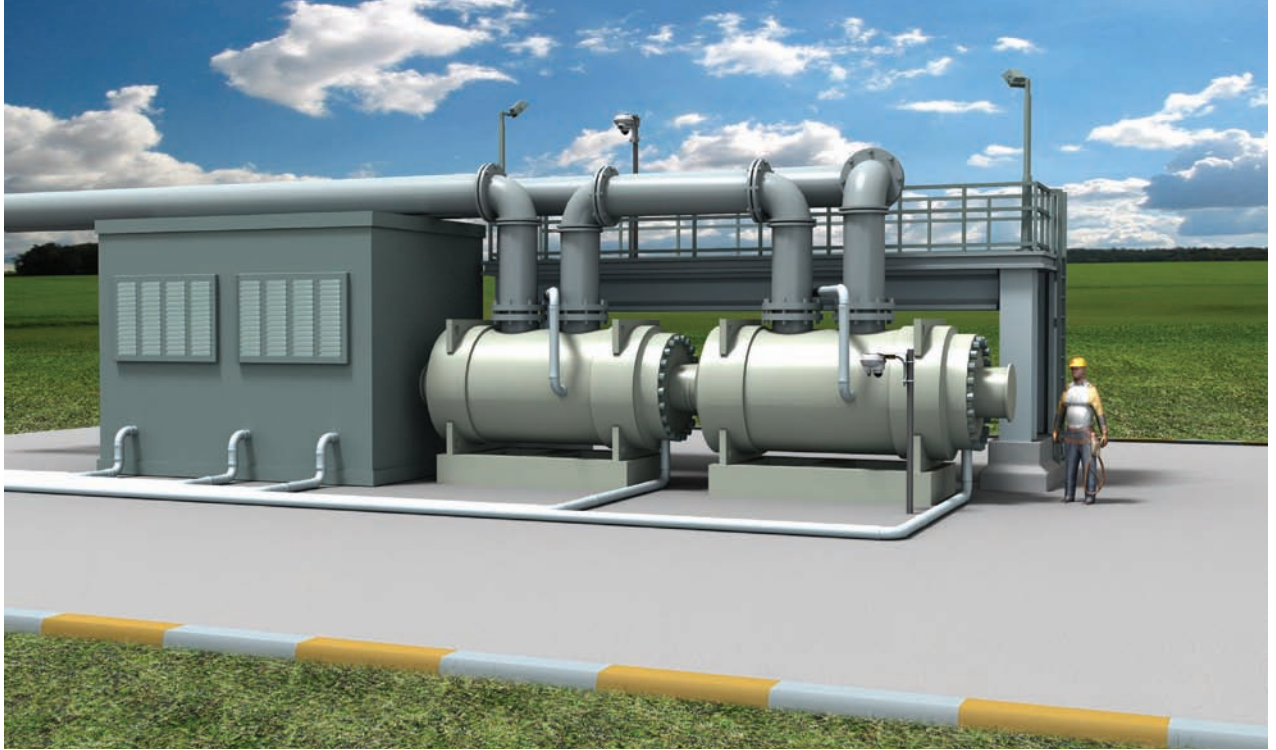


# COMPRESSOR STATIONS



Generic gas compressor area

## APPLICATION PROFILE

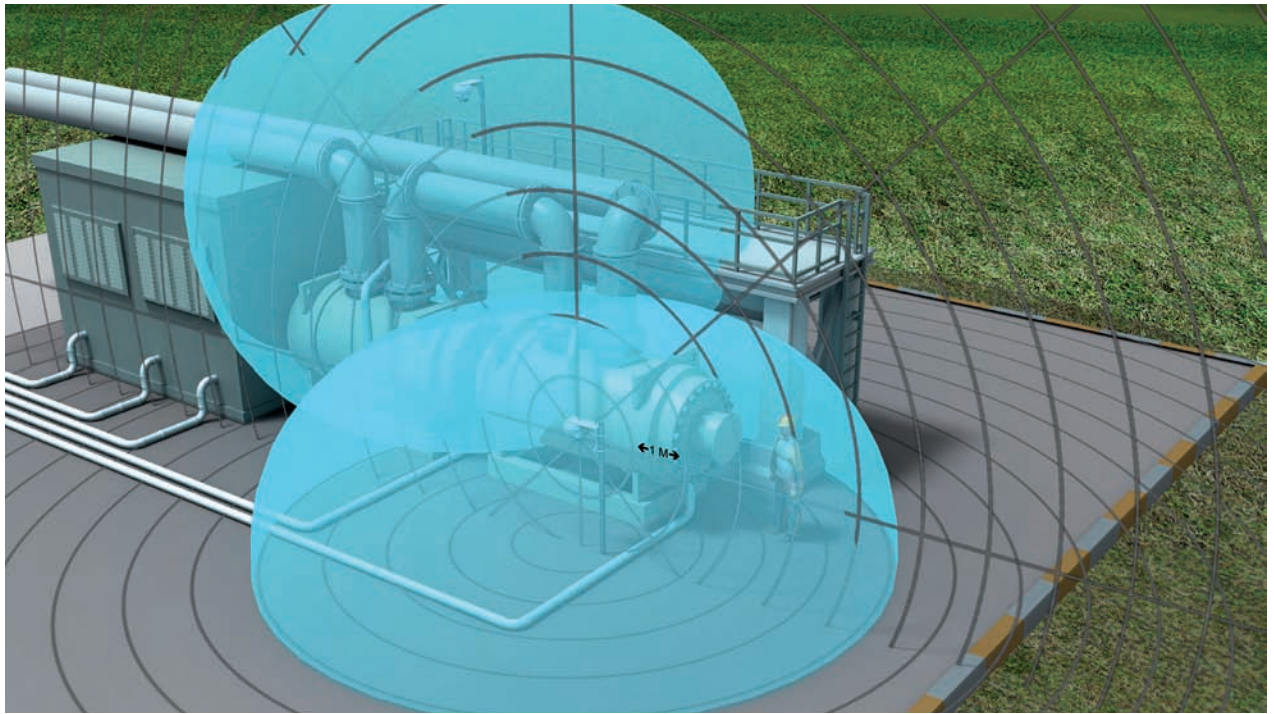
At a compressor or booster station two main processes typically take place: gas compression, performed in order to ensure the natural gas flowing through a pipeline remains pressurized, and gas chilling and cooling, which reduces the gas temperature. Both processes subject gas compressor equipment to high stresses. Vibration and heat from nearby machinery, for example, can produce cracks on seals and flanges. Hydrogen sulfide, liquids, and undesirable particles in the natural gas stream can corrode pipelines and degrade components. Over time prolonged exposure to these elements invariably leads to component failure and possibly to leaks of combustible material.

In order to mitigate the risk of fire or explosion, early warning of gas leaks is essential. One detection technology that is particularly well suited for fast, reliable

detection of escaping gas is ultrasonic gas leak detection. Ultrasonic gas leak detectors respond instantly to the source of the leak, and, because they are unaffected by gas dilution, leak direction, and wind speed, can respond to leaks in areas where other methods of gas detection are not wholly effective.

In gas compressor stations/buildings, ultrasonic gas leak detectors are typically installed in the following spaces:

