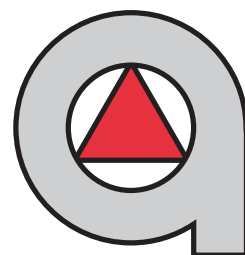
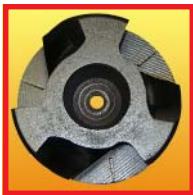


Transfer Pumps

WORKHORSE High Flow

MINI High Flow



**Molten
Metal
Equipment
Innovations**



Description

MMEI offers two molten metal transfer pumps, the larger WORKHORSE HF and the smaller MINI HF. Each pump is a proven hard working performer, engineered to provide maximum flow rates and higher lift capabilities. For transferring large amounts of metal fast, pumping metal to higher heights, or for ensuring a controlled flow of metal, MMEI has the pump that will do it reliably and safely. Typical applications for our transfer pumps include filling ladles of all sizes, emptying furnaces, transferring metal between furnaces and any application where a flow of metal is required in the production process.

Both the WORKHORSE and the MINI are available in either top or bottom feed versions and are designed for use in both aluminum and zinc applications. Each pump is also offered with either an air motor or with an electric motor complete with electric drive and controls for maximum performance and reliability.

The WORKHORSE and MINI both feature a robust shaft and stout posts, engineered for maximum strength and each is protected with a ceramic sleeve to ensure superior service life. The rotor features our advanced dual-flow "Hook" design, developed to maximize the flow of molten metal. Our shaft coupling is engineered to allow fast, easy shaft changes while providing secure, precision turning of the shaft and rotor.

Unlike other pumps, our unique riser is not a structural member of the pump and can be easily replaced. The riser sits on a button located on the base and is attached at the top with a simple bolt-on clamp. Changing the riser is now a simple operation. It can even be changed while the pump is still hot, thus reducing downtime!

All of MMEI's pumps are designed to be assembled in less than an hour. All of our pumps are self-aligning. Thus, they do not require an alignment fixture for assembly or repairs, therefore, allowing you to rebuild our pumps faster and easier.

Rugged design, high metal flow and lift capabilities, and longer service life make the WORKHORSE and MINI Transfer Pumps the right choice for transferring your molten metal. Please contact us for more info.

Product HighLights

- ◆ **Great for safely and reliably transferring molten aluminum or zinc - even in harsh environments.**
- ◆ **Higher flow rates and lift generated by large, dual-flow rotors.**
 - **Achieve same flow or more with lower RPM's.**
 - **Less turbulence created.**
 - **Less breakage, longer service life.**
- ◆ **Maximize your productivity.**
 - **Faster metal transfer keeps you moving quicker.**
 - **Pump higher than before to reach places you couldn't in the past.**
- ◆ **Unique riser with simple bolt-on clamp can be changed quickly and easily - even while pump is still hot!**
- ◆ **Larger, more robust parts improve reliability for less downtime and more uptime!**
- ◆ **Full ceramic sleeve protection on shaft, posts and riser for extended service life.**
- ◆ **Assembles in less than one hour!**
- ◆ **No alignment fixture required, simplifies assembly and repair.**
- ◆ **Thru-drilled post holes for fast, easy replacement of posts.**
- ◆ **Open top pump inlet, no baffle plates to clean out.**
- ◆ **Refractory lined pipe available to complete your transfer pump - straights and elbows custom fit to your needs.**



We also offer a complete range of refractory lined piping for use with our transfer pumps. Our piping is engineered to maximize flow while reducing blockage to provide superior service life. We offer straights in any length up to 48" sections as well as elbows in nearly any angle required. As a result, we can provide you with piping to match your application requirements. Contact us for more information.



Transfer Pumps

Features and Benefits

All of our transfer pumps share the same advanced design and construction features. The features and benefits of our transfer pumps are shown below for a WORKHORSE and also apply to our MINI HF pump.

Electrically driven for maximum performance and reliability. Uses a premium, energy efficient, totally enclosed, extra tuff, severe duty motor. Engineered to provide long service life even in harsh environments.

Riser connects at top with simple bolt-on clamp, allowing it to be replaced even while the pump is hot!

Shaft is protected with a full ceramic sleeve, offering maximum protection. Large diameter offers superior strength and life.

Riser is a non-structural component and is seated on a button located on the base, allowing it to be quickly and easily replaced without recementing.

Non-volute pumping chamber provides superior flow rates while eliminating internal pinch points which can prematurely damage a rotor.

External blower supplies cooling air through shroud to cool motor and coupling from exterior. Prevents dirt from getting into motor while eliminating need for filtered air.

