

OFFLINE FILTRATION SYSTEMS

MAFH-A 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 patented 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 due to small footprint and cart to access tight areas.

Principle of Operation

The MAFH uses patented 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
- Fluid reclamation and recycling

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
- Patented mass transfer technology uses ambient air to optimize and control dewatering rates
- Remove free and dissolved water
- Highly effective in low and high humidity environments
- 2.4 kW heater option for unheated reservoirs

Technical Specifications

Dimensions	45.2"(H) x 36.7"(W) x 20.3"(D)
Weight	295 lbs (134 kg)
Inlet Connections	1" SAE
Outlet Connections	
Flow Rate	120 gallons/hour or 2.0 gpm
Permissible Inlet Pressure Range	-5.8 psig (-0.4 bar) to 32 psia (2.2 bar)
Max. Permissible Outlet Pressure	75 psig (5 bar)
Fluid Service Temp.	100° F to 150°F (10°C to 79°C)
Power Supply	110V AC / 60Hz / 1 Ph. (Standard; alternative power supply options available)
Heater Options	220V/ 60hz/ 1 Phase, 460V/ 60hz/ 3 Phase
Attainable Water Content	< 50 ppm
Relative Humidity Display	Standard, 0-99% Range
Materials of Construction	Reaction Vessel: Stainless steel Seals: FKM (Viton®)
Max. Permissible Fluid Viscosity	1000 SUS (Standard) 500 SUS (w/ Option 'X')
Operating Fluids	Recommended for use with Hydraulic Fluids and Petroleum Based Fluids; (Consult factory for use with other fluid types)

Model Code

MAFH-A - V - M - A - B - 05 -

Series

MAFH-A = Dehydration station

Seals

V = Viton®

Mobility

S = Stationary

M = Caster base

Voltage

A = 110V AC / 60Hz / 1 Ph.

B = 220V AC / 60 Hz / 1 Ph.

C = 220V AC / 50Hz / 1 Ph.

D = 460V/60hz/3 Phase (Heater option only)

Air Source

B = Integral blower

Filter Element Rating (micron)

01, 03, 05, 10, 25

Options

X = Class 1, Div 2 explosion-proof, Supplied Voltage: 460V / 60Hz / 3Ph (contact factory if this option is required in for your application)

H = Heater Option (220V/ 60hz, or 460V/ 60hz ONLY)

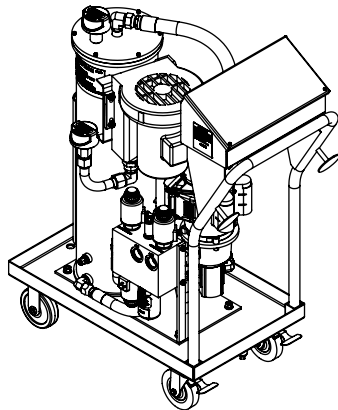
Y = Built with CSA approved components (requires CSA inspection on-site)

For replacement element part numbers, please see Section E - REPLACEMENT ELEMENTS of this catalog.

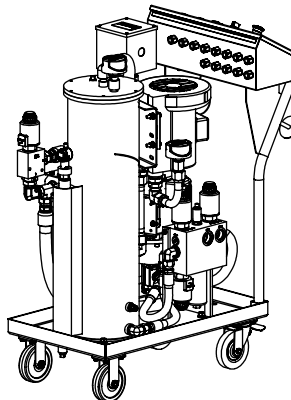
Model Codes Containing RED are non-standard items – Minimum quantities and longer lead times may apply - Contact HYDAC for information and availability.

Dimensions

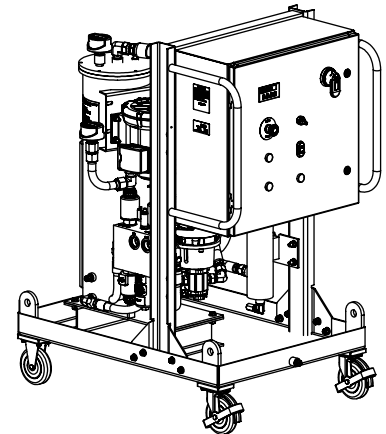
MAFH-A-V-S-A-B-xx



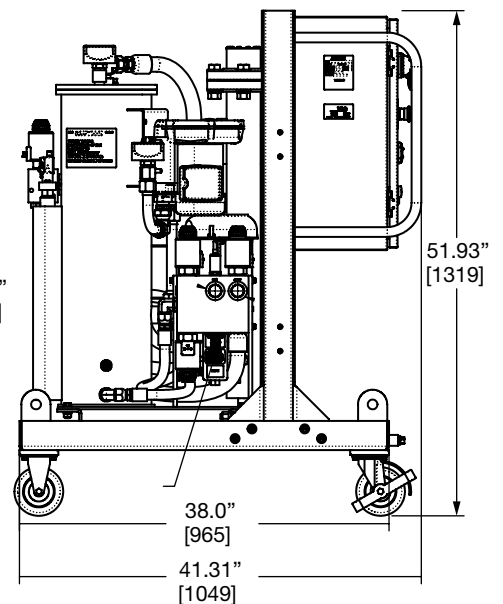
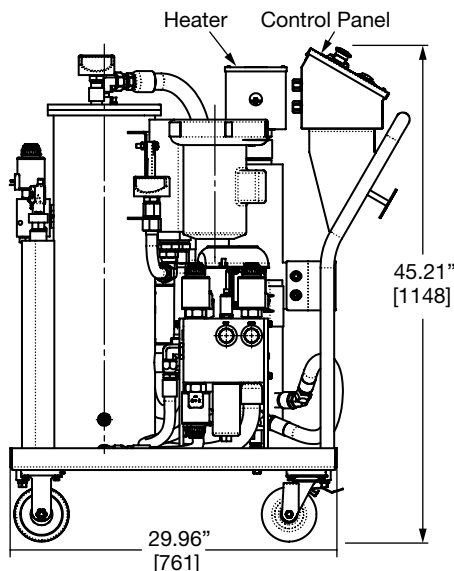
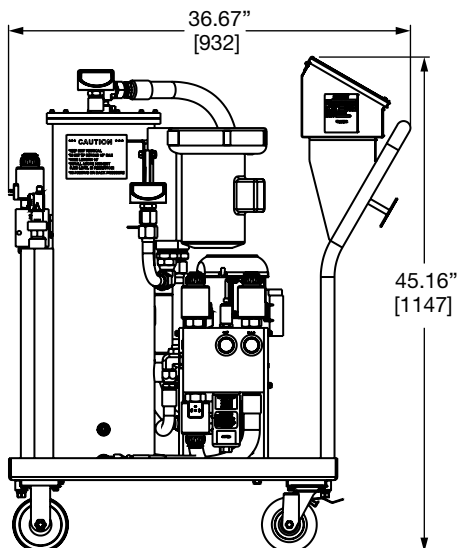
MAFH-A Standard (110V)



MAFH-A w/Heater (220V)



MAFH-A w/Heater (460V)



Dimensions are for general information only.