

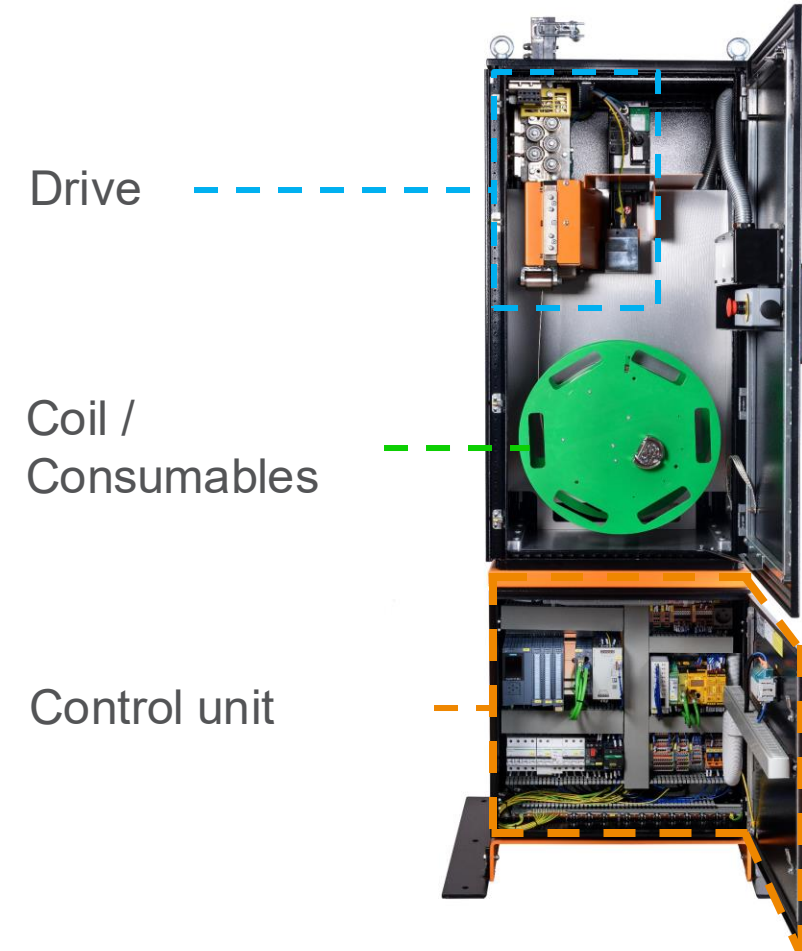
## CHAMELEON® FOUNDRY

PRECISE TEMPERATURE MEASUREMENT FOR  
FOUNDRIES

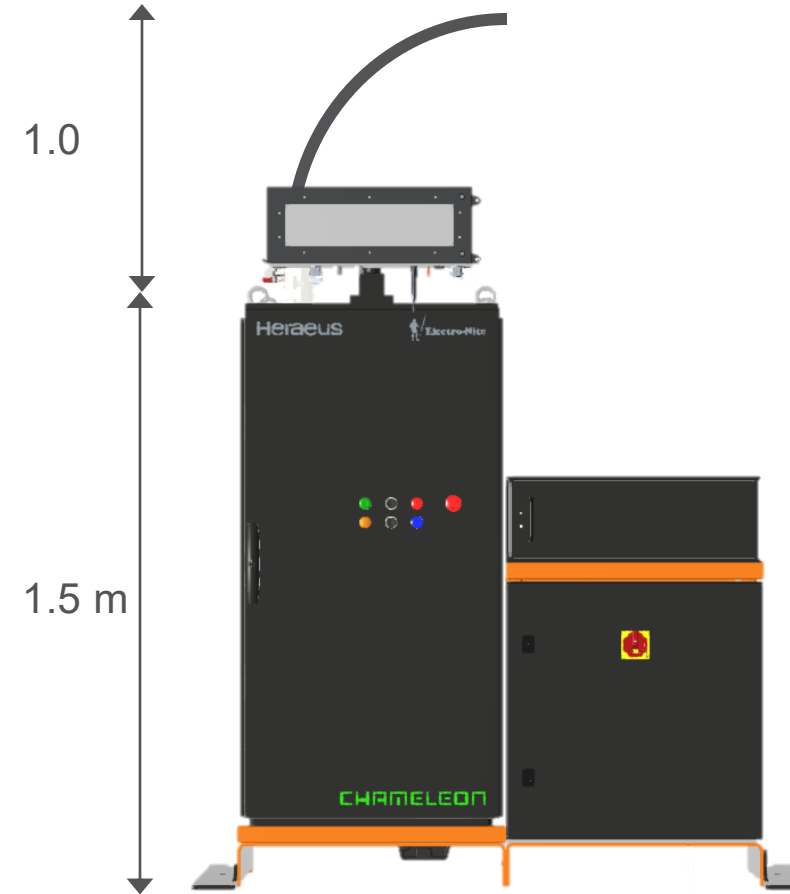
October 2025, Thomas Glawe, Heraeus Electro-Nite GmbH



