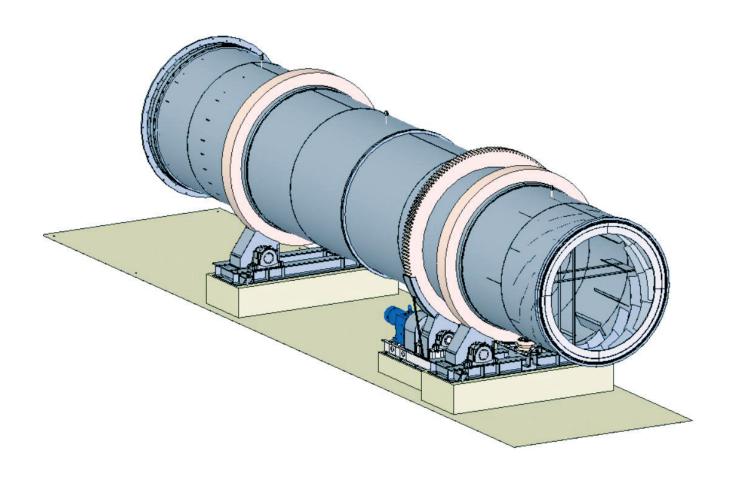


SUGAR BEET PULP DRYER





Purpose

The drum dryer is used for sugar beet pulp drying (of which some of the water was preliminary pressed out) to the level 88-90% of dry matter. For farmers this is the best and also the most convenient way for sugar beet pulp preserving. The thermal energy used in the beet pulp drying lines derives from combustion of different types of fuels. Mainly hot gases from coal and gas furnaces are used for sugar beet pulp drum dryers.

Description of operation

Overpressed pulp is routed to the drum dryer by discharge trough, which is fitted over the end part of the furnace. From discharge trough, the beet pulp is falling on circumferential spiral blades, which are mounted in to the first chamber of a drum and by a rotational movement of the drum are moved further and than fall between the crossed blades. Within the crossed blades, which are an essential part of a drum structure, the continuous traversed tumbling of the beet pulp from blade to blade takes place while moving the pulp in the longitudinal direction by countercurrent purge of hot exhaust gas. Moisture contained in pulp in contact with the flue gas turns into steam and together with containing some pulp dust gases are discharged outside by the redyer's outlet nozzle. The beet pulp from the discharge chamber is scraped out to auger and ejected outside. The drum is driven by electrical drive through a set of gears. Thanks to the frequency converter the correct starting and smooth control of the cardinal parameters of the drum is ensured.

Technical features

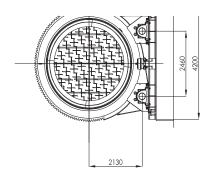
The following parameters of sugar beet pulp dyer are assumed:

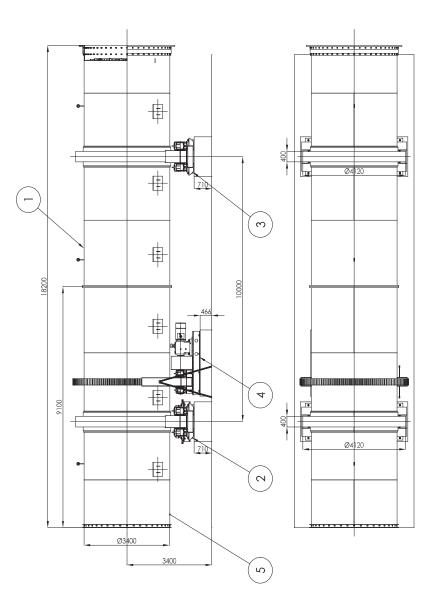
- rated sugar beet pulp production 6,5 ton/h.
- initial moisture content of the pulp 80,0%
- inlet gas temperature 800 1000 °C
- the final moisture content of the pulp 10%
- outlet gas temperature 120°C

ТҮР	Rotary Drum Dryer Ø3400x18200
Capacity	6,25 t/h
Internal diameter of drum	3 400 mm
Length of drum	18 200 mm
The frequency of rotation of the drum	1,43/1,92/2,85 min-1
Driving power	30 kW
Power supply	400 V
The weight of the empty drum	94 000 kg
The weight of full drum	123 000 kg



The sugar beet pulp dryer – dimensions.











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