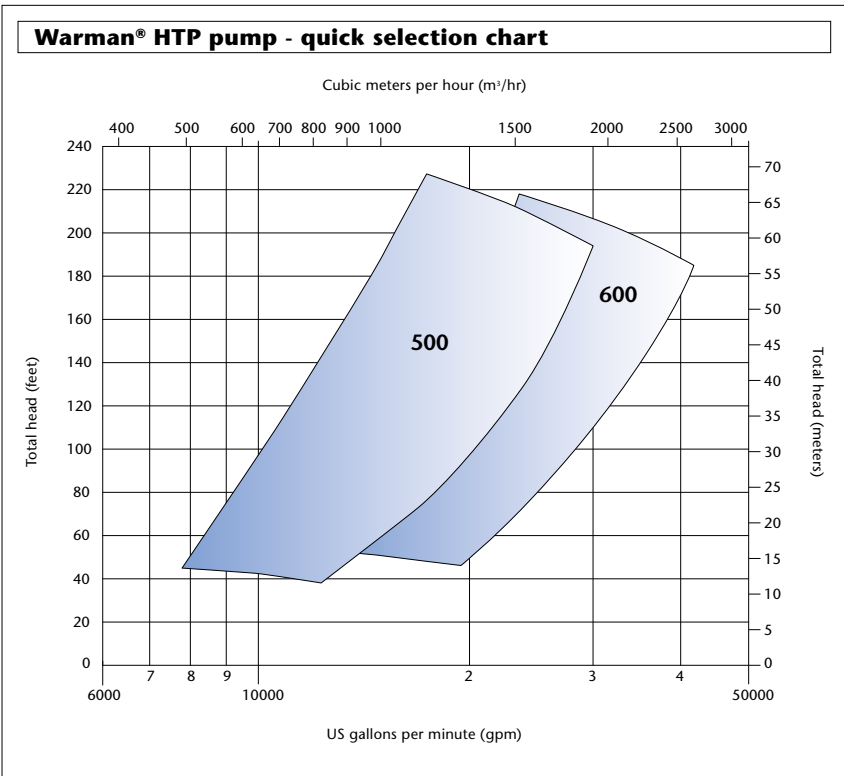
Warman® HTP

Fully lined pump for severe multi-stage applications which offers numerous ease of maintenance features

The Warman® HTP pump range represents the highest pressure-rated, large, lined pumps available from Weir Minerals with priority given to increased safety, wear life, and reliability.

The Warman® HTP pump is rapidly establishing itself as the dominant pump in the Canadian oil sands, providing an efficient and durable solution to long distance hydro-transport and tailings duties.

size range (discharge) 20" to 24" (500 mm to 600 mm)	capacities to 40,000 gpm (9100 m ³ /hr)	heads to 220 ft (67 m)	pressures to 580 psi (4,000 kPa)
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- Specifically designed hydraulics emphasize solid passing capability, head generation, wear life, and efficiency to deliver overall outstanding performance
- Multi-stage high pressure operation to 580 psi
- Major components designed with lifting points located with respect to center of gravity and specialized lifting tools enable rapid pump maintenance and turnarounds
- Ductile iron fully lined casing provides durability, strength, safety, and long service life
- Separate fully removable suction cover facilitates access and replacement of impeller, throatbush, and shaft sleeve without disturbing coverplate or discharge piping
- Unique, easily centered stuffing box reduces gland seal maintenance and extends packing life
- Grease or oil lubrication bearing assembly options offer ease of maintenance and reduced downtime
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life
- Liner design reduces operating costs by allowing replacement of individual components
- Erosion and corrosion resistant elastomers or alloys are available to handle solids-laden and/or corrosive slurries