## CHAMELEON® FOUNDRY – DESIGN

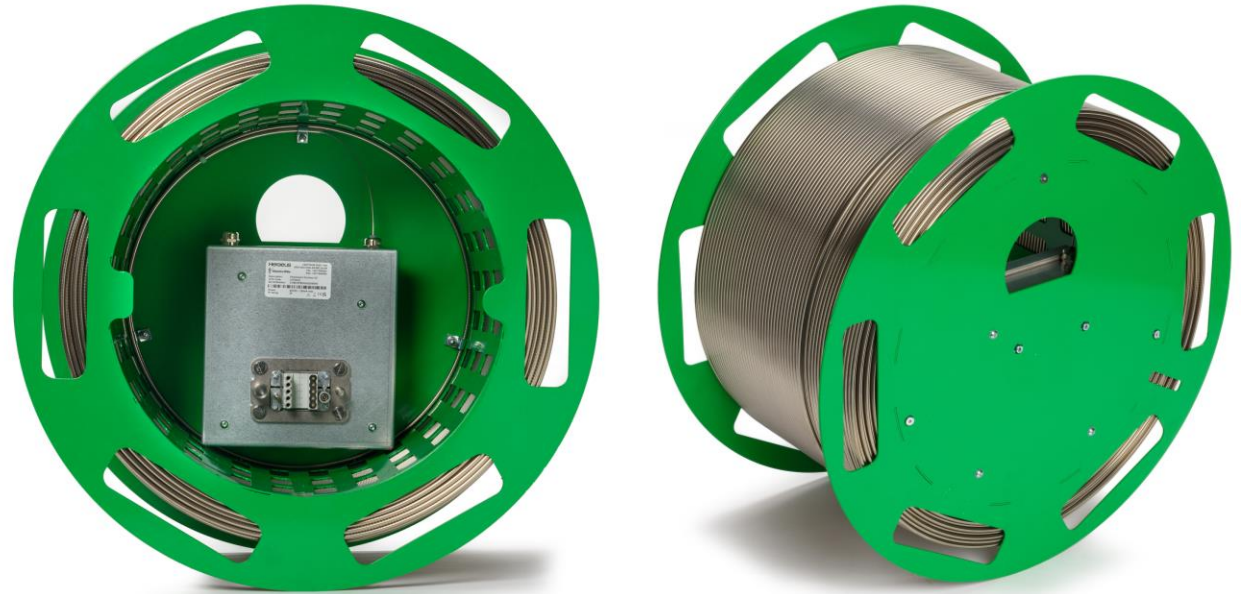


# CHAMELEON® FOUNDRY – DESIGN



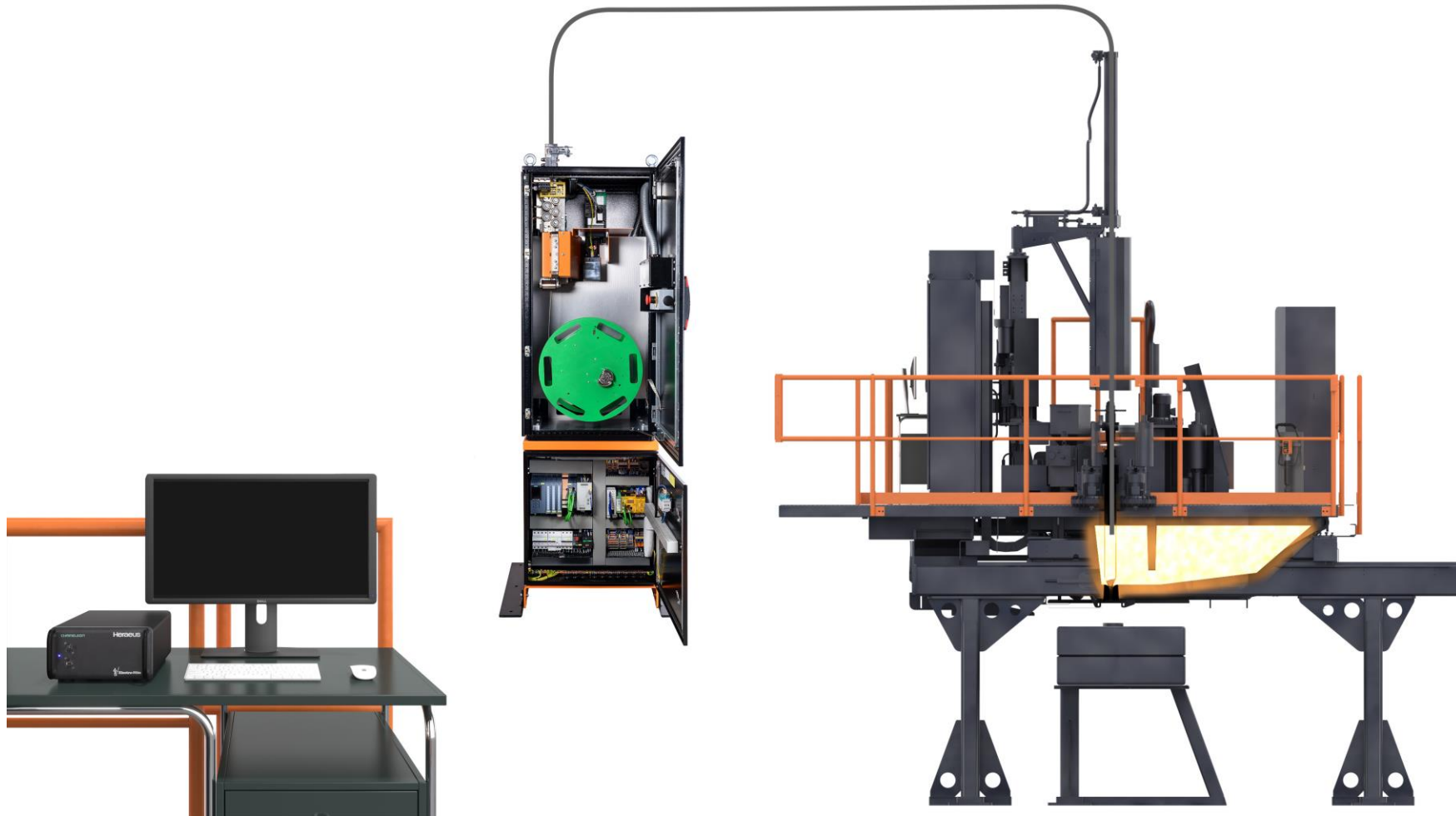
## CHAMELEON® FOUNDRY – COIL / CONSUMABLES

- Weight: 25 kg
- FIMT (fibre in metal tube)
  - Ø 4.3 mm
  - 600 m per coil
- Pyro box
  - Calibration by Heraeus Electro-Nite
  - Plug-and-measure system
  - Reusable up to 10 times
- Consumption
  - Approx. 10 cm per measurement (depending on the application)

