

# Goulds XHD

Extra Heavy Duty World-Class Lined  
Slurry Pumps



## Proven leadership in mining and mineral processing

### Proven Leadership

- 100 years of slurry pumping experience.
- Many industry firsts including: hard metal slurry pump, rubber lined pump and expeller / dynamic seal.

### Industry Leading Coverage

ITT Goulds Pumps offers the most complete line of products for the mining industry, including slurry, process and water pumps, valves, monitoring and control, and a full range of aftermarket and repair services.

### Tailored Solutions

Due to our extensive portfolio for the mining industry, we can provide the right pump for our customers application, thus maximizing reliability. ITT Goulds Pumps can provide a complete solution for any pumping needs.

### Global Presence

With sales offices, packaging and service centers located globally, ITT Goulds Pumps provides the coverage needed to serve our customers, whether small or multi-national companies located in any region.

## ITT has provided pumping solutions to all types of mineral processing sites throughout the world for well over one hundred years.

We know that only "up-time" yields money and is paramount to our customers. ITT Goulds Pumps products are engineered to maximize up-time, by offering our customers the best and most complete solutions. Our experienced and knowledgeable team further complements our portfolio of mineral processing solutions. We maximize the performance of your processing plants from start to finish.



## Goulds XHD

Extra Heavy Duty Rubber & Metal Lined Slurry Pump

Capacities to: 2950 m<sup>3</sup>/h (13,000 GPM)

Heads to: 85 m (280 feet)

Pressures to: 17 bar (250 PSIG)

Temperatures to: 120°C (250°F)

Applications:

**Primary Metals:** SAG/Ball Mill, Cyclone Feed, Tailings

**Mineral Processing:** Slurry Transfer, Flotation Cells, Thickener Underflow

**Non-Metallic Mining:** Heavy Media, Cyclone Feed, Raw Coal, Clay, Soda Ash and Phosphate Slurries, Slurry Heater, Slurry Digestion, Hydrate

**Power:** Absorber Recycle, Gas Cooling, Filter Feed, Lime and Ash Slurries

**Sand & Aggregate:** Sand Slurries, Tailings



**The Goulds Model XHD is the result of 100 years of slurry pumping experience.**

The XHD incorporates the latest technology including CFD analysis to provide the next generation in severe-duty slurry pumping. Extensive "Voice of the Customer" input was utilized to ensure our customers' most important needs were met. This includes high efficiency with extended wear life, along with maximum reliability and ease of maintenance. The XHD is designed to keep your process running.



Primary Sand Slurry Pump in an Aggregate Plant

# XHD



## Extra Heavy Duty World-Class Lined Slurry Pumps Designed for the toughest slurry applications



i-ALERT® 2  
EQUIPMENT HEALTH  
MONITOR Constantly  
measures vibration  
and temperature at  
the thrust bearing.  
Provides early warning  
of improper operation  
before catastrophic  
failure occurs.

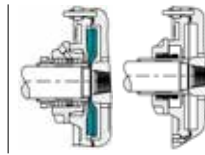
Bearing Isolators on  
both end covers keep  
out dirt and moisture.

Compact pedestal for  
rigid vibration-free  
support. Designed  
to allow retrofit to  
existing installations.  
(Patent Pending)

Fully machined slide  
rails for accurate shaft  
and bearing cartridge  
alignment. Designed-  
in rebuild capability.

Easy access dual rod  
impeller adjustment.

