



GAS STORAGE CAPABILITIES

EXPERTISE

Basic Systems is able to take care of everything from the well head to the pipeline tie-in at your gas storage site whether it's a salt formation, depleted reservoir, or an aquifer. We realize that there is more to storing gas than just pumping it into the ground.

The challenge of multiple modes of operation, both in the control system and the facility design, is only part of the equation. Dehydration, gas sweetening, wellhead telemetry, injection/withdrawal compression, they all require first-hand knowledge of the operation, the equipment, and the potential design pitfalls in order to make the best decisions.

Injection & Withdrawal Compression: Reciprocating, Centrifugal, Electric horsepower. Basic has completed the detail design for over 215,000 horsepower installed in storage facilities.

Dehydration: Glycol, Adsorption, J-T Plant, Refrigeration

Gas Sweetening: Removing hydrogen sulfide, and carbon dioxide

Gas Treatment: Gas separating, condensate separating, contaminant removal

Depleted Reservoirs, Salt Formation Caverns, Aquifers: Familiarity with all of the details to take field capacity limits and meet delivery demands during peak-periods. Designs for injection or withdrawal mode on single stage or two stage.

Metering & Regulation: Prepare specs and design for additional regulation, flow control, gas cleaning, and metering equipment.

Engineering Studies: Review capacity, pressure design conditions, velocity calculations, hp selection/specifications, operating modes



PACKAGES

DRIVERS

Reciprocating

Caterpillar, Waukesha, Cooper, Superior,
Dresser-Rand

Centrifugal

Solar, Dresser-Rand

COMPRESSORS

Ariel, Solar, Cooper



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BASIC SYSTEMS, INC.

DEHYDRATION



Dehydration Plant Design Experience

- Regeneration (Skids, Condensers/Coolers, heaters)
- Adsorber Vessels, towers, valve switching skids
- Triethylene Glycol Systems (Blowdown/separator/silencer, dehy inlet filter coalescer and outlet dry gas filter)
- Flash gas recovery compressors
- Thermal oxidizers
- Gas to glycol heat exchangers
- Storage pressure/flow control valves
- Dehy area control panels, motor control center, HVAC
- Slip stream hydrate control heating
- Dehydration contactors
- Fuel gas conditioning skids
- Storage tanks (Hydrocarbon, Triethylene Glycol)
- Free flow designs



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STORAGE METERING AND REGULATION

Metering & Regulation Experience

- Metering area control panel, motor control center, HVAC
- Regulation area control panel, motor control center, HVAC
- Ultrasonic measurement
- Pressure/flow control valves
- Measuring equipment
- Chromatograph
- Hydrocarbon dewpoint & moisture analyzers
- Flow computers
- Bi-directional
- Filter separators
- Water bath heaters



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