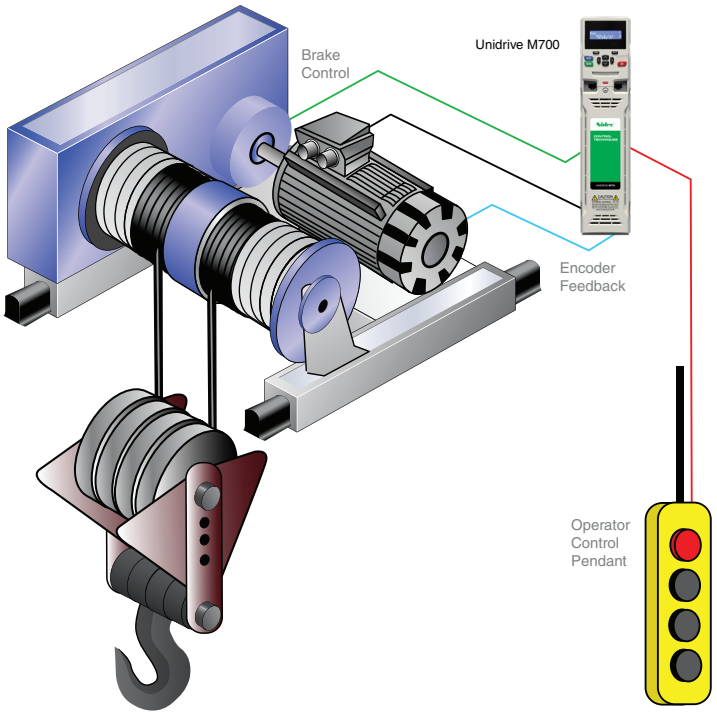
Nidec All for dreams

solutions

Hoists

Application Overview

Hoists are used to raise and lower materials in construction sites, transportation and shipping and several manufacturing industries. Drive reliability and hoist specific control features such as brake control are essential. Control Techniques offers AC and DC drives along with cost and space saving plug-in control options that include onboard PLCs, multiple feedback types, network connectivity and expandable I/O to meet the challenges of hoist control applications.



Application Requirements

Control & Connectivity

- No roll back on starting or stopping
- Auto tune without uncoupling load
- Load sharing capability
- Precise positioning
- Preset speeds with fine control mode
- Extended speed range

Protection

- Torque proving
- Over speed protection
- Phase loss detection
- Encoder feedback loss
- Brake monitoring

Minimize Operating Costs

- Ease of installation
- Energy savings with overhauling loads – regenerative braking/common DC bus, and Active Front End full regen solutions

Control Techniques' Solutions

VFDs, DC & Packaged drives

- Available up to 4,200 HP
- Global voltage ratings (115 V, 208-240 V, 380-480 V, 575 V, 690 V)
- Global standards UL, cUL, CE, C-Tick, ISO9002
- Compatible with standard NEMA B motors
- NEMA1 with UL Type 1 conduit box options
- On-board PLC functionality and advanced machine control module options
- Expandable I/O option module
- All major communication connectivity options (PROFIBUS, PROFINET, EtherNet/IP, EtherCAT, DeviceNet, and more)
- Unidrive M701 comes standard with Modbus RTU, Unidrive M700 and Unidrive M702 come standard with Ethernet (EtherNet/IP & Modbus TCP)
- Industry leading warranties

CONTROL TECHNIQUES™

Hoist Solutions

Control Techniques' Performance Advantages

Control*

- AC control (open loop vector, closed loop vector, rotor flux** and servo control modes), plus DC control
- Brake control
- Motorized potentiometer control
- 8 preset speeds standard – expandable with PLC option
- Built-in dynamic braking transistors
- Regenerative braking option
- Common DC bus connections
- Active Front End full regen solutions

Total System Protection

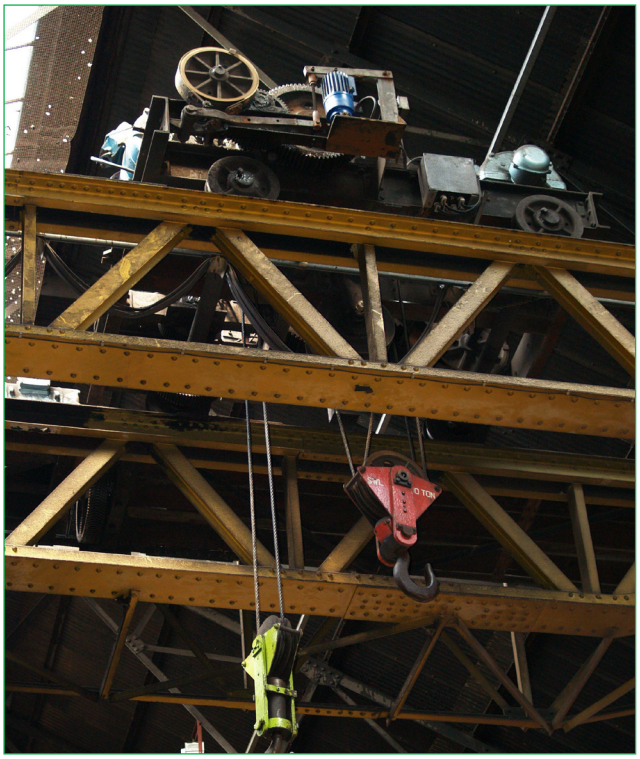
- Safe torque off system protection
- Torque proving
- S-ramp soft start and stop
- Over speed protection
- Automatic switch to RFC** mode on encoder loss
- Brake slip detection
- Intelligent thermal motor protection
- Multi level password protection
- Built-in diagnostics

Maximum uptime

- Very high quality—Product reliability
- Easy setup
- Smartcard or PC tool parameter backup
- Rotational or static auto tune (No need to uncouple motor)
- Last 10 trips logged

* Features vary by model range and options fitted. Contact your local sales representative for assistance in product selection.

** Rotor Flux Control (encoderless closed loop vector) provides exceptional speed and torque control.



Unidrive M700 Series AC/Servo Drives

Mentor MP DC Drives

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