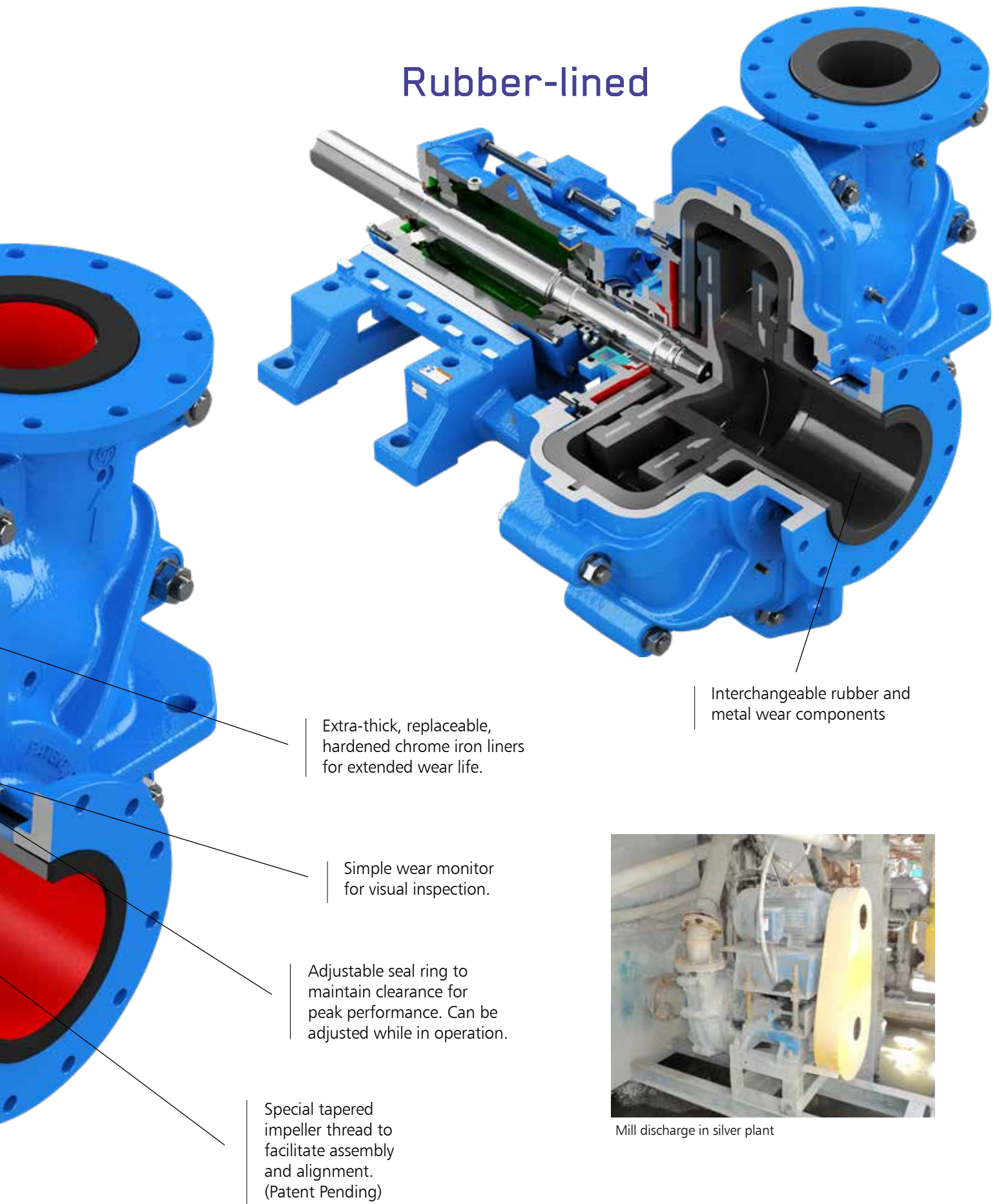
Impeller release collar  
standard on all sizes and  
large access openings  
make maintenance easy.



Choice of packing,  
expeller or mechanical  
seals.

Critical frame alignment  
surfaces protected by  
frame clamps for years of  
maintainability, extending  
life in corrosive mineral  
processing environments.

# Rubber-lined



Extra-thick, replaceable, hardened chrome iron liners for extended wear life.

Simple wear monitor for visual inspection.

Adjustable seal ring to maintain clearance for peak performance. Can be adjusted while in operation.

Special tapered impeller thread to facilitate assembly and alignment. (Patent Pending)

Interchangeable rubber and metal wear components

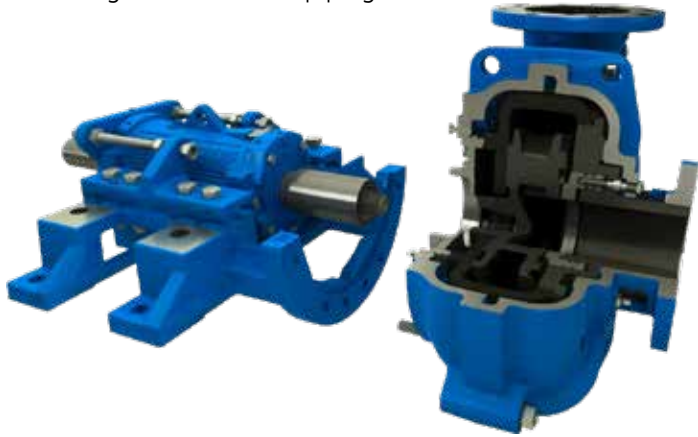


Mill discharge in silver plant

# XHD

## Quick Change Wet End & Bearing Cartridge

Allows for removal of complete wet end as a unit, or removal of the bearing cartridge for maintenance, and/or shaft sleeve or mechanical seal replacement without disturbing the wet end or piping.



## Adjustable Suction Seal Ring (Patent Pending)

Axial seal ring allows initial clearance to be maintained throughout the life of the pump:

- Allows adjustment from the suction side while online
- Maintains efficiency
- Reduces recirculation and wear
- Extends life of impeller and suction liner
- Allows for improved expeller performance by allow for front and rear impeller adjustment
- Provides ability to clamp impeller in place for bearing cartridge or wet end removal
- Provides for lower operating / maintenance costs and reduced parts usage.

