

**Marine Structures****Reference Details:**

Owner Québec,
Québec, Canada +++
General Contractor
Les Entreprises Kiewit
Ltée, Boisbriand,
Québec, Canada +++

Consulting Engineers
Tecsult Inc., Montreal,
Québec, Canada +++

Subcontractor Acier
AGF Inc., Longueuil,
Québec, Canada

DSI Units DSI Canada,
Eastern Division,
Gormley, Ontario,
Canada

DSI Services Supply of
85 tons of DYWIDAG
THREADBAR® Grade
150 St835/1030,
accessories, expertise
and equipment

**DYWIDAG THREADBAR® secure Grand-Mère Generating Station****New Grand-Mère Generating Station, Saint-Maurice river valley, Québec, Canada**

The Grand-Mère hydroelectric power station is located in the city of Grand-Mère on the Saint-Maurice River. Built in 1916, it's the third oldest of Hydro-Québec stations generating more than 150 megawatts.

To rehabilitate the station and increase its production, Hydro-Québec decided to build another one next to it, once the new setup is completed by the end of 2004, the old station will cease to function. The spillway structures were also replaced.

Operating underneath a 24.3m water head, the new generating station will be equipped with three turbine alternator groups and will generate 220 MW, an increase of 70MW from the existing one.

The beams supporting the trunnions of the radial gates in both the spillway and regulator structures were reinforced and post-tensioned longitudinally and transversally using DYWIDAG THREADBAR® tendons, Grade 150 /St835/1030, Ø32 and 36 mm.

Truss frames complete with welded steel pipes, anchor plates and grouting setup were manufactured to house the bars.

DSI's expertise ensured the implementation of specific details to provide a trouble free installation, stressing and grouting executed by Acier AGF specialist contractors.

The Grand-Mère Generating Station is another project along with many other hydroelectric power station installations throughout the world that have benefited from the DSI advantage.