

Material Handling

RACO Electric Actuator in sugar mill place

The applications in a sugar mill place high demands on reliability and availability of the production installations. Trouble-free, 3-shift operation has to be assured with unfailing reliability during the limited period of the sugar beet harvest.

The incoming sugar beets are transported by a 200 m conveyor belt to the transfer station for further processing. 7 electric cylinder actuators in control stations ensure true-run belt operation irrespective of the given load.

The electric cylinder actuators are fitted with a ball-screw drive to achieve a high positioning accuracy and that the given position is maintained with absolute certainty. In spite of the distance between the individual electric cylinder actuators, installation and commissioning, installation is nevertheless simple and cost effective because it is only necessary to establish the required electrical connections. Efficient operation is assured on account of a low electric driving power and low power consumption due to switched operation.

Furthermore, environment-friendly operation is also assured because there are no leakage losses or freezing problems as can be the case with auxiliary-based systems.

Technical data of the electric cylinder:

Type: K1K4
Thrust: $F = 5 \text{ kN}$
Stroke: $h = 300 \text{ mm}$
Speed: $v = 20 \text{ mm/s}$
Drive: three-phase motor 3 x 230/400 V,
50 Hz retaining „L“
6 limit switches

Type: K1K6
Thrust: $F = 15 \text{ kN}$
Stroke: $h = 200 \text{ mm}$
Speed: $v = 20 \text{ mm/s}$
Drive: three-phase motor 3 x 230/400 V,
50 Hz retaining „L“
6 limit switches

