



### Cement Squeeze Manifold

The HDI *CementGage* (Model 2300P) provides the high pressure accuracy, safety, and reliability needed in oil and gas well cementing operations. The greatest features of both analog and digital gauges are united in the HDI *CementGage*. The HDI *CementGage* is designed and manufactured specifically for use on cement squeeze manifolds in oil and gas well servicing operations. Its digital display is easily read at a distance of more than 30 feet, while the 101-segment analog bar graph allows instant estimation of changing pressures with visual presentation of trends. The piezo-resistive pressure sensor is vibration and shock resistant. Unlike hydraulic gauges, the HDI *CementGage* measures and displays the first several hundred psi. It is immune from the effects of pulsating pressures. The HDI *CementGage* sensor is protected from cement by primary and secondary replaceable diaphragms. The sensor is mounted inside a 17-4PH stainless steel housing featuring a special one-inch titanium hammer union wing nut with superior strength. The case has O-ring seals that protect the internal components against harsh environments. The HDI *CementGage* also features a 1/4 inch thick front protection lens made from ultraviolet ray-resistant polycarbonate for operation in direct sunlight and harsh conditions.

## Cementing Instrumentation

### HDI 2300 Pressure Gauge



### Specifications

<b>Accuracy</b>	0.5% of full scale (linearity, hysteresis, and repeatability)
<b>Resolution</b>	10 psi (over full range from 0 psi to full scale)
<b>Range</b>	0 to 16,000 psi standard / Options: 0-5,000 psi and 0-10,000 psi
<b>Engineering Units</b>	PSI standard / Options: bar and kpa
<b>Media Temperature</b>	-30 to 100°C
<b>Storage Temperature</b>	-40 to 100°C
<b>Battery</b>	Intrinsically Safe Sealed HDI Power Pack with silicone foam vibration isolation
<b>Battery Life</b>	1 Year continuous operation
<b>Battery Access</b>	Removable rear cap
<b>Display</b>	Liquid crystal with five-digit seven segment 0.45 inch (11.4 mm) digital pressure, 0.132 inch (3.4 mm) minimum and maximum digital scale, 0.210 inch (5.3 mm) alphanumeric engineering units, large 101-segment analog trend indicator, and low battery icon.
<b>Display Protection</b>	1/4 Inch (6.35 mm) thick Lexan clear lens with O-Ring seal
<b>Electronics Protection</b>	O-ring seals on front and rear caps, lens, and sensor housing
<b>Enclosure Dimensions</b>	Powder-coated 6061-T651 aluminum 4-inch diameter x 6-inch length x 9-inch height (101.6 mm O.D. x 152.4 mm long x 228.6 mm high)
<b>Weight</b>	7.5 Lbs (3.41 Kgs)
<b>Sensor Housing</b>	17-4PH stainless steel
<b>Sensor Cement Protection</b>	Replaceable primary and secondary rubber diaphragms
<b>Front Panel Access</b>	Removable front cap
<b>Front Panel Controls</b>	Mode, Enter, Up, Down
<b>Battery Access</b>	Removable rear cap
<b>Pressure Connection</b>	1" Guiberson fitting with titanium hammer union wing nut or 2" 1502 Hammer Union

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