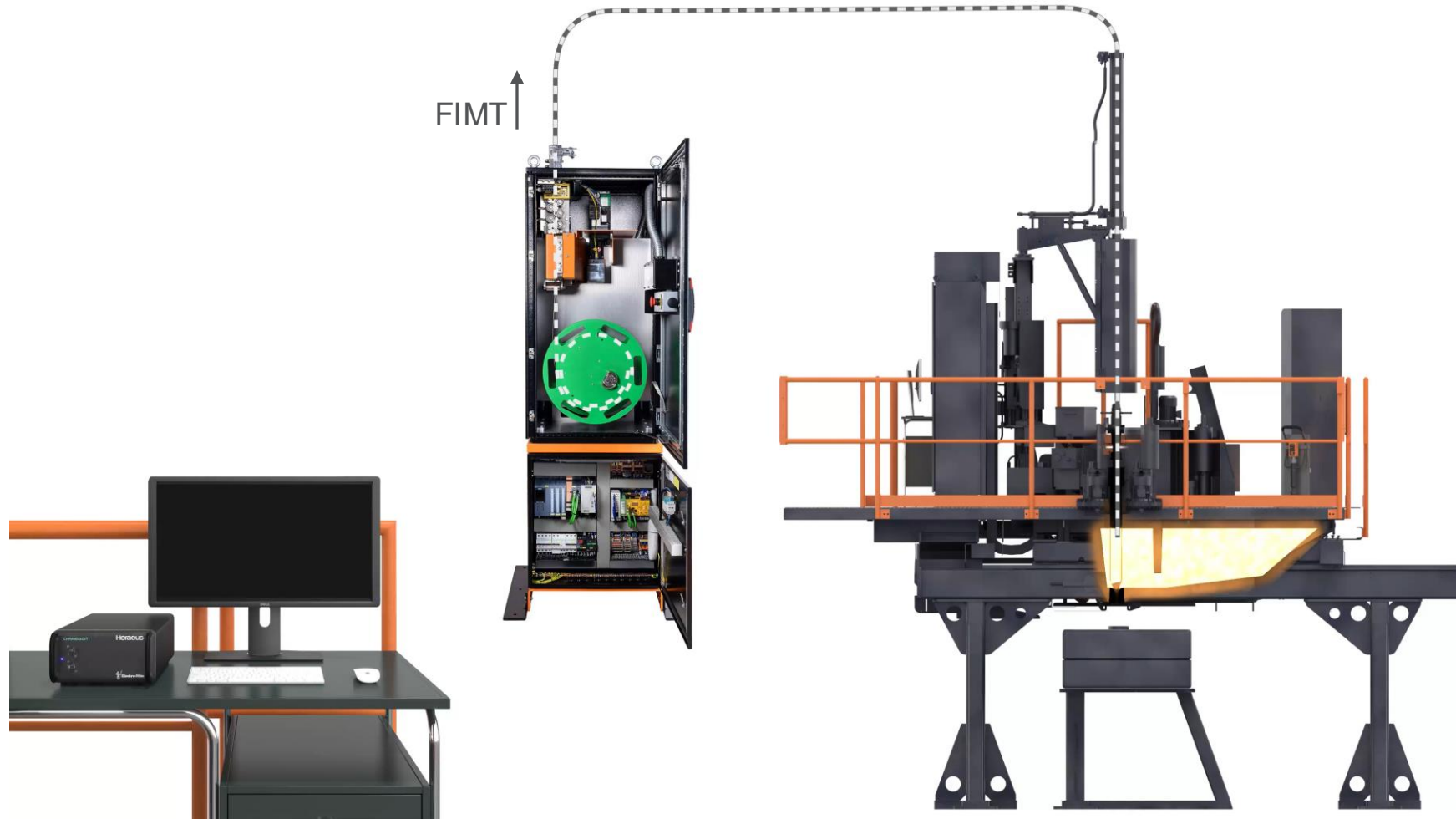




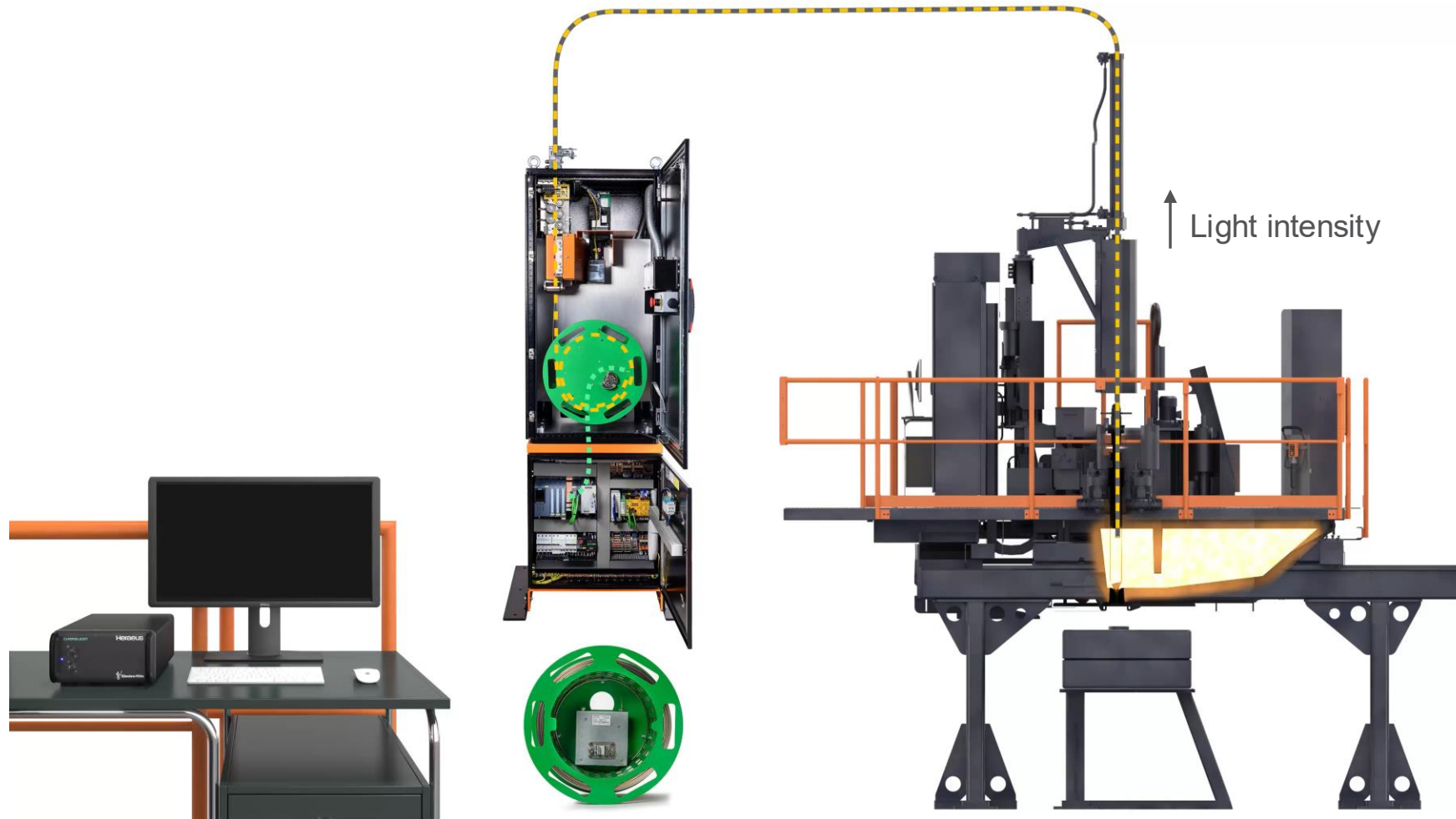
# CHAMELEON® FOUNDRY – WORKING PRINCIPLE