Warman® HTP

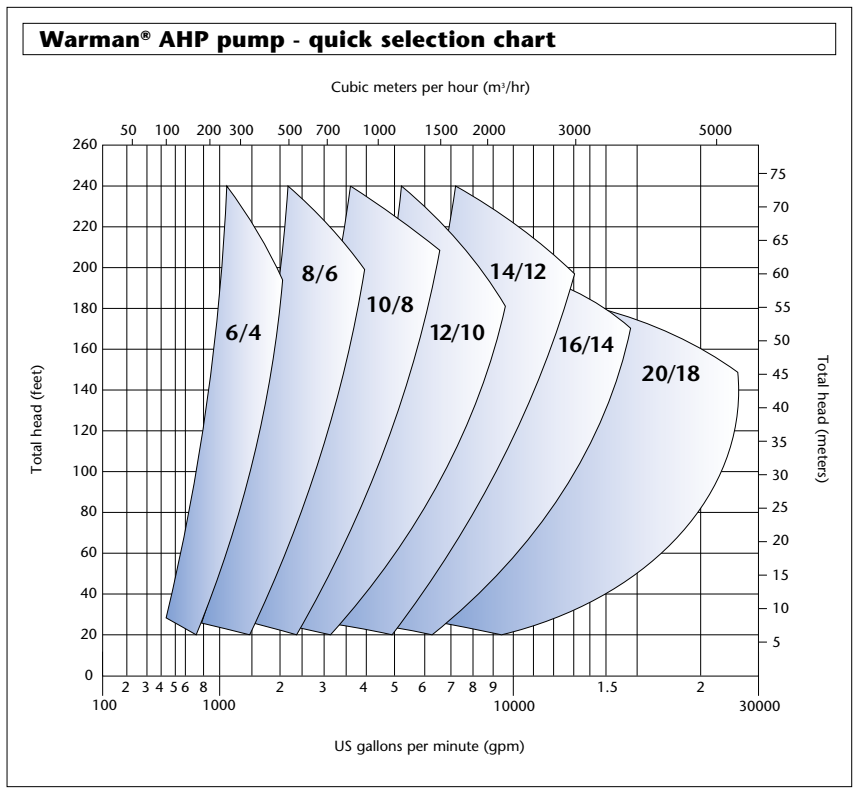
Warman® AHP/AHPP

Fully lined high pressure pump for multi-stage applications

Based upon the popular Warman® AH® series pump, the Warman® AHP/AHPP series high pressure pump offers the same features and benefits as the AH® pump, including identical hydraulics at up to 1000 psi.

The high pressure capability allows the user to operate several pumps in series all consolidated into one pump house, saving the expense of supporting systems like gland water supply systems in an alternative design of several pump houses along the transport line.

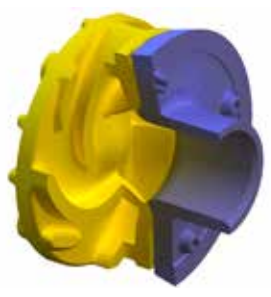
size range (discharge) 4" to 18" (100 mm to 450 mm)	capacities to 22,000 gpm (5000 m ³ /hr)	heads to 240 ft (73 m)	pressures to 1,000 psi (6900 kPa)
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- Multi-stage high pressure operation to 1000 psi
- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Ductile iron fully lined casing provides durability, strength, safety, and long service life
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages reduce internal velocities, maximize wear life and lower operating costs
- Thick elastomer or alloy bolt-in liners provide superior corrosion resistance plus offer ease of liner change-out and interchangeability to reduce overall maintenance costs and maximize wear life
- Minimal shaft/impeller overhang reduces shaft deflection and increases packing life
- Grease or oil lubricated bearing options offer ease of maintenance and reduced downtime
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life



