

## MAFH Series Dehydration Station



### Description

Water contamination in hydraulic systems can severely reduce the life of hydraulic systems and fluids. The MAFH is designed to eliminate 100% of free and up to 90% of dissolved water from small reservoirs, barrels, and gear boxes. Using a patent pending transfer process, the MAFH efficiently removes water and particulate contamination quickly in all environments. A proprietary design reduces aeration of free and entrained gases of returned fluid. The unit was designed to be extremely portable using either the central lifting point or the optional cart to access tight areas.

### Principle of Operation

The MAFH uses a new mass transfer dewatering technology. Ambient air is conditioned to increase its water holding capability before injecting to the reaction chamber. Fluid is equally distributed and cascaded down through reticulated media and the conditioned air stream. Water is transformed to water vapor and is expelled from the unit as a moist air stream. The relative humidity of the incoming fluid is continually monitored by an integral AS 1000 AquaSensor and displayed real-time on the control panel.

### Applications

- Steel and rolling mills
- Pulp and paper plants
- Power generation plants
- Tool machines / Plastic machines
- Hydraulic operated presses
- Oil conditioning

### Features

- High Dewatering Rates and particulate removal in one system
- Simple Controls; RUN/DRAIN modes
- Reduce fluid recycling cost
- No expensive vacuum pump to service and replace
- Patent Pending mass transfer technology uses ambient air to optimize and control dewatering rates
- Compact, efficient footprint - same diameter as a 55 gallon drum
- Remove free and dissolved water
- Highly effective in low and high humidity elements

### Technical Details

Dimensions	46"H x 23.25"OD
Fluid Viscosity	1000 SUS (216 cSt)
Weight	295 lbs (134 kg)
Inlet Connections	1/2" MJIC
Outlet Connections	3/4" MJIC
Flow Rate	90 gallons/hour
Inlet Pressure	Atmospheric
Outlet Pressure	to 40 psi
Fluid Service Temperature	50° F to 175°F (10°C to 79°C)
Power Supply	110 VAC, 60 Hz, 12 AMP
Attainable Water Content	< 50 ppm
Relative Humidity Display	Standard, 0-99% Range
Materials of Construction	
Base frame, vessel	Stainless steel
Seals	FPM
Fluid Viscosity	Minimum – 70 SUS Maximum – 1000 SUS
Operating Fluids	Recommended for use with Hydraulic Fluids and Petroleum based Fluids; Consult factory for use with other fluid types
Maximum Recommended Hose Length/Diameter	At 70 SUS - 10 ft/0.75 (inlet) 15ft/0.5 (outlet) At 1000 SUS - 8ft/1.0 (inlet) 10ft/0.75 (outlet)
Minimum System Connection Port Size	Inlet – 1/2 inch MJIC Outlet - 3/4 inch MJIC
Maximum Suction Pressure	-0.4 bar (11.97 in Hg)

### Element Performance

Micron Rating	Filter Rating	DHC (gm)
1	β 4.2(c) ≥1000	55
3	β 4.8(c) ≥1000	57
5	β 6.3(c) ≥1000	62
10	β 10(c) ≥1000	52
25	β 24(c) ≥1000	48

