



Thermocouple Cast Iron Protection Tubes

ALUMINIUM PROCESS

Primary Casthouse

APPLICATION

Melting Furnace

PREVIOUS SITUATION

The use of thermocouple protection tubes (TCPT) enables temperature to be measured continuously in harsh and demanding environments as a key part of remote monitoring and process control in melting furnaces. Aluminium casthouse operations are continuously searching for the longest lasting TCPT to reduce maintenance.

PYROTEK SOLUTION

Pyrotek has developed a proprietary manufacturing method for cast iron protection tubes that increases tube dimensional consistency, wall thickness, and life. Some key features are:

- Uniform wall thickness
- High-quality coating
- Lighter weight

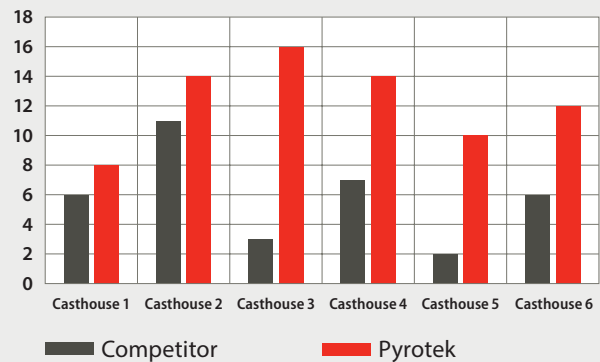
PERFORMANCE AND PROCESS IMPROVEMENTS

Field evaluations at several casthouses showed that the Pyrotek cast iron TCPT average double the life of the competitor's protection tube. With longer life, these casthouses experienced a reduction in operating costs, less frequent change-outs, continuous temperature monitoring, and better melting temperature control.



Pyrotek cast iron thermocouple protection tube in a furnace.

Evaluations at Customer Sites Performance Life, in Days



Performance	Competitor TCPT	Pyrotek TCPT
Average Life	5.8 days	12.3 days