Warman® AHP



Warman® WRT®

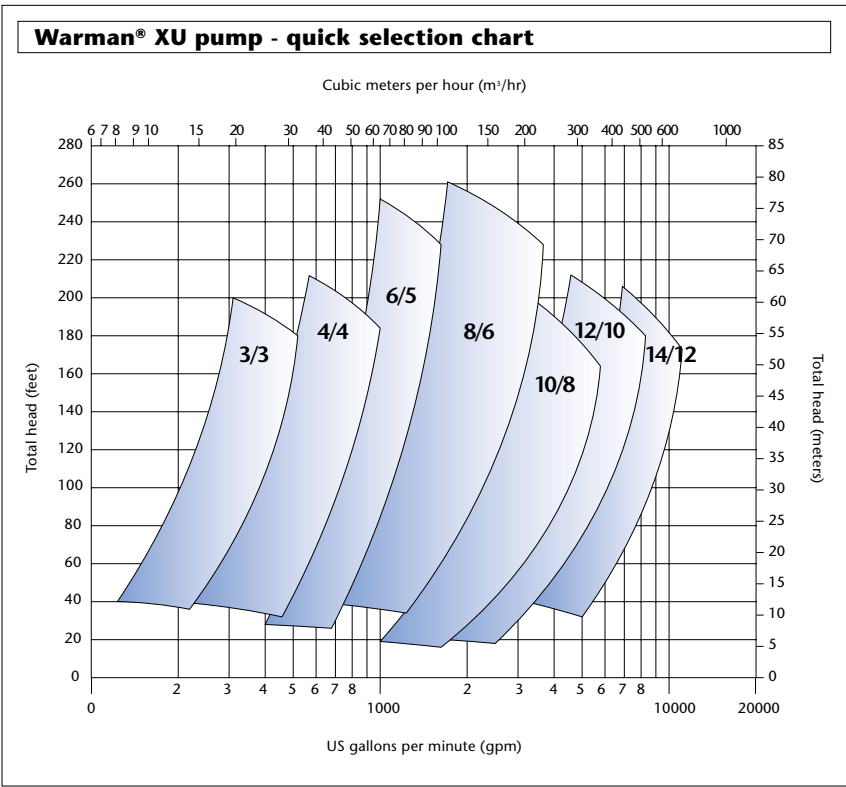
The new Warman® WRT® throatbush and impeller combination is a superior upgrade for your existing pump and is designed to enhance efficiency and improve wear performance

Heavy duty slurry pump

The Warman® XU pump range is the most recently released all-metal unlined pump range from Weir Minerals that integrates newly designed wet end wear components with the long proven Warman® mechanical end. Casing, impeller and liner have been optimized to provide low wear while delivering outstanding efficiency over a wide range of medium to heavy slurry applications such as coal, sand and gravel.

With many unique features, the Warman® XU pump is easy to maintain and is designed to offer the lowest cost of ownership in its class.

size range (discharge) 3" to 12" (75 mm to 300 mm)	capacities to 10,000 gpm (2275 m ³ /hr)	heads to 240 ft (73 m)	pressures to 150 psi (1,035 kPa)
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- Configured volute casing distributes material at point of maximum wear to extend life when pumping large solids
- Low V cutwater design reduces slurry velocities and wear in the casing, allowing operation over a wide range of flows
- Five-vane, thick sectioned, high efficiency impellers offer maximum wear life and low operating costs
- Impeller wear ring profile reduces wear on impeller and throatbush area by restricting recirculation
- Unique "tear drop" shaped frame plate liner insert insures any localized side wall wear occurs on liner and not on casing
- Wet end components constructed from abrasion resistant solid chrome iron, providing excellent wear life in most slurry applications
- Multiple shaft sealing configurations are available to best suit application requirements and are easily converted from one to another without expensive mechanical end changes
- Compact cartridge-style bearing assemblies offer reduced shaft/impeller overhang and minimize shaft deflection resulting in increased packing life and the ability to accept a range of mechanical seals
- Exceptional dry gland sealing performance due to improved expeller/impeller ratios reduces flush water requirements and lowers operating costs
- Full and low flush gland sealing options allow precise matching of seal water consumption to application needs
- Grease or oil lubrication bearing assembly options offer ease of maintenance and reduced downtime
- Quick release clamping collar design facilitates impeller removal
- Hydraulically interchangeable with long proven Warman® AH® pump designs



