



**Freeman Manufacturing & Supply Co.**  
1101 Moore Rd.  
Avon, Ohio 44012  
800-321-8511  
www.freemansupply.com

# Dopag Economix C Resin Dispensing System

**List Price: \$14,500**

**Sale Price: \$12,200**

F.O.B.: Avon, Ohio 44011

Terms: Cash or Net 15 days subject to credit approval

This machine is brand new with a 1-year warranty direct from the manufacturer. Only mesamaol solvent has been run through the machine for test purposes. No resins have been dispensed through this machine.

It is currently configured to provide the following mix ratio range (by volume):  
100:21 to 100:41

However, by rearranging the existing pumps this mix ratio can be obtained:  
76:100 to 152:100

By fitting a different size pump (no additional charge) this mix ratio can be obtained:  
100:37 to 100:73



This particular machine is fitted with a heavy duty agitator that is well suited for keeping coloring pigments in suspension. The mixer is driven by a 220 volt single phase motor. The mixer may be used on either tank and since it is self contained it can be removed and replaced with a standard lid that is available from the manufacturer. Finally the machine can be operated with the agitator left in place but not operational.

The dispenser will be securely shipped in a custom built wooden crate. Detailed owner's manual included.

To order or to inquire please call:  
**800-321-8511 Ext 117 or 109**



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**Additional features and benefits of the Dopag Encomix C include the following -**

- The Dopag system requires a minimum of ~15PSI material feed pressure. This pressure provides positive fill of the metering pumps and provides much more precise/repeatable metering. Since suction is not needed to fill the pumps, air bubbles in the mixed material are greatly reduced.
- Dopag uses double acting metering pumps to provide a high/continuous output. The metering pumps are sized to provide the proper flow rate and mix ratio. The maximum flow rate with the installed 30mm and 40mm pumps is ~ 10-12#/minute depending on the material viscosity and plant air supply.
- The metering pumps have adjustable Teflon V packing and are oriented upright. This orientation allows for a mesamol seal at the piston/packing interface. The seal extends the life of the packing (typically several years) and provides easier start-up after the system has been idle.
- The system includes a dehumidifier that removes moisture for the air used to pressurize the vessels.
- Equipped with 12 liter stainless steel vessels. The chassis is manufactured using heavy gauge galvanized sheet metal and is fitted with casters for portability. The dispenser has an approximate footprint of 2' x 2'.
- Includes a Dopag twin snuffer valve connected to a gun handle with a trigger for easy actuation of the system.



# DOPAG Two-Component Metering and Mixing System ECONO-MIX®



Hilger u. Kern / Dopag Group  
Metering and mixing technology

The ECONO-MIX is a compact DOPAG mixing and metering system for low to medium viscosity two-component media which can also be filled. It is used to process adhesives, polyurethane, epoxides and silicones.

There are three variants available:

- ECONO-MIX
- ECONO-MIX compact
- ECONO-MIX E

DOPAG mixing and metering systems transport, meter and homogeneously mix media.

Ease of operation and service-friendliness are features of these systems.



▲ ECONO-MIX

## Construction

**Design** The chassis is made of galvanised sheet metal and is fitted with rollers as options. The lever system, material

pressure vessels, control unit and compressed air supply unit are mounted on the chassis.

**Pressure Vessels** A wide selection of pressure vessels of various materials is available for almost all media.

Low viscosity media up to 50,000 mPa s can be processed direct from the original containers.

### Metering Pumps

The metering pumps for the A and B components are double action piston pumps. The piston rods are hard chrome-plated and sealed with special V sleeves so that even abrasive media can be processed.

The pumps are driven via a pneumatic cylinder arranged above the lever system. The synchronous movement of the pumps is achieved by a unilaterally mounted swing beam.

The B component pump can be moved on the swing beam via a slot to allow full adjustment of the mixing ratio.

Depending on viscosity of the media to be processed, different pump sizes are available for mixing ratios between 1:1 and 6:1.

The mixing ratio is controlled by manually measuring out the individual components.



▲ Lever system with swing beam

The control station sets the working pressure of the system.

The pressures for the pneumatic cylinder, flushing agent pump and material pressure vessels can be set separately. The maintenance unit filters out dirt, oil

and corrosion particles from the compressed air to ensure faultless function of the system.

