

Nitrogen Pumping, Purging, Testing Services



Any intrusive repairs or remedial work required to be carried out on process systems onshore or offshore have a requirement for hydrocarbon removal.

Historically this has been attempted by flushing systems with water, however, problems occur with disposing or treating of large volumes of water with which hazardous drain systems cannot always handle.

Flushing with water can therefore often leave large residual amounts of hydrocarbon liquids which boil off over a period of time and lead to build ups of hydrocarbon gases creating an explosive atmosphere.

It is also critical in many process systems not to have water present. Having residual water present within these systems therefore creates the need for thorough system drying prior to start up.

Nitrogen Purging is carried out by either :-

Pressure Cycle Purge whereby a system is repeatedly pressurised with nitrogen and depressurised via suitable drain, vent or flare.

Displacement Purge whereby a system is slowly filled with nitrogen and any liquids are displaced to drain and gas to suitable vent or flare.



Where systems cannot be drained of hydrocarbons or products, which would cause problems for any hot work to take place, Foam Inerting can be carried out. This service is carried out by injecting a nitrogen and surfactant mixture into a system producing nitrified foam which then dilutes any gases produced by product or hydrocarbons flashing off whilst hot work is ongoing.

..... offer air / helium leak testing as an alternative to nitrogen / helium leak testing, however, this service is only viable on low pressure systems, such as LP/HP flares, closed drains or as a gross leak test service prior to nitrogen / helium leak testing

Personnel Sourcing & Supply

Project Management Teams

EPC Engineering Services

FAT / SIT Vendor Selection

Procedure Preparation

Mechanical Installation

Electrical Installation

Mechanical Completion Services

Commissioning Service

Start-up & Operations Services

Maintenance & Shutdown Services

Pre-Commissioning Services

HVWF Flushing

High Pressure Jetting

Gauging & Pigging

Bolt Tensioning Flange Management

Hydrostatic : Pneumatic Testing

CCTV Inspection

Chemical Cleaning

Oil Flushing

System Drying

Critical Valve Testing

Nitrogen Leak Testing

NDT Inspection

www.ener-mex.com



Nitrogen Pumping, Purging, Testing Services



Históricamente esto se ha intentado realizar limpiando los sistemas con agua, sin embargo, ocurren problemas en cuanto a tirar o tratar grandes cantidades de agua con las cuales los sistemas de desagües peligrosos no pueden siempre manejar. Limpiar con agua puede frecuentemente dejar grandes cantidades de líquidos hidrocarburos residuales los cuales se evaporan después de un tiempo y conllevan acumulaciones de gases hidrocarburos, creando una atmósfera explosiva. También es crítico en muchos sistemas de proceso que no haya presencia de agua. Si hay agua dentro de estos sistemas crea la necesidad de secado a fondo antes del comienzo.

Donde los sistemas no pueden ser desaguados de hidrocarburos o productos que causarían problemas para que se llevase a cabo cualquier trabajo en caliente, se puede llevar a cabo inyectando espuma. Este servicio se lleva a cabo inyectando nitrógeno y una mezcla de "surfactant" y nitrógeno dentro del sistema produciendo espuma nitrificada que diluye cualquier gas producido que está lanzando mientras que está en marcha el trabajo en caliente.

ofrece los ensayos de fugas con aire / helio como alternativa, sin embargo, este servicio solo es viable en sistemas de baja presión, tales como llamas LP/HP, desagües cerrados o como un servicio de ensayos de fugas grandes antes de las pruebas de fugas con nitrógeno / helio.



Les tests hydrauliques et de vidange laissent généralement une quantité conséquente de résidus de liquides d'hydrocarbures qui, mis à ébullition pendant une période de temps prolongée, peuvent générer des gaz d'hydrocarbures hautement inflammables. Il est également primordial de vérifier l'absence absolue d'eau dans les systèmes. Pour cela, il convient de procéder à un séchage des systèmes avant la mise en marche.

différentes méthodes pour la suppression des hydrocarbures ou de tout produit indésirable présent dans les systèmes.

Lorsque les systèmes ne peuvent être vidangés et que des hydrocarbures ou autres produits y stagnent, il est risqué d'intervenir avec des méthodes traditionnelles employant la chaleur. Notre solution à ce problème est le Foam Inerting ou injection de mousse. Cette méthode consiste à injecter un mélange d'azote et de produit tensio-actif dans le système afin de produire une mousse nitrifiée qui dilue tous les gaz produits par un élément ou par la vidange d'hydrocarbures lorsqu'un travail par chaleur est en cours.

Personnel Sourcing & Supply

Project Management Teams

EPC Engineering Services

FAT / SIT Vendor Selection

Procedure Preparation

Mechanical Installation

Electrical Installation

Mechanical Completion Services

Commissioning Service

Start-up & Operations Services

Maintenance & Shutdown Services

Pre-Commissioning Services

HVWF Flushing

High Pressure Jetting

Gauging & Pigging

Bolt Tensioning Flange Management

Hydrostatic : Pneumatic Testing

CCTV Inspection

Chemical Cleaning

Oil Flushing

System Drying

Critical Valve Testing

Nitrogen Leak Testing

NDT Inspection

www.ener-mex.com

