







+ MULTITASK SYSTEMS + HIGH PRESSURE SYSTEMS + OILMIST COLLECTORS



#### EMP the COMPANY

European Machine Products GmbH (EMP) is a division of the Morris Goup Inc. (MGI), one of the largest machine tool companies in the world. With thousands of high pressure systems sold yearly in the US, the company is entering the European market with a dedicated subsidiary. Our mission at EMP is to provide peripheral equipment completely interfaced and working in sync. Special attention has been dedicated to the optimization of the installation process to achieve:

- OUICK INSTALLATION
- MINIMAL FLOOR SPACE
- LOWER ELECTRICAL CONSUMPTION
- SHARED MONITORING SYSTEM



Our organization relies on a brand new R&D division in Switzerland and 2 dedicated manufacturing sites in Italy. The team counts on selected technicians with experience in the field of coolant management, machine tools and accessories.



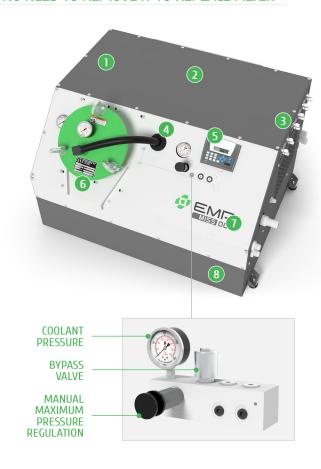






#### MISS 001

- FITS BELOW THE BAR FEEDER -SHARED INTERFACE -
- NO NEED TO REMOVE IT TO REPLACE FILTER -



## Swiss **type pump**

The MISS 001 is a new high pressure pump specifically designed for the Swiss Type Machines. Built in order to fit under the bar feeder. Based on the available height (under the bar feeder) we can add different sizes of tanks (40-160 L capacity).

- 1 HEAT EXCHANGER (AIR OR LIQUID OPTION)
- (2) ELECTRICAL PANEL
- 3 LOCAL OR REMOTE MANIFOLDS UP TO 12 OUTLET PORTS
- HIGH PRESSURE GEAR PUMP (70 BAR)
- (5) PLC
- 6 PRESSURIZED FILTER 0.005 mm RATING
- (7) INLET PUMP
- 8 OPTIONAL ON BOARD RESERVOIR 40-160 L CAPACITY



### technical **DATA**



DESCRIPTION	STANDARD	OPTIONAL
Dimensions (mm)	H650 x 1050 x 800 *	-
Fluid type	Oil	Water
Coolant pressure (bar)	70	140 or 210
Filtration	5 Microns single filter	5 Microns double filter (with bigger pump dimensions)
Basis motor (kW)	4.0	5.5
Flow rate (L/min)	20	18 \ 12 \ 10
Power supply (V)	200	400
Pump type	Plain gear	Piston pump / hydraulic pump
Variable pressure	Manual adjustable	Variable via M-Functions
Number of ports installed	4	8 or 12
Ports position	Installed in the pump	Valve block installed on the machine (remote block)
PLC	yes	-
Control voltage (V)	24	-
Cooldown system	-	Air heat exchanger, water cooldown, or external chiller
Filter system	Basket filter	Metal filter
Filter monitoring system	-	Monitoring sensor
Connection kit	Yes	-
Input connection	Left	Right
Feed pump	Yes	- * version with 80 L tanl



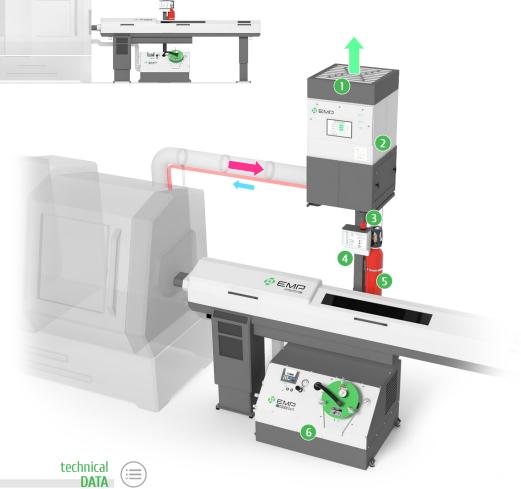
### MT 001

- LIMITED FLOOR SPACE -
- INTERFACED MIST COLLECTOR -
- OPTIONAL FIRE SUPPRESSOR ONE INSTALLATION FOR MULTIPLE DEVICES -



## Space and interface optimization

The MT is a modular and compact solution that combines high pressure with oilmist collector and fire suppressor. The objective is to minimize floor space and facilitate the installation process. The MISS 001 pump fits below the bar feeder while a dedicated vertical stand holds the mist collector and the fire suppressor. All the equipment is interfaced. The mist collector works on demand based upon the logic of the pump. The fire suppressor protects the mist collector as well in case of fire.



