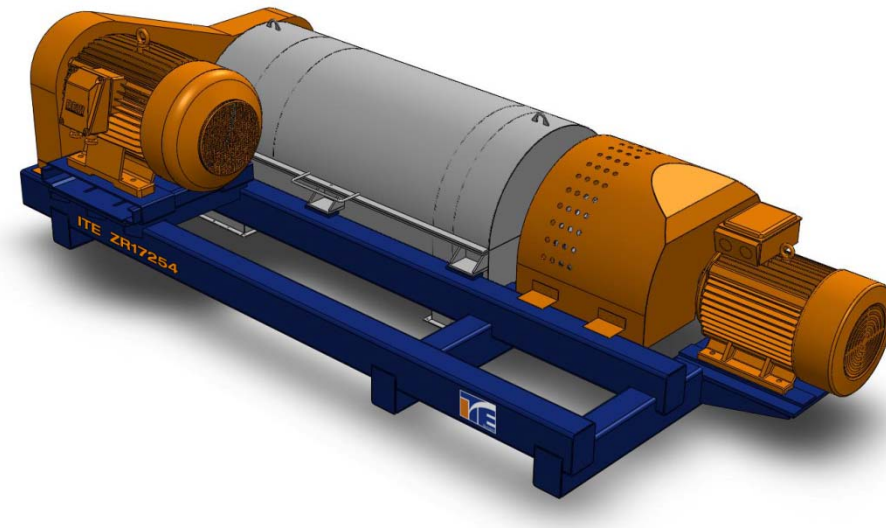


Description

The ZR17254 Decanter with variable speed drive is specially designed to keep pace with the demanding needs of slurry treatment in the tunneling and the specialist foundation engineering business. A new technology has been combined with the established durability and reliability in a product that is fully adjustable and still easy to operate.

The variable speed drive packages allow controlled impact of motor drive power to the centrifuge bowl and to the screw. The ability to vary the speed of the bowl and the screw power unit allows the centrifuge to be operated in the most efficient and productive manner subject to the encountered slurry properties. Critical temperature sensors and vibration switches support the monitoring system and give warning of abnormal operation.

The suspension is fed through a feed pipe located in the center of the rotor into the rotating bowl. The centrifugal force inside of the bowl forms a cylindrical fluid ring in which the solids settle. The deposited solids are conveyed toward the conical end of the bowl by a screw, which rotates at a slightly different speed than the bowl (rotational speed difference), finally extracted from the fluid level inside of the bowl and ejected from the centrifuge as mechanically dewatered solids with low residual moisture. The centrifuge effluent however flows to the other end of the bowl where it exits over an effluent weir.



Properties

- Rugged Decanter design with flattened cone, enhanced solid output diameter and special scroll design for high mineral solid throughput
- High-quality custom-made stainless steel parts and special frame painting for a long lifetime
- Special rotor wear protection with replaceable tungsten carbide tiles due to the high abrasivity of the solids
- Energy-saving, multi-stage speed drive with above-average safety factor for high torques even in case of high differential speed
- Energy-saving design of rotor for lower power consumption and less wear
- Frame design with low balance point for compensation of vibrations and comfortable maintenance

Transport dimensions

Length:	4400 mm
Width:	2150 mm
Height:	1400 mm
Weight:	4900 kg

Technical specification

Capacity*:	50 - 100 m ³ /h
Connection:	DN100
Bowl inner diameter:	536 mm
Bowl length:	1715 mm
Rotational speed (max.):	3150 rpm
G-force:	3000 G
Motor power bowl	110 kW
Motor power screw	45 (55) kW

*Capacity subject to solids loading and slurry properties

Site equipment

To meet the large variety of requirements and to comply with the specific requests of our customers the Decanter ZR17254 can be provided in the following configurations which are suitable for construction site use:

- height adjustable centrifuge stand
- compact 20ft container frame
- enclosed, heat insulated 20ft container

