Cuttings Management Systems and Products: Cuttings Treatment

THERMAL DESORPTION: HAMMERMILL Onshore





The HAMMERMILL desorption process is based on direct mechanical heating through the use of a pounding mill's action on the cuttings. The combination of high mechanical shear and in-situ heat generation creates an environment that promotes flash evaporation of water and hydrocarbons. There is no ignition source in this type of desorption process, hence the term "friction." This technology eliminates the need for large surfaces and complex systems for warming and maintaining a heat-transfer medium, e.g., hot oil, steam or exhaust gas. It is fast, clean and efficient to run.

Due to the operating flexibility of the mechanical approach to desorption, HAMMERMILL systems can be designed as compact units that meet the highest safety and explosion-proofing standards.

The drilling waste must be screened for larger objects by a simple shaker screen on top of the feed hopper. Double piston pumps have proven to be the most reliable method of introducing the material to the process mill. The efficient crushing of the solids results in significant amounts of ultra-fine particles following the vapors from the process chamber. These particles are efficiently removed by a cyclone and a special dust separator prior to the vapors moving through the condensers.

Features

- ATEX approved
- CE marked
- Small footprint
- Low manpower requirements
- Operates very cleanly and quietly
- Ability to operate offshore

Benefits

- Limited process temperature
- Very short retention time required for complete removal of oil in the solids
- Good condition of the recovered oil
- Efficient, intense agitation to break up solid particles, inducing efficient thermal desorption