Warman® XU

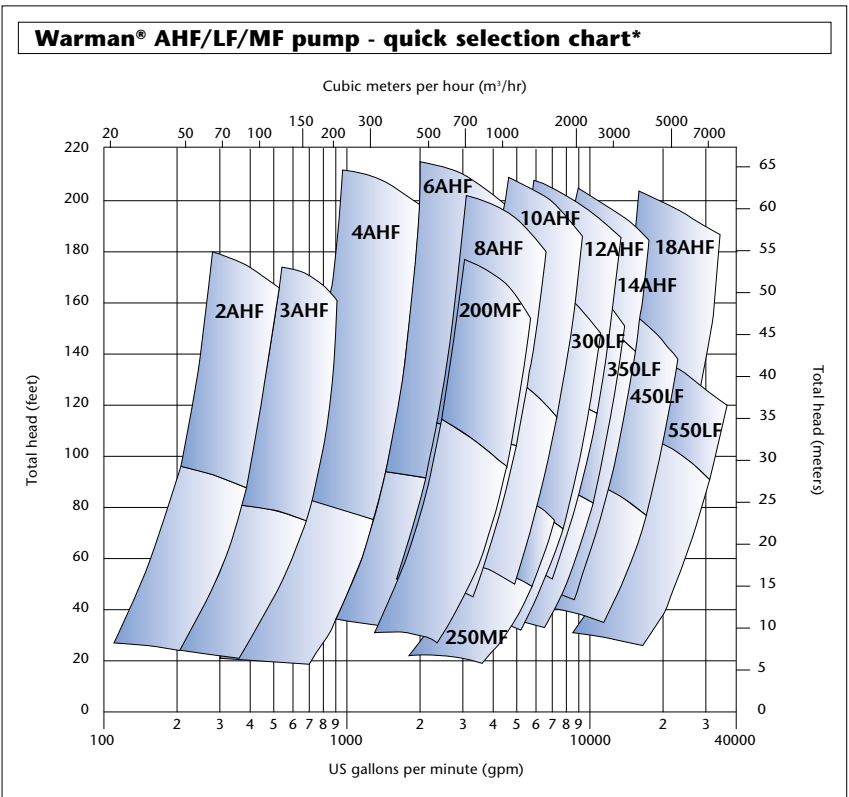
Warman® AHF/LF/MF

Heavy duty froth pump for tough flotation froth duties

Designed to handle heavy froth, the Warman® horizontal froth pump has a unique inlet and impeller design that is very successful where others fail.

A large oversized inlet with a unique impeller inducer blade handles heavy froth and higher viscosity dense slurries with ease. The Warman® AHF/LF/MF line of horizontal froth pumps has proven valuable for very dense slurries where viscosity starts to become a pumping issue for the standard slurry pump.

size range (discharge) 2" to 22" (50 mm to 550 mm)	capacities to 20,000 gpm (4,550 m ³ /hr)	heads to 120 ft (37 m)	pressures to 500 psi (3,445 kPa)
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*Lower light blue areas: recommended maximum operating range on aerated slurries

- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Ductile iron fully lined casing provides durability, strength, safety, and long service life
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages designed to reduce internal velocities, maximize wear life and lower operating costs
- Unique impeller design for most difficult froth applications
- Thick elastomer or alloy bolt-in liners provide superior corrosion resistance plus offer ease of liner change-out and interchangeability to reduce overall maintenance costs and maximize wear life
- Minimal shaft/impeller overhang reduces shaft deflection and increases packing life
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life
- Standard Warman® AH® pump and Warman® L pump can be converted by replacing cover plate, throatbush and impeller
- Full flush, low flow or dry running centrifugal seals minimize water usage and operating costs



Warman® AHF/LF/MF

Continuous Air Removal System

Adding innovative technology to the proven line of Warman® heavy duty froth pumps, the new continuous air removal system (CARS) is designed to separate and remove gas in tenacious froth applications to enable more efficient pumping. Retrofittable with our current Warman® family of froth pumps, CARS allows for an easy, cost-effective upgrade for your operation.

Galigher® Series 1000

General purpose slurry pump

The Galigher® Series 1000 pump is a long proven horizontal end suction centrifugal pump that will reliably and economically handle abrasive and corrosive medium duty services.

