



**MARPOSS**  
TECNA

# DOSASET

**DISPENSER OF CYCLOHEXANONE  
SOLVENT FOR PVC TUBE BONDING**



- Up to 4 adapters for bonding tubes with different diameters
- Adapters for internal and external bonding
- Programmable bonding sequence
- The vibration of the tube adapters compensates for the tolerances of tube diameters
- PLC interface for automation
- S485 communication interface for data transmission



## DESCRIPTION

DOSASET is a dispenser for cyclohexanone or similar solvents, used for manual bonding of plastic medical equipment, tubes and joints. DOSASET does not use porous elements or capillary holes or fluid pumps: its adapters are directly dipped

in the solvent, reducing the problems due to clogging or obstruction. DOSASET employs a new patented method, based on a rotating and vibrating system: the dispensing adapters are mounted on the circumference of a wheel turning inside

a chamber where the solvent level is continuously controlled. The solvent is kept inside a sealed external 250 ml bottle and is automatically loaded through a pneumatic micro-pump from the bottle to the dispensing chamber.

## DOSASET ADVANTAGES

- No maintenance required to prevent clogging or obstruction
- Constant solvent dispensing, determined only by the shape of tube adapters
- Reduced evaporation of the solvent, contained inside the dispensing chamber
- No wrist rotation, reduced risk of carpal tunnel syndrome
- Automatic control of solvent level, with automatic shut-off if the level is not restored
- The vibration of the tube adapters compensates for the tolerances of tube diameters
- Up to 4 tube adapters for different diameters on the same instrument
- A sequence of tube adapters can be programmed for subassemblies with different tube diameters
- Only one selected tube adapter is available for each new bonding, reducing errors

## SPECIFICATIONS

Power Supply	DST 401: 12 Vdc, 1 A, jack diameter 2.1 mm DST 501: 24 Vdc, 1.5 A, binder connector
Keyboard	4 keys: [R] Reset, [S] Sequence, Back, Forward
Indicators	Green LED: power on, Red LEDs: level alarm / wheel alarm Yellow LEDs: sequence / photocell / wheel position
Wheel Dispensing	Up to 4 adapters for bonding tubes with different diameters
Standard Adapters	Adapters for OUTER diameters bonding: 4.1 – 5.5 – 6.8 – 9.54 – 12.0 mm; Depth: 4.0 – 6.0 – 8.0 – 10.0 mm. Adapters for INNER diameters bonding: 3.0 mm (OD max 10.0 mm); Depth: from 2.0 to 8.0 mm Adapters for simultaneous ID/OD bonding: Inner: 3.0 mm; Depth: 8.0 mm - Outer: 4.1 mm; Depth: 4.0 mm
Wheel Rotation	Electronic actuation via photocell or PLC command
Solvent Tank	250 ml bottle
Solvent Level Sensor	Ultrasound sensor
Solvent Level Control	Automatically controlled and reset
PLC Connection	Optocoupled I/O for automatic systems
Data Interfaces	RS485 communication interface
Sequence Function	The operator can program a repetitive sequence for bonding tubes of different diameters on the same assembled part
Vibration	Compensates for the tolerances of tube diameters (ovalisation)

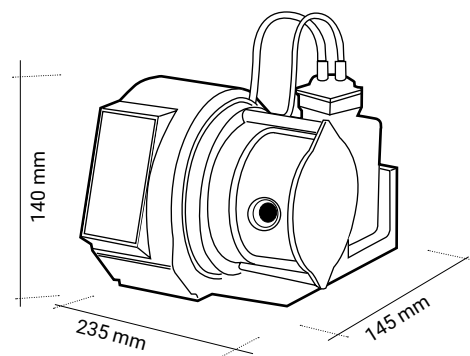
## OPERATING PRINCIPLE

Adapters are stainless steel with internal lining in closed-cell polyethylene foam, cut in special shapes according to the diameter of the specific part to be bonded.

Up to 4 adapters, easily removable and interchangeable, can be installed on the same instrument.

Bonding is very quick: each time the operator puts forward his hand inserting the tube inside the adapter, ready for bonding, a photocell detects the hand and the dispensing wheel vibrates; then, when the operator pulls out the tube, the photocell no longer detects the operator's hand and the dispensing wheel is automatically turned to place a new adapter on the front window, ready for the following bonding operation.

## DIMENSIONS:



## OPTIONS

- Customizable shape and size of adapters
- Entry side for bonding from above
- PLC interface

