

The following appeared in the “Sudbury Mining Solutions Journal” in June 2008.

Suppliers team up for shiploader upgrade

The recent upgrading of a shiploader at Lafarge North America’s Marblehead, Ohio limestone quarry by six Sudbury suppliers is a good example of the synergies inherent in the region’s mining cluster, claims Paul Ballard of the Fluid Power House.

Several of the suppliers had worked together two years ago to upgrade the Lafarge shiploader at Meldrum Bay, Ontario, so when a similar upgrade was planned for the Marblehead operation on Lake Erie, Lafarge knew who to call.

The shiploader, a material handling installation extending out over the lake, conveys limestone to a boom, which swings out and telescopes to evenly distribute the material in the holds. The upgrade called for refitting the boom with hydraulic controls for more precise maneuverability and reduced wear.

Lafarge asked BDI Canada, a supplier of bearings and gearboxes, to bid on the job, but the work entailed several different skill sets and required a team effort. BDI’s Ed Giroux contacted Ballard and, together, they recruited Minewise Technology, B&D Manufacturing, Sumitomo Drive Technologies and HIM (Hydraulic Installation and Maintenance).

Suppliers in the Sudbury mining cluster are used to working together on projects for the region’s big mining companies and know each other’s reputations, explained Ballard.

“We know what we’re each capable of doing, so there’s a level of trust. When you get that kind of comfort level, it’s easy to bring together a group of sub-suppliers.”

The Fluid Power House supplied the hydraulic controls, Minewise interfaced the electrical controls to the hydraulics, Sumitomo supplied the gearbox drives, B&D performed the mechanical installation and HIM installed the hydraulics. BDI served as project manager.

“The biggest challenge was deciding the scope of each component, so we all knew what we were responsible for and there were no surprises,” said Ballard.

The bids for each component of the work were tallied up and the contract was awarded in December. Installation was targeted for February and everything was completed and operational on schedule at the end of March for the start of the shipping season. Crews working from a barge fitted with a crane battled eight-foot waves and bone-chilling winds in the two weeks allotted for installation.

The hydraulic controls allow for a smoother start-up and maneuvering of the boom, said Ballard.

“The previous system was a little jerky because it was electric motor-driven. When you started it, there was a surge because electric motors don’t soft start very well under that kind of load. The boom could be out 200 feet, so when you shock it, it stresses everything and it’s hard on the welds.

“Maintenance is a big issue (in the quarrying business). If the thing goes down when a ship’s docking, the cost is huge. They can’t afford the downtime.”

www.bdi-canada.com

www.fluidpowerhouse.com

www.bdmfg.com

www.smcyclo.com

www.minewise.net