

# RPAH/HH Series Slurry Pumps



..... all about moving fluids

# RPAH/HH Series - Slurry Pumps



**RPAH / HH Series Horizontal Slurry Pump** is designed for handling of highly abrasive or corrosive high density slurries and is widely used in Metallurgical, Mining, Coal, Petroleum & Chemical, River & Channel dredging, and

#### Typical applications

<b>❖</b> Alumina	Copper	❖ Lead & Zinc		
Phosphate	Bauxite	❖ Paper & Pulp		
❖ Iron Ore	Cement	❖ Sand & Gravel		
❖ Oil Shale	<b>❖</b> Gold	❖ Mineral Sands		
<b>❖</b> Silver	❖ Coal	❖ Fertilizer		
❖ Potash	Titanium			



## **Pump Constructions:**

#### **WETTED PARTS**

**IMPELLERS**— wide variety of metallurgic and elastomeric options (metal and elastomer interchangeable) — pump out vanes on rear and front (on closed impellers) reduce recirculation within pump, and aid in preventing seal contamination — optional castings of straight or semi-Francis vanes (from 3 to 8 vanes on certain sizes) offer wider hydraulic options in single sizes

**LINERS** – wide variety of metallurgic heavy-duty high chrome liner and elastomeric options (metal and elastomer interchangeable) – active engineered attachment mechanism to casing via threaded bolts as opposed to unreliable glue

**THROATBUSH** – wide variety of metallurgic and elastomeric options (metal and elastomer interchangeable) – adjustable via cotters to account for wear over time and increase efficiency

**SEALS**— Variety of seal options to suit any process requirements

#### Centrifugal Seal: (Expeller)

Centrifugal seal, or expeller, available with low flow water flush or zero flow (grease lubricated) options to provide exceptional sealing where water introduction to the seal is intolerable or limited

#### **Gland Seal:**

Full flush gland seals are available to flow over the shaft sleeve and through the stuffing box to prevent media from escaping the pump housing. These seals provide excellent sealing properties with minimal cost and maintenance to the seal.

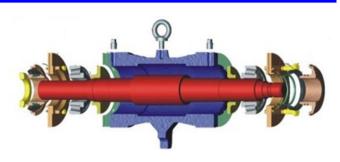
#### **Mechanical Seal:**

Customized mechanical seals solutions can be found for many applications where water flushing or grease-lubricated expellers are not options. We only apply mechanical seals specifically designed for abrasive and heavy-duty jobs.

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BEARING ASSEMBLY – all bearings assembled with Highest quality tapered roller bearings in controlled Environments to prevent lubricant and housing contamination – oversized shaft diameters and reduced overhang in the wet end contribute to long life and reliability in the field



CROSS SECTION—TYPICAL BEARING ASSEMBLY

**CASING** – split-case design allows for ease of access and maintenance on wet end parts – cast ductile iron with exterior ribbing provides increased pressure ratings and reliable service over time

**BASE** – a single piece base with integrated adjustment mechanism for impeller clearance within pump – bearing assembly locks into base using four heavy-duty bolts – three custom designed mounting modes available: overhead using integrated single pedestal system, side-by-side with adjustable motor mount, and direct-coupled with precision in-house alignment (optional VFD packages available)



**EXPLODED VIEW —TYPICAL PUMP ASSEMBLY** 

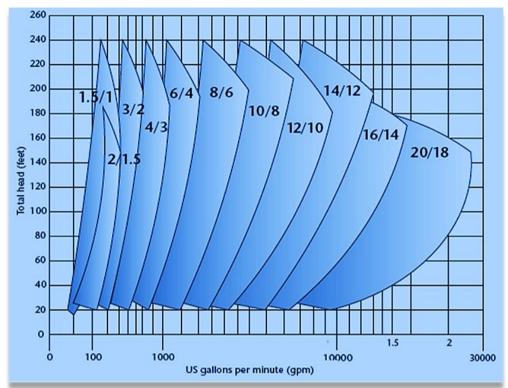
#### **PUMP SPARE PARTS**

Impeller, Expeller, Throat Bush, Frame Plate Liner, Cover Plate Liner

Molded elastomer or metal liner parts are readily available

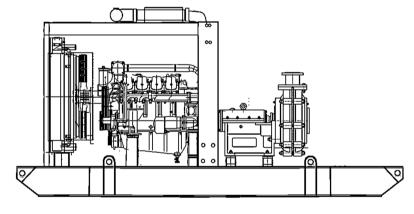


## **Quick Selection Chart**



Imperial Size	Metric Size		
(Inlet/Outlet)	(Inlet/Outlet)		
1.5 /1	32/25		
2/1.5	50/32		
3/2	75/50		
4/3	100/75		
E / a	450/400		
5/4	150/100		
6/5	200/150		
10/8	250/200		
12/10	300/250		
12/10	300/230		
14/12	350/300		
16/14	400/350		
10/14	400/350		
20/18	500/450		





TYPICAL LAYOUT OF A MINE DEWATER UNIT PACKAGE ENGINE DRIVEN FITTED WITH RPAH/HH SERIES SLURRY PUMP

# Regent pumps

## **Projects and International Division**

## Regent Asia Pacific Pty. Ltd.

102-104, Malcolm Road, Braeside VIC 3195, P.O.Box 650 Mordialloc VIC 3172 Australia

Tel: +61 (0) 3 97726742 / +61 452 045 228

Email: sales@regentap.com.au www.regentap.com.au

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