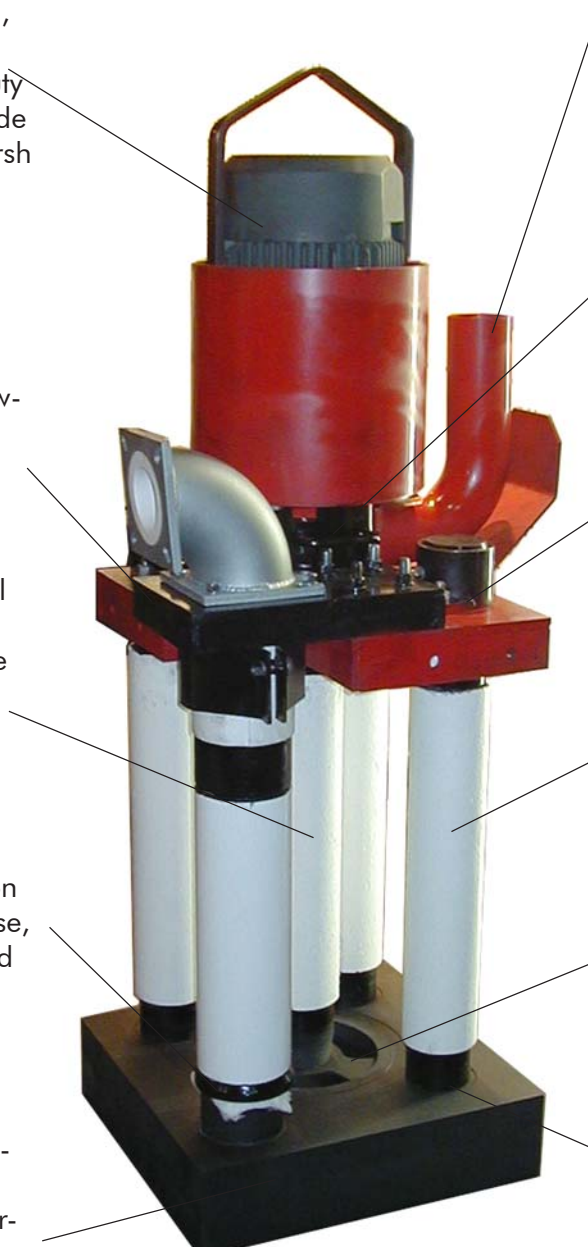
Shaft coupling allows fast, easy replacement of the shaft while providing accurate, secure spinning of the shaft.

Posts attached at motor mount with thru bolt and compression post clamp, eliminates cement for easier assembly and replacement.

Large diameter posts protected with a ceramic sleeve for superior service life.

Features a large diameter rotor for maximum flow and higher lift.

Posts cemented into through-holes in base for secure fit with easier assembly and replacement.



Covered under one or more of the following U.S. patent nos. 5,203,681; 5,330,328; 5,308,045; 5,662,725; 5,678,807; 5,944,496; 5,951,243; 6,027,685; 6,093,000; 6,123,523; 6,303,074; 6,345,964; 6,398,525; 6,689,310; 6,723,276; 7,402,276; 7,470,392; 7,507,367. Additional patents pending.



WORKHORSE HF Transfer Pump

Recommended Well Size:
36" x 36"

Approximate Weight:
1000 lbs.

Piping Size:
5" Nominal

Rotor Diameter:
10"

Electric Motor:
7.5 HP

Max. Metal Depth:
48"
(with 6" LTS Pump)

Min. Metal Depth:
12" (with bottom
feed rotor)



MINI High Flow Transfer Pump

Recommended Well Size:
24" x 24"

Approximate Weight:
500 lbs.

Piping Size:
4" Nominal

Rotor Diameter:
7"

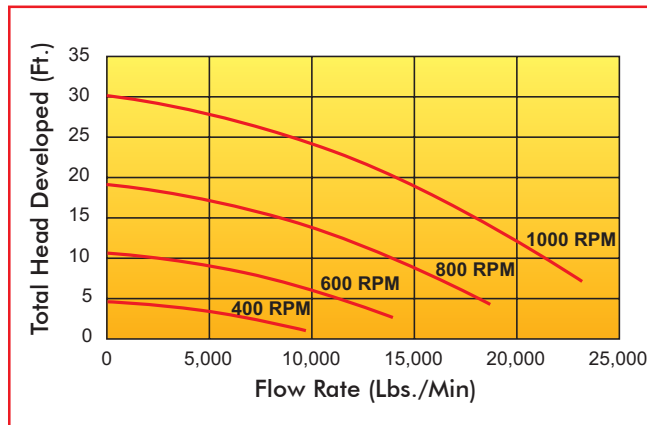
Electric Motor:
5 HP

Max. Metal Depth:
42"
(with 6" LTS Pump)

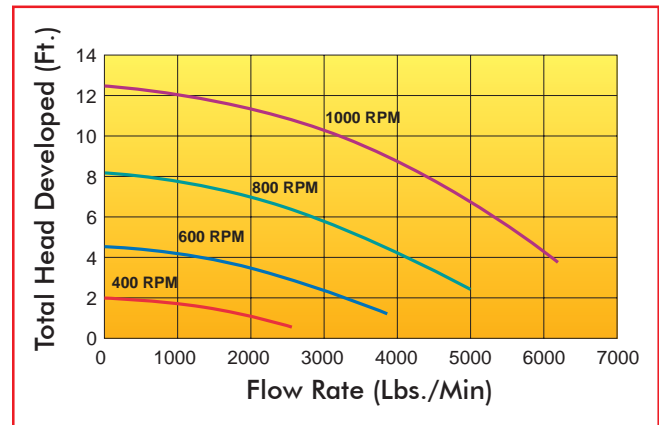
Min. Metal Depth:
8" (with bottom
feed rotor)



Flow Diagram

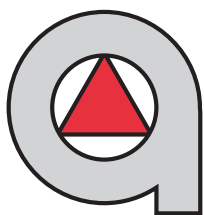


Flow Diagram



*Note: Above flow charts are for comparison purposes only and do not take into account the resistance from transfer piping which will effect actual flow rates achieved. This resistance will vary with each piping run.

Who to Contact for More Information



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