

CERTIFICADO DE CARACTERIZACIÓN / CHARACTERIZATION CERTIFICATE

INNOVATECIS CIA LTDA

General José María Guerrero N69-170 y Alfonso del Hierro

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Certificado No. (Certificate #): 57372

Fecha de Recepción (Reception Date): 2025-05-26

Fecha de Caracterización (Characterization Date): 2025-05-28

Próxima Fecha de Caracterización (Characterization Due): 2026-05

Fecha de Emisión (Emission Date): 2025-05-30

Cliente (Client): CORPORACION FAVORITA C.A.
COTOGCHOA / AV. GENERAL ENRIQUEZ S/N, QUITO (PICHINCHA)

Información del Instrumento (Instrument Information)

Equipo (Instrument):	HORNO DE COCCION	Int. de Medición: (Measurement Range)	(60 / 60 / 72 / 75) °C	Ubicación: (Location):	Planta de Embutidos
Marca (Brand):	SCHROTER				
Modelo (Model):	THERMICjet HR-4	División de escala: (Resolution)	0.1 °C	Lugar de Calibración: (Place of Calibration):	In Situ On Site
Serie (Serial #):	111459214				
Código (Code #):					

Datos de Calibración (Calibration Info)

Procedimiento (Procedure): INN-PC-29

Condiciones Ambientales (Environmental Conditions)

Temp. Inicial (Initial Temp.): 10.6 °C

Hum. Inicial (Initial Hum.): 69.7 %HR

Temp. Final (Final Temp.): 14.2 °C

Hum. Final (Final Hum.): 61.3 %HR

Trazabilidad (Traceability Info)

Patrón (Standard)	Marca (Brand)	Cert. #	Ultima Calibración (Last Cal.)	Período (Period)
Termocupla	-	56690 / 56700 / 56701	2025-05-14	1 año
Termocupla	-	56702 / 56703 / 56704	2025-05-14	1 año
Termocupla	-	56698 / 56699 / 56706	2025-05-14	1 año
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Resultados (Results)

Ver Resultados en Hoja Adjunta

See results in attached Sheet

El presente Certificado de Calibración posee la trazabilidad en esta magnitud hacia el Patrón Nacional, a través de la realización de la unidad de medida en el NPL, NIST, u otro Laboratorio Nacional reconocido al Sistema Internacional de Medidas. La calibración fue realizada bajo un Sistema de Gestión de Laboratorio conforme a la Norma ISO/IEC 17025:2017. Los resultados y su incertidumbre reportada con un nivel de confianza de $k=2$, 95% son relacionados a este instrumento y en el tiempo que se realizó las medidas. Este Laboratorio no se responsabiliza de los perjuicios que pueda ocasionar el uso inadecuado del instrumento calibrado. La reproducción parcial es prohibida, la reproducción total deberá hacerse con la autorización escrita aprobada por INNOVATEC Industrial Solutions. *This Certificate of Calibration provides traceability of measurement to the National Standard, through units of measurement realized at the NPL, NIST or other recognized National Standard Laboratories to the International System of Units. The calibration was performed under a Laboratory Management System in accordance with the ISO/IEC 17025:2017 Standard. The results and the reported uncertainty at a confidence level of $k=2$, 95% are related only to this instrument and at the time of measurement. This Laboratory is not responsible for any damages that may result from improper use of the calibrated instrument. Partial reproduction is forbidden, the total reproduction must have an approved written authorization by INNOVATEC Industrial Solutions.*

Comentarios: Los resultados son un promedio de los datos tomados durante la caracterización. Caracterización del Horno Lleno con Salchicha Vienesas
Comments

Caracterizado por:
Characterized by:

Ing. Patricio Llerena

Aprobado por:
Approved by:

Fin de Certificado (End of Certificate)

Certificado No.: 57372

Equipo (Instrument): HORNO DE COCCION

Fecha de Calibración: 2025-05-28

Marca (Brand): SCHROTER

Nominal (Nominal)	Patrón (Standard)	UBP (UUT)	Error (Error)	Precisión (Accuracy)	Estabilidad (Stability)	Uniformidad (Uniformity)	Incertidumbre (Uncertainty)
60 °C	49.752 °C	54.7 °C	4.923 °C	± 5.0 °C	25.642 °C	16.013 °C	± 18 °C
60 °C	58.315 °C	60.7 °C	2.358 °C	± 5.0 °C	6.235 °C	5.851 °C	± 9.9 °C
72 °C	68.207 °C	70.0 °C	1.763 °C	± 5.0 °C	9.027 °C	7.847 °C	± 14 °C
75 °C	66.957 °C	71.6 °C	4.623 °C	± 5.0 °C	6.873 °C	6.873 °C	± 12 °C

