

MA-Heavy Duty Slurry Pump

Email sales@smipumps.co.za Tel 011 397 5672

Address 13 Patrick Road Jetpark, Boksburg, Johannesburg

MA-Heavy Duty Slurry Pump



Pump type MA is the standard heavy duty slurry pump which designed for the continuous pumping of highly abrasive, high density slurries with minimal maintenance requirements. It maintains high efficiencies over the wear life of its components. This type of pump typically used in heavy minerals processing, mineral recovery process plant transfers, wet waste processes, recycling-washing plant, sand plant duties and chemical process plant.

Typical Application

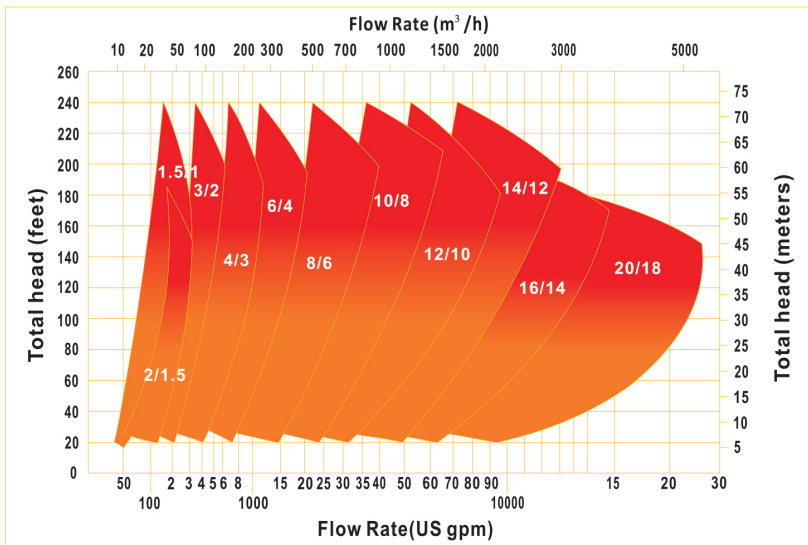
- Mill Discharge
- Coarse Sand
- Tailings
- Mineral Concentration
- Heavy Media
- Coal Washing
- FGD
- Chemical Processing
- Bottom/Fly Ash
- Metal Smelting

Pump Designation

8 / 6 E - MA



MA Pump Quick Selection Chart

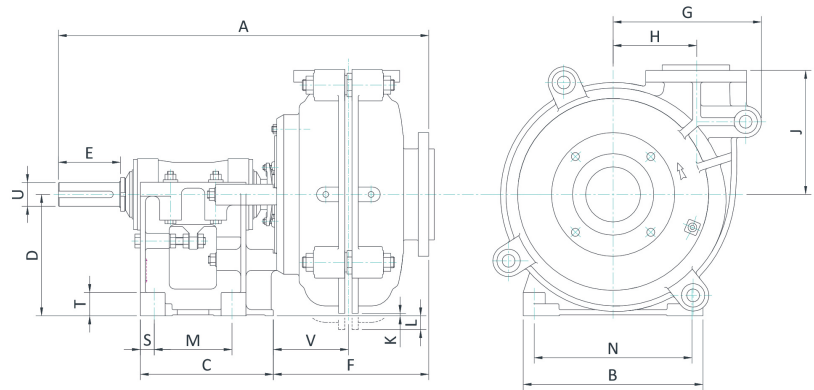


Pump Range

Discharge Size: 1" to 18"
Capacity: 4 to 5400m³/h
Head: 5 to 75 m



Outline Dimensions



Pump Features

Elastomer or high chrome alloy liners provide corrosion & abrasion resistance, plus the interchangeability to reduce the maintenance cost and maximize wear life

Large diameter, high efficiency impellers designed to offer maximum wear life and low operating cost, wide options of impeller for specific applications

Gland, expeller or mechanical seals are available to suite different working conditions

The bearing can be grease or oil lubricated which offer ease of maintenance and reduced downtime

The pump can be installed in multi-stage high pressure operation

Large internal passage designed to reduce internal velocities to maximize wear life and lower operating cost

Material Options

A major advantage of the slurry pump is the number of optional materials available. This enables a pump to be constructed with the most appropriate materials specifically to meet the duty requirements.