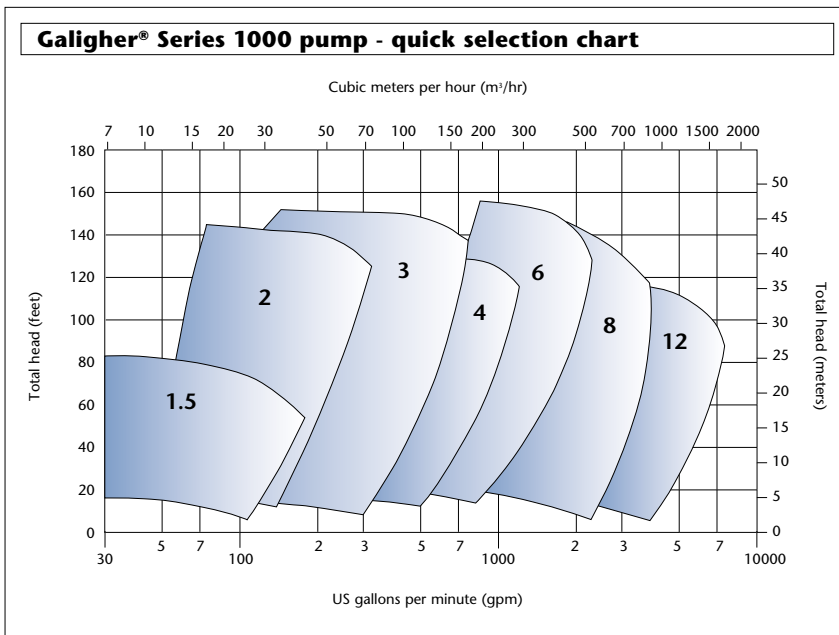
Several unique features make the Galigher® Series 1000 pump ideal for handling stringy/fibrous slurries, low NPSHA applications and services that require minimum dilution due to gland seal water.

size range (discharge)
1.5" to 12" (40 mm to 300 mm)

capacities to
6,500 gpm (1,480 m³/hr)

heads to
140 ft (43 m)

pressures to
232 psi (1,600 kPa)



- Heavy duty construction with through-bolt casing design provides ease of maintenance and minimal downtime
- Erosion and corrosion resistant elastomers or metal alloy liners are available to handle solids-laden and/or corrosive slurries
- Semi-open impeller easily passes large or stringy particles and is well suited for froth-laden slurries
- Unique impeller hydraulic design allows operation in systems with low NPSHA
- Cartridge-style bearing assemblies offer a compact reliable design that reduces shaft/impeller overhang, decreasing deflection for improved packing life and allows for easy rebuilds
- Multiple shaft sealing configurations are available to best suit application requirements including standard wet and dry glands as well as mechanical seals
- Effective expeller prolongs packing life while reducing or eliminating flush water requirement
- Casing drain plug allows for component wear inspection as well as draining slurry from the pump to prevent freezing or corrosion after flushing
- Grease or oil lubricated bearing assemblies offer ease of maintenance and reduce downtime



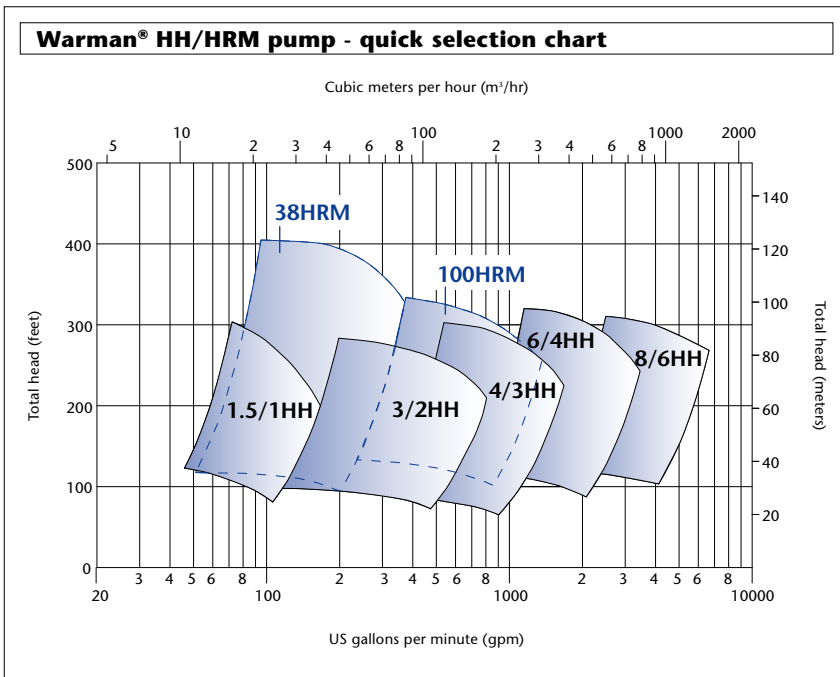
Galigher® Series 1000

Heavy duty high head lined slurry pump

The Warman® HH/H/HRM pump lines were designed to produce high heads per stage at high pressures.

