OIL & GAS PRODUCTION AND PROCESSING HAVE EVOLVED

...SO SHOULD YOUR INSTRUMENT AIR SYSTEM

OIL & GAS SOLUTIONS
[ FROM THE HIGH PRESSURE EXPERTS ]

BAUER has been the world’s leading manufacturer of high pressure compressors and integrated compression systems for industrial offshore applications as well as breathing air, for over 65 years. We’ve worked for many years to evolve our compressors and instrument air systems to meet the ever rising costs and increased safety requirements for offshore operations. Our systems are designed with oil and gas applications in mind, safely delivering consistent performance at higher capacities than ever before.

BAUER understands that reliability and optimal performance are extremely critical for oil and gas. **Evolve with us.**
APPLICATIONS
Instrument Air suitable for land-based refineries and offshore environments located in hot and humid hydrocarbon-rich environments.

THE PROBLEM WITH DESICCANT REGENERATIVE DRYERS
High humidity combined with high hydrocarbon levels in the ambient air can quickly break down the desiccant drying agent which is used in regenerative dryers. The result is an ineffective dryer and subsequent moisture in the instruments which can lead to instrument failure and high repair/replacement costs.

BENEFITS
Consistent Instrument Quality Dry Air
Instrument air quality is never compromised due to the degradation of the desiccant material as is common in regenerative dryers operating in hot, humid and high hydrocarbon environments.

Ability to Handle Spikes in Demand
High pressure storage at 3500 – 5000 PSIG provides a natural buffer to even out peaks in demand.

Lower Distribution Cost
High pressure distribution of the instrument air throughout the facility is much more efficient and requires smaller diameter piping than low pressure distribution.

THE THEORY
The theory behind BAUER’s InstruAire™ mechanical moisture separation system is based on the Principle of Thermodynamics. As moist air is compressed, the ability of the compressed air molecules to retain moisture is diminished. The BAUER InstruAire™ system takes the incoming moist air through 5 stages of compression. After each stage of compression the moisture is separated from the air through special separators seven times. This is akin to mechanically “wringing” the suspended water molecules out of the air like one would with a wet rag.

TOTAL PERFORMANCE WARRANTY
BAUER COMPRESSORS INC. reputation speaks for itself with over 70 years of market leadership.

Quality Standard for Instrument Air: ANSI/ISA-S7.0.01-1996

Particle Size
A maximum of 40 micrometer particle size in the instrument air system is acceptable for the majority of pneumatic devices.

Hydrocarbon Content
The lubricant content should be as close to zero as possible, and under no circumstances shall it exceed one (1) PPM w/w or v/v.

Dew Point
The pressure dew point as measured at the dryer outlet shall be at least -10°C (18°F) below the minimum temperature to which any part of the instrument air system is exposed. The pressure dew point shall not exceed 4°C (39°F) at line pressure.

SYSTEM CAPACITY FOR EACH INSTRUAIRE™ MODULE
Air Delivery
360 CFM

Storage Pressure
3500 - 5000 PSIG

Distribution Pressure
35 – 500 PSIG

BAUER INSTRUAIRE™ AIR QUALITY SPECIFICATIONS

Dewpoint
-59°F to -54°F at atmospheric pressure
-21°F to -15°F at 145 PSIG line pressure

Particle Size
< 1 micron

Hydrocarbon Content
< 1 PPM
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