

MAF SERIES

AXIAL

FLOW PUMP



ENHANCING TRUST



**SINCE
2002**

**CATALOG
2022-23**

AN ISO 9001 : 2015 CERTIFIED COMPANY

MAF SERIES

The Industry leader in circulating pump technologies

AXIAL FLOW PUMP

6-36" (150-900 mm)

For continuous circulation of corrosive/abrasive solutions and process wastes. Proven performance in a variety of services around the world.



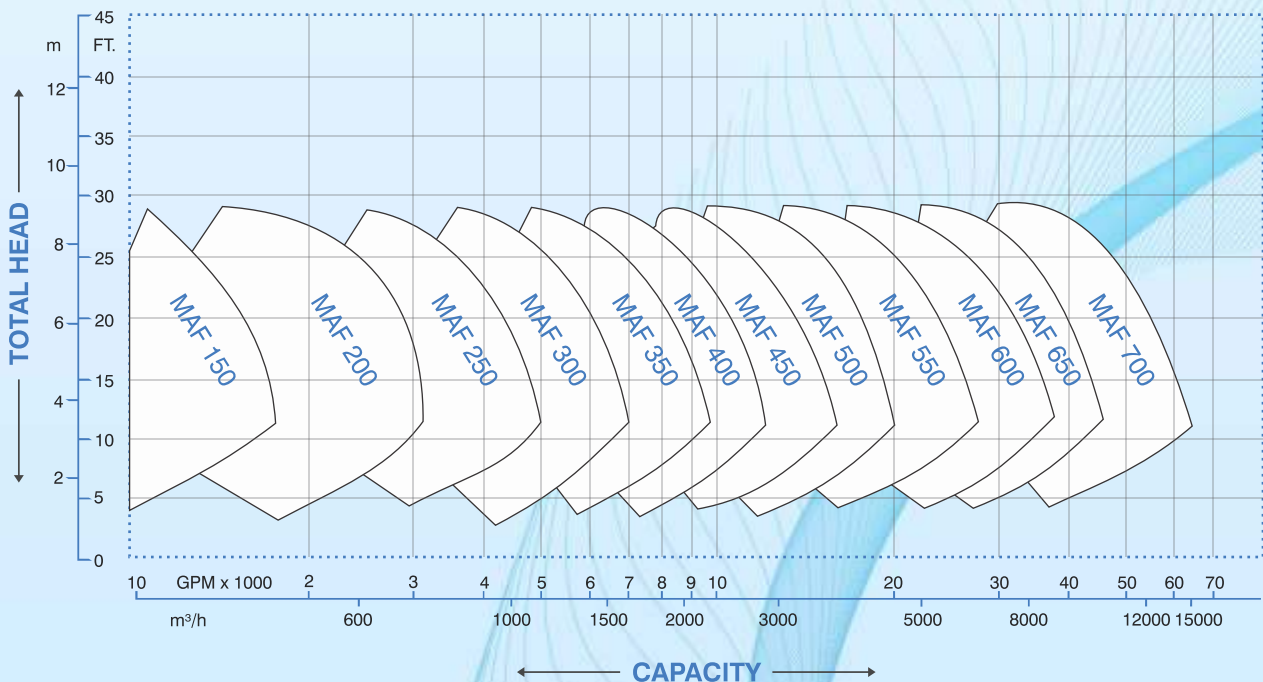
MEGATECH PUMP is unmatched in the industry for high volume/low head pumping requirements...especially when corrosive and/or abrasive solutions are involved. Extended service life, mechanical reliability, custom engineering, and a wide range of materials allow the Model **MAF SERIES** to stand out as the leader in the field.

- Capacities to 15,000 m³/h
- Low NPSH requirements
- Heads to 30 feet (9.2 m)
- Available in SS - 316, Austenitic stainless steels, Duplex alloys, Nickel, Nickel-chrome alloys, Nickel-chrome-moly alloys, Titanium, and other Alloys as required for the service
- Temperatures to 350° F (176°C)
- Available in 6-36", (150-900 mm) sizes (larger sizes available)

Operating Data

Pump size	5" to 36"
Flow up to	15,000 m ³ / hr
Head up to	9 meter
Temperature up to	300° C
Max. working Pressure	10 Bar

PERFORMANCE FAMILY CURVE



TESTING CAPABILITIES



MEGATECH's in house propeller pump test loop allows testing through 15,000 m³/h. This testing capability represents our dedication to the continued development of custom and advanced hydraulic capabilities to meet the specific needs of our customers. Our in house testing facility includes a 100 HP variable frequency drive and a fully instrumented test lab for measuring flow, head, efficiency, NPSH and a wide range of mechanical parameters.

