

DEAD WEIGHT PRESSURE GAUGE TESTERS

Dead Weight Pressure Gauge Testers are used for calibrating and standardizing pressure gauges and pressure transducers upto a pressure of 1000 bar (kg/sq.cm) HEICO Dead Weight Pressure Gauge Testers are so designed and manufactured that extremely small variations and very small pressures can be measured with great accuracy i.e. upto $\pm 0.1\%$ or better. The standardizing pressure is developed by loading with standardized weights a vertically arranged ram which works in a cylinder filled with oil.. This cylinder is connected to an oil reservoir through an isolating valve. A priming pump, a pressure pump, pressure gauge adaptors etc. are also connected to the cylinder. A set of standardized weights, for the testing range of the tester, is supplied with each instrument. A set of adaptors for different sizes of pressure gauge threads is also provided along with a set of spanners, a needle puller and a screw driver.

Dead Weight Pressure Gauges Testers are offered in four models.

HL 80
Single Ram, Single Gauge Type.

HL82
Single Ram, Two Gauge Type

HL84
Double Ram, Single Gauge Type.

HL86
Double Ram, Two gauge Type.

●● **HL80**
Single Ram Single Gauge Type

Suitable for standardizing one pressure gauge against dead weights. These testers have only one pressure range. The apparatus comprised the following main components.

- i) A precisely ground and lapped ram of known effective area moving without friction in an accurately honed cylinder and provided with a loading platform at its top.



HL80

- ii) A set of standardized weights for the test range.
- iii) A priming pump-cum-oil reservoir for quick initial setting of the unit.
- iv) A high pressure screw type pump for adjustment during the test at higher pressures.
- v) An isolating valve for the priming pump.
- vi) Pressure gauge adaptor.
- vii) A set of spare pressure gauge adaptors.
- viii) Two open ended spanners and a needle puller.

The apparatus is assembled on a sturdy base with leveling screws and is encased in a sheet metal cover. This type of apparatus is available for the following standard test ranges.

Cat. No.	Range (bar)
HL80.05	0.5 - 25
HL80.10	0.5 - 50
HL80.15	1.0 - 100
HL80.20	2.0 - 200
HL80.25	2.0 - 300
HL80.30	5.0 - 500
HL80.35	5.0 - 750
HL80.40	5.0 - 1000

●● **HL 82**

Single Ram Two Gauge Type

These models are very useful for situations warranting frequent checking of pressure gauges, when calibration against a dead weight system becomes much time consuming and cumbersome. Out HL 82 series of testers have the dual arrangements of testing the pressure gauges against standardized weights as well as by comparing the test gauge with a calibrated master gauge, which is very quick and convenient.

The dead weight loading rams in these models, can be isolated by an isolating valve included in the hydraulic circuit while comparing the test gauge with a master gauge.



Supplied complete with a set of weights, spanners, needle puller, pressure gauge adaptors but without the Master Gauge. Available in the following ranges.

●● **HL 84**

Double Ram Single Gauge Type

Similar HL80 but with two telescopic rams to give two ranges of pressure with the same set of weights. Low capacity pressure gauges and high capacity pressure gauges can be tested with the same precision on these testers.

Cat. No.	Range(bar)
HL82.05	0.5 - 25
HL82.10	0.5 - 50
HL82.15	1.0 - 100
HL82.20	2.0 - 200
HL82.25	2.0 - 300
HL82.30	5.0 - 500
HL82.35	5.0 - 750
HL82.40	5.0 - 1000

HL 84 DOUBLE RAM WITH SINGLE GAUGE ADOPTERS

Cat No.	Low Pressure Range(bar)	High Pressure Range(bar)
HL84.30	0.5 - 50	5 - 500
HL84.35	0.5 - 75	5 - 750
HL84.40	0.5 - 100	5 - 1000

HL 86 DOUBLE RAM WITH 2 GAUGE ADOPTERS

Cat No.	Low Pressure Range(bar)	High Pressure Range(bar)
HL86.30	0.5 - 50	5 - 500
HL86.35	0.5 - 75	5 - 750
HL86.40	0.5 - 100	5 - 1000