

# GET UP 'N GO

*Hydra-Slide equipment combines to complete changeout at fertilizer production plant.*

**M**yshak Crane & Rigging (MCR) utilized its entire fleet of Hydra-Slide hydraulic skidding equipment to changeout a horizontal converter at a fertilizer production plant in Alberta, Canada. The old and new converters weighed 514 tonnes and 520 tonnes respectively.

MCR, a Canada-based crane and specialized rigging company, was originally engaged in the project as a consultant, as the client considered its options at a confined site where congestion and ground pressure limitations were the main challenges.

Troy Burton, specialized rigging field manager at MCR, said: "Our group is what we consider a specialized rigging team that doesn't focus on only large complex projects but the small ones also. We try to excel in coming up with the best way to achieve our customers' goals in the most economical and safe way. In this case, the client wanted to replace the converter as efficiently as possible with minimal disturbance to the surrounding piping and other equipment. We discussed a number of options, including changing it out with a replica or increasing the size [of the converter]."

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Eventually, it was decided to replace it with a bigger unit, which would require MCR to explore the breadth of its rigging equipment fleet that includes a 300-ton capacity heavy-track HT300 and a 350-ton capacity low profile LP350 hydraulic skidding systems, complete with over 60m (197 ft.) of combined track. Hydra-Slide JLS250 jacking load shoes and a Hydra-Pac synchronous 10,000-psi hydraulic unit to power six double-acting hydraulic cylinders were also required.

Burton explained that MCR first received the new converter and accompanying basket from rail and offloaded them using the HT300 skid system for storage until the shutdown was underway. It was then required to load out and transport an old, spare basket from site to make room for the installation of the new, larger one. Then MCR loaded and transported the new converter basket from storage to the plant to be filled with catalyst prior to installation once the shells were switched out.

The old converter shell complete with basket and catalyst weighed 514,500kg and was 2.7m (9 ft.) in diameter and 32m (105 ft.) long. It was jacked up and skidded horizontally in one piece more than 50m (164 ft.) to an open area using the JLS250 skid shoes and HT300 skid track where it was then loaded onto a self-propelled modular transporter (SPMT).

The new converter shell weighed 377,000kg without the basket and 520,200kg with it, and measured 3m (10 ft.) in diameter and 35m (115 ft.) in length. It was then skidded the same distance into position over the foundations and lowered onto the anchor bolts.

The six JLS250 jacking load shoes were hydraulically connected in a three-point suspension to lift and slide the converters on the HT300 track. The shoes are a universal design that work with both heavy-track HT300 or HT500 skidding systems. They can be connected hydraulically with any number of other shoes increasing the total system capacity while maintaining equal load support and weight distribution.



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**Robert Young, director of operations at Hydra-Slide (left), with the Myshak Crane & Rigging team.**



**Six JLS250 shoes are connected hydraulically, increasing the total skid system capacity to 900 tons, while maintaining equal load support and weight distribution across all jacking points.**