

OFFLINE FILTRATION SYSTEMS

MAFH-E Series

Dehydration Station



Description

Water contamination in hydraulic systems can severely reduce the life of hydraulic systems and fluids. The MAFH-E is designed to eliminate 100% of free and up to 90% of dissolved water from reservoirs, barrels, and gear boxes. Using a patented transfer process, the MAFH-E 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 integrated lifting lugs located on each corner of the cart or the optional wheeled cart.

Principle of Operation

The MAFH-E 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
- 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

Technical Specifications

Dimensions	32" W x 59" L x 70.25" H
Dry Mass	Without Heater: 1050lbs (476 kg); With Heater: 1230lbs (558 kg)
Inlet Connections	1-1/2" MJIC
Outlet Connections	1-1/2" MJIC
Oil Viscosity	Min 75 SUS; Max 2500 SUS (14 to 539 cSt)
Flow Rate	up to 22 gpm (1320 gallons/hour)
Inlet Pressure	Atmospheric
Outlet Pressure	To 100psi (6.9 bar)
Fluid Service Temperature	50°F to 160°F (10°C to 71°C)
Power Supply	460V/3/60Hz, 13 amps 460V/3/60Hz, 28 amps w/Heater 575V/3/60Hz, 10.5 amps 575V/3/60Hz, 23 amps w/Heater
Attainable Water Content	<50ppm
Relative Humidity Display	Standard, 0-99% Range
Construction	Base Frame: Carbon Steel Vessel: Stainless Steel Seals: Viton
Protection Class	NEMA-2

Model Code

Series

MAFH-E = Dehydration Station

Flow Rate

(omit) = 15gpm
 22 = 22gpm
 VF = 3-15gpm Variable Flow

Seals

V = Fluoroelastomer (FPM)

Mobility

S = Stationary
 M = Mobile

Voltage

A = 460V/3/60 Hz
 B = 575V/3/60Hz

Air Source

B = Integral Blower

Filter Housing

K = 27" filter housing
 Q = 39" filter housing

Media* (microns)

01, 03, 05, 10, 25

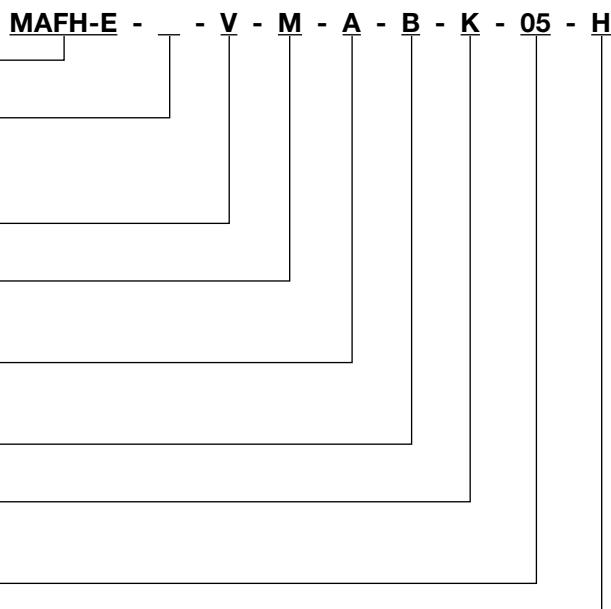
Optional Heater

H = 12500W Heater

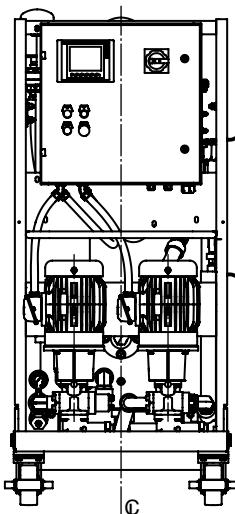
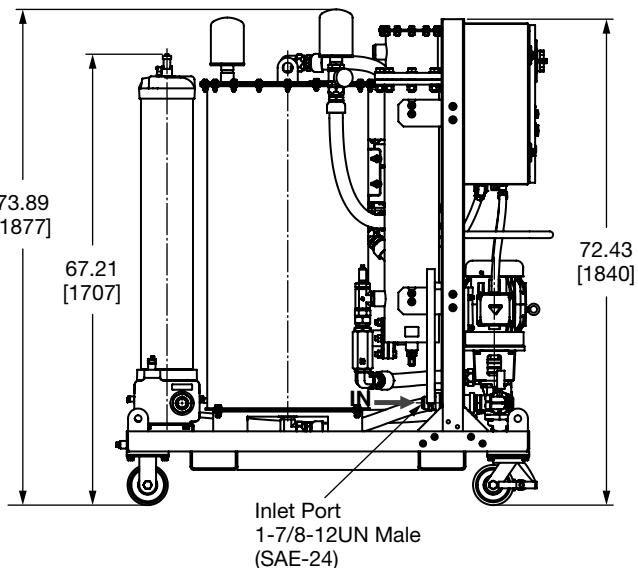
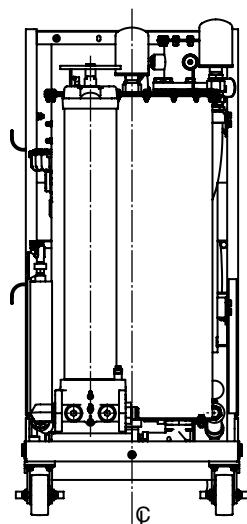
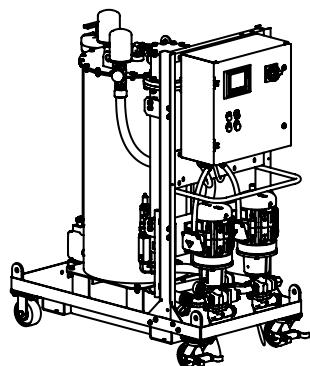
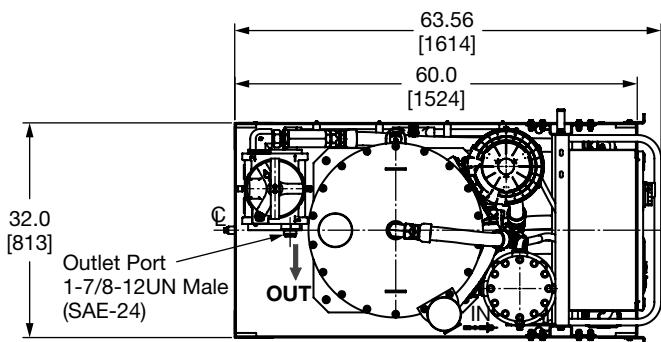
* = K filter housing will use the GeoSeal elements

Q filter housing will use the 39QCLQF Filter Systems elements

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



Dimensions



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