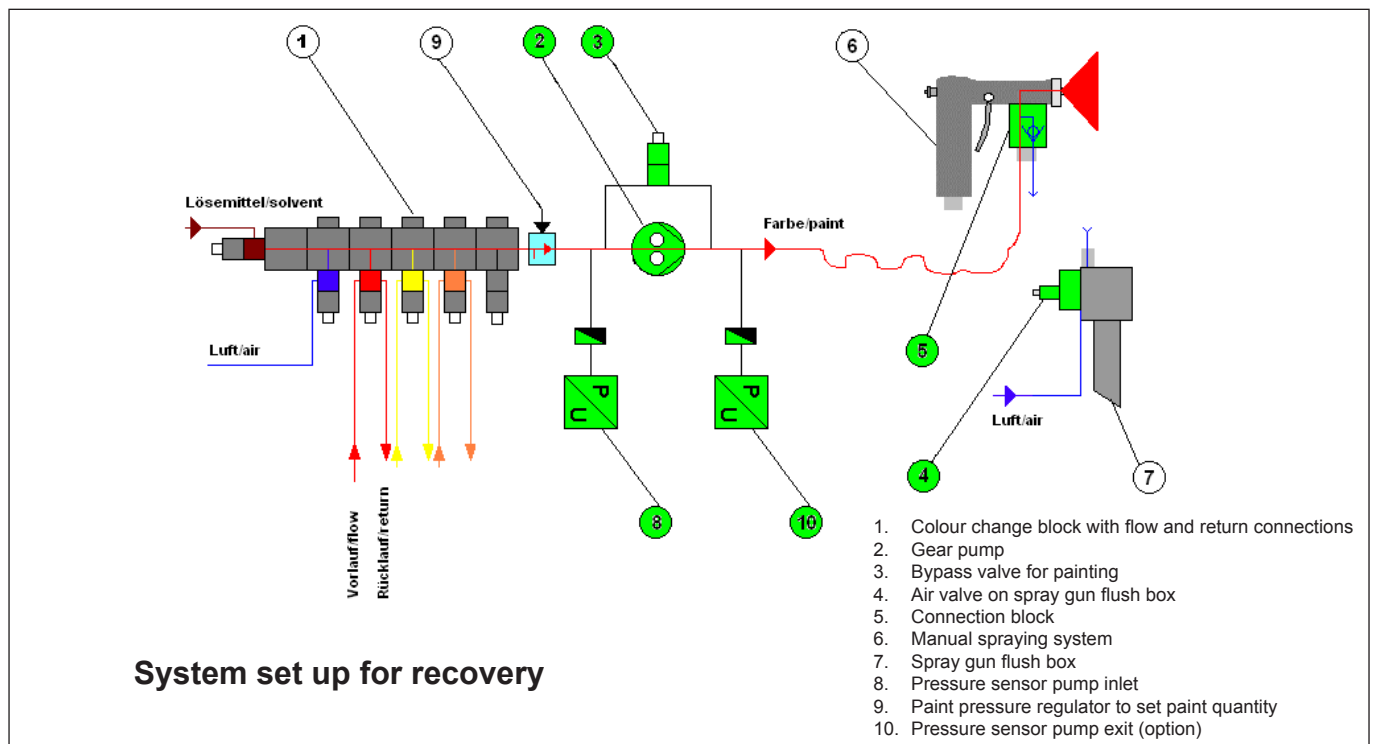


# REDOS-M

## Reiter dosing system with material recovery for manual stations



The number of colours demanded by the consumers rises very strongly in many parts of the industrial painting processes. Especially in the automotive and its supplier industries the number of different colours processed in a painting lines reaches a level where the use of automatic colour change technology is required. In addition the ecological and economic pressure to minimize the loss and consumption of paint material and solvents is mounting.

When changing the colours the material situated in the hose between colour change block and spray gun is normally dumped.

Considerable costs arise due to paint losses and flushing solvent determined by large hose diameters and lengths in the manual painting stations.

Reiter has therefore especially developed his REDOS-M concept for manual stations.

A gear pump is installed with an integrated Bypass valve after the colour change block of the manual gun. A valve block with check valve and quick connector is added to the spray gun fluid inlet port.

For painting the bypass valve is opened and the material flow is set by the manual paint pressure regulator.

For colour change the spray gun is placed in the gun flush box and connected to the integrated air valve. The paint is pressurized and pushed towards the gear pump by the compressed air.

The bypass valve is closed and the material pressure regulator set on maximum flow.

## PERFECT FINISH PAINTED BY THE SPECIALIST.

The task of pushing back the material between the spray gun and the colour change assembly into the supply line this is taken on by the gear pump. The built-in pressure sensor protects the process during this operation.

A short flushing cycle follows the recovery cycle, loading of the new colour completes the colour change sequence. The total time for a colour change is not longer than before. The recovery quota is typically 80% of the paint volume in the paint hose.

With little additional investment the gear pump system can be designed for dosing of the paint too.

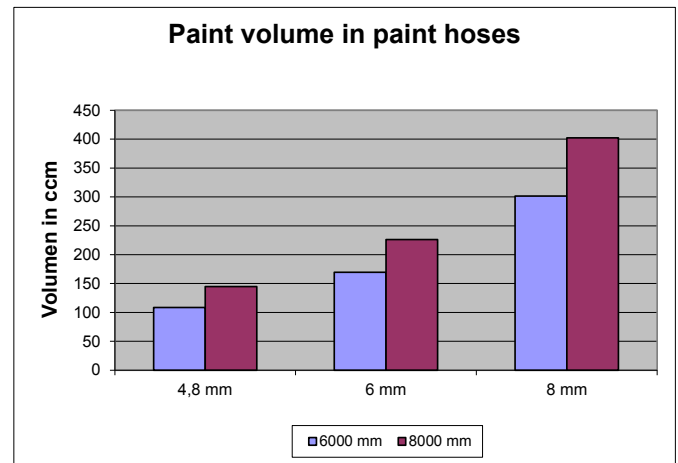
The servo motor drive gear pump will deliver exactly the paint required lead by the output pressure sensor.

Use of paint hoses with small nominal diameter and thus less volumes is possible.

By use of a paint hose with an inside diameter of 4.8 mm a considerable saving of the paint volume compared to the conventional inside diameter of 6 mm or 8 mm is achieved.

- **36% less paint volume in comparison with 6 mm**
- **64% less paint volume in comparison with 8 mm**

This means lower paint use from the beginning.  
Less solvent consumption to clean the smaller surface.



### Advantages

- Use of paint hoses with small diameter and thus less volume is possible
- No pig system necessary
- Advantages of the gear pump systems utilizable
- Simply to fit to existing systems
- No additional sensors are needed

### Applications

- Manual painting stations
- Solventborne- and waterborne paints, hardeners
- Air spray guns

Patent pending.