Diagram de Posición de Sensores (Sensor Position Diagram)



Leyenda:

- 1: Sensor #1
- 2: Sensor #2
- 3: Sensor #3
- 4: Sensor #4
- 5: Sensor #5
- 6: Sensor #6
- 7: Sensor #7
- 8: Sensor #8
- 9: Sensor #9

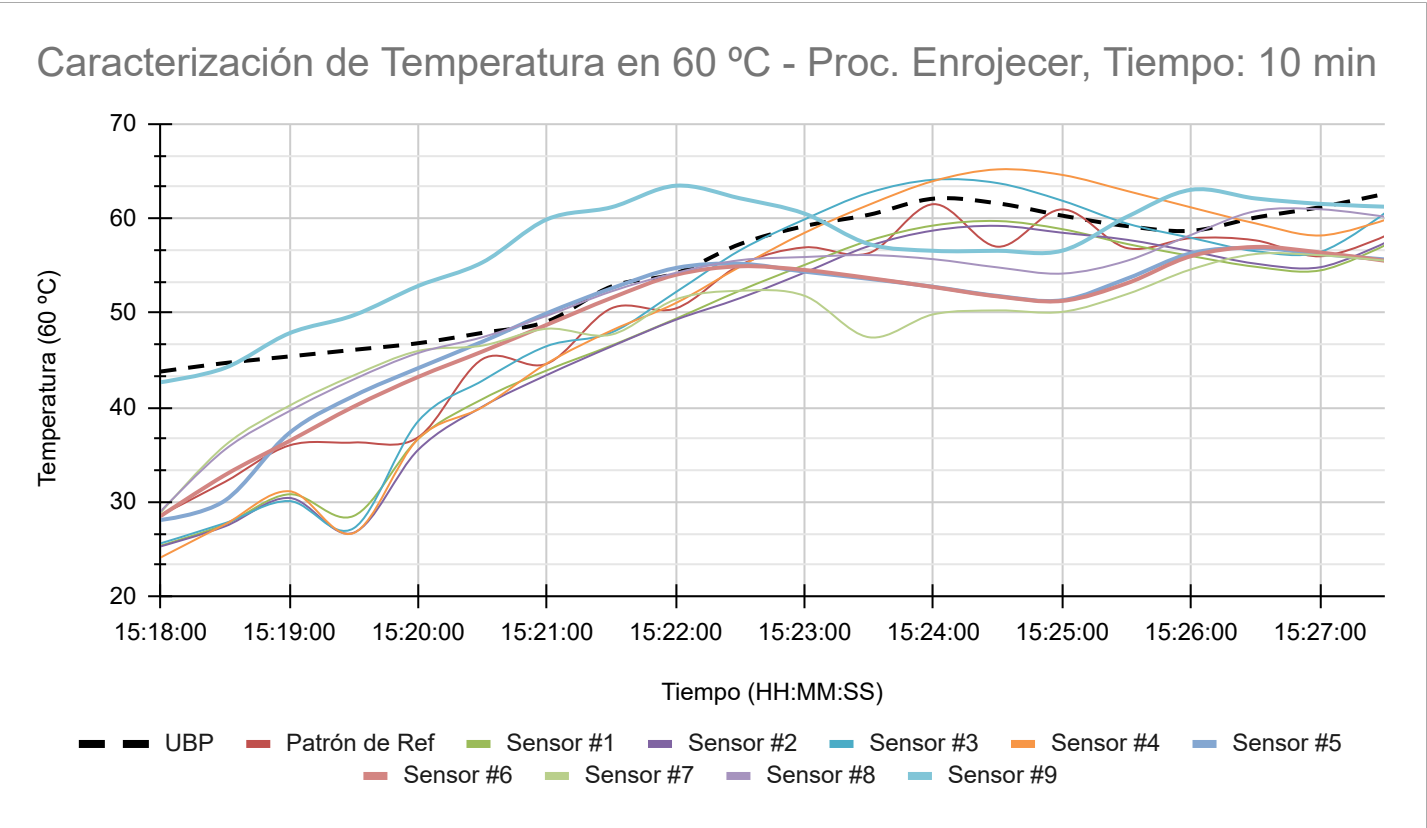
Las imágenes utilizadas solo son un ejemplo de lo puntos de medida empleados y posición de los sensores.