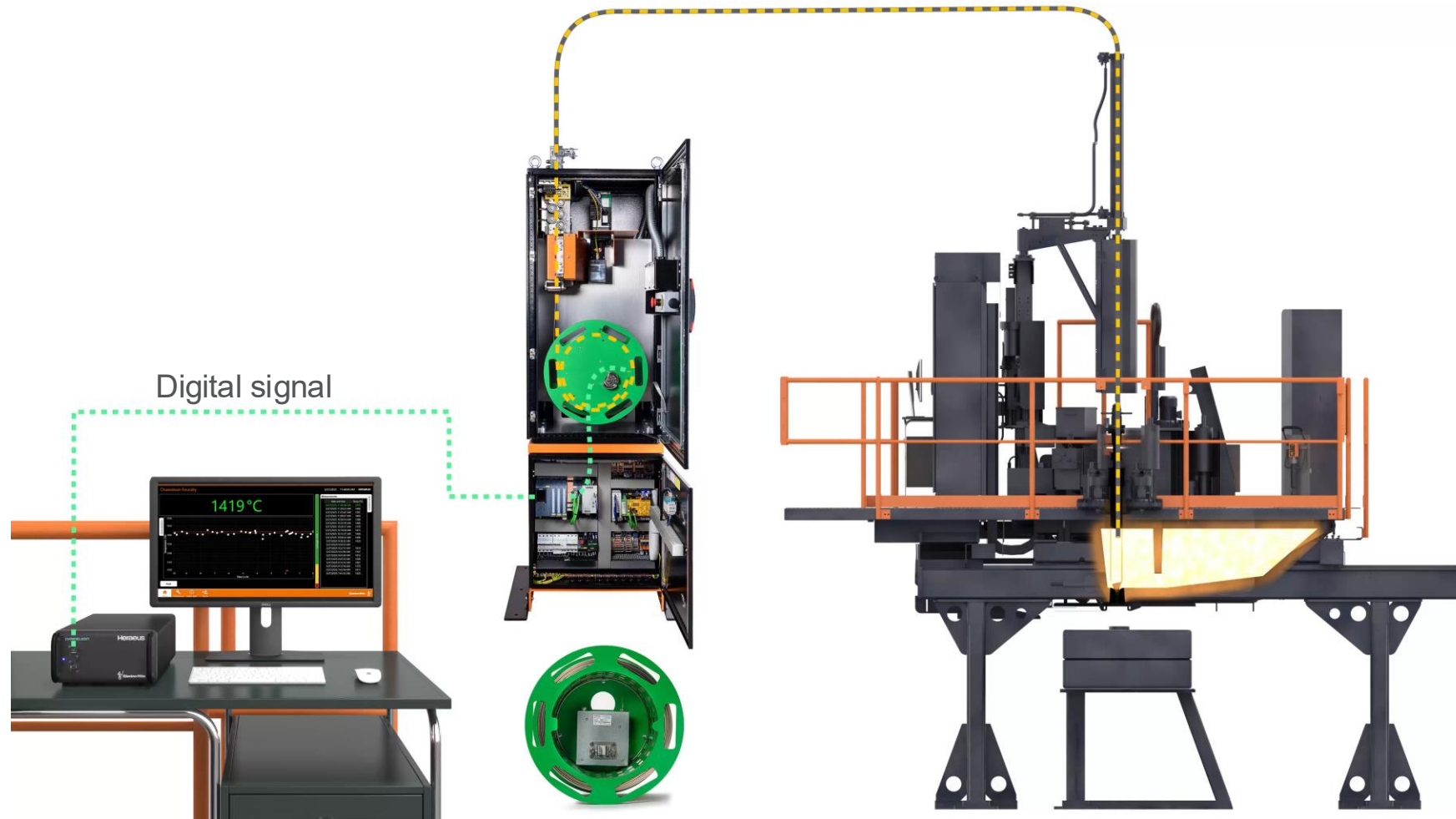
# CHAMELEON® FOUNDRY – WORKING PRINCIPLE



