

Thern

Product Application

Bulk Handling



Give Me Shelter: Thern is the Answer for Grain Industry



Temporary grain storage bins like the one shown above are covered with a heavy tarp to protect grain from the elements. Thern winches are used to raise and lower the tarp when the bin is filled and emptied.

It was a cover-up operation. Literally. LeMar Industries, one of America's premiere grain equipment providers, were growing their Midwest operations and required a cost-effective and efficient means to raise and lower the tarps for their temporary grain storage towers. With sufficient manpower, the process could be managed, but they knew there was an easier way.



The winches are mounted directly above the tarp on an access platform.

Their search for a solution led them to the answer: Thern winches.

LeMar Industries has been in the grain equipment business since 1982, providing an array of specialized equipment, including catwalks, towers, conveyers and overhead rail protection. Recent demand focused on their temporary grain towers, of which there are now over 50 in use across the Midwest. One of the main features of LeMar's temporary unit is that it offers effective protection from the elements. This is achieved by covering the towers with large tarps 200 to 300 feet in diameter.

The system developed in conjunction with Thern utilizes a four-winch setup, each with a 3000 lb. capacity, which is remotely controlled and allows for precision control over how quickly the tarps are raised and lowered during tower operations. This is a key consideration as the rate at which the tarps are raised and lowered coincides with the rate that the grain is moved





in and out of the grain tower. The winches are located at the corners of the grain distribution box located near the top of the tower with the custom-designed control console located separately at a central position.

LeMar selected 4WS3M series power winches to fulfill the needs of their application. In addition to load capacity, this winch series offers high durability, dependability and an attractive set of standard features including brake motors, enclosed machine cut gearing and flange-style ball bearings. For LeMar, these winches proved to be an exceptional choice for the application.



Thern winches mounted on the perimeter of a tower.

Before implementing Thern winches, the process of raising the tarps required five workers using hand winches located around the perimeter of the tower. The results after switching to Thern electric winches were impressive! The Thern winches reduced the number of necessary workers from five to two. “We are glad we found a cost effective solution for our system”, said LeMar Sales Rep Larry Stayner.

The success of this custom design resulted in LeMar Industries purchasing Thern winches for all of their tower units, making Thern a standard product feature. The LeMar project is yet another excellent showcase for the efficiency, dependability and versatility of Thern winches.

APPLICATION DETAILS

Lifting or pulling:	Lifting
Line pull required:	3,000 lbs
Line speed required:	15 fpm
Travel distance of load:	100 feet
Power source:	460/3/60
Installation requirements:	Ceiling Mounted
Environment:	Outdoors
Frequency of operation:	Intermittent

