



MEASUREMENT SOLUTIONS FOR THE OIL & GAS INDUSTRY

WELL SERVICING UPSTREAM MIDSTREAM DOWNSTREAM OFFSHORE



Our broad offering of instrumentation for the oil & gas industry addresses applications including:

- Conventional Oil & Gas Plays
- Unconventional Oil & Gas Plays
 - Oil Sands
 - Coal Bed
 - Shale
 - Offshore

NOSHOK is an industry leader in providing high quality, reliable & robust instrumentation to the oil & gas market. For over four decades, we have offered expertise in providing measurement solutions for a variety of applications, such as:

PRESSURE, TEMPERATURE & LEVEL MEASUREMENT

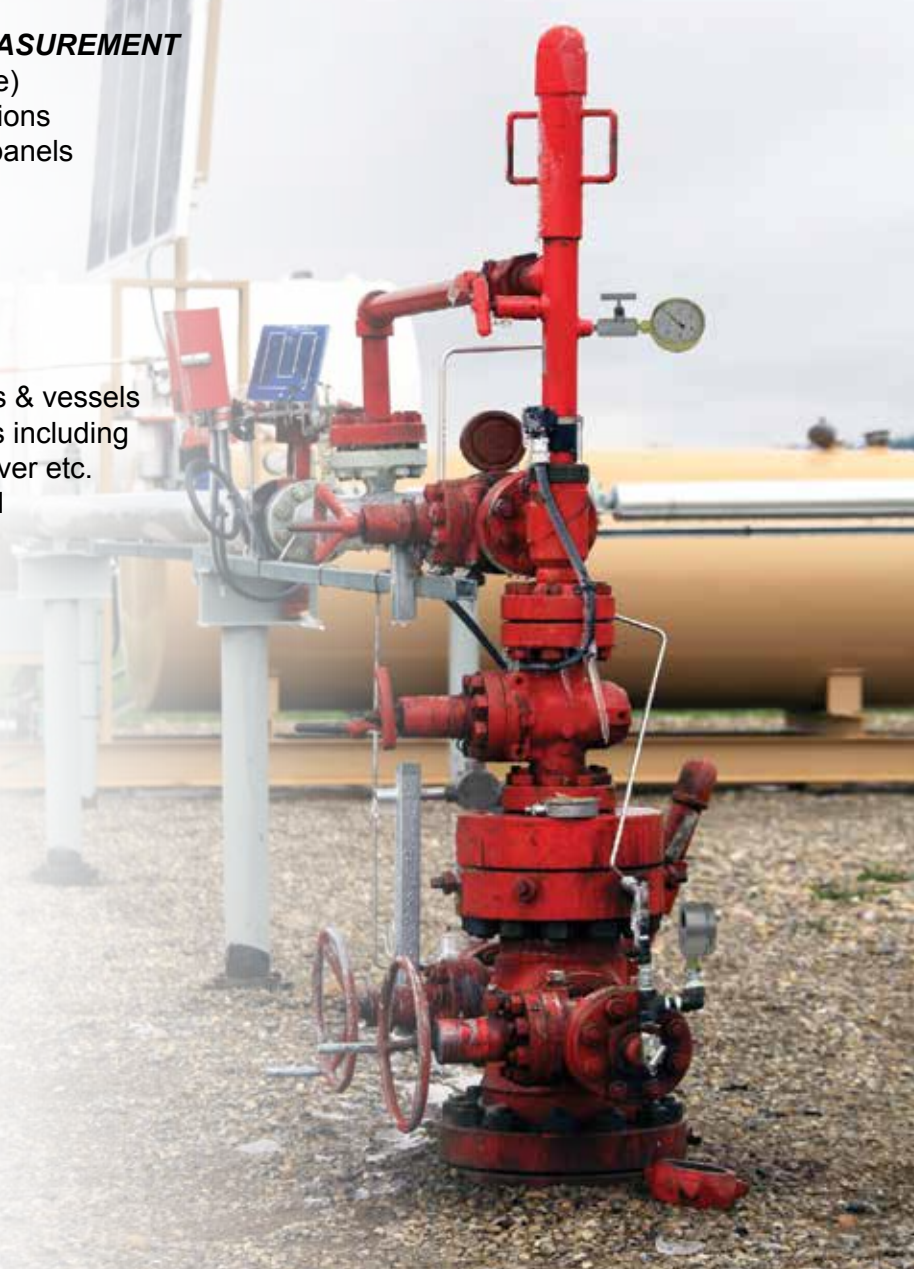
- Well automation (tubing & casing pressure)
- Compressor packages & compressor stations
- Mobile and stationary equipment control panels
- Hydraulic measurement
- Vapor recovery
- Hammer union
- Pump suction & discharge
- Engine monitoring
- Injection systems
- Local indication on distribution lines, tanks & vessels
- Remote measurement on service vehicles including blending, frac, cementing, wireline, workover etc.
- True water level measurement in coal bed natural gas wells
- Tank level
- BOP and subsea controls
- Filtration diagnostics

