### **Mechatronic Solutions**

#### **Liquid Chemical Dosing & Dispensing System**

# **Profix C**

Liquid Chemical Dosing and dispensing system, one of the main units of ENMOS mechatronic systems, is based on taking the right amount of chemicals needed for the manufacturing process and dispensing of these chemicals to the dyeing machine through a single-line.

The system consists of Profix C main dispensing unit, Profix L automatic level monitoring of chemical and manual filling unit and mechanical facilities. If we suppose that the system is at the tank farm where the chemicals are located, we can arrange the system's components like below;

Tank farm platform

PE polyethylene tanks for chemical stock

Profix L chemical tank automatic level monitoring and manual filling unit Tank farm and Profix C dosing and distribution unit between PVC/PPRC pipe system

Profix C/12" touch screen control panel

Special valve SS316 between Profix C and dyeing machines stainless piping

Considering that the investment cost of distribution unit, tank farm and installations of an automation system, corresponds to an average of 1 machine price. If a dyehouse is considered to have an average of 20 machine parks, one machine to be added corresponds to a 5% capacity increase. On the other hand, when chemical automation is preffered by spending the same investment, the capacity increase reaches 10% levels. In addition, you will be able to achieve a significant savings on chemicals, labour and energy at your costs, and you will also increase you dyeing or process qualities.

System parts are designed for 24 hours working flexibility. It co-operates with the dyeing machine control devices and software to minimizing the loss of time and waste of effort of chemical order process. The touch screen and user-friendly interface provide you to monitor and report all the processes online.





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Profix C will automatically be ready to dispense the next chemical after weighing and dispensing processes. It is enable to get detailed reports with Profix C, including historical information on chemical consumption and ordering processes. You can make various improvements in the consumption and production processes by using the information from these reports that you have received.

#### **General Specifications**

- Integrated with ERP Software
- Minimum service and maintenance due to special design
- Applicability in Indigo-Continue Dyeing, Washing
- Valve leakage test system

- Remote connection and software update
- Touch-Screen
- Report and analysis software
- Liquid chemical dosing
- Online tank level monitoring

Optional Specifications	
Load-balance system	Double flowmeter
Chemical storage tanks	Continous machine dosage
Sample machine dosage	Automatic filling

Technical Specifications						
Maximum Chemical Inlet	48		Pump	Multilobe Pump, PID invert. cont.		
Collector	Maximum 4 collecto	ors with 12 chemicals each	Washing	Double Washing Protection		
Max Collector	4		Water Inflow Size	1" Hot and Cold Inlet		
Distribution	Single		Collector Size	1"		
Measuring Accuracy	< 0.5 %		Machine Outflow Size	25,4 mm stainless steel piston valves		
Flowmeter	Electromagnetic or Massflowmeter					
Valve positioner	Standard					
Weighing	Minimum	Maximum				
Profix C	40 g ± 3 g	500 kg ± 0.5% (Limited	500 kg $\pm$ 0.5% (Limited by Software)			
Profix C+	10 g ± 0.2 g	500 kg ± 0.5% (Limited	500 kg ± 0.5% (Limited by Software)			

