

Xcelflo™



Centrifugal Slurry Pump





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The AH(R), HH, M Series Heavy Duty Slurry Pump

Designed for the continuous pumping of highly abrasive, high density slurries with minimal maintenance requirements, the Xcelflo horizontal centrifugal slurry pumps will maintain high efficiencies over the wear life of its components.

Xcelflo rubber and metal lined pumps feature casings which are radially split into two halves. Minimum casing bolts reduce maintenance and minimise downtime.

Moulded impellers and loose liners are available in various elastomers. Loose metal liners and impellers are also available in abrasive resistant alloys and various corrosion resistant metals.

Both metal or rubber liners and impellers, or a combination of both, are interchangeable within the same pump to facilitate use in various applications. Outline dimensions are common to both metal and rubber pumps allowing interchangeability without pipeline or civils rework being necessary.

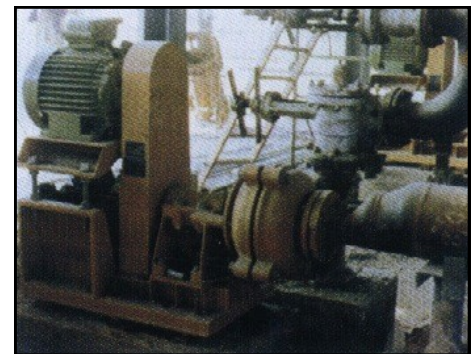
A removable cartridge type grease lubricated bearing assembly can be replaced with the pump base in-situ, facilitating easy maintenance. Extra heavy duty and oil lubricated bearing assemblies are available on request.

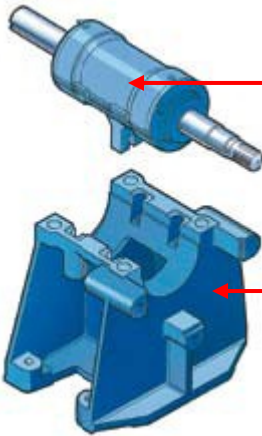
Pumps are available with an optional centrifugal shaft seal which eliminates the need for gland sealing water. This reduces costs, eliminates product dilution and is suitable where suction conditions permit.

Configurations of metal and rubber lined pumps of the same frame size use the same base, bearing assembly, stuffing box and shaft sleeve, reducing stockholding to a minimum.

Typical Applications

- ▶ Chemical Process
- ▶ Heavy Minerals
- ▶ Paper and Pulp
- ▶ Mill Discharge
- ▶ Sugar Beet
- ▶ Slag Granulation
- ▶ Bottom Boiler and Fly Ash
- ▶ Cyclone Feed
- ▶ Power Utilities



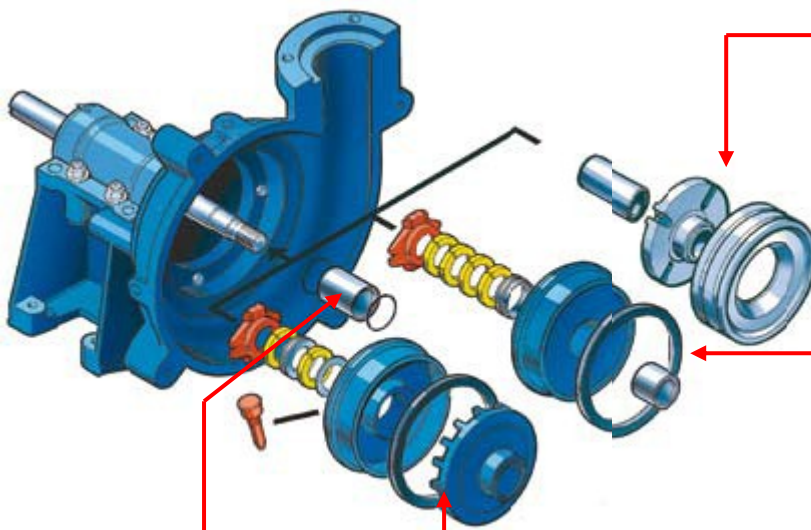


Bearing Cartridge Assembly

A large diameter shaft with a short overhang minimises deflection and vibration. Heavy duty taper roller bearings are housed in a removable bearing cartridge. Interchangeable, extra heavy duty cartridge assemblies are also available on request.

