

# CALSCAN

precision  
temperature pressure  
& flow measurement

## HAWK 9000 HST

### HYDROSTATIC PRESSURE TESTER

**The Hawk 9000 HST** is a complete replacement for a chart recorder and electronic deadweight that is typically used on hydrostatic pressure tests. By providing temperature-compensated sensors, PDF charts and ease of data retrieval, it modernizes the hydrostatic pressure testing process.

**Accurate and Stable Pressure Measurement:** The Hawk's pressure sensor accuracy is 0.024% Full Scale and digitally calibrated on a NIST traceable deadweight from -40°C to +60°C. This greatly reduces the pressure swings from ambient temperature changes typically seen on chart recorders. The test fluid is monitored with an external temperature probe so pressure changes from the expansion and contraction of the fluid can be easily discerned from an actual pressure leak.

**Data Retrieval:** Chart and pen replacements are no more, as all the data is collected via an SD card. Since the Hawk is Intrinsically Safe, the flash card can be inserted safely, *without a sniff check*, if there is hazardous gas on location. Once the card is inserted a copy of all the data is transferred to the flash card. If the card is lost or damaged it still can be copied again.

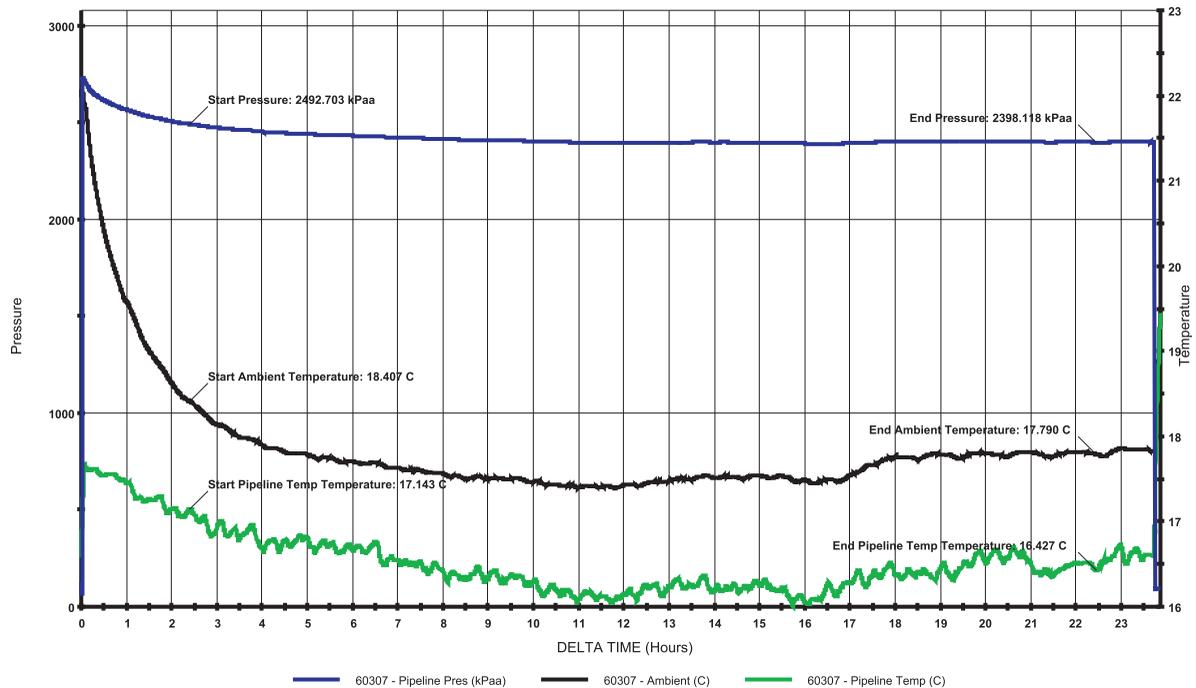
**PDF Charts:** The data collected, be it a 1 hour, 24 hour or longer test, is processed on our Windows software CalWin. Information important for the test is added such as a company name, location and Hawk serial number. Then a one page chart in PDF format is produced. This PDF chart can then be quickly printed, emailed or put on a removable memory card for the client. On the back of the brochure is an example of a typical chart.

**Hazardous Location Approved:** The Hawk 9000 is a Class 1 Division 1 Intrinsically Safe logger. This allows the Hawk to be used safely when a flammable gas or liquid such as methanol is used. Simple quick connect cables that require no explosion proof electrical seals, this allows installation to be completed within minutes.



# Chart Example

Hydrostatic Test  
Company: CalScan Services Location: Edmonton  
Licence Number: 12345 Line Number: 4321  
Test Section: Length 5812 m OD 8" W.T. 250" Gr. 270 Elevation. 700m  
Pipe Specification: Schedule 80 Mill Test pressure: 5000 kPa  
Test Number: 1 Test Medium: Water Test Company: ABC Company  
Pressure Range: 0.0 - 10442.0 kPaa Temperature Range: -39.0 - 61.0 C  
Time: Start January 18,2010 18:33:10 Stop January 19,2010 14:35:40 Total Hours 20.042  
Pressure: Initial 2492.703 kPaa Final 2398.118 kPaa Delta 94.585 kPaa  
Ambient Temperature: Initial 18.407 C Final 17.790 C Delta 0.617 C  
Pipeline Temp Temperature: Initial 17.143 C Final 16.427 C Delta 0.716 C  
Comments: 20 hour test



## Specifications

### Power Requirements

Power Supply: Two 3.6 VDC Lithium C or A cells  
Battery Life: 1 to 2 years

### Environmental

Hazardous Location CSA/UL Approved: Exia Intrinsically Safe  
Class 1 Division 1 Group A, B, C, D  
Temp Code T5a max Ambient 50°C  
Operating Temperature: -40°C to +60°C  
Operating Humidity: 5 to 95% non-condensing

### Pressure

Calibrated to NIST standards  
Ranges: 1500, 3500, 6000, 10000, 15000 psi

### Accuracy

Pressure:  $\pm 0.024\%$  Full Scale  
Temperature:  $\pm 0.5^\circ\text{C}$

### Programming and Reporting

CalWin for Windows 98/2000/XP/Vista/7

### Database Capacity

80 days of continuous tests

### Compliance

ERCB  
CSA: Oil and Gas Pipeline Systems Section 8



**For sales, rental, warranty, calibration, replacement battery, and local distributor information contact:**

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