Commonly used for long distance transport lines, the Warman® HH/H/HRM pump lines can often satisfy application duties with a single pump where others require multiple pumps in series.

size range (discharge) 1.5" to 6" (25 mm to 150 mm)	capacities to 4500 gpm (1025 m ³ /hr)	heads to 325 ft (100 m)	pressures to 750 psi (5170 kPa)
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- Ductile iron fully lined casing provides durability, strength and long service life
- Multi-stage high pressure operation to 750 psi
- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages designed to maximize wear life and lower operating costs
- Thick elastomer and alloy liners provide superior corrosion resistance and maximum wear life
- Full flush gland, low flow, and dry running centrifugal seals reduce flush water usage minimizing pump operating costs



Warman® HH/HRM

Warman® L

Rugged heavy duty slurry pump for medium to lower heads

The Warman® L series pumps incorporate the same design points as the Warman® AH® pump plus higher efficiency impellers at an attractive initial cost.

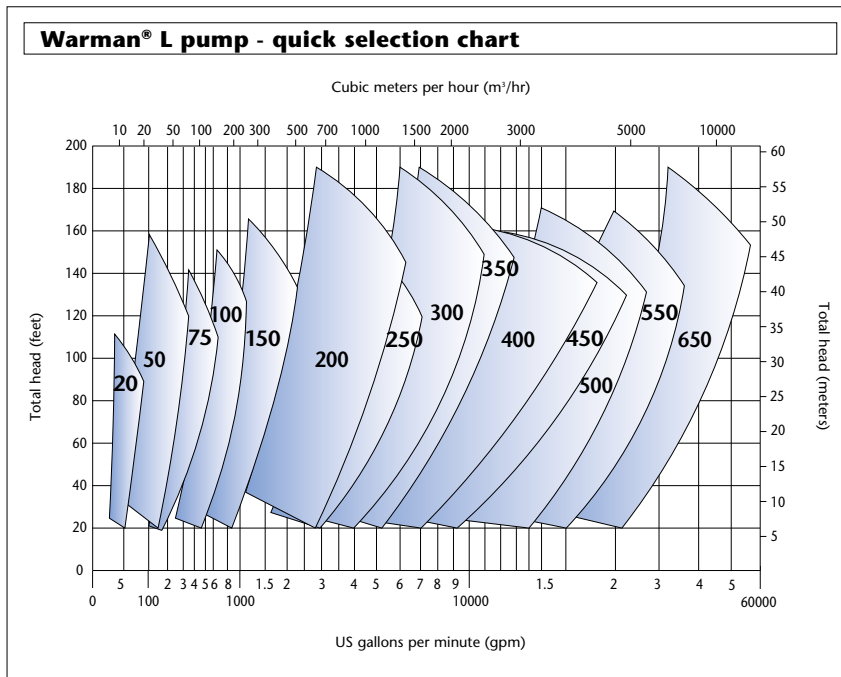
Designed for rugged duties while offering higher efficiencies, the Warman® L series is a combination of the proven Warman® AH® pump's unique features. The Warman® L series provides the widest range of hydraulics from the ¾" to a 26" discharge pumps. The ¾" is perfect for the laboratory or in demonstration plants.

size range (discharge)
.75" to 26" (20 mm to 650 mm)

capacities to
45,000 gpm (10,225 m³/hr)

heads to
180 ft (55 m)

pressures to
250 psi (1,725 kPa)



- Heavy duty construction with through-bolt design provides ease of maintenance and minimal downtime
- Ductile iron fully lined casing provides durability, strength, safety, and long service life
- Large diameter, slow turning, high efficiency impellers designed to achieve maximum wear life and low operating costs
- Large, open internal passages designed to reduce internal velocities, maximize wear life and lower operating costs
- Thick elastomer or alloy bolt-in liners provide superior corrosion resistance plus offer ease of liner change-out and interchangeability to reduce overall maintenance costs and maximize wear life
- Designed for rugged duties while offering excellent efficiencies
- Minimal shaft/impeller overhang reduces shaft deflection and increases packing life
- Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life
- Grease or oil lubrication bearing assembly options offer ease of maintenance and reduced downtime
- Full flush gland, low flow, and dry running centrifugal seals reduce flush water usage minimizing pump operating costs
- Mechanical seals reduce flush water usage, minimizing pump operating costs