Pump Base

A one piece casting cradles the bearing cartridge assembly. A minimum number of through bolts hold the pump casing to the frame. A simple single point impeller adjustment facility is provided in a convenient position below the bearing cartridge, minimising contamination from media pumped.



Mechanical seals ...

... are also available for most applications, single or double mechanical seals can be offered as an alternative to a conventional seal.

Gland Seal

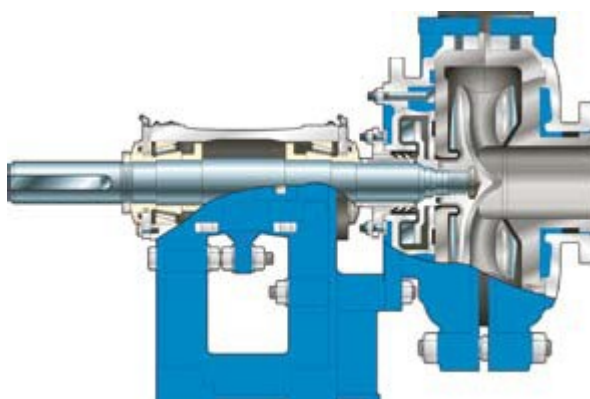
A packed gland type seal is available and can be fitted with ultra-low, low or full flow flush seal water arrangements.

Shaft Sleeve

Various options available from standard to hardened sleeves with O-Ring seals at both ends protects the shaft. A slip fit allows the sleeve to be removed and installed quickly. Various types of materials are available to cater for different duty requirements.

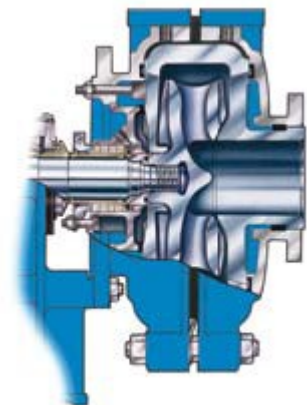
Expeller Seal

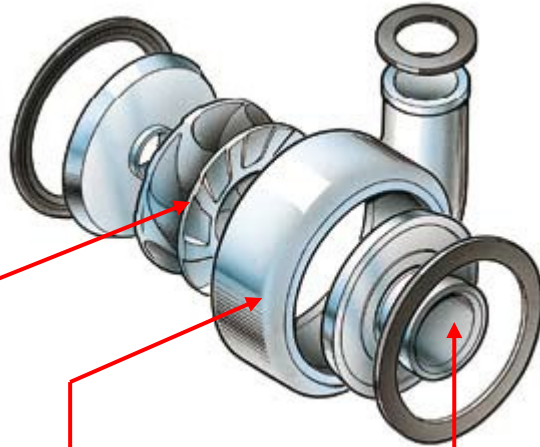
Suitable for most slurry pumping applications providing a major advantage where no gland service water is required. Not suitable for series pumping applications, or applications with high suction head.



Left: Cross section of rubber lined pump with centrifugal shaft seal.

Right: Cross section of hard alloy lined pump with water flushed packed gland seal.





Reduced seal pressure and recirculation ...

