

Screw Conveyor System

Single-unit or complete powder transport system

APPLICATIONS

Land and offshore drilling

ADVANTAGES

- Precise, cost-efficient tool
- Robust design
- Highly versatile, modular system
- Vertical, horizontal, and diagonal configurations
- Heavy-duty properties
- Sizes to fit all installation areas
- Fixed or variable speed motor drive
- Integrated inspection hatch
- Minimal maintenance requirements

Cameron delivers complete powder transport screw conveyor systems. The most common screw conveyor unit is a single-flight modular conveyor unit that can be configured to run horizontally, vertically, or bidirectionally. Each unit is run by an electrical gear motor.

Using a dosing screw, conveyor speed dosing rate is set automatically as part of the main mixing and dosing sequence. When feeding powder from the sack dosing unit (SDU) to the mud mixing unit, the screw conveyor rate is set automatically as part of the SDU selection and activation sequence.

Each module can be controlled and operated individually or as part of a system. Remote operation is standard.



A typical setup for two mud mixing hoppers.

Specifications

Area classification	Safe zone
Conveyor type	Single-flight helicoid module
Control and monitoring	Local and remote via mud control system (MCS)
Spiral diameter	Typical 8 in [203 mm]
Construction	AISI 316L
Dry weight (each)	Approximately 441 lbm [200 kg]
Screw conveyor motor type	Electrical gear motor
System drive	Fixed and variable speed
Dosing rate	1.76 to 17.61 galUS/min [0.4 to 4 m ³ /h]
Powder conveying capacity	Up to 88 galUS/min [Up to 20 m ³ /h]

Standard Scope of Supply

Single-flight conveyor with
Electrical gear motor
Inspection hatch
Interface to local control panel and MCS
Additional certification (CE and Hazardous Zone I and II)
NORSOK documentation