Certificado No.: 57372
Fecha de Calibraci3n 2025-05-28

Equipo (Instrument): HORNO DE COCCION
Marca (Brand): SCHROTER

Hora (Time)	UBP (UUT)	Patr3n de Ref (Ref. Standard)	Sensor #1 (Sensor #1)	Sensor #2 (Sensor #2)	Sensor #3 (Sensor #3)	Sensor #4 (Sensor #4)	Sensor #5 (Sensor #5)	Sensor #6 (Sensor #6)	Sensor #7 (Sensor #7)	Sensor #8 (Sensor #8)	Sensor #9 (Sensor #8)	Error (Error)
15:18:00	43.8 3C	28.608 3C	25.37 3C	25.29 3C	25.61 3C	24.11 3C	28.09 3C	28.49 3C	28.85 3C	28.99 3C	42.67 3C	15.192 3C
15:18:30	44.7 3C	32.118 3C	27.62 3C	27.41 3C	27.75 3C	27.62 3C	30.14 3C	32.84 3C	35.97 3C	35.53 3C	44.18 3C	12.582 3C
15:19:00	45.4 3C	35.980 3C	30.81 3C	30.42 3C	30.09 3C	31.13 3C	37.29 3C	36.44 3C	40.18 3C	39.61 3C	47.85 3C	9.420 3C
15:19:30	46.1 3C	36.290 3C	28.52 3C	26.74 3C	27.22 3C	26.71 3C	41.21 3C	40.09 3C	43.39 3C	42.97 3C	49.76 3C	9.810 3C
15:20:00	46.8 3C	36.848 3C	36.66 3C	35.51 3C	38.54 3C	36.68 3C	44.16 3C	43.23 3C	45.98 3C	45.76 3C	52.86 3C	9.953 3C
15:20:30	47.9 3C	45.123 3C	40.89 3C	40.09 3C	42.84 3C	40.04 3C	46.97 3C	45.93 3C	46.55 3C	47.44 3C	55.36 3C	2.777 3C
15:21:00	49.1 3C	44.635 3C	43.93 3C	43.44 3C	46.50 3C	44.67 3C	49.98 3C	48.76 3C	48.33 3C	49.71 3C	59.91 3C	4.465 3C
15:21:30	52.8 3C	50.493 3C	46.55 3C	46.45 3C	47.93 3C	48.14 3C	52.60 3C	51.59 3C	47.71 3C	52.28 3C	61.19 3C	2.307 3C
15:22:00	54.2 3C	50.483 3C	49.39 3C	49.28 3C	52.21 3C	51.05 3C	54.76 3C	54.04 3C	51.44 3C	54.25 3C	63.47 3C	3.718 3C
15:22:30	57.3 3C	55.082 3C	52.38 3C	51.58 3C	56.65 3C	54.91 3C	55.21 3C	54.94 3C	52.35 3C	55.59 3C	62.13 3C	2.218 3C
15:23:00	59.2 3C	56.943 3C	55.09 3C	54.28 3C	59.91 3C	58.49 3C	54.37 3C	54.55 3C	51.81 3C	55.92 3C	60.51 3C	2.258 3C
15:23:30	60.4 3C	56.344 3C	57.66 3C	57.09 3C	62.73 3C	61.46 3C	53.61 3C	53.70 3C	47.43 3C	56.13 3C	57.29 3C	4.056 3C
15:24:00	62.1 3C	61.515 3C	59.26 3C	58.73 3C	64.10 3C	63.97 3C	52.77 3C	52.74 3C	49.86 3C	55.69 3C	56.58 3C	0.585 3C
15:24:30	61.6 3C	57.012 3C	59.73 3C	59.22 3C	63.74 3C	65.20 3C	51.80 3C	51.75 3C	50.27 3C	54.82 3C	56.58 3C	4.588 3C
15:25:00	60.3 3C	60.963 3C	58.87 3C	58.49 3C	61.88 3C	64.61 3C	51.35 3C	51.28 3C	50.12 3C	54.17 3C	56.60 3C	-0.663 3C
15:25:30	59.2 3C	56.878 3C	57.31 3C	57.75 3C	59.47 3C	62.92 3C	53.63 3C	53.14 3C	51.99 3C	55.52 3C	60.17 3C	2.322 3C
15:26:00	58.7 3C	57.920 3C	56.03 3C	56.53 3C	57.95 3C	61.17 3C	56.32 3C	56.02 3C	54.62 3C	58.27 3C	63.04 3C	0.780 3C
15:26:30	60.1 3C	57.682 3C	54.89 3C	55.22 3C	56.54 3C	59.48 3C	56.88 3C	56.99 3C	56.24 3C	60.78 3C	62.12 3C	2.418 3C
15:27:00	61.2 3C	55.998 3C	54.50 3C	54.84 3C	56.45 3C	58.20 3C	56.24 3C	56.41 3C	56.11 3C	60.98 3C	61.55 3C	5.203 3C
15:27:30	62.6 3C	58.122 3C	57.14 3C	57.40 3C	60.55 3C	59.83 3C	55.67 3C	55.53 3C	55.54 3C	60.19 3C	61.25 3C	4.478 3C