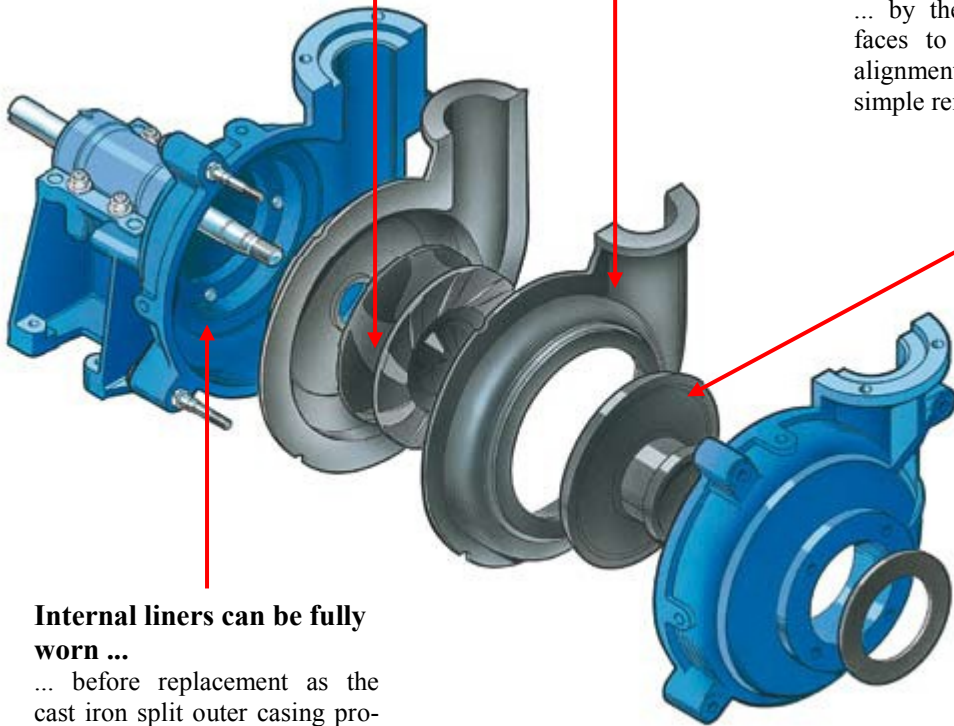
... is achieved by the deep sealing vanes on the front and back of both the hard alloy and pressure moulded elastomer impellers.

The best material for each application ...

... can be chosen from the wide range of hard alloy and pressure moulded materials, enabling us to optimise the wear characteristics of each component.

Wear is reduced and maintenance simplified ...

