**Eaton’s Hydre-MAC radial piston motor keeps Tolko’s Kraft paper operation running smoothly**

**Location:** Manitoba, Canada

**Challenge:** Eaton and distributor Wajax were called on to supply new motors to operate Tolko’s twin-feed roll press that matched the form, fit and function of the 16-year-old motors being replaced.

**Solution:** A direct drop-in replacement for the Hagglunds Marathon MB400, the Hydre-MAC™ motors allowed Tolko to easily switch out older equipment for newer, more reliable machinery.

**Results:** The Hydre-MAC low-speed, high torque motor and its custom encoder adapter enabled Tolko to save thousands in conversion costs.

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**Tolko needed a direct-replacement motor quickly, and Eaton was there every step of the way to ensure the Hydre-MAC RCD1025 motor maintained the machinery’s maximum performance.**

*Lyle G. Meyer*

Hydraulics Business

Eaton

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**Background**

Tolko Industries Ltd. is a leading global manufacturer and marketer of a broad range of forest products. Founded in 1956, Tolko has grown from a small sawmill in Lavington, British Columbia, to a company diversified by geography and product. Tolko manufactures lumber, unbleached kraft papers, panel products, co-products, biomass power, and a growing number of specialty wood products in its operations across Western Canada.

**Challenge**

Seeking to avoid potential plant downtime, Tolko looked for replacements for two Hagglunds Marathon MB400 motors that had been operating on a twin-feed roll press paper machine for more than 15 years. The company did not have any on-site spare motors in the event of machine failure, and wanted a new motor with improved performance to maximize roll press uptime.

Looking to use the functioning old motors as backups, Tolko needed a replacement that would replicate the existing motors with little or no conversion work required.

Tolko struggled to find a replacement motor with the appropriate configurations for its machinery.

Tolko came to Eaton’s distributor Wajax Corporation seeking replacement motors to match the form, fit and function of the Marathon MB400 – and when they learned about Eaton’s easy, drop-in solution – the new Hydre-MAC radial piston motor – a tough task became an easy fix.
**Solution**
Eaton's Hydre-MAC radial piston motor was the perfect fit for Tolko's proactive replacement of the motors on their twin-feed roll press machines. A direct drop-in replacement for the Hagglunds Marathon MB400, the Hydre-MAC motors allowed Tolko to easily switch out older equipment for newer, more reliable machinery. Featuring dual porting options, the motors did not require any modifications or conversion costs.

To ensure functionality without additional costs, Eaton designed a custom encoder adapter so the Hydre-MAC motors could immediately perform with the roll press' existing encoder.

The Hydre-MAC RCD1025 motor utilizes a constant flow cam profile and 18 pistons to deliver 144 power strokes per revolution to deliver Tolko class-leading, low-speed performance. The Hydre-MAC motor generates less heat and experiences less wear and tear, and all of its load bearing surfaces are serviceable, including the stainless steel shaft seal wear ring, piston seal and bearing pad. Additionally, the motor's increased number of pistons allow the motors to provide smoother operation speeds at lower repetitions per minute (RPMs).

**Result**
By quickly supplying and installing a direct replacement to the Hagglunds Marathon motor, Eaton and Wajax helped Tolko save thousands in conversion costs.

Downtime was a cost Tolko would rather avoid, so a direct replacement to our previous motor was needed quickly. Eaton was there with Tolko every step of the way to ensure the Hydre-MAC RCD1025 motor maintained maximum machine performance. The Hydre-MAC radial piston motor uses all of the same shaft and mounting hardware as our previous Hagglunds Marathon motor, which made installation quick and easy – completed in just one day – and helped Tolko save significantly in switching costs.

Additionally, the motor’s ability to maintain low speed – the twin-feed roll press operates at 3 RPMs – helps Tolko manufacture a more consistent product.

"The direct replacement solution from Eaton is helping keep our customer moving forward, without downtime caused by aging equipment," said Kevin Mills, Sales Manager, Wajax Industrial Components. "The Hydre-MAC motors are currently in operation and Tolko is quite satisfied with their performance and ease of operation."