# CHAMELEON® FOUNDRY – WORKING PRINCIPLE



# CHAMELEON® FOUNDRY – WORKING PRINCIPLE





## CHAMELEON® FOUNDRY – CUSTOMER TRIALS



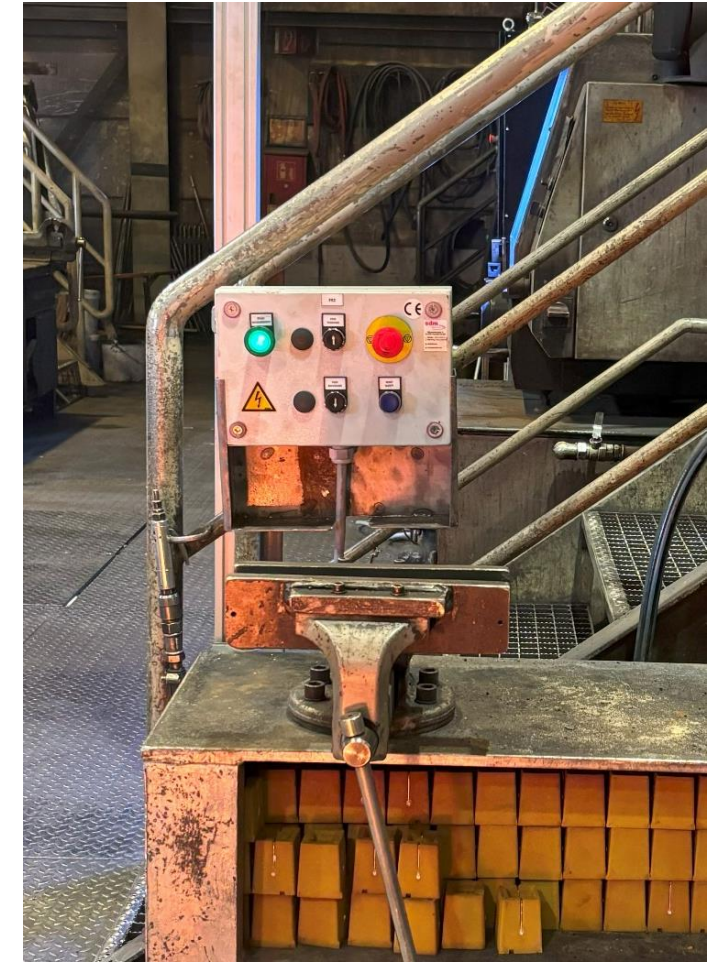
## CHAMELEON® FOUNDRY – CUSTOMER TRIALS



Chameleon Foundry – Precise temperature measurement for foundries



# CHAMELEON® FOUNDRY – TRIAL SETUP AT FRITZ WINTER (GERMANY)



# CHAMELEON® FOUNDRY – SOFTWARE INTEGRATION AT FRITZ WINTER (GER)

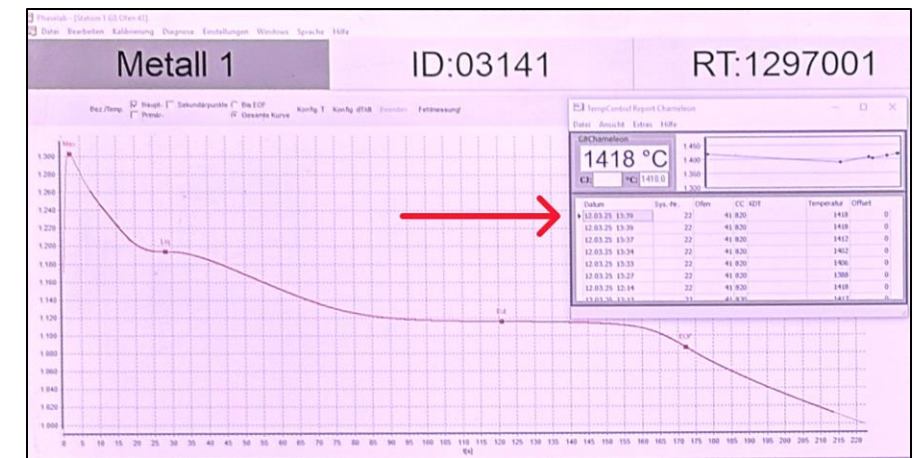
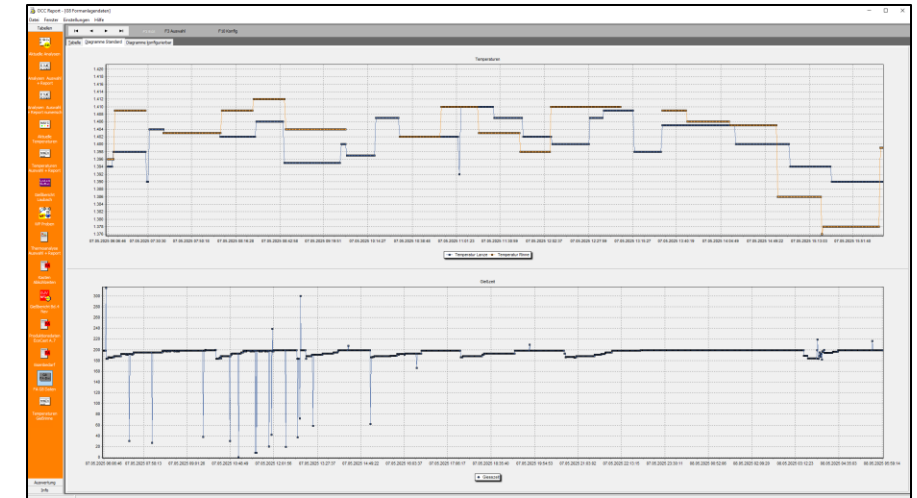
OCC Report - [G8 Formanlagendaten]

Datei Fenster Einstellungen Hilfe

Tabellen

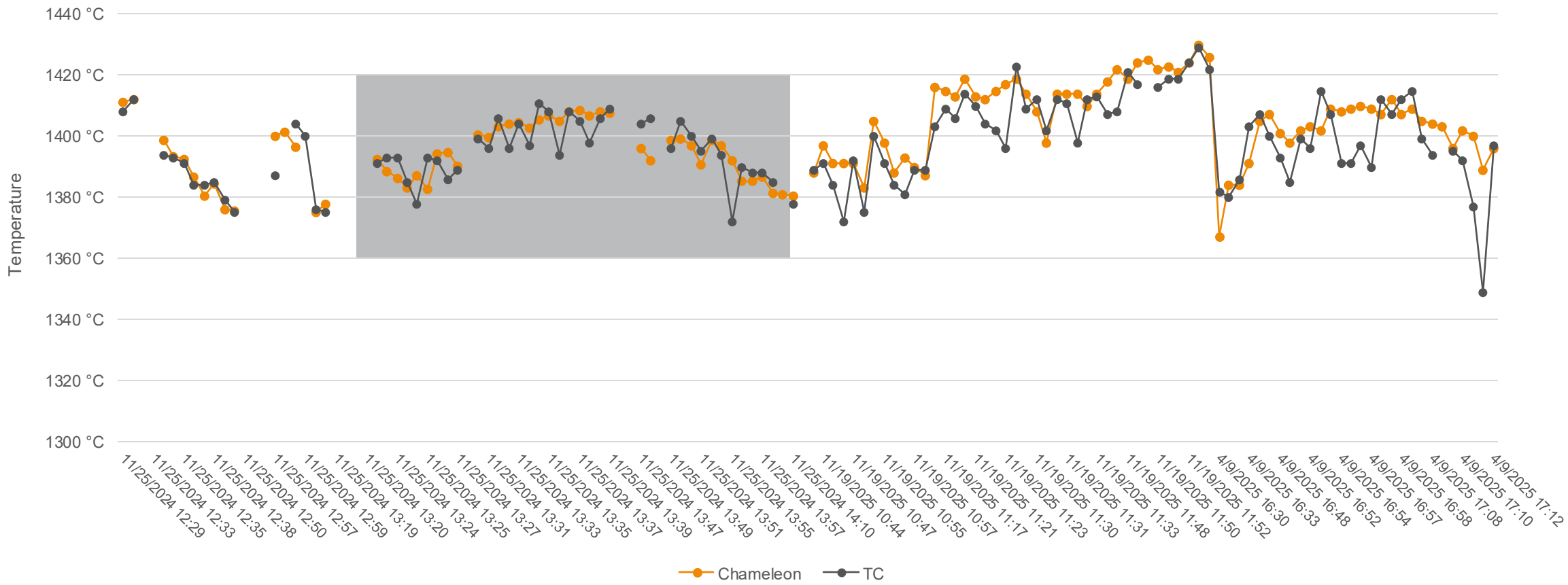
Diagramme Standard Diagramme konfigurierbar

Teil	Kasten-Nr.	Dat. gegossen	Status	Temp Lanze	Temp Lanze Dat.	Temp Cham	Temp Dat. Cham.
87	07.05.2025 06:06:46	1394	07.05.2025 05:48:31	1396	07.05.2025 05:48:56		
98	07.05.2025 06:07:18	1394	07.05.2025 05:48:31	1396	07.05.2025 05:48:56		
98	07.05.2025 06:08:02	1394	07.05.2025 05:48:31	1396	07.05.2025 05:48:56		
107	07.05.2025 06:08:36	1394	07.05.2025 05:48:31	1396	07.05.2025 05:48:56		
107	07.05.2025 06:12:32	1398	07.05.2025 06:12:23	1396	07.05.2025 05:48:56		
107	07.05.2025 06:13:11	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
36	07.05.2025 06:13:53	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
70	07.05.2025 06:14:29	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
70	07.05.2025 06:15:11	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
61	07.05.2025 06:15:42	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
61	07.05.2025 06:17:53	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
161	07.05.2025 06:18:22	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
161	07.05.2025 06:19:04	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
161	07.05.2025 06:19:36	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
147	07.05.2025 06:20:19	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
92	07.05.2025 06:20:51	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
92	07.05.2025 06:21:34	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
37	07.05.2025 06:22:06	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
37	07.05.2025 06:22:49	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
124	07.05.2025 06:23:22	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
124	07.05.2025 06:24:03	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
5	07.05.2025 06:24:35	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
5	07.05.2025 06:25:27	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
5	07.05.2025 06:25:57	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
72	07.05.2025 06:26:41	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
103	07.05.2025 06:27:13	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
103	07.05.2025 06:29:06	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
103	07.05.2025 06:29:38	1398	07.05.2025 06:12:23	1409	07.05.2025 06:12:46		
143	07.05.2025 07:30:01	1390	07.05.2025 07:21:21				
17	07.05.2025 07:30:30	1390	07.05.2025 07:21:21				

