



Materials

Maximum Flexibility and High Throughput for Sand Processing

A fully mobile sand stacker is nearing commissioning, specifically designed for flexible operating conditions and high throughput.

The goal was to create a solution that adapts quickly to changing site requirements while enabling efficient, demand-driven stockpile formation.

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Project Overview

Thanks to its electro-hydraulic drive, the plant is mobile on almost any surface, offering maximum mobility during operation. In addition, supplementary conveyor belts, which can be repositioned using a wheel loader, allow individual adjustment of the stacker's position to meet specific process requirements.

With a slewing radius of approximately 23,000 mm, a telescopic range of around 13,000 mm, and a stacker length of about 45 m, the system achieves efficient stockpile geometry with optimal use of space. The plant is designed for sand handling capacities of up to 400 t/h. Stepless control of the belt speed up to 4.8 m/s via frequency converter ensures smooth and controlled material flow.

The total weight of the plant, including the approximately 23 m long carry-on belt, is around 37 tonnes. Precise control is provided by a robust tracked undercarriage with electro-hydraulic drive and radio remote control—enabling safe, accurate manoeuvring even under challenging operating conditions.

Challenge

A plant was required that combines high throughput with maximum mobility and flexibility. At the same time, precise stockpile formation needed to be possible without complex modifications or permanent installations. Simple operation, robust engineering, and reliable performance under changing conditions were essential.

Solution Mobility meets performance

The fully mobile sand stacker integrates electro-hydraulic drive technology, flexible conveyor solutions, and a powerful stacker design in a single system. The large slewing and telescopic ranges, along with repositionable conveyors, allow the plant to be precisely adapted to site and process requirements. Stepless belt speed control ensures smooth material flow even at high throughput.

Result

A high-performance, flexible, and future-ready solution for sand processing. The fully mobile sand stacker enables efficient stockpile formation, high throughput, and maximum adaptability, while remaining easy to operate and highly reliable.

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Highlights

- **High mobility:** Electro-hydraulic drive for operation on almost any surface
- **Flexible stockpiling:** Large slewing radius, telescopic function, and additional conveyors
- **High throughput:** Up to 400 t/h sand with steplessly adjustable belt speed
- **Precise control:** Tracked undercarriage with radio remote for accurate manoeuvring
- **Robust design:** Powerful, fully mobile plant for continuous operation

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