

SEMI AUTOMATIC TEST UNIT



Model **FIT100/1S**

Code **MZC2009**

General description

The unit is designed to execute testing of all cylinders that require periodic review, in particular for liquefied gas cylinders that are used into firefighting installation.

The testing takes place in semi-automatic mode: the unit will automatically manage the three phases of testing (filling, pressurization, water drain). Unit needs authorization of the operator to switch from one phase to the sequent.

The FIT100-1S is composed by:

- An inverter (Ref. A) designed to clamp the cylinder safely and manage the rotation upside-down of 180°.
- A process unit (ref. B) containing all the elements necessary for the management of the three phases of testing.
 - A water storage tank (ref. C).
 - A safety perimeter for protection of cylinder tilting area. (ref. D).



Fig. 1. Main components

General dimensions

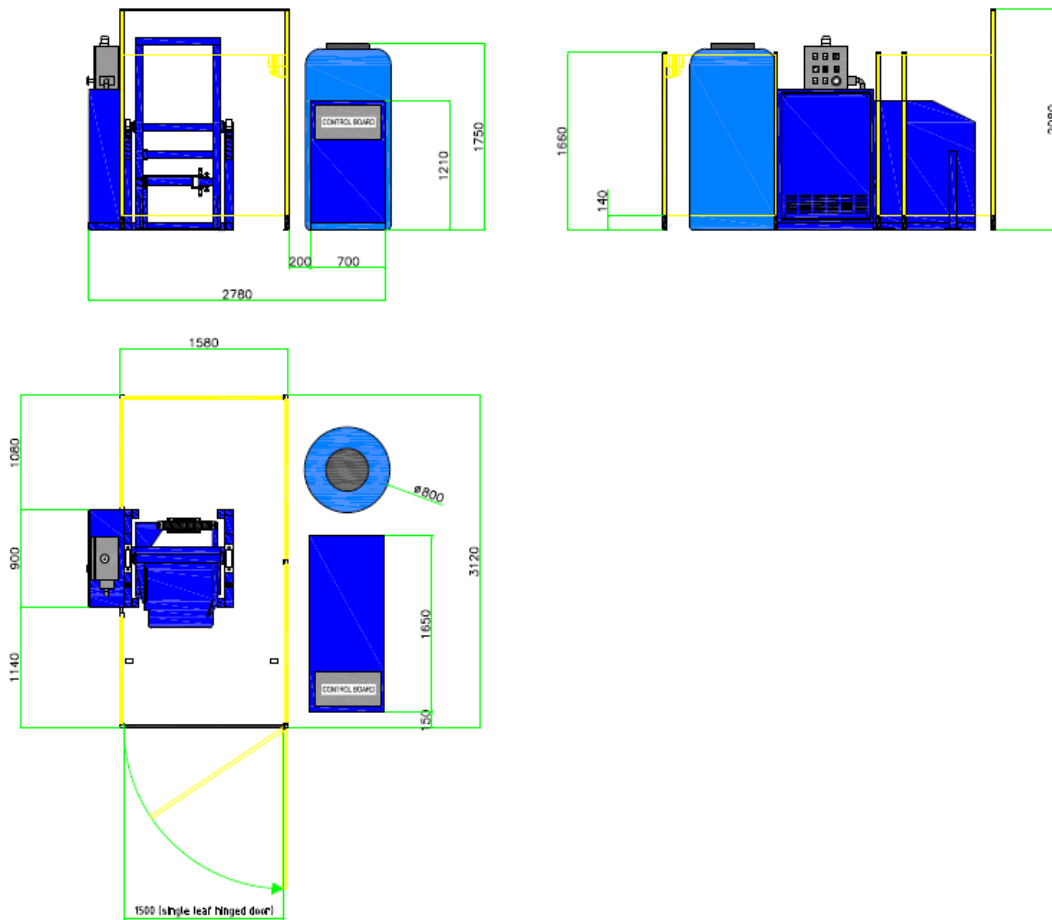


Fig. 2

Test Cycle (ref. fig. 1)

- Place the cylinder on the cylinder inverter A.
- Connect the Test adapter to the cylinder.
- Position the "Drain switch" according to the needs (water purge or water reuse).
- Close the protection door D.
- Push the "Photocell reset" button.
- Turn the "Man/Auto" switch in "Auto" position.
- Turn the "Stop 45°" switch in "Yes" position to test the cylinder rotated of 45° or in "No" position to test the cylinder in vertical position.
- Push the "Start Filling cycle" button.
- After some time depending from the cylinder size, the pump automatically stops and the cylinder is full of water and the "Start test cycle" button start to blink.
- Push the "Start test cycle" button.
- Only if the "Stop 45°" switch is turned in "Yes" position, the inverter rotate of 45° the cylinder.
- The pump start and when the pressure reaches the set value of "Test pressure", the pump automatically stops.
- The system remain under pressure for the set "Test time" and then automatically depressurizes, the "Start emptying cycle" button start to blink.
- Push the "Start emptying cycle" button the inverter tilt the cylinder of 180° and the emptying cycle starts.
- After some time depending from the cylinder size, the cylinder became empty and the unit detect automatically this status, the inverter tilt the cylinder in the vertical original position and the full cycle stops.
- Disconnect the test adapter and remove the cylinder from the inverter.

Main panel:



Fig. 4.5.

1	Switch MAN/AUTO
2	Switch STOP 45°
3	Light POWER ON
4	Light SECURITY ON
5	Button ROTATION+
6	Button ROTATION -
7	Light FRAME POSITION 0°
8	Light FRAME POSITION 45°
9	Light FRAME POSITION 180°
10	Button RESET PHOTOCELLS
11	Light PHOTOCELLS ON
12	Button START FILLING CYCLE
13	Button STOP FILLING CYCLE

14	Light FILLING CYCLE FINISHED
15	Button START TEST CYCLE
16	Button STOP TEST CYCLE
17	Display
18	Light TEST PRESSURE REACHED
19	Light BY-PASS TEST PRESSURE
20	Button START EMPTYING CYCLE
21	Button START COMPRESSED AIR
22	Light DEPRESSURIZATION FINISHED
23	Button LAMP TEST
24	Button EMERGENCY
25	Blinker WORK CYCLE FINISHED
26	Pressure gauge

Technical data

- Cylinder inverter
 - Process unit
 - Safety perimeter
 - Water Tank T800
 - Water supply valve
- Max cylinder capacity each cycle:1 cylinder
 - Cylinder diameter allowed: min. 200 max 410 mm.
 - Cylinder height:min. 250, max 1850 mm.
 - Max. test pressure: 100 bar
 - Air supply pressure:.....6÷8 bar
 - Total Electrical power: 4.1 kW
 - Power supply: 400/50 Volt/Hz
 - Sizes: 2800 x 3150 x (h) 2080 mm.
 - Total weight: 650 kg
 - Noise (at distance of 0,5 m): < 75 dB
- Standard equipment:
 - Use and maintenance manual
 - Set of "Process pipes"
 - Set of Test adapter