

GGB delivers bearings for China's Xiangjiaba hydropower plant



GGB Hydro Group's Edward Chen (holding flashlight) and William Barreto (kneeling right) assist in the assembly of the first wicket gate for China's new Xiangjiaba hydropower plant.

GGB Bearing Technology, formerly Glacier Garlock Bearings, recently delivered its specially designed, filament-wound bearings for assembly of the first wicket gate for the first of four 812 MW Francis turbines that will drive China's Xiangjiaba hydropower plant. The bearings were specified by Tianjin Alstom Hydro Co. Ltd., based on GGB's successful bid for another of the company's projects, the 2,000 MW Ahai hydropower plant.

Designed specifically for hydropower applications, GGB's HPM™ and HPF™ filament-wound bearings combine the self-lubricating properties of PTFE with the strength and stability of a glass-fiber-filled epoxy resin backing. The greaseless, maintenance-free bearings provide high load capacities, excellent shock and edge loading resistance, low friction and wear, long service life, low water absorption, and excellent corrosion resistance.

The HPM bearings are being used in Xiangjiaba's wicket gates, as well as the servomotors and linkages. HPF™ filament-wound segments are being used for the regulating rings and thrust washers.

The new plant's first turbine will begin generating power in 2012. When it becomes fully operational in 2015, Xiangjiaba will be China's third-largest hydropower plant after the Three Gorges project and the Xiluodu plant.