To protect the A and B components in the pressure vessels against ambient humidity, an absorption agent can be supplied.

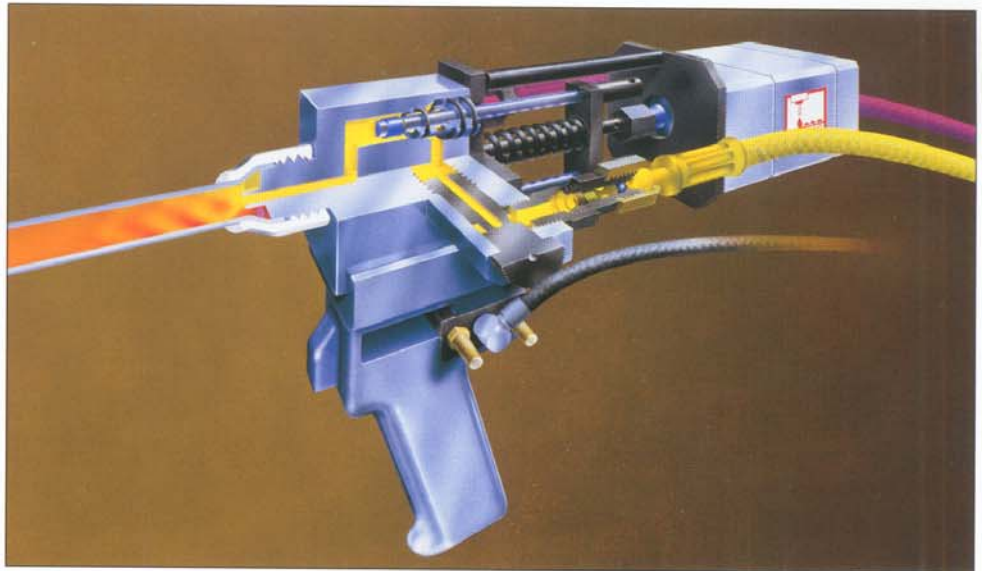
## Mixing and Outlet System Static Mixer

Two separate material feeds protected by non-return valves supply the media to the outlet valves.

The separate material feeds mean there is no need for complex flushing with solvents which could constitute a risk to the environment.

The outlet valves are designed so that on closing they generate a return suction effect which prevents dripping at the mixing pipe outlet.

This suction power is fully adjustable.



▲ Static mixer (twin outlet valve with static mixer pipe) solvent-free

## Static Mixer Unit

The advantage of a mixing and metering system with a static mixer unit is better control of widely differing material viscosities of the A and B components and extreme mixing ratios.