MEGATECH's Pumps Plus team of pump professionals is dedicated to providing rapid response to customer needs for pump systems, parts and service. Pumps Plus ensures that each customer's requests are handled with care and expedience.

ENGINEERING SERVICES

Mechanical and hydraulic design, including new propeller technologies

Nozzle load calculations

Coordination of associated equipment

DESIGN FEATURES

Multiple Impeller selections for optimum performance and efficiency.

Tapered Bore Stuffing Box for longest mechanical seal life on cast sizes.

Dual lantern ring configuration available for packed stuffing box

Back pullout construction standard on cast sizes

Robust bearing frame and shaft for long life on critical, continuous duty services

SERVICES

Chemical



Evaporator and crystallize circulation

Mining & Minerals



Phosphate, soda ash, potash, & sodium chloride processing

Pulp & Paper



Black liquor evaporator, chlorine dioxide generators

Municipal



Sewage digesters

General Raw water



pumping, flood control, marine ballast transfer

Petrochemical



Polypropylene reactors, xylene

PRESSURE				HEAD			
bar	atm kg/cm ²	kN/m ² kPa	lb/in ²	ft	(Water 15°C) m	(Hg 10°C) in	mm
1.0	1.02	100	14.5	33.5	10.2	29.5	750
0.981	1.00	98.1	14.2	32.8	10.0	29.0	736
0.690	0.703	69.0	10.0	23.1	7.04	20.4	517
0.339	0.345	33.9	4.91	11.3	3.46	10.0	254
0.299	0.304	29.9	4.33	10.0	3.05	8.82	224
0.133	0.136	13.3	1.93	4.47	1.36	3.94	100

FLOW						
m ³ /h	hl/h	l/s	lgpm	lgph	USgpm	
4.55	45.5	1.26	16.7	1000	20.0	
3.60	36.0	1.0	13.2	792	15.8	
2.27	22.7	0.631	8.33	500	10.0	
1.0	10.0	0.278	3.67	220	4.4	
0.273	2.73	0.076	1.0	60	1.2	

HP	POWER kW	(metric HP) PS or CV
1.34	1.0	1.36
1.0	0.746	1.01
0.986	0.736	1.0

$$\text{kW} = \frac{\text{m}^3/\text{h} \times \text{m} \times \text{SG}}{367.12 \times \text{Effy}}$$

$$\text{HP} = \frac{\text{lgpm} \times \text{ft} \times \text{SG}}{3300 \times \text{Effy}}$$

KINEMATIC VISCOSITY (for performance corrections)		
cSt	m ² /s	ft ² /s
9.29 ⁴ x 10	9.29 ² x 10	1
1	1 x 10 ⁻⁶	1.08 ⁻⁵ x 10

DYNAMIC VISCOSITY (Kinematic visc = $\frac{\text{Dynamic visc}}{\text{SG}}$)			
cP	Pa.s* N.s/m ²	lb.s/ft ²	kg.s/m ²
1.0	1 x 10 ⁻⁸	2.09 x 10 ⁻⁵	1.02 x 10 ⁻⁴
0.981	0.981 x 10 ⁻⁸	2.05 x 10 ⁻⁵	1.0 x 10 ⁻⁴
0.478	0.478 x 10 ⁻⁸	1.0 x 10 ⁻⁵	0.488 x 10 ⁻⁴

* = kg/m.s



MEGATECH ENGINEERS

Unit-1

323, Gatrad Bakrol Road,
Nr. Ice Factory, Bakrol,
Ahmedabad, Gujarat,
India.

Unit-2

16, Prarthna Ind. Estate, B/H. Shakariba
Party Plot, Jamfalwadi Road, NH - 8, C.T.M.,
Amraiwadi, Ahmedabad - 380 026.
Gujarat, India.

Mo. :

+91 94260 62885 / 94266 80629 / 99240 68885

Email :

info@megatechengineers.com / megatechk@gmail.com

Web :

http://www.megatechengineers.com