

Project Profile: Indirect Rotary Kiln for Drilling Mud



PROCESS

The customer came to FEECO looking to improve their existing system for recovering oil from contaminated drilling mud. While effective, their system was incurring significant expense through maintenance and replacement parts.

Drilling mud is used in the extraction of oil and gas to carry debris to the surface of the well, while also keeping the drill bit lubricated and cool. Spent drilling mud is typically disposed of under special regulations, but the customer recovers both hydrocarbons and the mud, selling the hydrocarbons as fuel and reusing the drilling mud.

After conducting test work in <u>batch- and pilot-scale kilns</u> at the FEECO Innovation Center to show proof of process, FEECO was commissioned to supply an <u>indirect</u> rotary kiln (also sometimes called a calciner) for recycling the spent drilling mud.

The project presented unique challenges due to the consistency of the drilling mud and the reactions it goes through under thermal treatment conditions. Through testing, FEECO was able to develop a specialized feeding system, along with a sophisticated system of internals, to prevent sticking and buildup of material in the kiln's interior, allowing for effective processing.

FEECO was chosen for the project because of our extensive testing capabilities, which proved to be an asset to the project.

PROJECT SPECS

Customer:

Proprietary

Equipment Supplied:

Indirect Rotary Kiln (Calciner)

Project Location:

Texas, USA

Industry:

Energy

Material:

Contaminated Drilling Mud

Project Engineer:

FEECO International, Inc.