Pump Size	A	B	C	D	U mm	Key Size	E	F	G	H	J	K	L	M	N	V	T	S	Pump Weight(KG)	
																			Metal	Rubber
1.5/1B-MA	583	295	248	198	28	8×7	79	207	181	98	171	47	-	143	254	100	38	24	87	70
2/1.5B-MA	592	295	248	198	28	8×7	79	217	203	114	184	34	-	143	254	102	38	24	95	77
3/2C-MA	768	406	311	255	42	12×8	125	281	238	138	210	72	-	175	356	129	48	30	180	149
4/3C-MA	843	406	311	255	42	12×8	125	354	292	149	262	25	-	175	356	167	48	30	285	210
4/3D-MA	943	492	364	331	65	18×11	163	354	292	149	262	101	-	213	432	167	64	38	344	287
6/4D-MA	1021	492	364	331	65	18×11	163	424	406	229	338	9	-	213	432	205	64	38	596	470
6/4E-MA	1178	622	448	458	80	22×14	222	433	406	229	338	136	-	257	546	214	76	54	785	620
8/6E-MA	1302	622	448	458	80	22×14	222	553	551	318	460	-	61	257	546	261	76	54	1424	944
8/6R-MA	1348	680	590	353	85	22×14	216	554	551	318	460	-	174	490	560	262	70	50	1655	1164
8/6F-MA	1502	857	635	610	100	28×16	279	542	551	318	460	90	-	349	762	250	98	95	1789	1349
10/8F-MA	1646	990	705	609	100	28×16	279	683	673	419	635	-	12	584	762	349	102	61	3085	2808
10/8G-MA	1910	1219	876	852	140	36×20	360	682	673	419	635	230	-	749	851	347	152	64	4059	3594
10/8ST-MA	1748	1150	780	650	120	32×18	280	693	673	419	635	28	-	620	900	359	125	80	3750	3150
10/8T-MA	2110	1150	1040	650	150	36×20	350	694	673	419	635	35	-	880	900	360	125	80	-	-
12/10F-MA	1721	990	705	609	100	28×16	279	752	755	464	674	-	105	584	762	371	102	61	3904	2940
12/10G-MA	1978	1219	876	852	140	36×20	360	750	755	464	674	-	138	749	851	371	152	64	5107	4287
12/10ST-MA	1816	1150	780	650	120	32×18	280	762	755	464	674	-	64	620	900	381	125	80	4318	3678
12/10T-MA	2180	1150	1040	650	150	36×20	350	762	755	464	674	-	65	880	900	381	125	80	-	-
14/12F-MA	1760	990	705	610	100	28×16	279	802	944	629	832	-	265	584	762	396	102	61	5870	4132
14/12G-MA	2030	1219	876	852	140	36×20	360	801	944	629	832	-	22	749	815	395	152	64	6682	4945
14/12ST-MA	1873	1150	780	650	120	32×18	280	812	944	629	832	-	224	620	900	406	125	80	6409	4672
14/12T-MA	2230	1150	1040	650	150	36×20	350	813	944	629	832	-	224	880	900	406	125	80	-	-
16/14G-MA	2320	1460	1050	900	150	36×20	351	953	1044	660	889	-	84	860	1200	502	150	95	8750	7100
16/14TU-MA	2320	1460	1050	900	150	36×20	351	953	1044	660	889	-	84	860	1200	502	150	95	10000	7900
20/18TU-MA	2475	1460	1050	900	150	36×20	351	1100	1414	940	1230	-	421	860	1200	520	150	95	19150	14050

Note: All the dimensions are in millimeter (mm).

Material Code	Hardness (HRC)	Impact Toughness (J/cm ²)	Application	Standards
M05	≥58	5~7	Alloy M05 is particularly suited for greater impact load and fair corrosion resistance, and it is used when pH range is 5-12.	ASTM A532 CL III-A
M07	≥58	5~7	Alloy M07 has lower wear resistance but higher impact resistance than Alloy M05. It is used when pH range is 5-12.	ASTM A532 CL III-A
M49	35~45	5~7	Alloy M49 has certain erosion resistance and better corrosion and abrasion resistance, which is used in mild acid application with pH =4, particularly suitable for Flu Gas Desulphurization (FGD) applications.	
M33	30~40	5~7	Alloy M33 excels in erosion resistance and corrosion resistance, which can be used in oxidizing medium with pH =1, such as delivery of phosphogypsum and nitric acid, sulfuric acid and phosphoric acid, etc.	
M12	60~67	2~5	Alloy M12 has better wear resistance than Alloy M05, but it is not best suited for corrosion application. It can be selected when pH ranges of 6-14, where Alloy M05 provides fair wear life.	
M61	60~67	5~6	Alloy M61 has better toughness compared to Alloy M12. Alloy M61 can be further hardened by adjusting heat treatment, thereby improve its wear resistance. It is suitable for high abrasive slurry with fine particles with pH ranges of 6-14.	

Material Code	Material Name	Description and Application
M08R	Natural Rubber	M08R is a black natural rubber, low to medium hardness generally used for impellers, and is required in fine particle slurries.
M26R	Natural Rubber	M26R is soft natural rubber, normally used for liners, and is required in fine particle slurries applications.
M33R	Natural Rubber	M33R is a premium grade material for use where M26R does not provide sufficient wear life.
M38R	Natural Rubber	M38R is a black natural rubber, of medium hardness, M38R is used for impellers where superior erosive is required in fine particle slurries.
M55R	Natural Rubber	M55R is a premium grade material for use in a high wear application. Superior physical properties give increased cut resistance to hard, sharp particle slurries.
M02S	EPDM Elastomer	M02S is an acid resistant rubber which is of medium abrasion resistance.
M12S	Nitrile Elastomer	M12S is synthetic elastomer which is generally used in low abrasion/erosion application. It provides excellent resistance to oils, fats and waxes.
M21S	Butyl Rubber	M21S exhibits excellent chemical stability and good resistance to heat and oxidation. It is generally used in acidic applications.
M31S	Hypalon	M31S exhibits an excellent balance of chemical resistance to both hydrocarbons and acids.
M42S	Neoprene	M42S provides improved resistance to temperature, weather and ozone attack. It has excellent oil resistance.
M51S	Fluoroelastomer	M51S has exceptional resistance to oils and chemicals at elevated temperature. Limited erosion resistance.

Pump Structures

