Ideal Welders constructs Olympic bobsled track in record time

Four years before the start of the 2010 Winter Olympics, Vancouver-based Ideal Welders started thinking of a better way to build the massive 1.7 km bobsled and luge track known as the Whistler Sliding Centre in nearby Whistler, British Columbia. To keep the surface frozen, the track design contained 28 separate cooling systems that required a total of 110 km of pressure piping ranging from 1-inch to 16-inches in diameter and over 27,000 pressurized pipe welds.

Rather than follow the norm of bending, fabricating and welding the cooling system onsite, Ideal Welders moved the majority of the work to their fabrication facility in Vancouver, avoiding weather delays and achieving greater efficiency. They divided the track into 130 modules that could be fabricated in the shop and trucked to the site for assembly.

However, transporting the sections posed a critical issue. The 50-foot modules of 80 to 100 pipes that had been shaped into the track’s profile were fragile and could be damaged during shipping and installation. Ideal Welders found a solution by contacting Plasti-Fab, who produced sections of expanded polystyrene (EPS) foam shaped to fit each individual section of track and protect it during shipping and handling.

“We were pleased to discover Plasti-Fab’s expanded polystyrene modules that could be cut to fit any section. They allowed the modules to be shipped around the world to Vancouver without damage,” said Jurgen Lohmann, Director of Operations at Ideal Welders.

Innovative packing and crating concepts developed by Plasti-Fab allowed more efficient transport of the completed modules from the shop to the site without damage,” said Al Humber, Manager of Business Development at Ideal Welders. “The product was used repeatedly over the course of the project and withstood the rigors of a construction site extremely well.”

Using innovative modular construction reduced the project schedule by 25 percent and saved approximately 20 percent in construction costs, earning Ideal Welders the Gold Medal of Appreciation from the Vancouver Olympic Committee.

“It was great to be involved with this project and contribute in part to the Olympic Games,” said Plasti-Fab Sales Representative Sean McBeth. “Plasti-Fab offers a number of custom lightweight EPS product solutions, but this is one of the most unique and sizable projects we’ve been a part of.”