

Project Profile: Frac Sand Dryer



PROCESS

As a leading supplier of robust thermal processing equipment, FEECO was tasked with engineering a custom replacement <u>sand dryer</u> for Badger Mining Corporation's frac sand processing plant.

The co-current (parallel flow) dryer takes mined sand and reduces the moisture content to the desired amount through an optimized, efficient dryer design.

The dryer included an additional 5' (1.5m) shell length (for a total of 55' (16.8m) in length) to incorporate flame-cut openings for supporting an externally mounted wire mesh trommel screen. The trommel screen aids in assuring that only material of proper particle size distribution moves on to storage/transport.

The discharge breeching also utilized an oversize design to reduce dust load to the scrubber or baghouse. The carbon steel-constructed hood included an access door and sight window.

Additionally, the dryer included forward kicker flights at the inlet and highefficiency flights throughout the remainder of the drum to maximize heat transfer efficiency and ensure an optimal drying solution.

PROJECT SPECS

Customer:

Badger Mining Corporation

Equipment Supplied:

- 8'-6" (2.6m) Dia. x 50' (15.2m) Long
- Rotary Dryer

Project Location:

Wisconsin, USA

Industry:

Mining

Material:

Frac Sand

Project Engineer:

FEECO International, Inc.