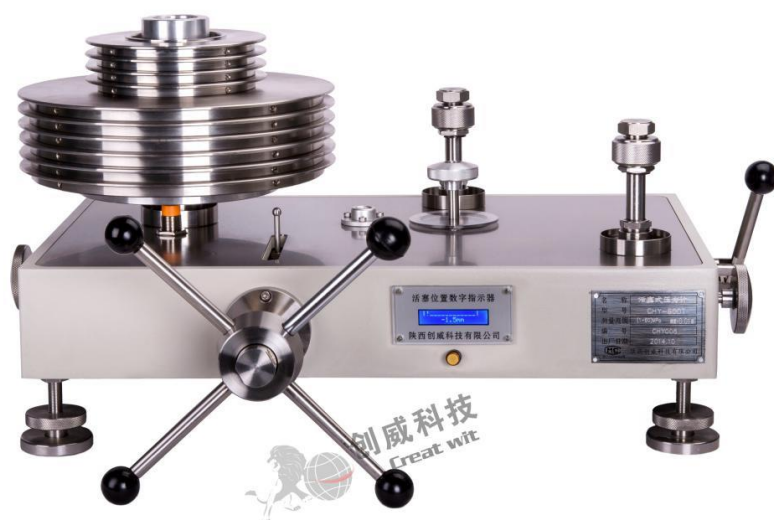


## Hydraulic Dead Weight Tester

**Model: CW series:**



### Specification:

**Model (optional):** CW-6T CW-60T CW-250T CW-600T CW-1000T CW-1600T

**Measuring range (bar):** (0.4-6) , (1-60), (5-250), (10-600), (20-1000), (20-1600)

**Accuracy:** 0.005%; 0.01%; 0.02%; 0.05%

## Products description:

### 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 an 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.

### Applications:

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 of pressure measuring instruments.

## Materials:

Piston system (the rod and cylinder): tungsten carbide

Weight (Mass): Non-magnetic stainless steel (level 0.005, 0.01, 0.02);

Carbon steel (level 0.05)

Base: stainless steel

## Working medium:

<25MPa: Mixed oil (transformer oil and kerosene oil)

≥25MPa: sebacate oil

## Features:

- Accord with JJG59-2007<<Piston-type pressure gauge>>;
- Able to test two gauges synchronously; Applied the fast pressure plug; no oil leakage;
- Abrasive resistance is improved because of the high-tensile and high-hardness wolfram carbide material;
- The piston rod is anti-breakage structure.
- The piston system configures Eddy current displacement sensor,adopts integrated double row LCD digital cursor display. Therefore, piston position can be observed clearly at any time.
- With pre-pressure pump, it can fill oil to large capacity gauge, several gauges or long distance calibration pipeline system.
- 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.