BaraPhase™ Thermomechanical Cuttings Cleaner (TCC)

MODULAR & SCALABLE THERMAL PROCESSING OPTIONS FOR ENVIRONMENTALLY-SENSITIVE APPLICATIONS

CHALLENGE

Efficiently separating solids and waste from usable fluids can have dramatic impacts on project and fluid performance. As more locations transition to tighter environmental regulations or zero-discharge requirements, the ability to minimize waste volumes and recover or re-use fluids is crucial to meet overall operational goals. On-site treatment of drilling waste and cuttings can help operators limit the waste volumes that require transportation to a final waste disposal facility. Thermal treatment technologies are the most efficient and effective way to reduce overall waste volumes and recover valuable base fluid for re-use in the active mud system. However, offshore and land-based rigs have very different installation requirements, and modular or customizable options are needed to satisfy operational constraints.

OVERVIEW

Halliburton Baroid has developed a range of BaraPhase™ Thermomechanical Cuttings Cleaner (TCC) options to provide thermal treatment of cuttings and waste in both onshore and offshore applications. The BaraPhase™ TCC design can be adjusted based on rig constraints and operational requirements. The friction-based cuttings treatment utilizes rotating hammers to create heat and eliminates the risk of other thermal treatment options that utilize open flames. This helps BaraPhase™ TCCs achieve Zone 2 ratings, so they can be installed next to the shaker house.

BaraPhase™ TCCs can be configured to process three or six tons per hour on land, or six tons per hour offshore. Land-based installations are able to process waste and cuttings from multiple rigs or wells simultaneously, while offshore installations are stackable to help reduce deck space requirements and free up space for other assets. The advanced thermal processing can reduce retained oil-on-cuttings (ROC) below one percent. During processing, oil recovered from the cuttings can be repurposed into the active mud system to help reduce overall material consumption and lower fluid costs. Additionally, the oil recovery and re-use helps maintain fluid properties and contributes to overall fluid performance throughout the drilling project.

FEATURES

- Rotating hammers for friction-based cuttings treatment
- 3 or 6 metric ton per hour average processing capacity
- Can achieve average ROC levels below 1%
- Electric or diesel drive options
- Offshore and onshore options
- Offshore design incorporates smallest footprint on the market
- Zone 2 rated and can be located next to the shaker house
- Land-based TCC can handle cuttings treatment for multiple wells/rigs simultaneously

BENEFITS

- High efficiency recovery and re-use of base oil helps lower overall project costs
- Lower ROC helps reduced waste volumes
- Reduced waste transportation liability
- Treat waste at source
- No flashpoint or base oil degradation
- Modular design with stackable options for offshore unit allows easy installation and reduces deck space requirements
APPLICATIONS

The BaraPhase™ TCC family is designed to provide efficient on-site cuttings treatment and fluid recovery in both land and offshore operations. The unique configurations are ideal for environmentally-sensitive and limited or zero-discharge locations. The friction-based treatment system helps to decrease overall waste volumes, recover and re-use valuable base oil, reduce waste transportation liability, and lower overall project costs.