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LOW VOLTAGE AC DRIVES

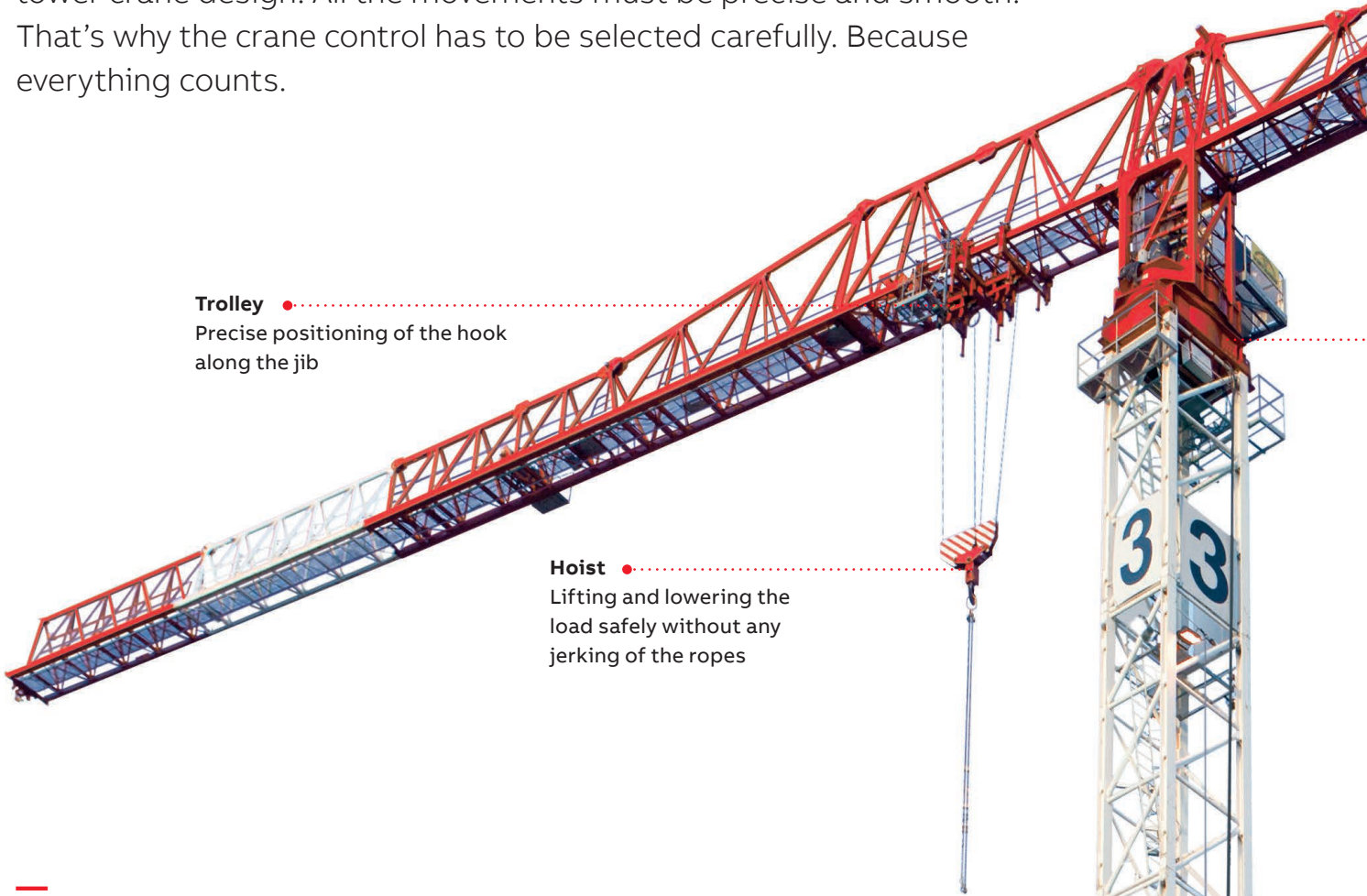
# Smooth tower crane operation with ACS880 drives



# Efficiency. Speed. Performance. Safety.

## Everything counts.

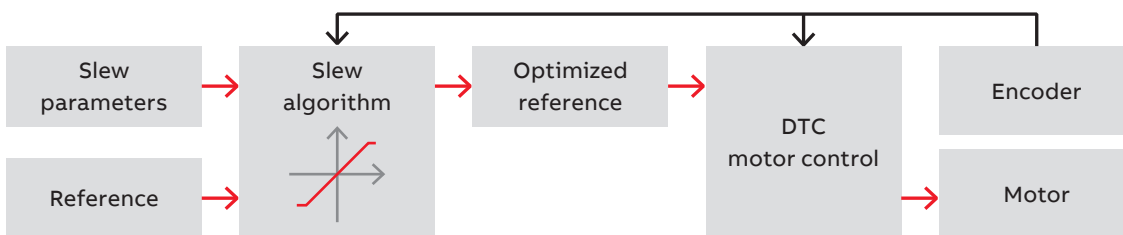
The need for efficient and safe operation imposes strict demands on tower crane design. All the movements must be precise and smooth. That's why the crane control has to be selected carefully. Because everything counts.



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

**Hoist** ●  
Lifting and lowering the load safely without any jerking of the ropes

ACS880 drive's slew motion operation principle





### ● Slew

Smooth jib rotation without oscillation



The ACS880 product family is available in a power range from 0.55 to 5600 kW and at voltages of 230, 400, 500 and 690 V. Enclosure class options are IP20, IP21 and IP55. Tower crane control software ordering code is +N5650.

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 AC500-S safety PLC offers a flexible platform for extending crane safety even further.

### ● Custom crane solutions with a PLC

Our AC500 range of PLCs gives you freedom to develop crane solutions when complex control or extensive inputs and outputs are needed.



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

[www.abb.com/drives/cranes](http://www.abb.com/drives/cranes)

[www.abb.com/drivespartners](http://www.abb.com/drivespartners)

