



TWMA Vertical Cuttings Dryer



Talk to the specialists

Introduction

The TWMA Vertical Cuttings Dryer set the industry standards in field testing which meets the US EPA standards of Best Available Technology Economically Achievable (BAT) and Best Practical Control Technology Currently Available (BPT) establishing environmental parameters for allowable fluids discard on drill cuttings.

TWMA Vertical Cuttings Dryers are recognised for dramatically reducing the drill solids waste discharge and the maximum recovery of non-aqueous drilling fluids.



Operating Detail

The cutting dryers are screen type cuttings dryers, capable of receiving cuttings from a CT Unit, Auger or Vacuum System. The dryers are capable of treating cuttings at between 25 and 60 tonne per hour depending on the Model.

TWMA will supply, install, manage and operate the Cuttings Dryer to ensure it is operated to its optimum performance to meet and exceed clients expectations.



Operation

- High capacity, continuous-feed dryers have the throughput to keep pace with drilling operations.

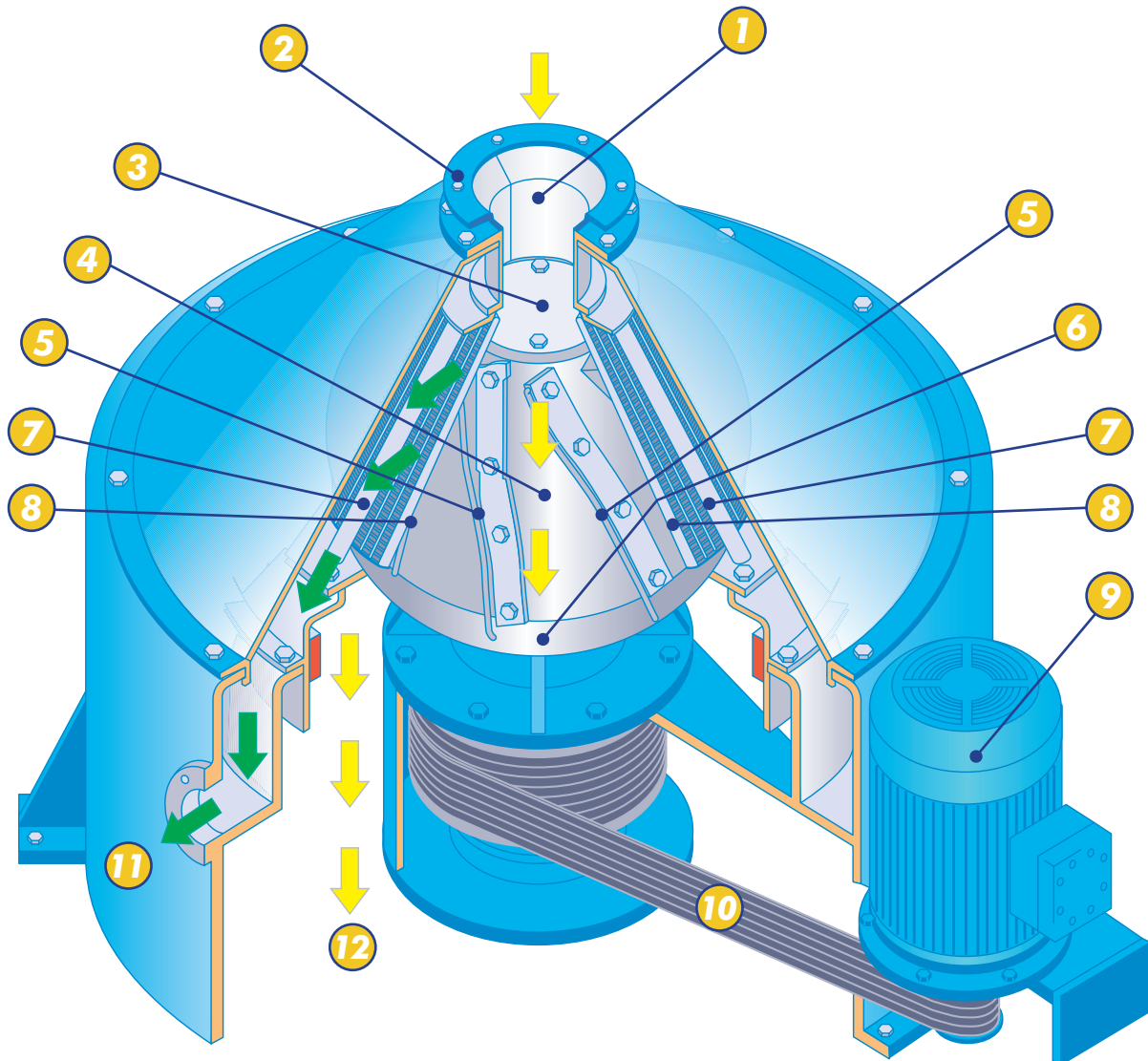
Safety

- Explosion-proof motors are certified for use in Class I, Division I areas, meeting US Coast Guard (USCG) and US Mineral Management Services (MMS) requirements.
- Built-in Walkway on stand allows safe access around the cuttings dryer, meeting USCG, MMS, and OSHA requirements.

