

## Primary Standards

# Nagman Hydraulic Dead Weight Testers

High Precision  
Bench-top / Table-top Model

*Ideal for Fine Increments & for Medium Volume Calibration. Ensures – Easy & Controllable Pressure generation for Calibrating Pressure Gauges / Transducers / Transmitters, Transfer Standards, Recorders, Digital Calibrators etc.*

*Screw Pump with built-in Priming Pump*

### Model

#### H6900 Series

- Ranges : Upto 700 Bar
- Accuracy :  $\pm 0.015\%$  of Reading
- Single / Dual Piston
- Oil operated
- Engineering Units : Bar / Kg/Cm<sup>2</sup> / PSI. (Kpa & Mpa also available).
- Adjustable Foot & Spirit Level
- Piston Calibrated thro' "Cross Floating Techniques"
- Calibrated to Standard Gravity (Optional : Calibration to Local Gravity as per Customer's requirement)
- Accuracies Traceable to International Standards
- Non-Magnetic Stainless Steel Weight Sets
- Calibration Certificate – for overall Accuracy + PCU (Area) + Weights (Mass) from NABL Accredited Lab – as per ISO/IEC 17025:2005
- DWTCal Calibration Software



Motorized Version  
- Optional

\* Accessories shown above are not part of standard equipment.

Manufactured by

**Nagman Instruments & Electronics (P) Ltd.**

27<sup>th</sup> KM Stone, Chennai-Bangalore NH-4, Nazarethpet P.O., Chembarambakkam, Chennai – 600 123. INDIA.

#### Domestic Sales

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## Specifications

## H6900 Series

Ranges	35 / 70 / 100 / 160 / 350 / 600 / 700 Bar
Piston	Single / Dual
Standard Accuracy	±0.015% of Reading
Traceability	International Standards
Weights	Non-Magnetic Stainless Steel
Pressure generation	Thro' Priming Pump & Screw Ram
Standard Corrections	Gravity : 9.80665 m/s <sup>2</sup> * / Temperature : 20°C / Air Density : 1.2 Kg/Cm <sup>2</sup>
Weight (approx.)	Instrument : 19 Kg. ; Weight Sets : 8 to 33 Kg.
No. of Weights	12 to 15
Instrument Dimensions	530 x 325 x 230 mm (L x W x D)
Operating Fluid	Oil
DWTCal Software	Standard

**Table 1**

Model	Accuracy	PCU	Weight Set	Certification	Remarks
H6900	±0.015% of Reading	Tungsten Carbide Piston & Matching Hardened Cylinder	Non-Magnetic Stainless Steel	Overall Accuracy + PCU (Area) + Weights (Mass)	Issued by NABL ISO/IEC 17025:2005 Accredited Lab

**Table 2**

Piston Type	Piston Model	Pressure Ranges		
		1 / Bar	2 / Kg/Cm <sup>2</sup>	3 / PSI
Single	SP-35	0.5 to 35	0.5 to 35	10 to 500
Single	SP-70	0.5 to 70	0.5 to 70	10 to 1000
Single	SP-100	5 to 100	5 to 100	75 to 1500
Single	SP-160	5 to 160	5 to 160	75 to 2500
Single	SP-350	5 to 350	5 to 350	75 to 5000
Single	SP-600	10 to 600	10 to 600	150 to 9000
Single	SP-700	10 to 700	10 to 700	150 to 10000
Dual	DP-160	1 to 160	1 to 160	15 to 2500
Dual	DP-350	1 to 350	1 to 350	15 to 5000
Dual	DP-600	1 to 600	1 to 600	15 to 9000
Dual	DP-700	1 to 700	1 to 700	15 to 10000

### STANDARD DELIVERY

- Basic Instrument
- Full set of Adaptors consisting of 1/8", 1/4", 3/8", 1/2" BSP (Set of NPT Adaptors available on request)
- Calibrated S.S Weight Sets - Refer Table 1 & 2
- Spirit Level, Pointer Puller / Punch, Set of Spanners & Screw Driver
- Operating Fluid (500 ml)
- 'O' Ring & Seals
- Dust Cover, Wooden Carrying Case (for Weight Sets)
- DWTCal Calibration Software
- Calibration Certificate from NABL Accredited Laboratory (as per ISO/IEC 17025:2005) - Refer Table 1
- Instruction Manual

### OPTIONALS

- Right angled Adaptor
- Two Gauge Adaptor
- Conversion Weight Sets to convert from one unit of Pressure to another
- Incremental Weight Sets for smaller increments of Pressure
- Motorized Version

## Software

# Nagman DWTCal

**Pressure Calculation, Correction &  
Certificate Generation Software for  
Precision Dead Weight Testers**

*Flexible Working Tool for Easier, Quicker  
& More Accurate Calibration*

### Model

### DWTCal

- Menu Driven, easy to use software
- Maintain Multiple Dead Weight Tester files
- 5 Pressure Units
- Pre-loaded Calibration Data
- Automatic generation of Calibration Certificates
- Pressure Equivalent calculations with all corrections applied
- Allows users to apply all necessary corrections (Local Gravity, Pressure Head, Temperature etc.) to enhance the performance / Accuracy of the Dead Weight Tester
- Calibration details are stored and/or automatically inserted into a Calibration Certificate
- MS-Windows Compatible



SNo	Applied Pressure bar	Equivalent Pressure psi	Indicating Pressure psi	Deviation psi	Remarks
1	0	0.0000	0.0000	0.0000	PASS
2	1	14.5010	14.5000	-0.0010	PASS
3	2	29.0035	29.0000	-0.0035	PASS
4	3	43.5053	43.5051	-0.0002	PASS
5	4	58.0070	58.0000	-0.0070	FAIL

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Specifications subject to change owing to continuous development

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