## Model Code

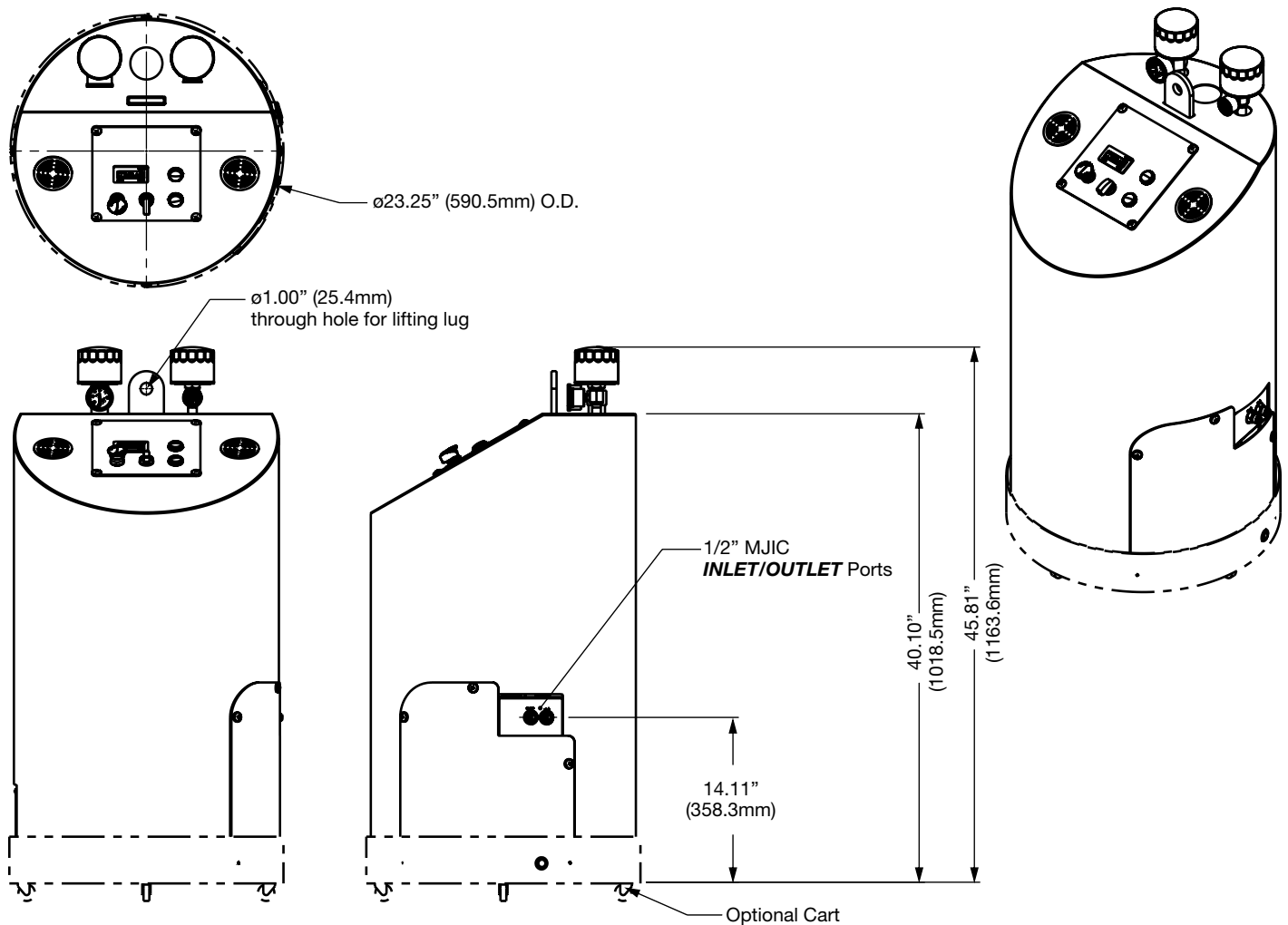
**MAFH - A - V - S - A - B - 01 - X**

<b>Series</b>	MAFH =	Dehydration station
<b>Flow Rate</b>	A =	1.5 gpm average
<b>Seals</b>	V =	Fluoroelastomer (FPM)
<b>Mobility</b>	S =	Stationary
	M =	Caster base
<b>Voltage</b>	A =	110V/60 Hz/1 Phase
	B =	220 VAC 50 Hz
<b>Air Source</b>	B =	Integral blower
	C =	Compressed air (supplied)
<b>Element Size</b>		01, 03, 05, 10, 25
<b>Options</b>	X =	class 1, Div 2 explosion-proof (contact factory if this option is required in for your application)

For replacement element part numbers, please see page 69 of this catalog.

*Model Codes Containing RED are non-standard items – Minimum quantities and longer lead times may apply - Contact HYDAC for information and availability.*

## Dimensions



Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.