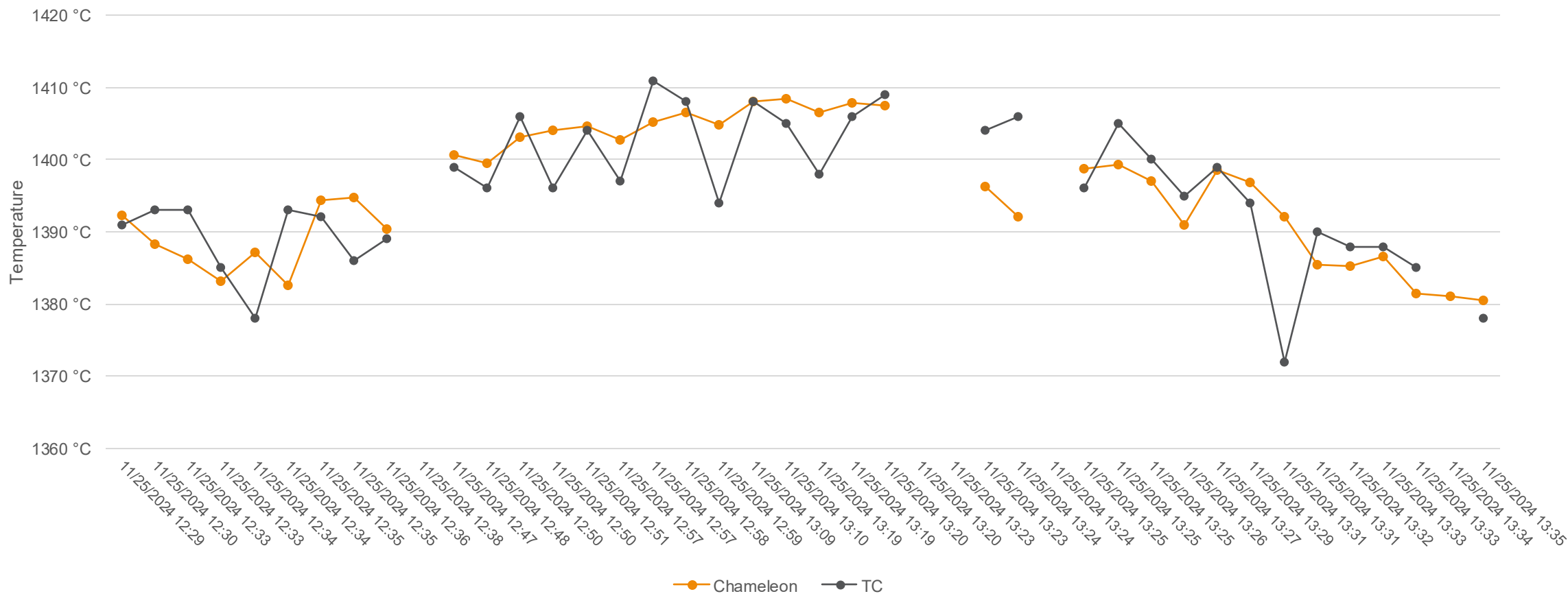




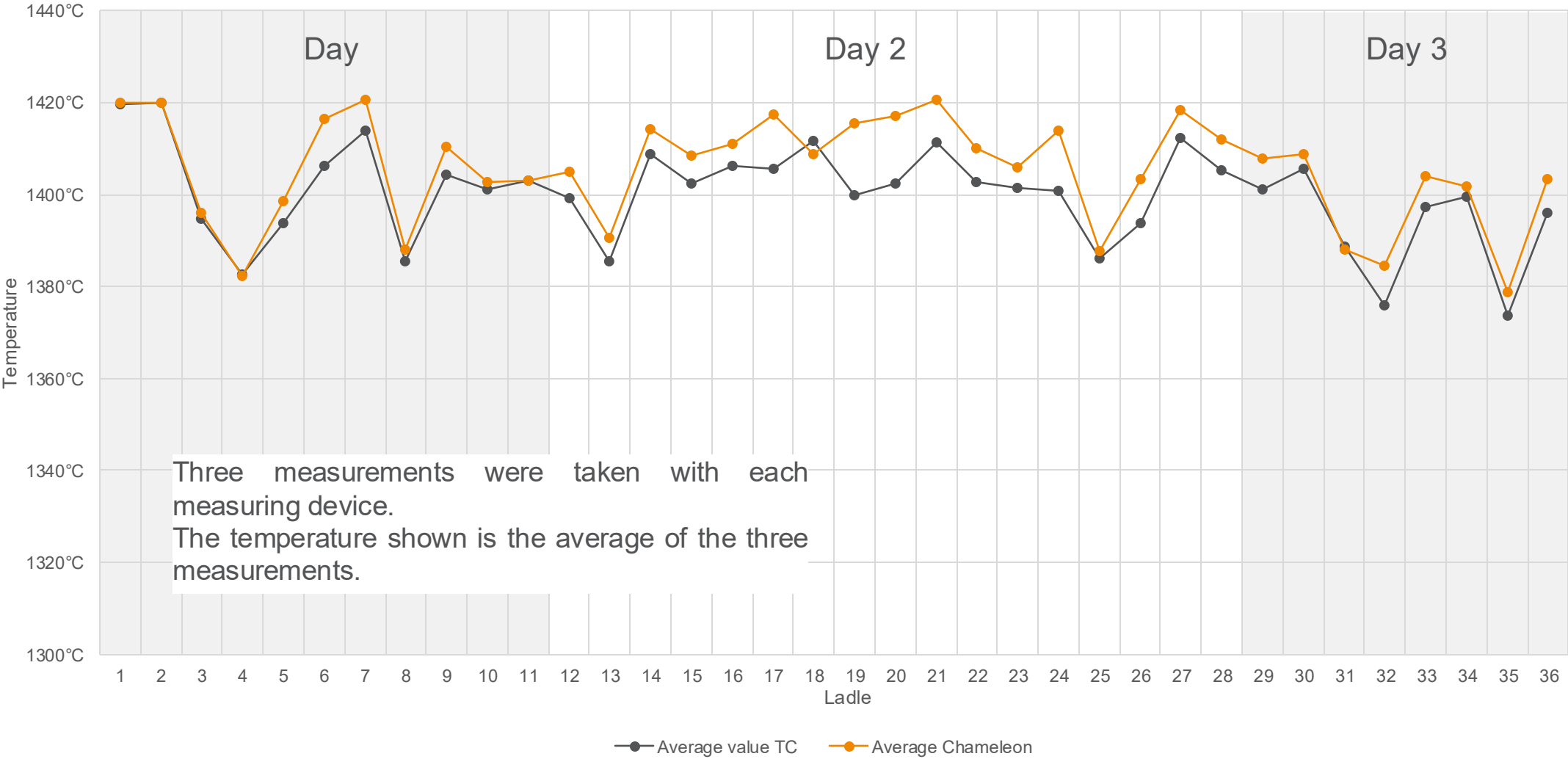
# CHAMELEON® FOUNDRY – COMPARATIVE MEASUREMENTS



