## SPXFLOW

## Minimum Replacement for Maximum Reliability Lightnin CMX



Lightnin's <u>Conversion Mixer eXchange</u> (CMX) program is a drive end replacement for failing or obsolete competitor geardrives with a current Lightnin Mixer Geardrive. Each unit is custom-engineered as a drop-in replacement to the existing installation that reuses the motor, sealing device and in-tank components.

## SITUATION:

A Midwest industrial customer contacted SPX FLOW about a competitor gearbox installation that they were conducting excessive maintenance. The maintenance department advised that they were conducting gearbox rebuilds or replacement annually, stripping valuable dollars and man-hours from their budget.

## **SOLUTION:**

With over 90 years' experience, SPX FLOW has reviewed the entire application from process to mechanical and considered the lowest total cost of ownership. From a process perspective the input power from the mixer, and the impeller type that was installed quickly proved to provide adequate mixing as it applied to the customer's defined mixing objective.

The factory trained representative selected a robust Lightnin gearbox based upon torque rating and Lightnin service factor. Fluid forces generated by the impeller were calculated and checked against the gearbox rating. Field dimensions were acquired for mounting plate dimensions, however, connection to the in tank Rigid-Removable coupling could not be acquired during mixer operation.

Lightnin executed a project schedule that suited the user's outage window. A custom mounting plate was engineered to accommodate a drop-in replacement. After shutdown, the failing gearbox was sent to a Certified Lightnin Service Center to compile dimensions on the coupling. The coupling was promptly machined to mate with the in tank rigid coupling to ensure a secure connection. The upper installed in the gearbox and the complete package returned to the customer with ample time for reinstallation and commissioning checks.

Unit is online and customers' process is back in operation. CMXs can be completed in a timeframe to suit the user needs, as quickly as a few days with proper access.

