Smooth tower crane operation with the ACS850 machinery drives

You consider your customer’s needs when designing your tower cranes. There’s a demand for efficiency and safety, and the movements need to be precise and smooth. You know that everything counts when selecting crane control.

ACS850 drive’s slew motion operation principle

- **Slew parameters**
- **Slew algorithm**
- **Optimized reference**
- **DTC**
- **Encoder**
- **Motor**

- **Trolley**
  Precise positioning of the hook along the jib

- **Hoist**
  Lifting and lowering the load safely without any jerk on the ropes
The ACS850 crane control program comes standard with built-in slew, hoist and trolley movement control.

ACS850 machinery drives with built-in crane control software

- The built-in crane control software can handle all of the crane's movements, reducing your need for other external devices or additional software
- ACS850 drives come standard with an integrated safe torque off (STO) safety function with up to SIL 3 level. The STO function fulfills IEC 61508, EN 62061 and EN ISO 13849-1 standards.
- You can configure up to four sets of crane parameter settings in each drive
- Side-by-side installation helps you reduce the size of crane cabinets
- Support all common crane I/O and fieldbusses
- A removable memory unit stores the application firmware with complete drive settings for easy drive recommissioning
- Wherever your crane is installed, ABB’s global service and support network is always near

Slew
Smooth jib rotation without oscillation

Extend the control and safety with PLCs

- Our AC500 range of PLCs gives you freedom and flexibility to develop crane solutions when complex control or extensive inputs and outputs are needed
- AC500-S safety PLC offers a flexible platform for crane safety with its comprehensive selection of trigonometric functions and structured text programming

ACS850 product family is available with power range from 0.37 to 560 kW and voltages of 230, 400 and 500 V.
Contact us

For more information please contact your local ABB representative or visit:

www.abb.com/drives/cranes
www.abb.com/drivespartners