

# Material Handling

## Subject: Salt loading station

Railway wagons are loaded in a salt loading station and then shunted by a wagon marshalling installation. The wagons are marshalled by a shunting carriage that is moved by ropes between the railway tracks, thereby eliminating the need for a shunting engine. Movement of the shunting carriage is centrally controlled by stored program control.

Mechanical coupling of the shunting carriage with the wagons is by way of lever linkage system that is actuated by a RACO type T1F4 electric actuator. Adaptation at the push rod is by way of a clevis while the actuator is mounted by a trunnion so that it can move within corresponding bearing feet. On account of the high level of ambient dirt, extra corrosion protection has been provided by epoxy-resin paint, a guiding cap with a double seal and an ice/dirt stripper and a pusher rod enclosed by expansion bellows.



The compact construction - achieved in spite of a robust design for heavy-duty service - ensures that the electric actuator can be mounted underneath the wagons. Apart from the power supply connections, there are no other controlling media supply lines to operate the electric actuator. The danger of media-induced functional failures and environmental pollution by leakage is thereby excluded. Increased corrosion protection ensures outdoor operation throughout the year and has proved its worth in spite of tough ambient conditions, particularly on account of salt and moisture. Trouble-free operation is therefore assured without any extra maintenance work.

Due to the outstanding product features and excellent practical experience of many years of trouble-free operation, the client has once again selected RACO type T1F4 electric actuators for the forthcoming extension of the marshalling installation.



### Technical data of the electric actuator:

F = 3.5 kN  
V = 40 mm/s  
S = 300 mm  
3 x 400 V, 50 Hz, P = 0.55 kW