DESCRIPTION	MT 001
High pressure pump	MISS 001
Pressure range (bar)	20-210
Tank capacity (L)	40-160
Mist collector	EMC M - EMC L
Air flow rate (m³/h)	1000 - 2000
Shared control box	Included
Interfaced mist collector	Included
Main touch screen	Optional
Fire suppression	Optional
Fire damper	Optional Optional
Installation service	Available upon request

- 1) HEPA FILTER
- (2) MIST COLLECTOR
- (3) VERTICAL MODULAR STAND
- (4) MAIN CONTROL BOX
- 5 OPTIONAL FIRE SUPPRESSOR
- (6) HIGH PRESSURE PUMP





### VR #

- SIMPLE TO INSTALL •
- SUITABLE FOR COOLANT OR OIL -IDEAL FOR TWIN TURRET MACHINES -
  - **REDUCED MAINTENANCE AS -**WE USE A MEMBRANE PUMP (NO CONTACT WITH THE COOLANT)





#### Universal pump solution

EMP and his partner offer you the ideal product range for your needs. The Variable Pressure high pressure pumps are suitable for all kinds of machines. So they fit perfectly for machining centers, CNC lathes and even for Swiss Type machines. Thanks to the integrated membrane pump, there is no contact with the fluid, and this makes the VR series very reliable. The VR series can be used for coolant emulsion but also for oil. No need to specify this in advance. The VR8 Twin is equipped with two totally independent coolant systems. So you can control different coolant pressures based on the tool or kind of operation you are working on. This is the perfect solution for 2 or 3 turret lathes or a very good solution to regulate internal and external coolant on your machining centers. Naturally also on these pumps you can add a mist collector and so improve the working conditions on your factory.

- TWO FILTERS 0.005 mm RATING
- ELECTRICAL PANEL WITH PLC
- VARIABLE FREQUENCY DRIVE (VFD)
- ON BOARD RESERVOIR 190-260L OR MORE OP ON REQUEST
- INLET PUMP
- (6) **INLET PRESSURE**
- MEBRANE PUMP (NO COOLANT CONTACT)







DESCRIPTION	RF8	VR8	VRT
Dimensions (mm)	H1067 x 914 x 711	H1067 x 914 x 711	H1067 x 1067 x 711
Max. pressure (bar)	70	70	70
Max. flow rate (L/min)	32	32	32+32
Adjustable or varable pressure	Manual	M-Codes	M-Codes
Reservoir (L)	140 or 190	190	260
Built-in feed pump	Yes	Yes	Yes
Voltage (V)	200 / 400 (opt.)	200 / 400 (opt.)	400
Coolant type	Water / Oil	Water / Oil	Water / Oil
No. of ports	2 Standard, 3 Optional	2 Standard, 3 Optional	2 Standard, various opt.
Clear display PLC	Yes	Yes	Yes



### MS 001

- ONE INSTALLATION FOR MUTIPLE DEVICES -
  - SHARED INTERFACE •
- EFFICIENT MANAGEMENT/INSTALLATION EASY TO INSTALL -





# technical DATA

DESCRIPTION	MS 001
Dimensions (mm)	H2200 x 1200 x 800
Pressure range (bar)	20-70
Tank capacity (L)	140-220
Mist collector air flow rate (m³/h)	1000 - 2000
Main control box	Included
Interfaced mist collector	Included
Main touch screen	Included
Pressure setting	Available
Fire suppression	Available
Chiller	Available
Fire damper	Available
Installation service	Available

## Multitask **system**

The MS represents a new and innovative concept of a ready to go modular single UNIT seamlessly integrating a high pressure pump and a mist collector. It is equipped with an integrated PLC to monitor all the accessories. Designed to work with all types of machine tools and coolant, it ensures an easy and effective installation. Ready for multiple piping connection with the machine tool, it also comes equipped with a shared touch screen to monitor the various operations and communicate with the machine tool plc. It can have a fire suppressor and a chiller. Regardless of where the MS is placed in reference to the machine tool, installation is easy since the piping ports are multi directional.

- 1) MIST COLLECTOR
- (2) OPTIONAL FIRE SUPPRESSOR
- (3) OPTIONAL HEAT EXCHANGER OR CHILLER
- (4) TOUCH SCREEN
- (5) ALARM SIGNAL TOWER
- (6) COOLANT TANK
- 7) HIGH PRESSURE PUMP INCL. FEED PUMP





### MC M/L

- IE 5 MOTORS -
- TOUCH SCREEN HDMI -
- TWO SPEEDS READY -
  - STD HEPA FILTER •
- ANALOGIC/DIGITAL INPUTS/OUTPUTS -



# Digital Variable Speed mist collector

EMC is a line of mist collectors specifically designed to work in sync with our line of high pressure systems and / or with the machine tool. Equipped with IE5 EC motor with integrated inverter to optimize air flow rate based upon the specific need with a consequent energy saving. Available in 2 sizes it comes with adjustable air flow rate to be controlled either manually or automatically thanks to the integrated PC board. With led alarms indicators it can be equipped with an optional HDMI to visualize filters status and running hours.

- HEPA FILTER
- MAIN FILTER
- PREFILTER
- (4) TOUCH SCREEN

#### 4+1 multi inlets

Maximum flexibility for installation. The lower portion of the unit can be rotated on each of its 4 sides. In addition there is convenient vertical direct inlet for direct positioning on top of the machine tool.







#### technical DATA



DESCRIPTION	MC M	MC L
Dimensions (mm)	H889 (+300) x 550 x 550	H987 (+300) x 620 x 620
Nominal air flow rate range (m³/h)	600-1000	1000-2000
Motor size (kW)	0,75	2,2
Consumption (kW)	0,44	1,4
EC IE5 Motor	200/1/50	200/1/50
Static pressure (Pa)	200/1/50	1700
Noise level (dB)	200/1/50	75
Weight (Kg)	200/1/50	105
Filtration efficiency	99,5% AFNOR norm	99,5% AFNOR norm
Inlet diameter (mm)	150	150



#### **EUROPEAN MACHINE PRODUCTS GmbH**

Birren 10A | CH - 5703 Seon | Switzerland www.europeanmachineproducts.com

