



Trusted Construction Company (TCC)

Liquid Dosing System - Technical Catalogue

General Information

The Liquid Dosing System is part of the WEIGHT MODEL XL solution, designed for the accurate dosing of chemical additives and viscous liquids in industrial applications. The system combines precision, durability, and operational efficiency through high-quality components and a robust construction, making it suitable for demanding working conditions.

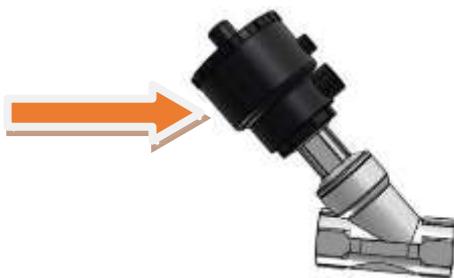
The system is engineered to ensure reliable dosing performance, continuous additive supply, and easy integration with plant control systems. It is supplied in a practical configuration that supports straightforward installation, operation, and remote supervision.

Main Features

- Accurate dosing of chemical additives and viscous liquids
- Heavy-duty construction with high-quality stainless-steel components
- Continuous monitoring of additive weight through load cell technology
- Flow regulation through inverter-controlled pump operation
- Integration capability with automatic PLC control systems
- Remote supervision capability through HMI / Easy Access connection
- Plug-and-play delivery concept for simplified on-site installation

Technical Specifications:

Q.ty	Description	
01	Powder coated "pump and steel cylinder" containment cabinet with BLIND door, IP55 protection rating, dimensions 800x600x300 mm. Complete with cable passage fittings.	
01	DOSING pump, body in stainless steel construction, shafts and gears in stainless steel. Pump complete with collar seal. Max flow rate 9,6 l/min about, Max. head 05 Bar, 3/4" gas ports, Motor power 0,75 kW, 900 RPM, 230/400V 50Hz, Three-phase.	
01	Stainless steel container, for the storage of liquid additive, with a net capacity of 3,0 lt complete with max level limit switch and load cell. The cylinder is maintained full during the work time; the pump discharge the required quantity and after the same pump provide to refill of it.	

Q.ty	Description	
01	Load cell that control every time the weight of the liquid additive inside of containment cylinder.	
02	Pneumatic valves - Angle seat valves Normal. Closed (316 Stainless Steel) DN 20 PN 25: one in suction and second in delivery.	
-	PVC / stainless steel fittings.	
40mt	Rubber pipe for the connection between liquid dosing system with the consignee point.	
01	Electrical control panel (IP 55) in painted sheet metal according to CEI 17/13-1 standards complete with electric pump flow regulation inverter and ventilation grill. • Mains presence indicator light • Main door lock switch • Nr. 01 Inverter SCHNEIDER ATV12 1,5KW 230V for flow regulation • Nr. 01 Laumas TLB weight transmitter-indicator, with 6-digit red LED display, 16-bit analog output: 0/4-20 mA; 0-5/10 V; $\pm 5/10$ V, RS485 port (Modbus RTU/Laumas ASCII protocol) • Nr. 01 Siemens S7 1211C PLC – PLC • Nr. 01 COMMUNICATION BOARD SIEMENS CB 1241, RS485 for managing load cell instruments, TLB and inverter commands • Nr. 01 Router switch for connect the machine to internet and for a remote supervision of machine.	

Q.ty	Description	
01	Remote panel (to be installed in the ASPHALT SYSTEM CABIN) complete with: - Emergency stop button - START dosing button - Warning light(s): mains presence - alarm - Control unit for the management of the quantities to be dosed; analog output that can be interfaced with a PLC automatic control system (asphalt plant) 20 m connection cable REMOTE PANEL – MAIN PANEL.	
(#)	INCLUDED: Connection to the HMI display with “EASY ACCESS” (real display view on computer, smartphone by APP). P.S. The user give the internet supply at the control panel.	
01	Frame steel for contain the all parts: control panel and box of dosing pump.	

Some



illustrative images of the dispenser



Please note that the machine will be delivered in a plug-and-play condition, and the only required work on site will be arranging and connecting the hydraulic, electrical, and air pressure supply connection.

Note: The drawing shown in the image below is a schematic illustration of the system operation, and that the anti-stripping agent is directed to the curing tank, not directly to the plant.

