How can you control the glass forehearth temperature for the production of bottles and glass containers?

Situation Analysis

From the furnace, molten glass flows into one or more forehearths and is cut by a shearing blade to form a cylinder of glass called a gob. The gob is dropped into molds where the initial forming is done by either a blowing process with compressed air, or a pressing process using a plunger and mold. Maintaining the proper temperature in the forehearth is critical to insure that the molten glass is in the proper homogenous condition when it reaches the exit, particularly important for proper gob viscosity. A temperature difference of 1 K causes a viscosity deviation of 1%, so it is critical to locate temperature measurement sensors along the forehearth to monitor the molten glass temperature and control the forehearth zone temperatures.
Solution and Improvements

The Modline® 6, is available with fiber cable lengths up to 22m (72ft). The system includes a mounting bracket, quick connect air purge and inconel sight tube.

Ircon Product

Modline 6, 62 Series

Benefits

- Viscosity control
- Fuel savings
- Reduced scrap from glass breakage
- Improved production rates