

Mahr | Meter Mix Dispense



Solutions for the flexible packaging industry



MarMax | MarDrum | MarIBC

Your production gains flexibility with MarMax:

The modular machine concept easily adapts your application. You benefit from high metering accuracy and a visual, user-friendly interface.

Flexibility and precision for your packaging films

Key tasks of metering technology in state-of-the-art production are high flexibility, fast changeover of different adhesive systems and shorter downtimes. This is where MarMax comes in: in addition to the proven 2K concept, the Mahr Unipre meter mix dispense machines also offer 1 + 2K (1 NCO and 2 different OH), 1 + 3K (1 NCO and 3 OH), 2+2K (2 different adhesive systems) and 2K-DUO (1 adhesive system with two metering heads). A faster material change is simply impossible! For reactive systems, the 1K solution is available. Overfill protection and cavitation warning extend the safety concept.

The coordinated level monitoring of day tanks and the adhesive puddle allow continuous operation of the metering machine. Thus, the machine automatically regulates the material supply at different web speeds and widths.

An even finer tuning for the complete lamination process can be realized by linking the metering machine to the converting line. The direct connection between laminating and metering machine guarantees higher process reliability of the entire system. To automate the process – e.g. with high running speed, wide web widths and various application weights – automatic refilling of the metering machine is recommended. Whether from drums or IBCs, MarMax takes control of the refilling.



MarMax | Meter Mix Dispense Machine

One platform, many advantages

- High metering accuracy due to high-precision gear metering pumps from Mahr
- 1 + 2K & 1 + 3K – toggle via software from low- / middle- / highperformance adhesive systems
- 2 + 2K - toggle adhesive systems with the push of a button
- 2K DUO for laminating a triplex structure with only one metering machine
- Process reliability and efficient use of materials thanks to integrated sensors
- High quality components
- Cost-effective solution thanks to application-specific equipment

Precise mixing and dosing in the next generation

In addition to the proven quality, the continuous development of the MarMax series assures you, the highest possible flexibility in your production process – for your current tasks and future challenges.

The MarMax machine concept sets new standards. Whether you use a 2K adhesive system, 1 NCO and 2 different OHs, 1 NCO and 3 different OHs or 2 different adhesive systems – MarMax offers the solution.



2K Mixing and dosing head



Dessiccant dryer

Control cabinet with 15" display

Modul 1

Modul 2



Motor

Heated dosing hoses

Features

- For cold and hot adhesive systems
- Mixing ratio 100: 100 to 100: 1, others on request
- Flow rate approx. 50 to 4,000 ccm / min, depending on the mixing ratio and viscosity
- Mahr gear metering pumps
- Flow measurement via gear flow meter, optionally virtual flow meter or Coriolis flow meter
- Temperature control from the day tank to the dosing head (optional)
- Level control of the machine day tanks
- Overfill protection of MarMax day tanks
- Level control of the adhesive puddle
- Remote maintenance via VPN
- Data storage of process parameters for quality assurance on
 - USB-Stick
 - OPC UA (optional)
- Connection to converting lines of all manufacturers
- Calculation of the coating weight
- Active valve controlled mixing & dosing head (no dripping)
- Password protected operation guarantees reliable operation

Scope of supply

- MarMax as 1K, 2K, 1+2 K, 1+3 K, 2+2K or 2K-DUO
- Base frame
- Control cabinet with 15" display
- Machine day tanks with 32 liters volume
- Metering hoses
- Gear metering pumps including drive
- 1K dosing head or 2K mixing & dosing head

Features

MarMax 1K to 4K

Equipment feature		MarMax 1K to 4K
Flow rate (further on request)		50 – 4000 ccm/min
Mixing ratio [according to output + viscosity] (further on request)		100:100 to 100:1
permissible operating temperature		max. 90°C
Heating features	unheated	○
	partially heated	●
	fully heated	○
Gear flow meter		●
Flow control instruments, virtual		○
Coriolis flow meter		○
Pump technology	Gear metering pump with mechanical seal	○
	Gear metering pump with stuffing box seal	●
	Gear metering pump with magnetic coupling	On request
Mixing and dosing head		●
Vessel 32 l	Screw lid	●
	Flap lid	○
Remote maintenance	VPN	●
Day tank connection with ...	Dessiccant dryer	●
	Level sensor	●
	Spare port	●
Production process	manuel	●
	automatic	○
Refilling	manuel	●
	automatic	○
Connection to laminating machine		○
Optical signal		●
Acoustic signal		●
Touch panel operation, 15" colored		●

The table shows the equipment selections. Modularly assemble your MarMax flexibly and custom-fit.

● = standard, ○ = optional

MarDrum and MarIBC



MarDrum 200 Drum Pump Supply System

MarDrum ensures the automatic raw material supply to the mixing & dosing machine when the media is being supplied in 200 l drums.

Details

- controlled by Meter Mix Dispense Machine
- mobile, easy drum replacement by drum dolly
- pump selection depending of media to be pumped
- permissible operating temperature: max. 90°C
- required compressed air connection: 6 bar
- different pump types available
- optionally non-, partially or fully heated

MarIBC 1000 Container Supply Systems

Larger production quantities require larger quantities of raw materials. With MarIBC you simply connect the container of 1.000 l to MarMax. Here, too, MarMax takes over the automatic refilling control.

Details

- controlled by Meter Mix Dispense Machine
- gravimetric feed of the raw material
- pumped feed of the raw material
- Material availability control
- surveillance and security concept
- different pump types available



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