NEEDLE & MANIFOLD VALVES

- Safety shutoff
- Block, bleed and isolation of critical instrumentation
- Retrofit manifold make up for use on pneumatic recorders and meters
- Manifolds for differential pressure measurement and flow measurement

FORCE MEASUREMENT

- Pump jacks
- Pulling units
- Overhead cranes, chain hoists and cable hoists



NOSHOK

PRESSURE MEASUREMENT SOLUTIONS

Pressure Gauges

Full offering to address vacuum and pressure from 10 inH₂O through 145,000 psig, as well as differential pressure applications.

3 YEAR WARRANTY

- Vibration, shock, pulsation and chemical resistant
- Available in dial sizes of 1-1/2" to 6", bottom and back connected, with wetted parts in copper alloy or 316L stainless steel
- High quality construction including heavy Bourdon tubes for longer life
- Liquid filled and dry configurations available

Transmitters and Transducers

Available in vacuum, absolute and gauge pressure ranges up to 145,000 psig.

3 YEAR WARRANTY

- Explosion-proof, non-incendive, intrinsically safe vapor recovery & intrinsically safe hammer union models
- Vibration & chemical resistant with a full array of outputs (4-20 mA, 0-0 Vdc, .5-4.5 Vdc, etc.)
- Extremely stable zero and span
- Full offering in the low power units when used with solar power or battery power
- NACE Compliant
- High RFI, EMI & ESD protection



LEVEL MEASUREMENT SOLUTIONS

Includes low pressure gauges, transducers and submersible transducers designed to measure head pressures from inches of water, feet of water, to psig.

3 YEAR WARRANTY

- Reliable and cost-effective approach to level measurement
- Pressurized vessels and well sites can be accurately measured using a dual transducer approach
- Available in hazardous location versions



Your Single Source Instrumentation Company

NEEDLE VALVE & MANIFOLD VALVE SOLUTIONS



NOSHOK manifold valves and needle valves provide precise indication and flow management.

NOSHOK carbon steel valves are among the first in the industry to come standard with zinc nickel plating, an alloy which provides exceptional corrosion resistance. Other benefits of zinc nickel plating include:

- Increased deposit hardness
- Extended wear resistance
- Longer service life
- WEEE & RoHS compliant



3 YEAR WARRANTY

- Made in the USA
- Standard bore & large bore manifold valves, needle valves, and block & bleed valves with hard or soft seat/tip designs
- Mini valves feature a patented design which significantly increases the pressure rating up to 10,000 psi without compromising the flow coefficient (Cv)
- Flare Pattern™ option on 5-valve manifolds allows maximum finger clearance during operation
- Stabilized & non-stabilized connectors available to reinforce the installation by shifting radial-stress load away from the NPT connections
- Carbon steel, stainless steel & brass materials available
- Custom designs available





TEMPERATURE MEASUREMENT SOLUTIONS

Bimetal and Vapor Actuated Thermometers

Vapor actuated thermometers and bimetal thermometers to address temperatures from -100°F to $1,000^{\circ}\text{F}$.



1 - 7 YEAR WARRANTIES

- Reliable and cost effective temperature measurement
- Full offering of thermowells to address corrosive and erosive fluids, high volume flow lines and tanks
- High volume producer of vapor actuated thermometers to the oil and gas industry, offering a full array of options including capillary length, dial sizes, panel mount configurations and temperature ranges



Temperature Transmitters, Transducers & RTDs

NOSHOK temperature transmitters, transducers & RTDs address temperatures from -40°F up to $1,100^{\circ}\text{F}$.



3 YEAR WARRANTY

- Simple RTD primary element with or without built-in amplifier
- Hazardous location, explosion proof models available
- Full offering of stem lengths and options for electrical connections
- Can be used in conjunction with a thermowell to address harsh applications



FORCE MEASUREMENT SOLUTIONS



NOSHOK provides load cells and force sensors for most applications, that include:

- Hydraulic load cells
- Tension compression load cells
- Load pins
- Silo kit systems for tank weighing

1 YEAR WARRANTY

- Local or remote indication
- Fully amplified output signals including 4 to 20 mA, 0 to 10 Vdc, etc.
- Silo kit package offers a turn key solution for tank or vat weighing





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From responsible
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