

DOSASET



MARPOSS
TECNA

DISPENSER OF CYCLOHEXANONE SOLVENT FOR PVC TUBE BONDING



- Up to 4 adapters for bonding tubes with different diameters
- Adapters for internal, external and simultaneous bonding
- Info and codes marking on each adapter
- Programmable bonding sequence
- The vibration of the tube adapters compensates for the tolerances of tube diameters
- PLC interface for automation
- RS485 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
- Each adapter is marked with bonding information: diameters, length and codes; for reliable, quick and easy quality check during assembly operations

DEVICES FOR PRODUCTION

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)

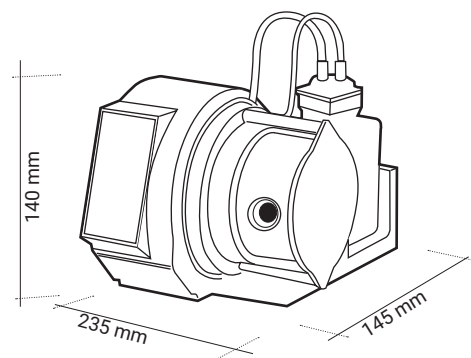
OPERATING PRINCIPLE

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 AND ACCESSORIES

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

