

Handling Technology

RACO intelligent positioning and regulating cylinders for tracking height

Automated processes require flexible adjustment to parts of different sizes or various stacking heights. Actuators that track the machine, tool or a conveyor belt with appropriate precision in real time and simply are necessary for this purpose. Typical applications are labelling machines that have to track packages of different heights, demagnetizing devices for objects of different heights, or tracking the height of a swivelling conveyor belt on buffer stackers of different heights in de-stacking devices.

An external sensory system (ultrasonic spacing sensors, light grilles, etc.) scans the heights of objects and transmits them directly via a 4-20 mA signal as a positional control value to the positional and regulating cylinders in all of these cases. The integrated positioning control unit in the RACO actuator responds immediately to a change in the positioning control value and it travels to the new target position: this enables the heights to be tracked simply and locally without any extra effort by the control unit in the switch cabinet. The adjusting accuracy within a range of millimetres is more than adequate in this instance for all cases.



The combination of an asynchronous three-phase motor with an integrated frequency converter and an incremental path-measuring system with the positional control unit, enables the intelligent RACO positioning and regulating cylinders to offer an economical solution in comparison with servomotors. The drive's parameters can be set according to the customer's requirements, by means of the configured Windows software that is supplied. Pre-programmed input functions enable the electronic drive to be operated via 4 digital and 2 analogue inputs. The optional Profibus with a DP interface is available alternatively.