Warman® L

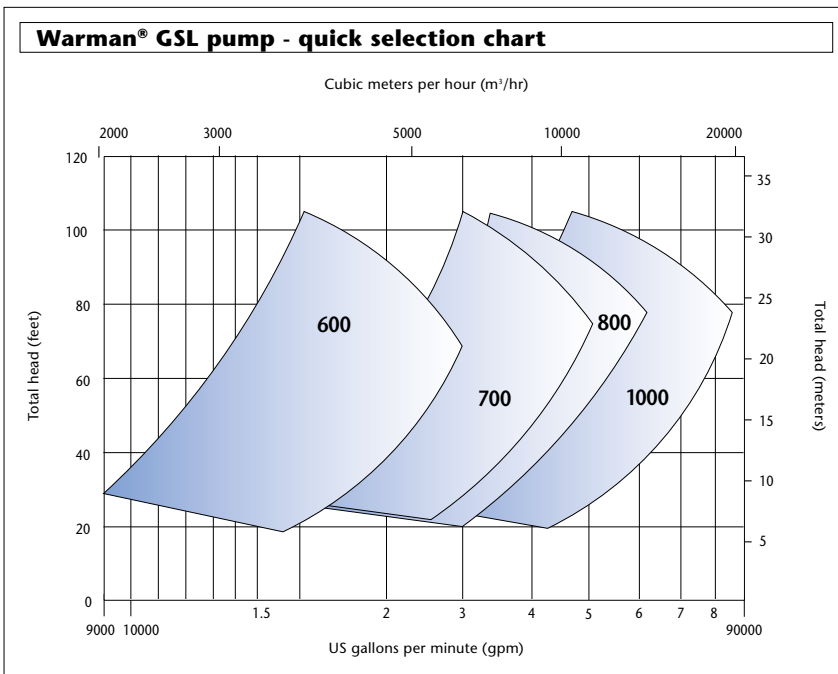
Since the introduction of the first Flue Gas Desulfurization (FGD) systems in the 1970s, Weir Minerals has supplied more than 4,000 specially designed FGD pumps worldwide. With an ever evolving industry, Weir Minerals prides itself on continual product improvements and has researched and designed the next generation of the Warman® GSL pump series to meet these needs and provide customers with the ultimate in wear and corrosion resistant pumps.

size range (discharge)
24" to 40" (600 mm to 1000 mm)

capacities to
80,000 gpm (18,180 m³/hr)

heads to
105 ft (32 m)

pressures to
125 psi (860 kPa)



The newly designed Warman® GSLHD Pump

- New throatbush design
- New impeller design featuring HMT improvements
- New suction cover design
- Increased efficiency at maximum flow for excellent scrubbing performance
- Cone to cone fit, designed to minimize recirculation and wear between the impeller and throatbush
- Maximized component cross section designed to maximize wear life
- Externally axially and radially adjustable throatbush, eliminating the need to reposition the bearing assembly to maintain impeller to throatbush clearances
- Retrofits with existing pump designs



Warman® GSLHD

Silicon Carbide Polymer Ceramic

Weir Minerals has teamed up with a leading Silicon Carbide Polymer producer to develop components using this uniquely formulated material. This Silicon Carbide Polymer Ceramic, especially engineered for use in FGD applications, is unaffected by chemistry changes and is designed to provide extreme wear and corrosion resistance.

Silicon Carbide Polymer (SiCP) is more corrosion resistant than white cast irons, making it ideal for handling duties that are both corrosive and erosive.