Maintenance

- Automatic cuttings dryer shut-off senses low oil pressure, preventing internal and bearing damage.
- Individually balanced components are designed to be interchanged without affecting the high-speed, vibration-free operation.

The continuous flow of material is designed (see diagram below) to achieve optimum liquid/solid separation. Test Results

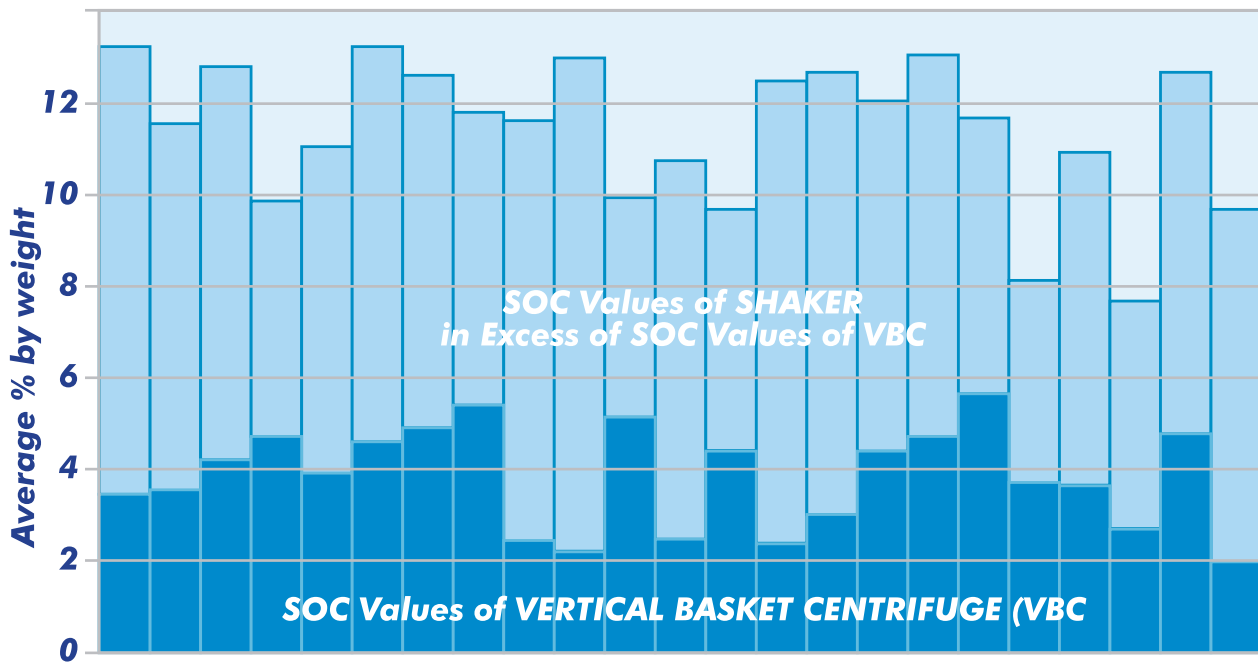


- | | | |
|------------|-----------|-----------------------------|
| ① Feed | ⑤ Flights | ⑨ Motor |
| ② Hopper | ⑥ Rotor | ⑩ Drive Belts |
| ③ Cone Cap | ⑦ Basket | ⑪ Liquid Effluent Discharge |
| ④ Cone | ⑧ Screen | ⑫ Dry Cuttings Discharge |

Performance data from 23 wells revealed that the Synthetic On Cuttings (SOC) was reduced from 11.7% to 4.15% by weight after being processed through our technology. Discharges range from 6% to as low as 1% oil by weight. Based on these averages, a 65% reduction in fluid discharge can be achieved. As referenced in EPA Compliance Cost Methodology for BAT/NSPS Cuttings Dryer Technology.

Synthetic Retention on Cuttings

**Synthetic Oil Cuttings Values
(Average percent by weight)
of Shaker vs. TWMA Vertical Cuttings Dryer**



Each column represents one well from the study*
 * Data from operation of 23 wells as referenced in the Society of Petroleum Engineers SPE #66535 and presented at the SPE/EPA/DOE Exploration & Production Environmental Conference.

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