Graficos (Graphs):

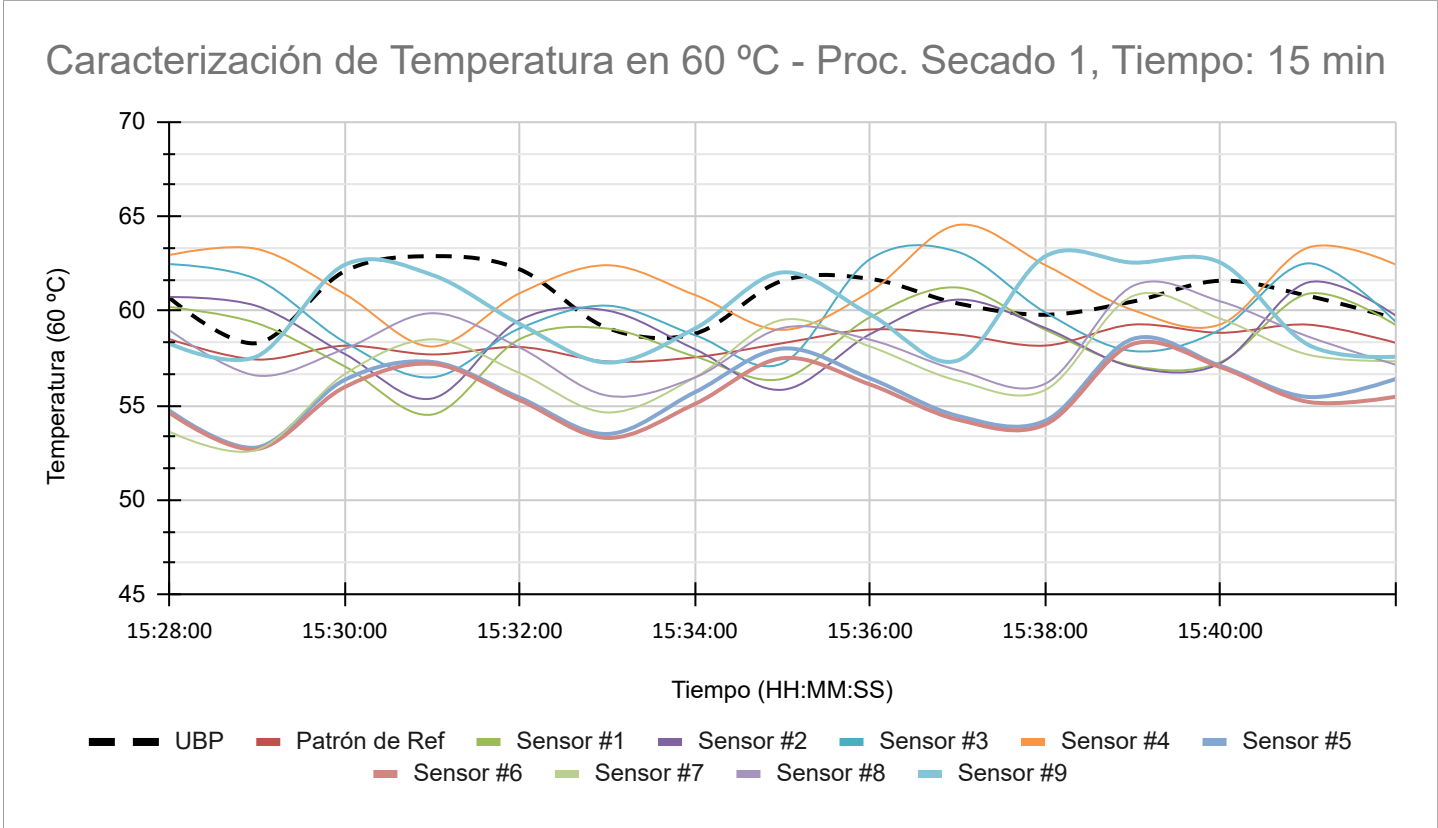


Certificado No.: 57372
Fecha de Calibració 2025-05-28

Equipo (Instrument): HORNO DE COCCION
Marca (Brand): SCHROTER

Hora (Time)	UBP (UUT)	Patrón de Ref (Ref. Standard)	Sensor #1 (Sensor #1)	Sensor #2 (Sensor #2)	Sensor #3 (Sensor #3)	Sensor #4 (Sensor #4)	Sensor #5 (Sensor #5)	Sensor #6 (Sensor #6)	Sensor #7 (Sensor #7)	Sensor #8 (Sensor #8)	Sensor #9 (Sensor #8)	Error (Error)
15:28:00	60.7 °C	58.510 °C	60.21 °C	60.74 °C	62.48 °C	62.96 °C	54.73 °C	54.61 °C	53.61 °C	58.98 °C	58.27 °C	2.190 °C
15:29:00	58.3 °C	57.429 °C	59.35 °C	60.26 °C	61.67 °C	63.28 °C	52.78 °C	52.69 °C	52.65 °C	56.58 °C	57.60 °C	0.871 °C
15:30:00	62.1 °C	58.162 °C	57.07 °C	57.73 °C	58.36 °C	60.90 °C	56.35 °C	55.97 °C	56.65 °C	57.99 °C	62.44 °C	3.938 °C
15:31:00	62.9 °C	57.699 °C	54.52 °C	55.37 °C	56.49 °C	58.12 °C	57.30 °C	57.20 °C	58.50 °C	59.88 °C	61.91 °C	5.201 °C
15:32:00	62.2 °C	58.091 °C	58.51 °C	59.52 °C	59.08 °C	60.94 °C	55.41 °C	55.28 °C	56.71 °C	58.06 °C	59.31 °C	4.109 °C
15:33:00	59.1 °C	57.331 °C	59.07 °C	60.02 °C	60.28 °C	62.42 °C	53.49 °C	53.28 °C	54.63 °C	55.52 °C	57.27 °C	1.769 °C