- Chilling and cooling area
- Gas compressor area
- Pig launcher/receiver area
- HP inlet/outlet areas and discharge vessels



Generic gas compressor area with coverage provided by Gassonic's ultrasonic gas leak detectors

### ULTRASONIC GAS LEAK DETECTION

Unlike conventional gas detectors that measure %LEL, ultrasonic gas leak detectors respond to the ultrasonic noise created by a pressurized gas leak. This ultrasonic noise provides a measure of the leak rate and for establishing warning and alarm thresholds.

Ultrasonic gas leak detectors provide wide area coverage and do not require transport of the gas to the sensor. They are thus suited for outdoor installations and indoor spaces with high ventilation rates.

### THE MAIN CHARACTERISTICS FOR GASSONIC'S ULTRASONIC GAS LEAK DETECTORS INCLUDE

- Instant detection of pressurized gas leaks from 10 bar/145 psi
- Immunity to gas dilution, leak direction, and wind speed
- Immunity to audible noise
- Wide detection coverage (up to 20 m/60 ft radius)
- Senssonic™ self test technology, which ensures failsafe operation
- Standard 4 - 20 mA analog output and digital communication
- Hazardous area certification: ATEX, CSA, C-UL, FM, IECEx, and SIL 2 suitable
- No consumable components and high reliability (MTBF > 11 years naval sheltered)



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