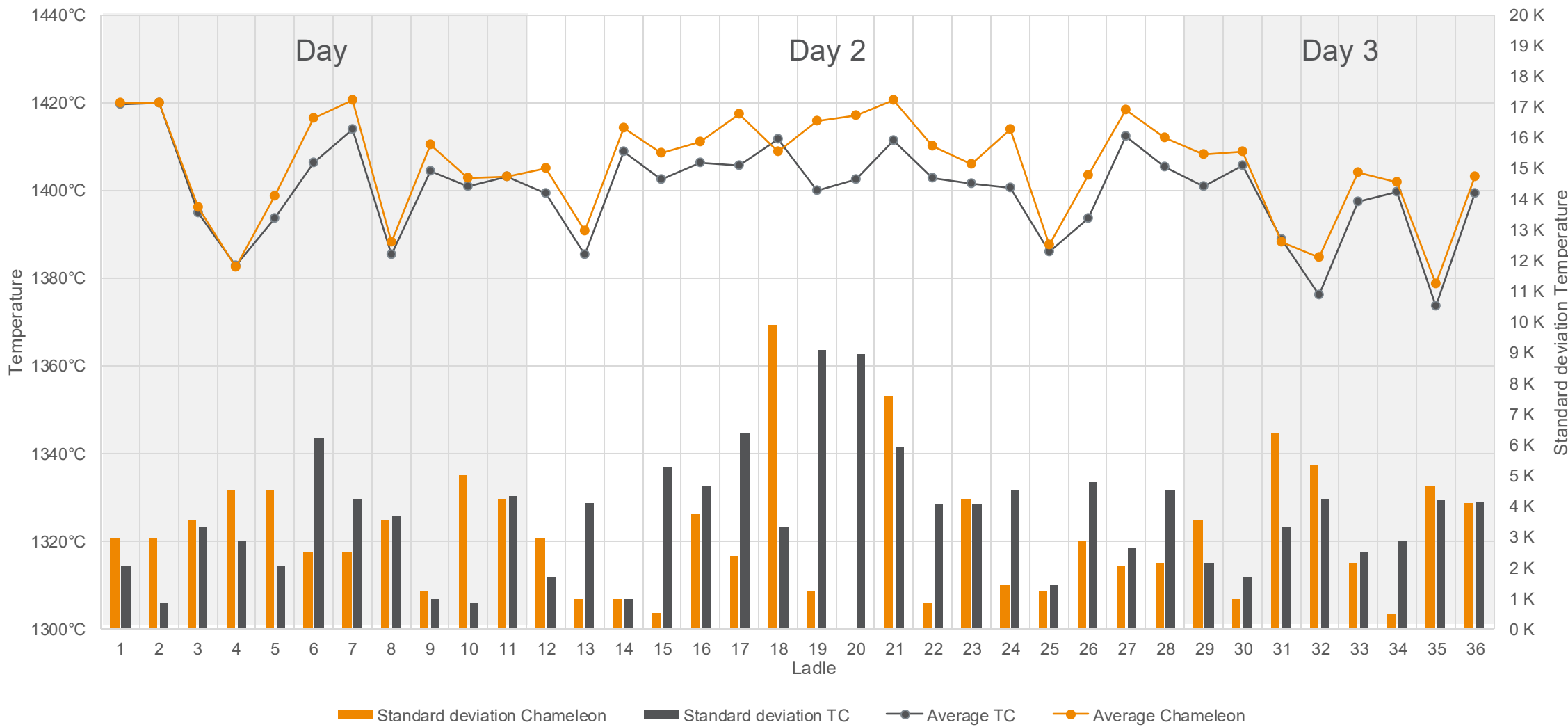
# CHAMELEON® FOUNDRY – COMPARATIVE MEASUREMENTS