15:34:00	58.8 °C	57.550 °C	57.59 °C	57.98 °C	58.72 °C	60.85 °C	55.70 °C	55.08 °C	56.48 °C	56.48 °C	59.07 °C	1.250 °C
15:35:00	61.6 °C	58.294 °C	56.41 °C	55.83 °C	57.23 °C	59.00 °C	58.01 °C	57.50 °C	59.53 °C	59.10 °C	62.04 °C	3.306 °C
15:36:00	61.7 °C	59.018 °C	59.67 °C	58.77 °C	62.74 °C	61.02 °C	56.43 °C	56.11 °C	58.12 °C	58.48 °C	59.82 °C	2.682 °C
15:37:00	60.4 °C	58.753 °C	61.24 °C	60.60 °C	63.13 °C	64.55 °C	54.45 °C	54.25 °C	56.31 °C	56.87 °C	57.38 °C	1.647 °C
15:38:00	59.8 °C	58.168 °C	59.01 °C	59.10 °C	59.93 °C	62.43 °C	54.19 °C	53.99 °C	55.82 °C	56.15 °C	62.89 °C	1.632 °C
15:39:00	60.5 °C	59.279 °C	57.10 °C	57.04 °C	57.88 °C	60.05 °C	58.52 °C	58.25 °C	60.79 °C	61.32 °C	62.56 °C	1.221 °C
15:40:00	61.6 °C	58.846 °C	57.29 °C	57.23 °C	59.01 °C	59.29 °C	57.10 °C	57.03 °C	59.59 °C	60.51 °C	62.56 °C	2.754 °C
15:41:00	60.8 °C	59.277 °C	60.91 °C	61.51 °C	62.52 °C	63.35 °C	55.45 °C	55.19 °C	57.69 °C	58.65 °C	58.22 °C	1.523 °C
15:42:00	59.6 °C	58.317 °C	59.26 °C	59.76 °C	59.43 °C	62.46 °C	56.40 °C	55.46 °C	57.34 °C	57.16 °C	57.58 °C	1.283 °C

