



Background:

Ward Leonard designed, engineered and built the original Sliding Block 2-speed 75/25HP motor for the Navy's T-AKE vessel program, one of over 20 services supplied to this dry cargo and ammunitions support ship.

As part of the Navy's Heavy UNREP System, it was determined that the Sliding Block motor required an upgrade to be rated for higher loads. To accomplish this, the Navy's designated marine architectural firm contacted Ward Leonard directly.

Challenge:

Increase motor horsepower by 20% to enable it to lift the transfer head with the applied load of 45,000 pounds, at an angle of 30° below the horizontal – *without increasing the motor shaft height.*

If the shaft height was in any way affected, the entire drive train alignment and adjacent components would also be affected – resulting in unexpected, and unbudgeted, expenses and schedule delays.

Solution:

Ward Leonard redesigned the motor to 90/30HP and increased the motor core length to achieve the desired higher power rating – thereby maintaining the shaft height at the previous specification throughout the drive train.

Additional:

As a result of this solution, Ward Leonard will be supplying all new upgrade motors for the T-AKE vessels as they come in for Periodic Maintenance Availabilities (PMA).

Solutions for the T-AKE Heavy UNREP System

Redesigned, Higher Capacity Motors That Maintain The Original System Layout

For over 115 years, Ward Leonard has partnered with the Department of Defense to produce innovative motor and control solutions that meet the toughest mil-spec requirements. For more information or to speak with one of our engineers, visit us at www.wardleonard.com.



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