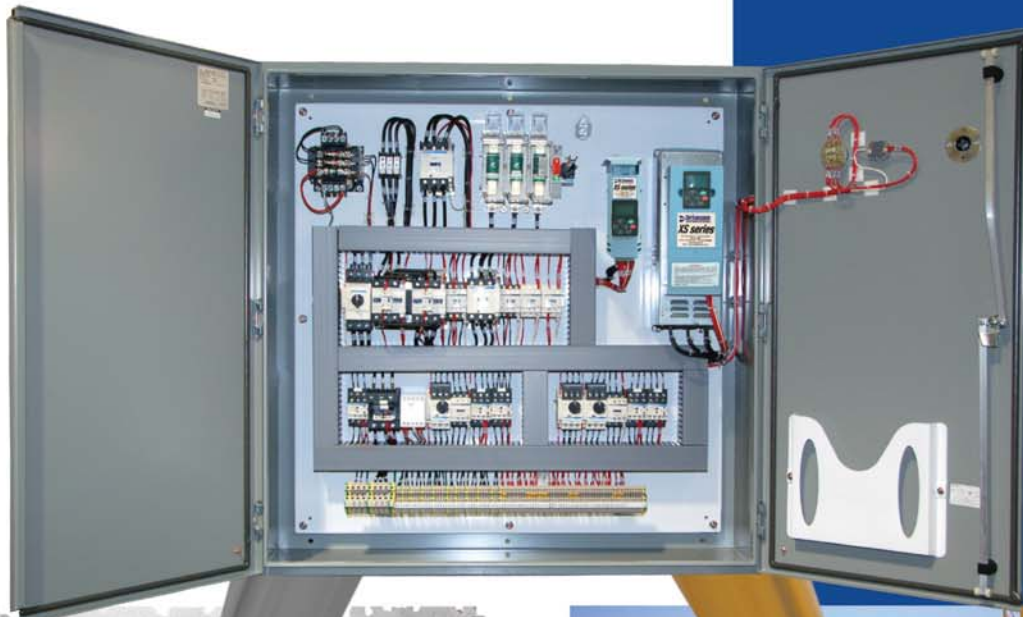




Crane Controls Modernization Program



DID YOU KNOW THAT YOUR OLD CRANES ARE RENEWABLE RESOURCES?

Drivecon Crane Controls Modernization Programs are designed and packaged to retrofit any crane with leading edge controls technology...

Driving The Future

AC Variable Frequency Drives
Engineered Systems
Master Switches
Pendant Stations
Radio / Wireless Remote Controls
Variable Frequency Drive Accessories

www.drivecon.com

ARE YOUR EXISTING CRANES UP TO THE TASK?

Today's competitive business environment is forcing everyone to increase production capabilities while reducing overall costs.

1. Generation Capacity Increases – Larger turbines usually mean more demanding lifts.
2. Shorter Time For Maintenance Shut-downs – Most new turbine maintenance and installations are executed under the shortest shut-down conditions possible. The manipulation of larger heavier delicate components demand the most reliable crane performance.
3. High Labor Efficiency and Safety – High labor efficiency are paramount for quick repairs. Accurate crane positioning provide faster and safer load manipulation in this demanding environment.



A TYPICAL CHALLENGE:

Handling and Installing Turbine Rotor Assemblies in Limited Clearance Area.

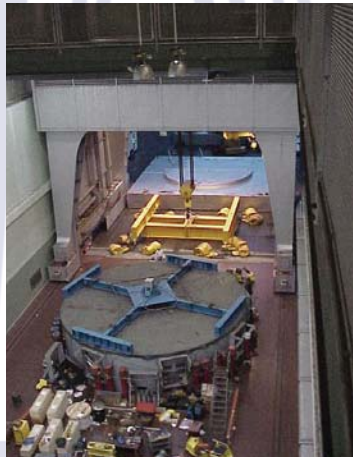
OUR SOLUTION:

Drivecon's Variable Frequency Drives (VFDs), the XT SERIES equipped with Closed Loop Vector Control, provide the ultimate in infinitely variable speed control for extreme spotting precision.

By having a precision encoder mounted on the motor shafts, it is possible to control the hoist, trolley and bridge motor speeds with an accuracy of 0.01% of the nominal motor speeds. Full motor torque is also present even at this slow speed. Programmable smooth accelerations and decelerations eliminate the need for "jogging" to obtain fine positioning. Consequently, the impact deflection of the crane bridge girders is reduced/eliminated preventing the hazardous "load bouncing" effect. Our VFDs monitor vital information such as motor temperature, brake opening delay time, motor speed and many other functions crucial for the success of the lift.

THE RESULTS:

Quicker turbine installation using a reliable and precise crane.



CRANE CONTROLS MODERNIZATION PROGRAMS

Many of today's cranes are structurally and mechanically sound but lack adequate controls. These cranes have many years of life remaining but unreliable controls and hard to source parts make them a costly nuisance to maintain.

Through a complete electrical upgrade many of today's cranes are finding new life, improving productivity, reliability and operator safety while reducing maintenance costs.

For example, outdated wound rotor motors that require constant inspection and maintenance can be reworked and VFD controlled to obtain a more reliable performance.

Drivecon's Crane Specific Variable Frequency Drives are the heart of our controls. Smooth starts and stops reduce brake wear, mechanical and structural impacts, and deliver the most accurate crane positioning. Through our exclusive VFD Speed Supervision Feature, costly and inefficient mechanical load brakes are eliminated.



SOLUTIONS INCLUDE:

- Turn-key AC crane control modernization packages include: application analysis through design, build, start-up and training, motors, festoon systems, pendants, radio remote systems, AC drives, anti-collision systems, encoders and accessories.
- Drivecon Advanced Load Control:
 - Drivecon Sway Control (DSC)
 - DSC plus Zoning
 - DSC plus Zoning plus Auto Positioning
- Cab-to-radio and cab-to-floor controlled systems
- Hoist Monitoring Unit (HMU) for monitoring such conditions as 2 hoist load summing, overload, slack rope, hoisting limits, tare load, load display, 2 hoist leveling and much more
- Hazardous Location Controls
- Multiple hoist synchronization controls for load leveling and crane synchronization
- Grab and bucket controls