

## RMF System Mini Water Vac Vacuum Dehydration Unit

The Mini Water Vac is a designated oil purification unit which can be applied directly to various types of machine reservoirs. It dehydrates and cleans most types of oils such as lubricating, hydraulic, transformer, and switch oils. The Mini Water Vac is a self-regulating filtration unit which removes particles, gas, and water. The purified oil satisfies the most stringent quality requirements.

### Simple Operation

The Mini Water Vac neither removes or alters oil additives. The water removal process is based on pure vacuum evaporation inside a vacuum chamber at a maximum temperature of 65°C (149°F). Solid particle removal is achieved through a well proven RMF Systems micro filter.

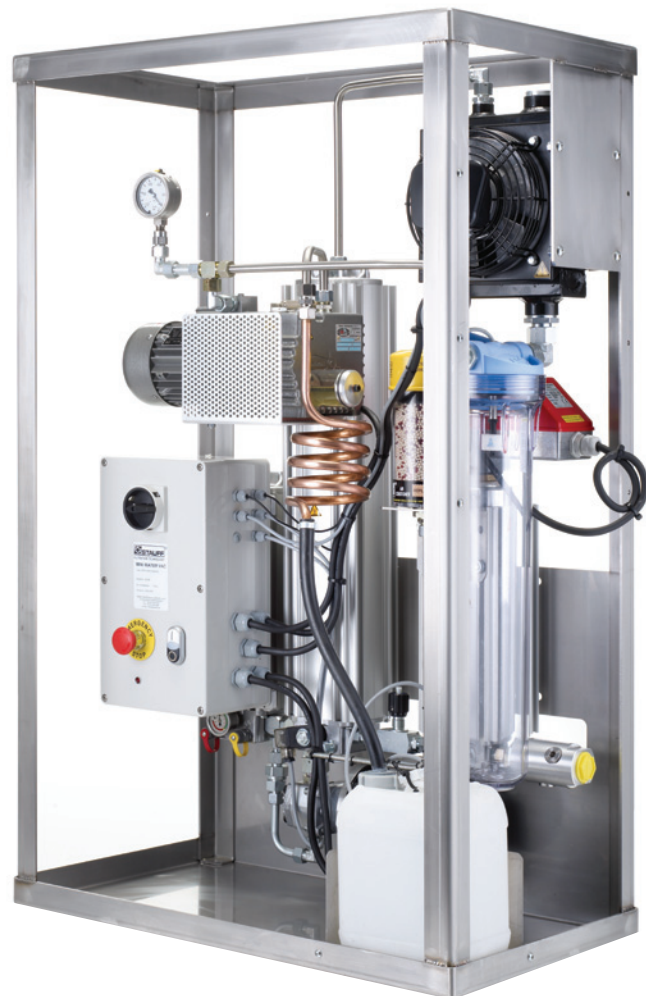
The Mini Water Vac does not require continuous supervision while operating. Once the unit is connected and commissioned, oil purification is a semi-automatic process. Desired oil temperature can be selected via the integrated heater thermostat. The dehydration and filtering process is fully automatic and is controlled via the PLC. The only manual action required is the emptying the pre-condenser bowl and the waste water container which are equipped with float switches to prevent overflow.

