



INDUSTRIAL

Gas Pipelines



Property Damage
Restoration



Temporary
Humidity Control



Property Damage
Prevention



APPLICATION

Overview

Munters moisture control services offer the experience and technical expertise in the effective drying of the inside of gas pipes following hydraulic testing and pipeline maintenance during the shutdown of refineries. Liquid droplets within pipelines can cause product contamination, as well as increasing the threat of corrosion resulting in a shorter life cycle for the pipe or other steel equipment.

Most pipelines projects require a target dew point between -8°C and -35°C , below atmospheric pressure to achieve the best results. Through the use of high volume desiccant dryers, molecular sieve desiccant dryers and oil free compressor units, Munters is able to provide technical solutions to dry internal pipelines to reach the required target dew points, irrespective of weather conditions, pipe diameter or pipe length.



Munters has supplied pipeline maintenance solutions to more than 20 countries.

Before gas can be introduced into a new pipeline or pipeline station the quality of the construction of the pipe requires testing. To replicate the gas that would pass through the pipeline, high pressure water is passed through the pipeline at a nominal pressure rate above the actual process pressure. Following this testing, Munters uses high pressure desiccant dryers and compressors to pass 'pigs' through the length of the pipeline (when possible) to ensure the required dew point is achieved and to ensure that standing water is removed prior to the start of processing.

Existing steel pipelines can be negatively affected when condensation droplets caused after cooling, as a result of the gas scrubbing process or carry-over in the evaporation process get trapped in pipes. The need for technical solutions to eliminate these moisture problems droplets are a must. Utilising Munters advanced drying systems ensures optimised chemical and petrochemical processes by eliminating the presence of undesirable liquids. Additionally, it helps prevent pollution and restricts emissions from the scrubbing system processes. It also helps to prevent corrosion in gas turbines, air inlets and compressor stations.



PROCEDURE

In order to ensure that the equipment is tailored specifically to each pipeline application, the following detailed information is necessary:

- Diameter and length of the pipe
- Available power source
- Pipe openings
- Detailed project specifications
- Site logistics.

Only when this information is compiled and analysed can the suitable equipment be selected. Munters personnel can then engineer the equipment for specific applications to meet the desired specifications for the project.

Munters technicians' service and check the equipment, ducting and ancillary items prior to delivery. After delivery to the site, the equipment is then placed in a designated area, positioned close to a power supply and set up to maximise the safe operation of the unit. The Munters technicians will continually track the progress of the project by measuring dew point, air velocity and the dry bulb temperature in an effort to optimise the energy consumption of the system.

Munters state-of-the-art desiccant dehumidification systems are utilised to deep dry the ambient air, ensuring that moisture levels in the pipe are low enough so as to reduce the moisture load. Munters provides a turnkey solution with well engineered equipment offering around the clock service that is unmatched in the industry.



Maintaining the pipeline.



Monitoring pipeline dew point levels.

RESULTS

Munters experienced and highly trained staff can consult customers on the best solutions for their pipeline projects. This technology ensures that the contractor receives only the equipment required to meet the project specifications while maximising efficiency and guaranteeing the highest possible results. Additionally, using dry air is safer and less expensive than alternative methods such as nitrogen purging.



Cost effectively ensuring high levels of productivity.

BENEFITS

Munters pipeline drying solutions offer:

- Consultancy and project studies delivered by experienced engineers
- Adaptability for a variety of stations
- Installation and maintenance of systems
- Fixed prices
- Cost effective solutions to optimise drying times and minimise delays
- The components remain accessible during treatment
- Desiccant systems are non – hazardous, unlike nitrogen.