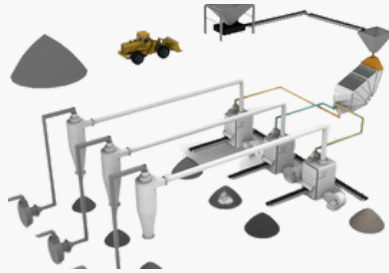


DRY BARITE CONCENTRATION PROCESS

The barite mineral (Barium Sulfate $BaSO_4$) is mainly mined in the United States, China, India, Morocco, and Mexico. Barite is mostly used as an additive for drilling fluids, especially in oil wells for oil production. Due to its high density, the barite can achieve a high gravity pressure in the fluid, which stabilizes the borehole.



Compared to conventional wet processes, creating a valuable product out of smaller particle fractions in dry conditions is now possible. The former amount of disposal material is getting a sellable product. This leads to superfast payback periods for the needed equipment.

EFFICIENT DRY CONCENTRATION

Type of Process	● Dry Barite Concentration
Feed rate	● 100 t/h
Machines & Equipment	● 1 Mogensen Sizer ● 3 GSort Densimetric Tables ● 3 Cyclones & Fans ● 1 Hopper ● 8 Conveyor Belts ● 1 Control System
Particle fractions for dry concentration	● 3 - 25 mm
Water & Wastewater	● No Water needed & no Wastewater generated
Quality requirements iBarite Concentration	● Oil: 4,2 kg/l ● Chemical: 4,35 kg/l ● GSort achieves: 4,44 kg/l

BENEFITS

- Small footprint allows easy & quick installation
- Less environmental footprint: No water is needed, and no wastewater is generated
- Creating valuable products from former disposal material: Fractions of 3 – 25mm can be concentrated by dry processing (impossible in the wet process!)
- Less energy consumption means low operation costs
- Maximum flexibility in case of changing input materials (different grain sizes)
- Low investment costs compared to wet process - Extremely short payback times for 32 t/h dry barite process within ca. 100 Days



A member of the

JOEST group

MOGENSEN