### Water, Gas and Particle Removal

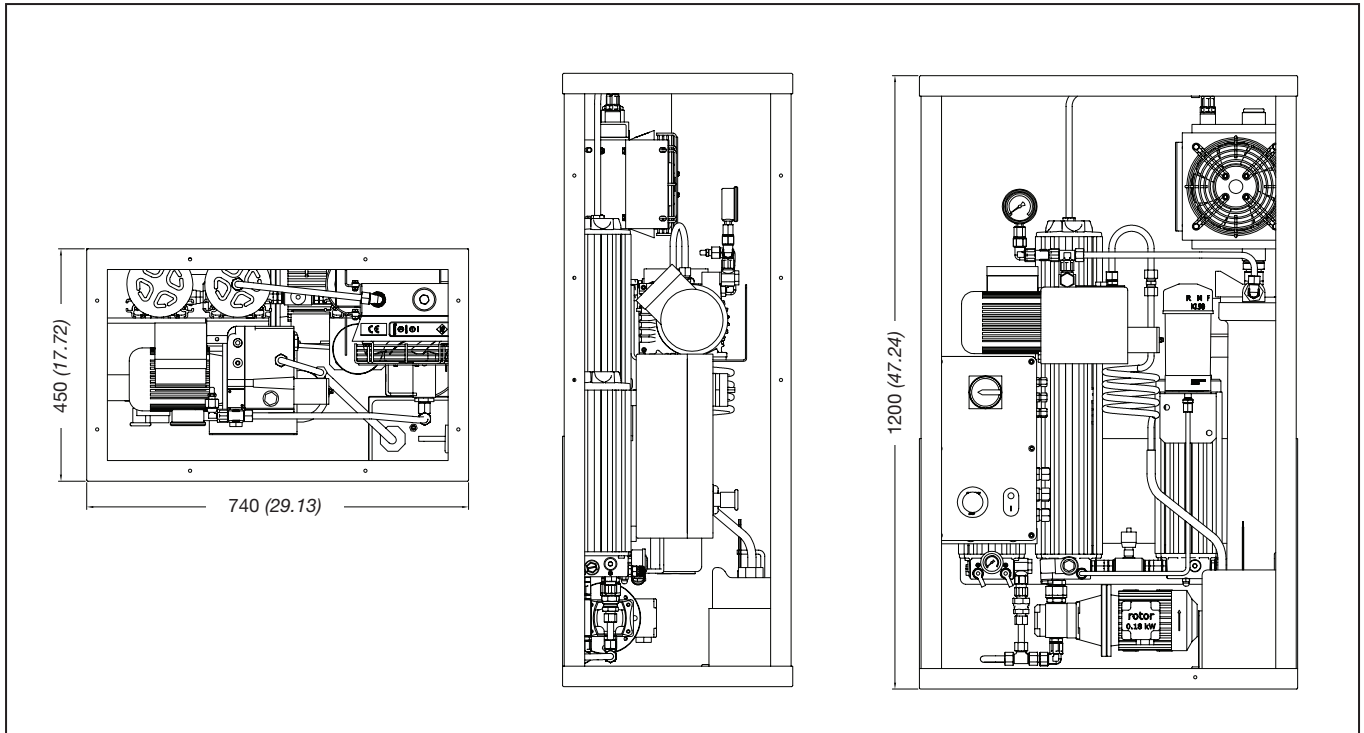
The Mini Water Vac removes liquid, gas, and solid particle contamination, which are corrosive and contribute to the reduction of machine life. Contamination greatly increases maintenance costs and contribute to breakdowns and total machine failures. The Mini Water Vac offers protection against malfunctions, breakdowns or total failures. The Mini Water Vac also protects the environment by reducing oil consumption and oil disposal.

### Benefits

- Efficient water, gas and particle removal
- Extension of fluid life
- Reduces fluid disposal
- Minimizes corrosion
- Reduced failures and downtime
- Reduce operating costs



