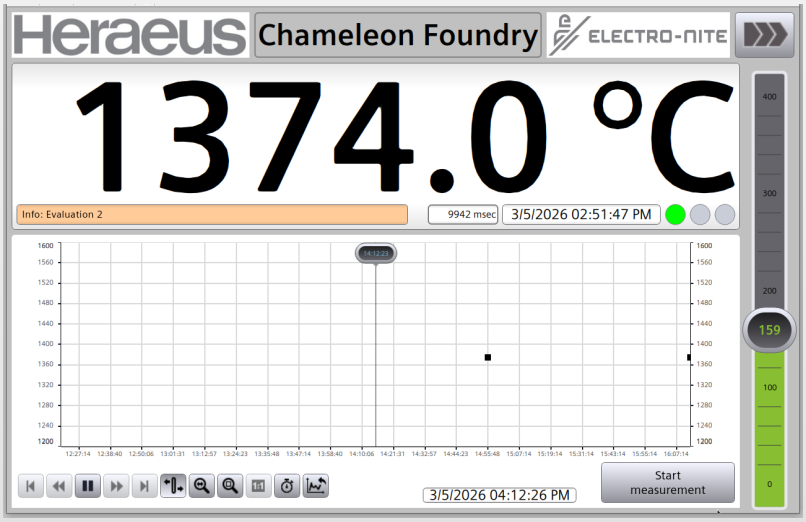






Chameleon Foundry

A New Era in Automated Temperature Measurement for Iron Foundries

Chameleon Foundry
Consistent Measurement.
Better Process Control.
Safer Operations.

UP TO 6,000 MEASUREMENTS
from a single 25 kg coil

Introduction

Chameleon Foundry is a fully automated fibre-optic temperature measurement system developed for iron foundries. It enables fast, reliable temperature measurement of liquid iron in applications such as pouring streams and ladles, while reducing operator involvement and improving process consistency.

Benefits

Automated Measurement:
- Consistent measurements independent of operator practice
- Automatic or on-demand measurement
- Integration with production processes

Improved Process Control
- Earlier detection of temperature deviations
- Improved process stability and casting consistency
- Potential measurement of every mould where the application allows

Improved Safety
- Reduces the need for operators to approach molten metal
- Minimizes exposure to radiant heat and metal splash

Reduced Consumables & Environmental Impact
- Up to 6,000 measurements from one coil
- Significantly reduces disposable thermocouple usage, packaging, storage and waste

Standard features

Designed for Foundry Environments
- A robust feeder and control cabinet
- Armored interface cables

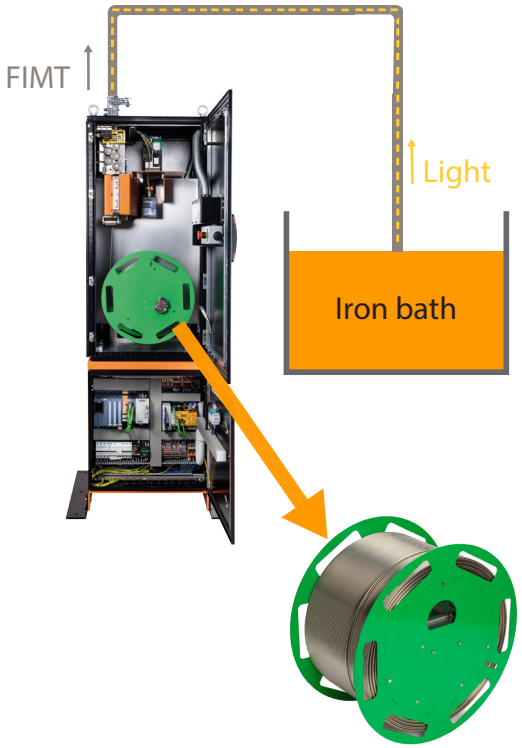
High Visibility controls and Displays
Remote HMI for on-demand measurement and system monitoring

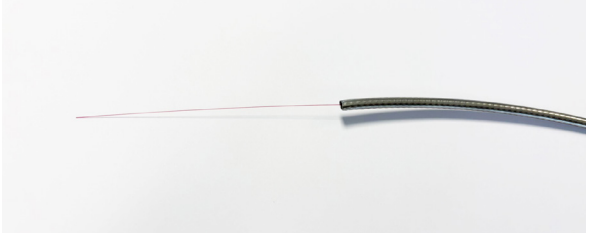
Reliable Measurement Technology
Each coil is calibrated and tracked by Heraeus Electro-Nite for consistent accuracy

How it works

Chameleon Foundry uses FIMT (Fibre in Metal Tube) technology. During measurement, the fibre is automatically fed into the liquid iron. Light emitted by the molten metal is transmitted through the fibre to the Pyrobox, where it is converted into a temperature signal. The result is calculated and displayed automatically.

The measurement can be initiated on demand or automatically integrated into the production process.





FIMT

The system

The system consists of two primary components: the feeder unit and the control unit. An integrated HMI on the instrument provides user interaction and system monitoring.

Feeder Unit

The feeder unit houses all the mechanical parts needed for measurement. Key components include the coil holder, feeder, and straightener.

The feeder securely grips and feeds the wire into the molten iron. The straightener helps ensure that the FIMT is guided into the molten iron in a controlled and consistent manner.

Control Unit

The control unit, located below the feeder unit, contains the electronics to operate the system.

System Interface

The HMI is integrated into the instrument, allowing operators to control the system, monitor its status and view measured temperatures directly at the unit.

Optional Remote Display

For installations where measurement results need to be visible away from the instrument, optional remote displays can show temperature readings at a distance. Its large, bright LED digits are easy to read from wide viewing angles, and its rugged design is suited to demanding foundry environments.



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