Graficos (Graphs):

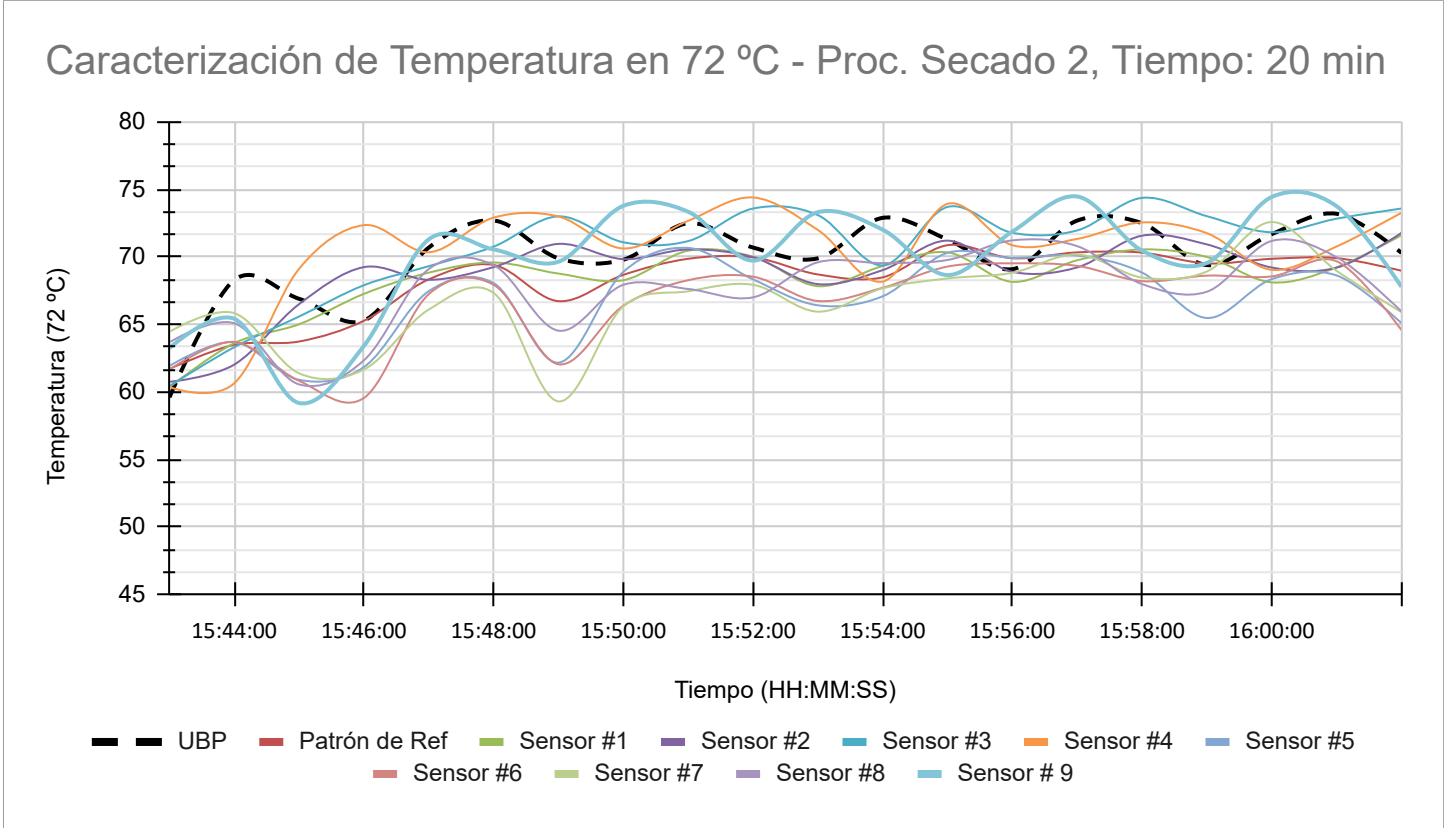


Certificado No.: 57372
Fecha de Calibració 2025-05-28

Equipo (Instrument): HORNO DE COCCION
Marca (Brand): SCHROTER

Hora (Time)	UBP (UUT)	Patrón de Ref (Ref. Standard)	Sensor #1 (Sensor #1)	Sensor #2 (Sensor #2)	Sensor #3 (Sensor #3)	Sensor #4 (Sensor #4)	Sensor #5 (Sensor #5)	Sensor #6 (Sensor #6)	Sensor #7 (Sensor #7)	Sensor #8 (Sensor #8)	Sensor #9 (Sensor #9)	Error (Error)
15:43:00	59.6 °C	61.705 °C	60.36 °C	60.75 °C	60.44 °C	60.36 °C	61.93 °C	61.66 °C	64.46 °C	63.68 °C	63.25 °C	-2.105 °C
15:44:00	68.3 °C	63.494 °C	63.62 °C	62.03 °C	63.32 °C	60.65 °C	63.70 °C	63.70 °C	65.84 °C	65.09 °C	65.42 °C	4.806 °C
15:45:00	66.9 °C	63.739 °C	65.02 °C	66.51 °C	65.59 °C	69.13 °C	60.90 °C	60.82 °C	61.38 °C	60.56 °C	59.18 °C	3.161 °C
15:46:00	65.3 °C	65.278 °C	67.27 °C	69.25 °C	67.91 °C	72.36 °C	61.85 °C	59.56 °C	61.67 °C	62.35 °C	63.42 °C	0.022 °C
15:47:00	70.7 °C	68.345 °C	68.84 °C	68.31 °C	69.32 °C	70.35 °C	67.47 °C	67.25 °C	66.11 °C	69.11 °C	71.31 °C	2.355 °C
15:48:00	72.7 °C	69.406 °C	69.59 °C	69.25 °C	70.77 °C	72.92 °C	68.06 °C	67.94 °C	67.33 °C	69.39 °C	70.56 °C	3.294 °C
15:49:00	69.9 °C	66.726 °C	68.77 °C	70.97 °C	73.01 °C	73.00 °C	62.17 °C	62.05 °C	59.30 °C	64.54 °C	69.65 °C	3.174 °C
15:50:00	69.8 °C	68.678 °C	68.28 °C	69.84 °C	71.09 °C	70.63 °C	68.90 °C	66.39 °C	66.35 °C	67.94 °C	73.79 °C	1.122 °C