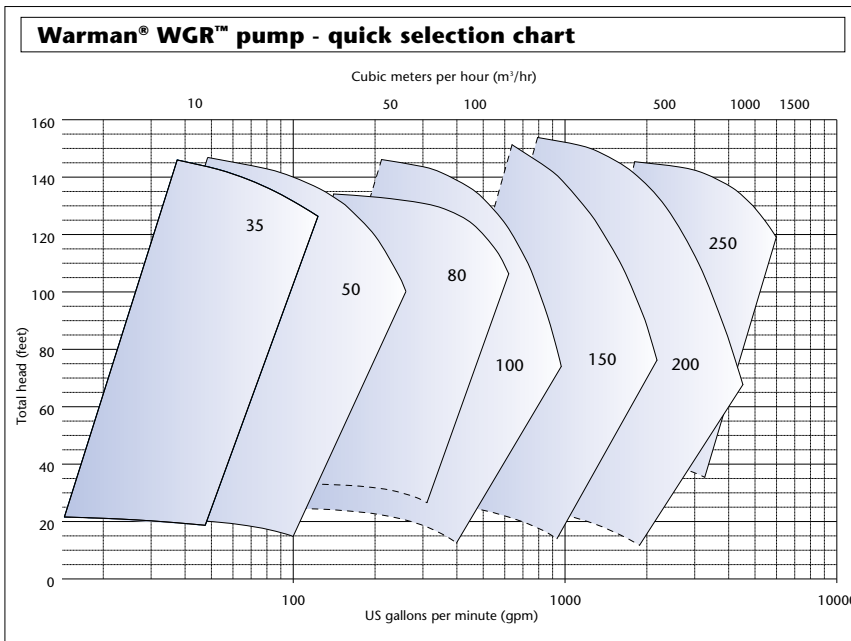
Features and benefits

- Resistant to chlorides
- Not affected by pH swings
- Excellent fine particle erosion and abrasion resistance

Medium duty slurry pumps for sand and aggregate applications

The streamlined design allows easy access to all parts of the pump and the internal components, making servicing easier and reducing downtime. When this is combined with the long service life of our parts and the proven wear life of our proprietary Linatex® premium rubber, Weir Minerals provides pumping solutions that are designed to achieve the lowest total cost of ownership in operation.

size range (discharge) 1.5" to 10" (35 mm to 250 mm)	capacities to 6,000 gpm (1363 m ³ /hr)	heads to 150 ft (46 m)	pressures to 130 psi (896 kPa)
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- Our patented Warman® WRT® throatbush and impeller designs minimize turbulence and cavitation for extended wear life and maintenance performance
- Impeller and gland assembly can be replaced through the suction side of the pump
- Replaceable Linatex® rubber liners provide superior abrasion resistant performance in fine slurry applications
- Patented flexible discharge adaptor is the same size as the inlet and positioned so the pump can be fully serviced without removing the discharge piping
- Loose swivel flanges are offered to match mating pipe orientations
- Adjustable impeller with release collar can be adjusted externally to achieve optimum clearance between the impeller and the throatbush for the full working life of the wear components
- Newly designed larger impeller allows for lower speeds which results in longer wear life
- Incorporation of the removable suction cover in the cover plate means that the throatbush can be replaced without incurring the cost of removal of the cover plate
- New design gives increased durability, resulting in lower overall lifetime costs



Warman® WGR™

WEIR MINERALS SERVICES™

The Weir Minerals Services™ Sentinel® program is a team concept providing lower Measured Total Ownership Cost through improved reliability, lower power consumption and reduced maintenance cost.

Sentinel® Program

Our menu approach allows each customer to select the level of commitment and participation they feel best meets their needs.

Pump users enter into formal agreements with Weir Minerals with the aim of benefiting from ongoing reductions in operating costs.

Sentinel® Program modules include:

- Cooperative cost focus groups
- Pump audits
- Equipment maintenance monitoring
- Wear life monitoring
- Performance based agreements
- Spare parts supply agreements
- Customized training programs
- Equipment rebuild services
- Pump exchange services
- Tailored maintenance packages

WARMAN®

Centrifugal Slurry Pumps

GEHO®

PD Slurry Pumps

LINATEX®

Rubber Products

VULCO®

Wear Resistant Linings

CAVEX®

Hydrocyclones

ENDURON®

Comminution Equipment

KHD*

High Pressure Grinding Rolls

FLOWAY® PUMPS

Vertical Turbine Pumps

ISOGATE®

Slurry Valves

MULTIFLO®

Mine Dewatering Solutions

HAZLETON®

Specialty Slurry Pumps

LEWIS® PUMPS

Vertical Chemical Pumps

WEIR MINERALS SERVICES™



For further information on any of these products or our support services contact your nearest sales office or visit:

www.weirminerals.com



Weir Minerals Division



sales@weirminerals.com | www.weirminerals.com

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