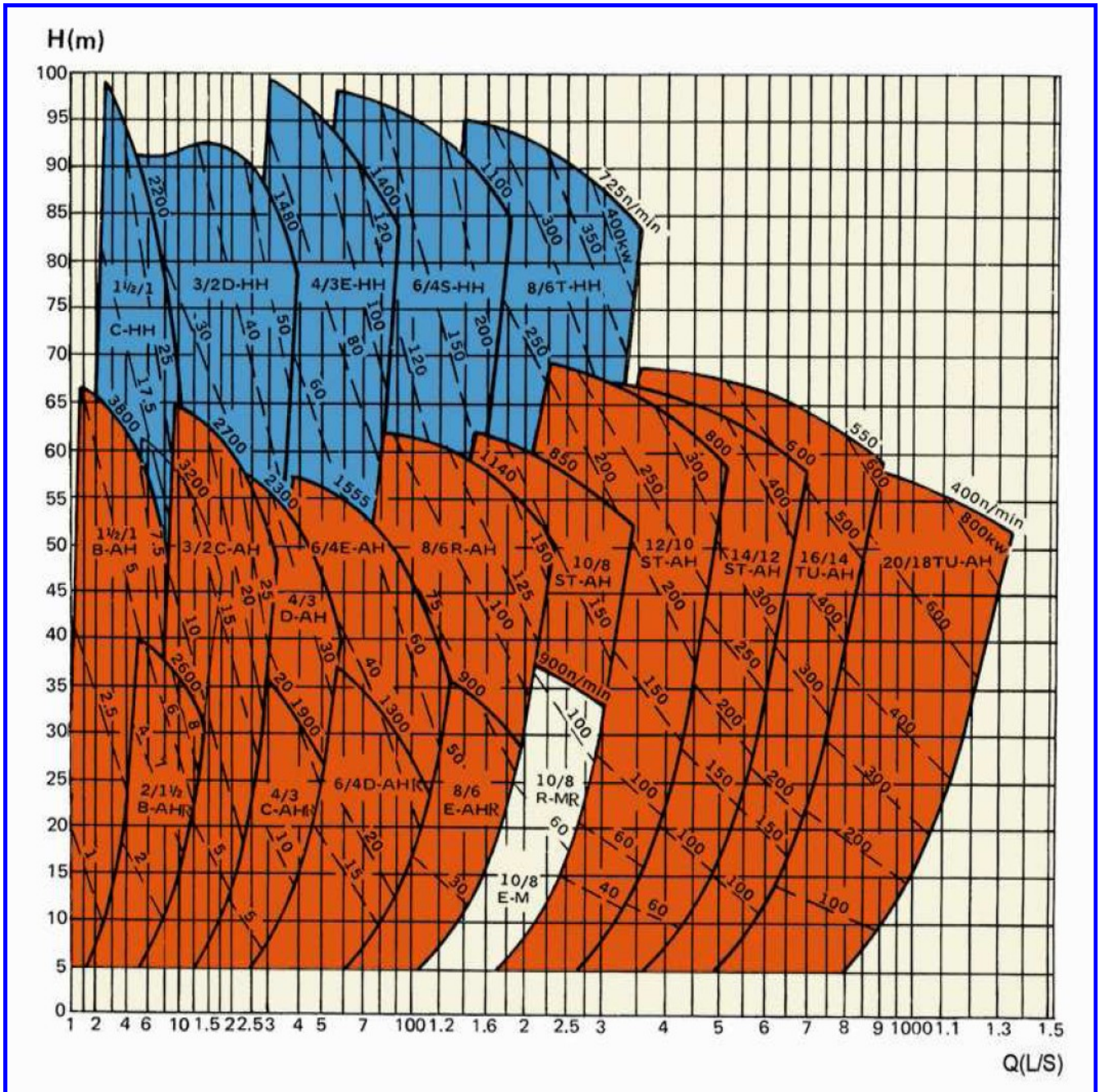
... by the use of tapered mating faces to allow positive accurate alignment during assembly and simple removal.



Internal liners can be fully worn ...

... before replacement as the cast iron split outer casing provides structural integrity and high operating pressure capability.

