

## SERIES: DWT2700

- **ACCURACY: UP TO 0.008%**
- **RANGE: 10...30,000 psi (1...2000 bar)**
- **EXCELLENT ACCURACY AND STABILITY**
- **AUTOMATIC CHANG-OVER FROM LOW TO HIGH PRESSURE (except models above 15,000 psi)**

**Dual  
Piston**



### INTRODUCTION

Indumart *DWT2700 Series* of Deadweight Testers provide high quality and cost effective means of calibrating pressure instruments. The instrument comprises baseplate / manifold with two piston assemblies, two test stations, a fluid reservoir and a ram screw pressure generating mechanism.

The design uses the piston gauge principle, in which, an applied pressure within the system balances a known mass applied to a piston of known effective area. Moreover, the *DWT2700 Series* deadweight testers (below 15,000 psi models) are equipped with separate low and high pressure systems built into the same unit. It consists of two plungers with different areas, that move along the same axis in their respective cylinders, developing pressures in the low and high cylinders respectively.

The standard package includes a unit of *DWT2700 Series* Deadweight Tester, a set of precision weights in a metal carrying case, a set of tools, a set of NPT and BSP adaptors, an angle for back connection gauges, a set of spare seals, a dust cover, a bottle of operating fluid, pointer puller and pointer punch, calibration certificate and operating manual.

An added port (2<sup>nd</sup> port) to provide the possibility of converting the unit to a pressure comparator is an optional feature of *DWT2700 series*.

### PRECISION PRESSURE GAUGES

The *DWT2700* can be combined with one or two pressure gauges to form a complete pressure calibration system.

- 1) Indumart DG50 digital Test Gauge,
- 2) Indumart P52 Series Test Pressure Gauge.

*They must be ordered separately.*

### SPECIFICATIONS

<b>Accuracy</b>	0.015% (std.), 0.008% (optional)
<b>Tester's Case Material</b>	Stainless steel
<b>Cylinder / Piston Mat.</b>	Tungsten carbide/HCHC
<b>Adaptor Set</b>	1/8", 1/4", 3/8" & 1/2" NPT & BSP
<b>Operating Fluid</b>	Special Hydraulic Oil
<b>Material of Masses</b>	Non-magnetic stainless steel
<b>Tester Size &amp; Weight</b>	361 x 382 x 245 mm (~12 kg)
<b>Weight Box</b>	12" x 12" x 12" (28 to 40 kg)
<b>Gravity*</b>	9.80665 m/s <sup>2</sup>
<b>Temperature</b>	23°C
<b>Air Density</b>	1.2 kg/m <sup>3</sup>

\* Adjustment for the local gravity is available on request.

Model	Range	
B	0.2 ~ 160 bar	20...16,000 kPa
	10...2,000 psi	0.2 ~ 160 kg/cm <sup>2</sup>
D	1...700 bar	100...70,000 kPa
	10...10,000 psi	1...700 kg/cm <sup>2</sup>
F	1...1,000 bar	100...100,000 kPa
	10...15,000 psi	1...1,000 kg/cm <sup>2</sup>
G	1...1,400 bar	100...140,000 kPa
	10...20,000 psi	1...1,400 kg/cm <sup>2</sup>
H	1...2,000 bar	100...200,000 kPa
	10...30,000 psi	1...2,000 kg/cm <sup>2</sup>

### ORDER CODES

Model **DWT2700-** ☐ ☐ - ☐

#### Pressure Generation

Select a model from the above Table

#### Measurement Unit of the Weights

kPa  
bar  
kg/cm<sup>2</sup>  
psi

#### Options (more than one can be selected)

0.008% Accuracy  
A 2<sup>nd</sup> port

Example: DWT2700-DC-A,P