15:51:00	72.5 °C	69.866 °C	70.47 °C	70.56 °C	71.18 °C	72.68 °C	70.67 °C	68.28 °C	67.46 °C	67.63 °C	73.35 °C	2.634 °C
15:52:00	70.7 °C	69.979 °C	70.02 °C	69.98 °C	73.59 °C	74.41 °C	68.34 °C	68.54 °C	67.94 °C	67.01 °C	69.73 °C	0.721 °C
15:53:00	69.9 °C	68.706 °C	67.84 °C	67.99 °C	73.10 °C	72.00 °C	66.42 °C	66.74 °C	65.95 °C	69.61 °C	73.32 °C	1.194 °C
15:54:00	72.9 °C	68.495 °C	69.33 °C	69.03 °C	69.38 °C	68.18 °C	67.09 °C	67.72 °C	67.68 °C	69.55 °C	72.02 °C	4.405 °C
15:55:00	71.3 °C	70.874 °C	70.34 °C	71.21 °C	73.71 °C	73.94 °C	70.31 °C	69.29 °C	68.41 °C	69.78 °C	68.66 °C	0.426 °C
15:56:00	69.1 °C	69.905 °C	68.16 °C	68.90 °C	71.79 °C	70.87 °C	69.93 °C	69.53 °C	68.83 °C	71.23 °C	71.89 °C	-0.805 °C
15:57:00	72.7 °C	70.343 °C	69.76 °C	69.23 °C	71.97 °C	71.34 °C	70.11 °C	69.34 °C	70.19 °C	70.80 °C	74.48 °C	2.358 °C
15:58:00	72.5 °C	70.325 °C	70.56 °C	71.58 °C	74.38 °C	72.56 °C	68.84 °C	68.21 °C	68.48 °C	67.99 °C	70.47 °C	2.175 °C
15:59:00	69.4 °C	69.521 °C	70.00 °C	70.93 °C	73.02 °C	71.76 °C	65.48 °C	68.62 °C	68.93 °C	67.43 °C	69.56 °C	-0.121 °C
16:00:00	71.7 °C	69.865 °C	68.12 °C	69.22 °C	71.83 °C	69.05 °C	68.36 °C	68.56 °C	72.59 °C	71.19 °C	74.45 °C	1.835 °C
16:01:00	73.2 °C	69.915 °C	69.23 °C	69.21 °C	72.84 °C	70.78 °C	68.63 °C	69.68 °C	68.97 °C	69.98 °C	73.76 °C	3.285 °C
16:02:00	70.3 °C	68.979 °C	71.62 °C	71.79 °C	73.59 °C	73.28 °C	65.10 °C	64.58 °C	65.91 °C	65.96 °C	67.79 °C	1.321 °C

