LOW VOLTAGE AC DRIVES

Smooth tower crane operation with ACS880 drives

The need for efficient and safe operation imposes strict demands on tower crane design. All the movements must be precise and smooth. That’s why the crane control has to be selected carefully. Because everything counts.

ACS880 drive’s slew motion operation principle

Trolley
Precise positioning of the hook along the jib

Hoist
Lifting and lowering the load safely without any jerking of the ropes
ACS880 drives include built-in tower crane control software for trolley, hoist and slew movement

- The drives can handle all of the crane’s movements, reducing your need for other external devices or additional software.
- ACS880 drives come with an integrated safe torque off (STO) safety function as standard, up to SIL 3. The STO function fulfills the requirements of the IEC 61508, EN 62061 and EN ISO 13849-1 standards.
- You can configure up to four sets of crane parameter settings in each drive.
- Crane functionality can be customized with Adaptive programming.
- Dynamic braking and regenerative options available.
- A removable memory unit stores the application firmware with complete drive settings for easy drive recommissioning.
- Side-by-side installation helps you reduce the size of crane cabinets.
- Support all common crane I/O and fieldbuses.
- Wherever your crane is installed, ABB’s global service and support network is always near.

Drive-based safety
Safe torque off is built-in as standard in the drive. An optional FSO-21 safety functions module provides additional safety functions achieving a safety level up to SIL 3 or PL e.

Support with feedback encoder
If the application requires safe encoder feedback, it can be established with the safety-certified FSE-31 pulse encoder interface module.

PLC based safety
The ACS500-S safety PLC offers a flexible platform for extending crane safety even further.

Custom crane solutions with a PLC
Our ACS500 range of PLCs gives you freedom to develop crane solutions when complex control or extensive inputs and outputs are needed.
For more information, please contact your local ABB representative or visit

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