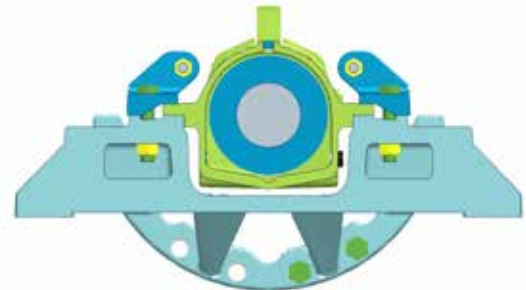


## Split Stuffing Box & Gland

For quick and easy packing and lantern ring adjustment and replacement. Also allows for inspection of shaft sleeve.



Through bolting on bearing cartridge and motor mount for ease of maintenance. Ideal for pumps in corrosive environments.



Pumps shown with adaptor bases designed to replace existing pumps with no foundation work while maintaining piping centerlines.



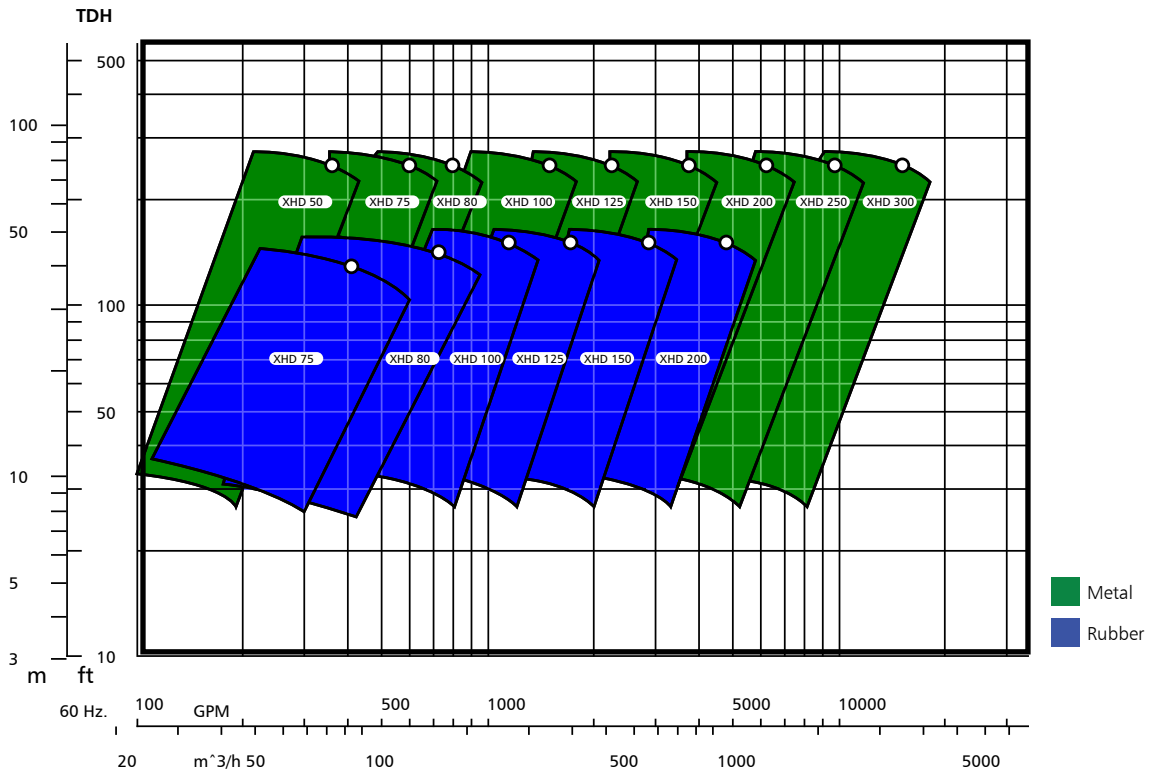
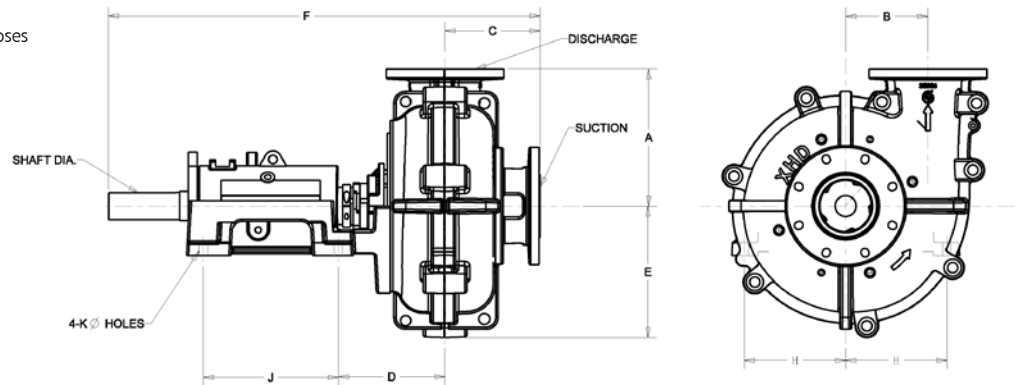
Ball mill discharge in Phosphate plant    Tailings in a Gold processing plant