CHAMELEON® FOUNDRY – COMPARATIVE MEASUREMENTS

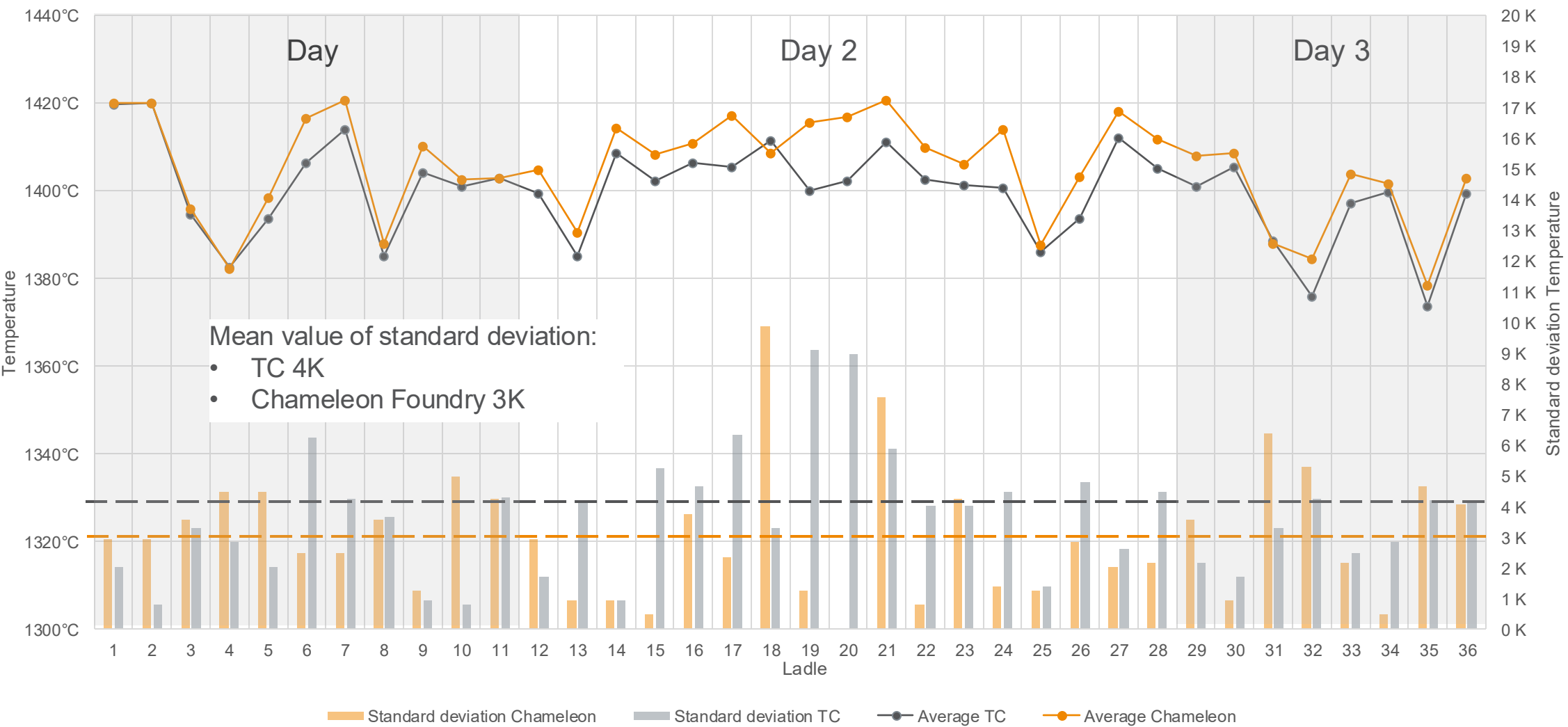


# CHAMELEON® FOUNDRY – COMPARATIVE MEASUREMENTS





CHAMELEON® FOUNDRY – COMPARATIVE MEASUREMENTS



# CHAMELEON® FOUNDRY – VERSUS THE HANDHELD MEASURING LANCE

## Improved safety



- ✓ Shorter dwell time at the melt
- ✓ Reduction of hazards
  - ✓ from splash iron
  - ✓ from combustion at measuring lances

## Efficiency optimisation



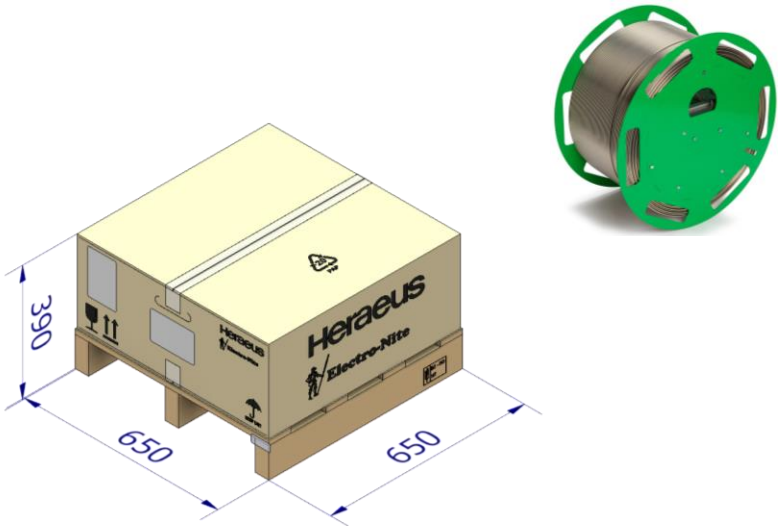
- ✓ Less effort required for:
  - ✓ procurement/logistics
  - ✓ Set-up times
  - ✓ Inspection/calibration
- ✓ Automatability
  - ✓ Reduction of human error
  - ✓ Better temperature control
- ✓ Faster measurement results

## Reduction of emissions

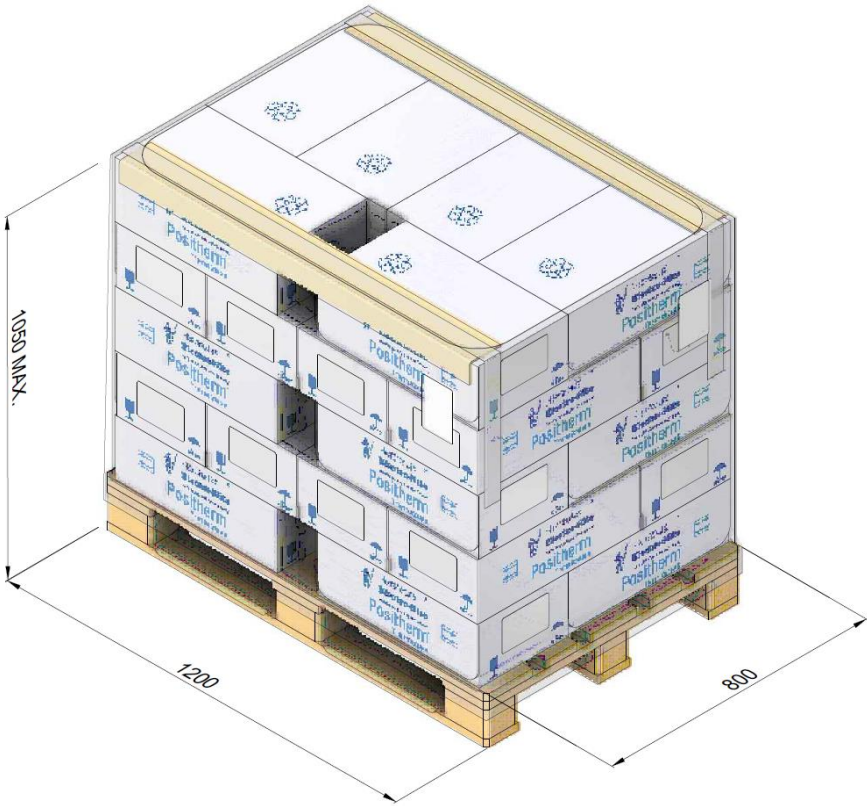


- ✓ CO2 emissions - 75%

CHAMELEON® FOUNDRY – CONSUMABLES CHAMELEON VS. TC



Coil dimensions	Ø460 x 250 mm
Measurements	≈ 6.000



TC type	400 mm non-splash
TC's (= measurements) per pallet	840 pcs.

# CHAMELEON® FOUNDRY – POTENTIAL APPLICATIONS





## CHAMELEON® FOUNDRY – SYSTEM OVERVIEW



Thank you for your attention!