



### HIGHLIGHTS

- PHC-R magnetic particle clutches are designed for tension rewind, soft start applications
- EB electro brakes are pre-packaged and require no maintenance

### Application Success Story



## PHC-R Series Clutch & EB Series Brake Wire Rewinder

### PROBLEM

A New York-based wire manufacturer needed to improve its control on a wire rewinding system. New wire is wound onto large spools that will be thousands of feet of material (depending on the size of the wire on each spool). Since customers can order specific lengths of wire, a rewinder system is needed to transfer wire from the large spool to a smaller spool to meet the customer's specific need.

As the wire unwinds, it travels into a festoon storage system that controls material flow. A clutch at the rewinding spool adjusts tension and speed as wire accumulates on the rewind roll. Speed is reduced as the material builds up so that a constant linear speed on the wire is maintained.

When the set amount of wire has accumulated on the rewind reel the tension clutch disengages and a brake engages to bring the reel to a stop and holds it while the operator seals up and removes the loaded rewind reel for shipment to the customer. A new, empty rewind spool is then installed for fulfilling the next customer order.

### SOLUTION

A Warner Electric PHC-R Series magnetic particle clutch was installed to provide smooth variable torque and slip between the constant speed motor and the variable speed rewind roll. PHC-R models are specifically designed for tension rewind, soft start applications. Units feature a hollow center for shaft mounting and are self-cooling with an integral fan.

A Warner Electric EB Series electro brake was also incorporated to provide rapid stopping and holding functionality. Pre-packaged EB brakes are designed for maximum heat dissipation and require no maintenance. The Model EB-375 selected for this application features 16 ft.lbs. of static torque and a max. speed of 5000 RPM.

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