## Dimensions MWV-1A



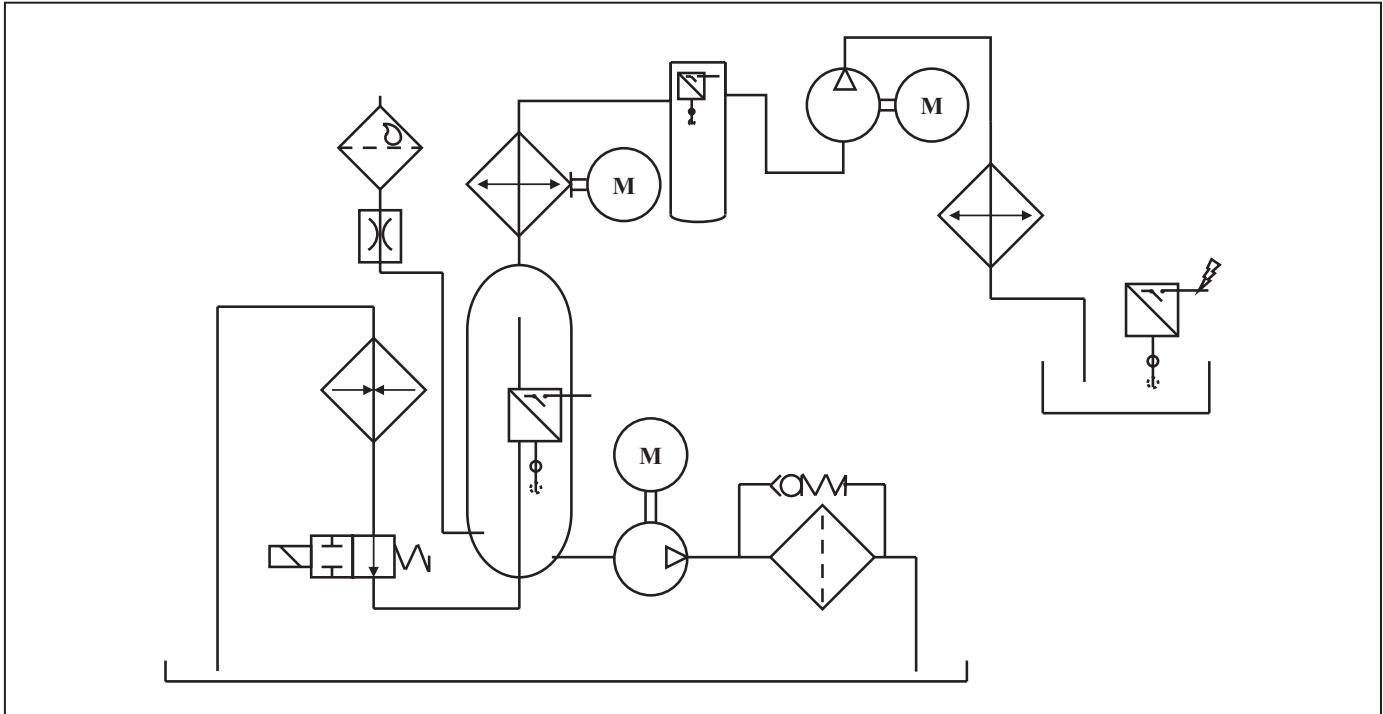
Dimensions in mm (inch)

## Technical Specification

Type Filter	MWV-1A-30...
No. of filter housings	1
Material filter housing	Anodized Aluminum
Material vacuum chamber	Anodized Aluminum
Material heating chamber	Anodized Aluminum
Recirculating flow rate	90 l/ hr (23.8 Gal/hr)
Max viscosity	500 Cst
Min viscosity	20 Cst
Attainable water content	Below 100 ppm
Water removal	100% of free water >80% of dissolved water
Gas removal	100% of free and entrained gases >80% of dissolved gases
Max system volume	3,000 liter (795 gal)
Dimensions h x w x d	1,200 x 740 x 450 mm (47.3 x 29.1 x 17.7 in)

Weight	130 kg (287 lb)
Voltage (standard)	230/400 VAC 50 Hz 255/460 VAC 60 Hz
Power supply (standard)	3 phase
Heater section	2 Kw
Vacuum section	.037 kW vacuum pump
Max Amp	3
Process control	PLC unit
Filtration section	1 micron microglass β1 > 200
Inlet	1" BSP female
Outlet	1/2" BSP female
Max back pressure	1 bar (14.5 psi)
max heater temperature	65°C (149°F)
Connection for online-particle counter	Stauff Test (M16 x 2)

## Schematic



## Ordering Code

**MWV - 1A - 30 - G1 - B - B - 60 - 0 - 0 - 0**

FILTRATION

Basic Configuration	
<b>MWV</b>	Mini Water Vac Oil Purifier (industrial applications)

Housing Configuration			
Code	Single length	suitable for reservoir size	N° of elements
1A	Single Housing Single Length	3,000 l (705 gal)	1

Filter Element Length	
30	300 mm (standard)

Filter Material	
G01	Glass Fiber 1 micron $\beta_{1>200}$
G03	Glass Fiber 3 micron $\beta_{3>200}$
A05	Glass Fiber/Polymer 5 micron $\beta_{5>200}$ (water absorption)

Seal Material	
B	NBR (Buna-N®) (standard)
V	FPM (Viton)

Options	
0	None

Extra Functions	
0	None
1	Including water sensor

Pump Options	
60	1 cc / rev

E-Motor	
0	230/400 VAC50 Hz 3 phase 255/460 VAC60 Hz 3 phase

Heating Element	
0	2000 Watt (Standard)