# Dimensions

Pump Size	Pump Size (in)	Frame Size	Suction mm (in)	Discharge mm (in)	ANSI Flange Size Suct & Disch <sup>(4)</sup>	Dimensions (mm)								Shaft Dia.
						A	B	C	D	E	F (approx)	H (3)	J	
50	2.5x2-9	PF1	63 (2.5)	50 (2)	3"	255	135	152	296	241	943	310	230	45
75	3x3-10	PF1	75 (3)	75 (3)	4"	280	160	160	320	257	980	310	230	45
80	4x3-12	PF2	100 (4)	80 (3)	5"	300	165	210	336	278	1020	350	227	60
100	5x4-15	PF3	125 (5)	100 (4)	6"	350	215	240	389	325	1233	405	283	80
125	6x5-15	PF3	150 (6)	125 (5)	8"	400	240	275	393	394	1273	405	283	80
150	8x6-21	PF4S	200 (8)	150 (6)	12"	515	310	360	510	560	1710	425	420	80
150	8x6-21	PF4	200 (8)	150 (6)	12"	515	310	360	516	560	1761	502	420	100
200	10x8-27	PF4S	250 (10)	200 (8)	14"	650	400	435	540	710	1804	425	420	80
200	10x8-27	PF4	250 (10)	200 (8)	14"	650	400	435	546	710	1851	502	420	100
250	12x10-32	PF5	300 (12)	250 (10)	16"	725	490	500	677	720	2174	515	490	120
300	14x12-40	PF5	350 (14)	300 (12)	20"	925	625	585	733	925	2285	515	490	120

## Notes:

1. All dimensions in mm
2. Not for construction, installation, or application purposes
3. Pedestal mounting holes
4. Companion flanges required



# i-ALERT<sup>®</sup> Monitoring Solution

## Sensor | App | Ai Platform

www.i-alert.com



### What it Does:

#### Monitor

Tracks vibration, temperature & run-time hours 24/7/365.

#### Alarm

Takes high resolution data when an alarm condition occurs and stores it for later analysis.

#### Trend

Captures data every 1-60 minutes and has up to 170 days of hourly on-board storage.

#### Analyze

Diagnose machine faults with vibration tools  
Fast Fourier Transform (FFT) & Time Wave Form Analysis.

#### Environment

Rated for any industrial environment. water & dust resistant.  
Intrinsically Safe with a 3-year battery life (use dependent).

- ATEX Zone 0 AEx ia IIB Ga (Groups C & D)

#### Wireless

Sync data via Bluetooth Smart enabled smartphones and tablets.

#### Online Monitoring

Monitor and manage all of your i-ALERT enabled machines in one place - i-ALERT Ai Online Platform. This subscription service requires no software to download or dedicated hardware to run.

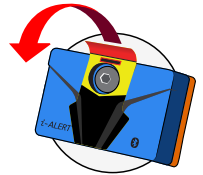


Spend less time collecting data and more time fixing problems. The i-ALERT mobile app has the ability to scan multiple i-ALERT2 sensors within range to quickly and safely inspect multiple machines.

### How it Works:

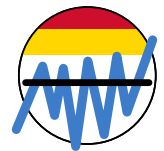
#### 1. ACTIVATE

The i-ALERT2 devices are light activated by removing the sticker. The sensor begins wirelessly broadcasting once activated.



#### 2. AUTO CONFIGURATION

The i-ALERT device averages the vibration over 25 hours of run-time and sets the alarm levels to 2 x average (0.1-1.5ips minimum). Temperature alarm default to 80°C (176°F)



OR

#### 2. MANUAL CONFIGURATION

User manually sets the alarm thresholds via the i-ALERT mobile application.



#### 3. Monitor

The i-ALERT2 sensor is configurable to check every 1-5 minutes. If two consecutive readings are above alarm threshold the i-ALERT device will go into alarm.



#### Dashboard

Simple, intuitive dashboard to track vibration, temperature, run-time & battery life.



#### Trending

Trend vibration, temperature, & kurtosis to monitor any changes in the equipment operation.



#### BOM

Load the as built of materials based on the pump serial number.





# Notes



# Locations



For more information Please Visit:  
[www.gouldspumps.com](http://www.gouldspumps.com) | [www.ittproservices.com](http://www.ittproservices.com)



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