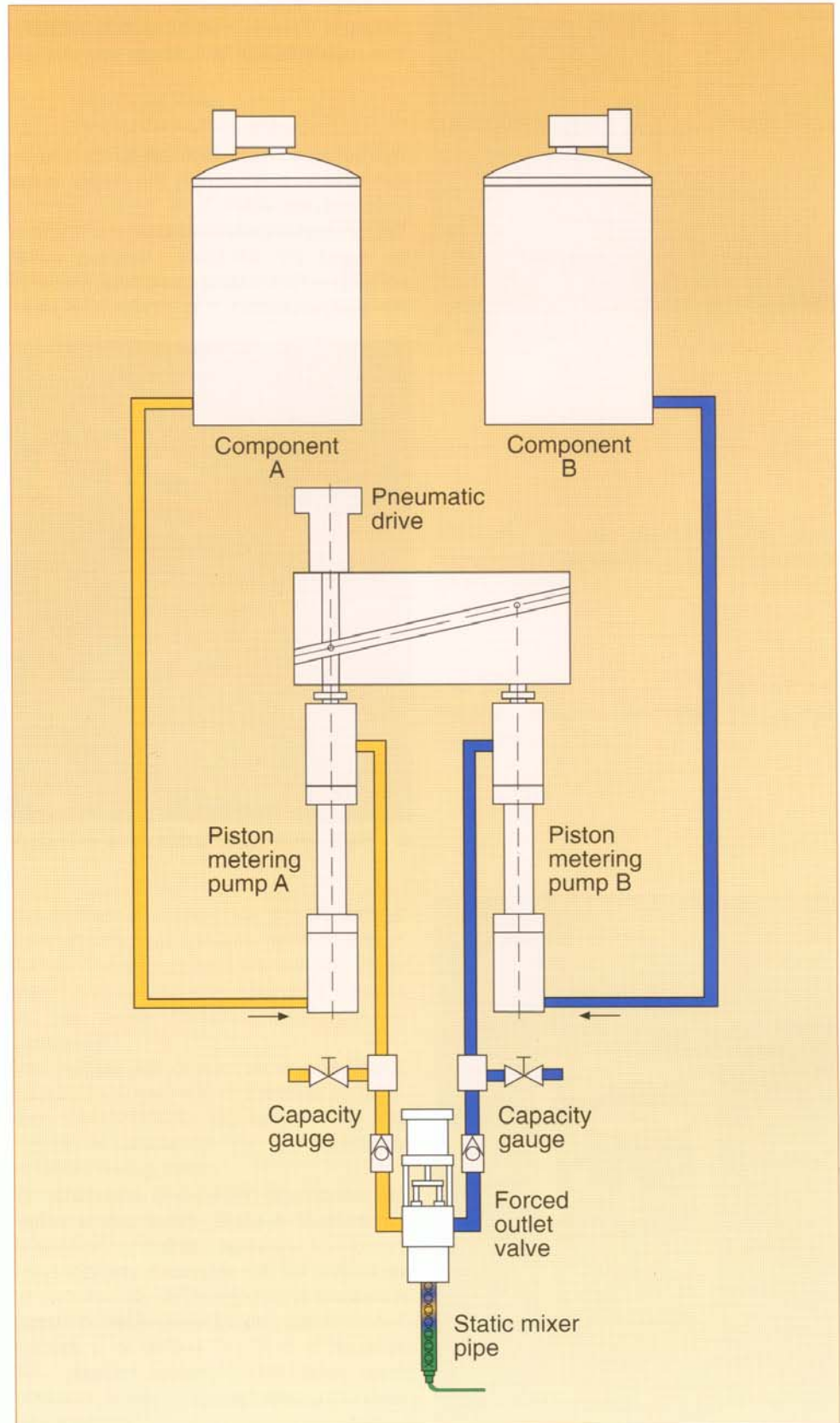
Under these conditions, the material pressure is built up evenly in a mixing block and simultaneous supply of materials guaranteed.



▲ Static mixer unit (mixing block with static mixer pipe)

The two media are supplied to the metering pump from the pressure vessels and metered precisely.

The A and B components are passed to the outlet system separately and mixed evenly in the static mixer pipe.



▲ Function diagram of ECONO-MIX with static mixer

|                                      | <b>ECONO-MIX</b><br>- flushing solvent-free<br>- with solvent flushing | <b>ECONO-MIX</b><br>Compact                             | <b>ECONO-MIX E</b><br>Flushing solvent-free |
|--------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|
| Viscosity range [ mPa s ]            | To 80,000                                                              | To 50,000                                               | To 15,000                                   |
| Mixing ratio                         | 1:1 to 6:1                                                             | 1:1 to 6:1                                              | 1:1 to 4:1                                  |
| Working pressure [ bar ]             | max. 100                                                               | max. 100                                                | max. 100                                    |
| Flow rate [ cm <sup>3</sup> /min ]   | max. 2,000                                                             | max. 1,700                                              | max. 1,000                                  |
| Compressed air connection<br>[ bar ] | 6                                                                      | 6                                                       | 6                                           |
| Air consumption [ l/min ]            | static 300                                                             | static 300                                              | static 300                                  |
| Pneumatic cylinder [ mm ]            | ø 100<br>stroke 120                                                    | ø 100<br>stroke 120                                     | ø 100<br>stroke 120                         |
| Material container [ Ltr ]           | 2 x 4 to 60                                                            | 2 x 4 to 45                                             | 2 x 18<br>welded                            |
| Chassis [ mm ]                       | Approx 600 X 600<br>(depending on design)<br>on rollers                | Approx 600 X 600<br>(depending on design)<br>on rollers | Approx 570 X 800<br>(depending on design)   |
| Height [ mm ]                        | Approx 1,200<br>(depending on design)                                  | Approx 1,200<br>(depending on design)                   | Approx 1,100<br>(depending on design)       |
| Weight [ kg ]                        | Approx 90<br>(depending on design)                                     | Approx 130<br>(depending on design)                     | Approx 120<br>(depending on design)         |