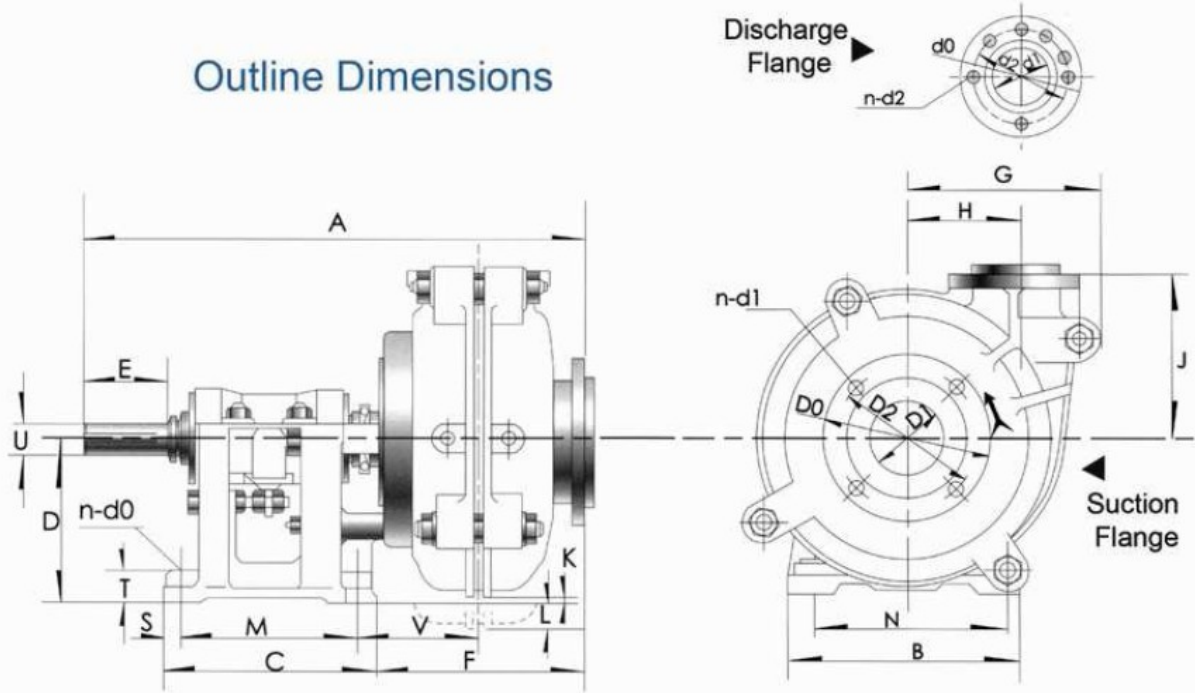
Quick selection chart



The selection chart should be used as a basic guide only.

It indicates the range and quantity of flow and head available from Xcelflo slurry pumps with standard impellers. It can also, however, be used to obtain a preliminary pump selection providing the user is able to estimate the quantity of slurry to be pumped and the developed head required.

Outline Dimensions



TYPE	A	B	C	D	U	E	F	G	H	J	K	L	M	N	V
1 1/2 1B-AH	583	295	248	197	28	79	206	181	98	171	46	---	143	254	181
1 1/2 1C-HH	759	406	311	254	42	121	306	270	194	254	---	11	175	356	252
2 1/2 1B-AH	592	295	248	197	28	79	217	205	114	184	33	---	143	254	184
3/2C-AH	768	406	311	254	42	121	281	238	138	210	71	---	175	356	233
3/2D-HH	986	492	364	330	65	164	389	384	254	368	---	51	213	432	298
4/3C-AH	843	406	311	254	42	121	354	292	149	262	24	---	175	356	270
4/3D-AH	943	492	364	330	65	164	353	292	149	262	100	---	213	432	279
4/3E-HH	1240	622	448	457	80	222	492	492	330	432	---	---	257	546	381
6/4D-AH	1021	492	364	330	65	164	421	406	229	338	11	---	213	432	318
6/4E-AH	1178	622	448	457	80	222	433	406	229	338	138	---	257	546	351
6/4S-HH	1668	920	780	450	120	280	596	616	413	546	---	134	640	760	353
8/6E-AH	1302	622	448	457	80	222	557	551	318	460	---	62	257	546	402
8/6R-AH	1360	680	590	350	85	215	---	511	318	460	---	170	490	560	312
8/6T-HH	2275	1150	1040	650	150	350	852	835	584	812	---	160	880	900	538
10/8E-M	1337	622	448	457	80	222	584	613	381	470	---	83	257	546	403
10/8R-M	1395	680	590	350	85	215	---	613	381	470	---	190	490	560	314
10/8ST-AH	1748	1150	780	650	120	280	692	673	419	635	27	---	620	900	439
12/10ST-AH	1816	1150	780	650	120	280	762	755	464	674	---	65	620	900	416
14/12ST-AH	1873	1150	780	650	120	280	812	937	629	832	---	224	620	900	486
16/14TU-AH	2320	1460	1050	900	150	350	953	1048	660	889	---	84	860	1200	597
20/18TU-AH	2475	1460	1050	900	150	350	1100	1420	940	1230	---	420	860	1200	615
6S-H	1700	920	780	450	120	280	622	625	415	615	---	155	640	760	382

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