

# PRECISION DEADWEIGHT TESTERS

## 0.1% ACCURACY; 15 to 10,000 psi

### DWT1305 Series



- ✓ Easy-to-Use 2-Stage Hydraulic Pump
- ✓ 2 Interchangeable Piston/Cylinder Assemblies
- ✓ Vernier Screw Adjustment for Pressure Settings
- ✓ Portable—Rugged Carrying Case Provided

#### Each Unit Includes

- ✓ Hydraulic Pump
- ✓ Weight Set
- ✓ 2 Piston/Cylinder Assemblies
- ✓ 3 Wrenches
- ✓ Spare O-Rings
- ✓ Piping and Fittings
- ✓ Rugged Carrying Case
- ✓ Operator's Manual
- ✓ Optional NIST-Traceable Calibration



DWT1305D-30, shown smaller than actual size, comes complete as shown.

DWT1305 deadweight testers are dual-range, precision-built hydraulic instruments for testing, setting, calibrating, or repairing pressure-measuring devices. Each instrument is self-contained and comes with tools and metal carrying case.

With the optional “-CAL-3” calibration, the DWT1305 can be a primary standard with 0.1% accuracy of the pressure produced. Each unit is adjusted for standard gravity conditions, all weights are labeled, and an NIST-traceable certification is supplied.

For optimal accuracy, deviation from standard gravity conditions must be applied to the readings.

Each unit comes with 2 interchangeable piston and cylinder assemblies. One is for

low pressure (below 2000 psi/ 14,000 kPa); the other is for high pressure (through 10,000 psi/ 70,000 kPa). The same weights are used with both pistons.

#### SPECIFICATIONS

**Accuracy:** 0.1% of produced pressure

**Operating Pressure:** 15 to 10,000 psi (100 to 70,000 kPa)

**Body Material:** Aluminum alloy

**Piston and Cylinder Material:** Stainless steel

**Weights:** Non-magnetic die-cast zinc alloy, NBS traceable

**Operating Fluid:** SAE 20 automotive or machine oil

**“O” Rings:** Standard Buna-N

**Reservoir Volume:** Approximately 0.7 liter (1.5 pints)

#### To Order

MODEL NO.	PISTON ASSEMBLY PRESSURE RANGE		PISTON VALUE		NUMBER OF WEIGHTS BY VALUE							NET WT.	
					L-5	L-10	L-20	L-40	L-100	NET WT.			
					psi TYPE	LOW	HIGH	LOW	HIGH		H-25	H-50	H-100
DWT1305D-10	15/200	75/1000	5	25	1	3	2	3	—	60	27		
DWT1305D-20	15/400	75/2000	5	25	1	3	2	3	2	70	32		
DWT1305D-30	15/600	75/3000	5	25	1	3	2	3	4	85	39		
DWT1305D-50	15/1000	75/5000	5	25	1	3	2	3	8	105	48		
DWT1305D-100	15/2000	75/10,000	5	25	1	3	2	3	18	175	80		
DWT1305D-10-CAL-3*	15/200	75/1000	5	25	1	3	2	3	—	60	27		
DWT1305D-20-CAL-3*	15/400	75/2000	5	25	1	3	2	3	2	70	32		
DWT1305D-30-CAL-3*	15/600	75/3000	5	25	1	3	2	3	4	85	39		
DWT1305D-50-CAL-3*	15/1000	75/5000	5	25	1	3	2	3	8	105	48		
DWT1305D-100-CAL-3*	15/2000	75/10,000	5	25	1	3	2	3	18	175	80		

Comes complete with pump, weights, piston assemblies (2), o-rings, piping/fittings, wrenches, case and operator's manual.

\* Units with “-CAL-3” suffix feature NIST traceable calibration as a primary standard.

Ordering Examples: DWT1305D-100-CAL-3, tester with 15 to 10,000 psi range with NIST-traceable calibration.

DWT1305D-50, tester with 15 to 5000 psi range.