Cranes & Hoists
Lifting your bottom line

Crane & Hoist:

Horsepower: ¼ - 2,000
Savings: Up to 10% (Depends on duty cycle.)

Crane & Hoist control achieves new levels of speed and smooth operation using Control Techniques AC and DC drives. Cranes & hoists raise and lower materials in construction, metals, paper, transportation, and many other industries within the manufacturing sector. The application demands drive reliability and hoist specific control features such as brake control and 115 Volt inputs & outputs.

Cranes and hoists traditionally used large DC contactors for energizing motors and magnets. This resulted in rough start-stop control, jerking of the load, spectacular contactor arcing, and high maintenance requirements on equipment. Today’s AC and DC drives provide smooth S-ramping and faster run speeds to achieve superior speed, control, and accuracy.

When a crane or hoist is lowering it’s load, the motor acts like a generator and sends power back to the drive. This energy was traditionally dissipated with a large brake or sent to resistors and transformed to heat. DC drives reduce energy loss by regenerating the energy back to the power line. AC drives improve regeneration efficiency to 97% at unity power factor. This becomes significant energy savings on a busy crane. The generated energy can either be shared over a common DC bus to other drives or regenerated back to the power line.

It is easy to underestimate the value of smoothly accelerating and decelerating the load. This demands less energy, reduces stress on the crane and hoist machinery, and improves safety. Risk of damage to the load is significantly reduced.
Crane & Hoist Solutions

Productivity is improved as operators are able to more quickly and accurately position the system to pick up loads and lower them to the preferred location.

Control Techniques can evaluate your application and help you decide which variable speed solution is best for your situation.

Control Techniques provides metering in the drive to monitor the amount of energy being used. Available kWh energy, run-time, and running energy cost meters help document energy and cost savings. Powerful networking options enable you to share this information with your PLC or other systems.

Even greater cost savings can be achieved using our unique, embedded PLC functionality to manage local I/O. Most crane & hoist control can be implemented within the drive to further simplify the installation.

Contact Control Techniques to help lower energy costs in your facility.

World Class Products & Support

- Assistance estimating energy savings
- Worldwide Application & Field Service Network
- 24/7 support line 1-800-893-2321
- Custom software and panel configurations

Drives plus...

DC Drives to 5,000 hp
AC Drives to 2,900 hp