Graficos (Graphs):



Certificado No.: 57372
Fecha de Calibració 2025-05-28

Equipo (Instrument): HORNO DE COCCION
Marca (Brand): SCHROTER

Hora (Time)	UBP (UUT)	Patrón de Ref (Ref. Standard)	Sensor #1 (Sensor #1)	Sensor #2 (Sensor #2)	Sensor #3 (Sensor #3)	Sensor #4 (Sensor #4)	Sensor #5 (Sensor #5)	Sensor #6 (Sensor #6)	Sensor #7 (Sensor #7)	Sensor #8 (Sensor #8)	Sensor #9 (Sensor #9)	Error (Error)
16:03:00	71.4 °C	68.519 °C	68.12 °C	67.42 °C	68.86 °C	68.94 °C	68.66 °C	68.40 °C	68.31 °C	69.44 °C	70.94 °C	2.881 °C
16:03:30	72.4 °C	66.334 °C	66.29 °C	65.40 °C	66.59 °C	66.48 °C	67.27 °C	65.58 °C	66.86 °C	66.20 °C	67.25 °C	6.066 °C
16:04:00	73.2 °C	67.396 °C	69.04 °C	67.91 °C	68.11 °C	69.26 °C	68.20 °C	65.68 °C	65.27 °C	65.70 °C	67.66 °C	5.804 °C
16:04:30	72.4 °C	70.644 °C	71.59 °C	70.40 °C	71.10 °C	72.82 °C	71.16 °C	69.17 °C	69.94 °C	68.97 °C	68.23 °C	1.756 °C
16:05:00	71.9 °C	70.988 °C	71.56 °C	70.57 °C	71.19 °C	73.83 °C	71.59 °C	70.71 °C	69.15 °C	69.30 °C	71.12 °C	0.913 °C
16:05:30	71.4 °C	67.641 °C	68.40 °C	68.26 °C	66.30 °C	67.39 °C	66.62 °C	66.21 °C	68.71 °C	69.24 °C	68.35 °C	3.759 °C
16:06:00	71.2 °C	65.038 °C	65.45 °C	65.76 °C	65.29 °C	64.29 °C	64.71 °C	64.86 °C	65.42 °C	64.52 °C	64.98 °C	6.163 °C
16:06:30	70.9 °C	62.845 °C	62.76 °C	63.04 °C	61.98 °C	60.22 °C	62.20 °C	63.16 °C	64.09 °C	65.31 °C	65.48 °C	8.055 °C
16:07:00	70.6 °C	65.305 °C	65.22 °C	65.91 °C	64.84 °C	63.25 °C	65.45 °C	65.21 °C	65.99 °C	66.57 °C	70.51 °C	5.295 °C
16:07:30	70.4 °C	64.859 °C	65.31 °C	64.81 °C	65.49 °C	62.23 °C	65.26 °C	65.17 °C	64.32 °C	66.28 °C	70.81 °C	5.541 °C

Graficos (Graphs):

