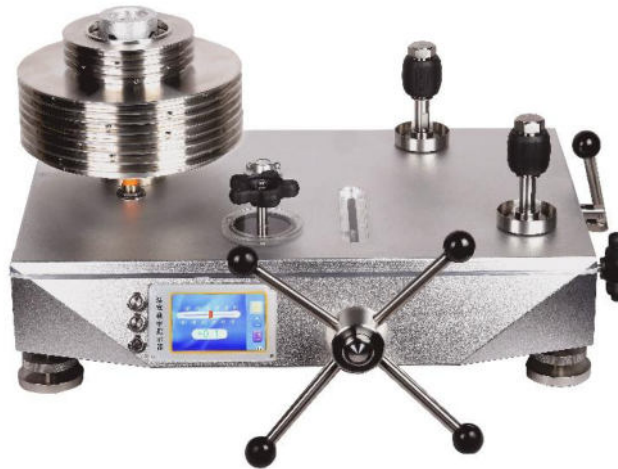


# SCW Hydraulic dead weight tester



## Working principle

Mechanical dead-weight testers or primary standards are the most accurate reference instruments for pressure. Their functional principle is based on the physical principle of  $\text{pressure} = \text{force}/\text{area}$ . Mass pieces placed on the top of a piston-cylinder system are the source of a precisely defined force. By producing a certain (counter) pressure inside the pressure balance equilibrium is achieved: the mass pieces, including the free-running piston of the piston-cylinder system, are floating, which will lead to a very accurate pressure at the test port.

## Application

1. Primary standard for defining the pressure scale in a range of up to 1600bar.
2. Pressure reference for factory and calibration lab for the testing, adjustment and calibration

## Specification

Model (optional):	SCW-6T	SCW-60T	SCW-250T	SCW-600T	SCW-1000T	SCW-1600T
Range(MPa):	(0.04~0.6)	(0.1~6)	(0.5~25)	(1~60)	(2~100)	(2~160)
<b>Accuracy:</b> 0.005%; 0.01%; 0.02%; 0.05% of Readings						

## Material

Piston system (the rod and cylinder): tungsten carbide
Weight (Masses): Non-magnetic stainless steel (0.005%, 0.01%, 0.02%); Carbon steel (0.05%)
Base: stainless steel

**Working medium:**

< 25 MPa : Mixed oil (transformer oil and kerosene oil)
≥25 MPa: sebacate oil
Gravity: user's local gravity
Piston displacement: LCD display

**Packing** : Flight case



**Features**

- Able to test two gauges synchronously; Applied the fast pressure plug;
- The piston rod is anti-breakage structure.
- With priming pump, it can fill oil to large capacity gauge, several gauges or long distance calibration pipeline.
- The tester junction with stop valve and piston stop valve, so it can be used as independent pressure source, when piston stop valve is closed.

**Scope of delivery**

Measuring base
Weights
Measuring system
“O” Ring
Hand Wheel
Operation manual &CD
Certificate of approval
Calibration record
Power adapter