

HD SERIES

DROP DOWN & SIDE SWING DOOR · BRICK INSULATION (23)

Flex Muffle Furnaces · 1000°C - 1200°C

STANDARD FEATURES

- CE manufactured
- Affordable basic line
- Maximum temperature 1200°C
- Compact and lightweight
- Designed for occasional intermittent work
- 2 or 3 heating plates with KANTHAL AF
- Double low thermal mass insulation
- Built with low density ceramic 23/26 bricks and ceramic fiber
- Outer case in painted metal sheet (inox optional)
- Ceramic chimney
- Thermocouple type K
- Spare parts easily replaceable by end user

CHAMBER OPTIONS

- Fiber insulation by request

FURNACE CONTROLS

- Lower front or lateral control panel
- Solid state relay
- **PA Analogical control**

OR

- **PAD Digital control**
 - PID parameters
 - Non-volatile memory
 - Microprocessor
 - Alarm

DIGITAL CONTROL OPTIONS

- 1 program / 8 segments programmer
- 4 program / 15 segments programmer
- Programmers up to 64 segments
- Data logger and programmer communication by Ethernet/ RS232

SAFETY SHUT-OFF

- Thermocouple break shut-off

ACCESSORIES

- Interchangeable temperature-uniform trays with rim
- Refractory ceramic tray
- Incoloy stainless steel tray
- Smoke chimney
- Forced smoke chimney
- Safety alarm Class II. Over-temperature protection
- Inlet gas entry
- Flow meter box
- and more, ask for our full assortment!



HD SERIES

DROP DOWN & SIDE SWING DOOR · BRICK INSULATION (23)

Flex Muffle Furnaces · 1000°C - 1200°C

CHARACTERISTICS

- Metal case with chrome-phosphatizing base protection and external finish with heat-resistant metal paint.
- Easy loading drop down or side swing door closes hermetically, brick on brick.

CONTROLS OPTIONS

- **"PA" CONTROL:** analog temperature adjustment.

OR

- **"PAD" CONTROL:** Allows for automatic temperature control and adjustment through an automatic digital adjusting pyrometer, such that temperature and temperature rise speed and inertia can be monitored at any time.

BASIC ACCESSORIES

- **Extraction Chimney:** Self-extraction design to eliminate smoke in processes that produce smoke in a considerable amount or when smoke extraction is advisable due to the nature of the process. Chimney outlet connection to a smoke bell or to the exterior by end user.
- **Forced air extraction chimney:** Specially designed for a forced self-extraction to evacuate smoke fast at resistance in refractory insulation of very low thermal conductivity coefficient.
- **Bottom trays:** Interchangeable, temperature uniform, with rim to protect against spilling, fusion or adherence of materials.

SPECIFICATIONS

Fully customized solutions by request
We reserve the right to change technical specifications

Reference	Internal Dimension (mm)			External Dimension (mm)			Volume (L)	Power (Kw)	Voltage (V)	Temp Max. °C	Temp Max. Intermittent work °C	Temp Max. Continuous work °C	Weight (Kg)	Thermocouple	Heating Zones	Heating Elements	Control Type
	H	W	D	H	W	D											
HD150 PAD	80	130	150	430	300	330	16	1.7	220	1200	1100	---	30	K	3	Kanthal	Digital
HD150 PA	80	130	150	430	300	330	1.6	1.7	220	1200	1100	---	30	K	3	Kanthal	Analog
HD230 PAD	160	200	240	490	430	450	7.6	3.8	220	1200	1100	---	45	K	3	Kanthal	Digital
HD230 PA	160	200	240	490	430	450	7.6	3.8	220	1200	1100	---	45	K	3	Kanthal	Analog
HD330 PAD	230	260	300	600	600	600	18	4.5	220	1200	1100	---	60	K	3	Kanthal	Digital
HD330 PA	230	260	300	600	600	600	18	4.5	220	1200	1100	---	60	K	3	Kanthal	Analog
HD430 PAD	260	310	300	650	650	600	24	4.5	220	1200	1100	---	75	K	3	Kanthal	Digital
HD430 PA	260	310	300	650	650	600	24	4.5	220	1200	1100	---	75	K	3	Kanthal	Analog
HD530 PAD	260	310	300	650	650	600	28	4.5	220	1200	1100	---	100	K	3	Kanthal	Digital
HD530 PA	300	310	300	700	750	600	28	4.5	220	1200	1100	---	100	K	3	Kanthal	Analog

MF SERIES

VERTICAL PARALLEL LIFT DOOR · REFINED DESIGN · CERAMIC FIBER INSULATION (1200/1400, 300/400)
High Quality 24/7 Continuous-T° Muffle Furnaces · 1000°C - 1200°C - 1300°C

STANDARD FEATURES

- CE manufactured
- Maximum operating temperature: 1000°C - 1200°C - 1300°C- 1400°C
- Rapid heating
- Compact and lightweight
- 24/7 continuous work capability
- 4 heating plates with KANTHAL AF
- Low thermal mass insulation
- Built with low density ceramic bricks and ceramic fiber
- Double insulation includes air chamber
- Outer case in painted metal sheet (inox optional)
- Rear ventilation via ceramic chimney
- Ceramic tray included
- Thermocouple type K or S
- Spare parts easily replaceable by end user

FURNACE CONTROLS

- Lower front control panel
- Solid state relay
- General safety switch
- General safety contactor
- **PAD Digital control**
 - PID parameters
 - Non-volatile memory
 - Microprocessor-based temperature controls
 - Alarm

CONTROL OPTIONS

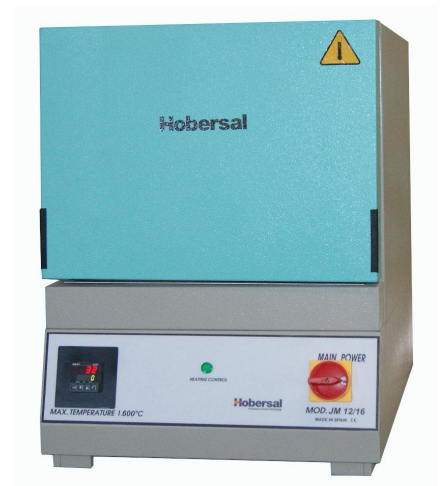
- 1 program / 8 segments programmer
- 4 program / 15 segments programmer
- Programmers up to 64 segments
- Data logger and programmer communication by Ethernet/ RS232

SAFETY SHUT-OFF

- Thermocouple break shut-off
- Turns off upon door opening

ACCESSORIES

- Interchangeable temperature-uniform trays with rim
- Refractory ceramic tray
- Incoloy stainless steel tray
- Smoke chimney
- Forced smoke chimney
- Safety alarm Class II. Over-temperature protection
- Inlet gas entry
- Flow meter box
- and more, ask for our full assortment!



MF SERIES

VERTICAL PARALLEL LIFT DOOR · REFINED DESIGN · CERAMIC FIBER INSULATION (1200/1400, 300/400)
High Quality 24/7 Continuous-T° Muffle Furnaces · 1000°C - 1200°C - 1300°C

CHARACTERISTICS

- Modern design metal case with chrome-phosphatizing base protection and external finish with heat-resistant metal paint.
- Refractory parts engineered to resist extreme temperature changes, and specific ceramic paste types applied according to temperature and work fatigue of each part.
- Heat resistance in refractory insulation of very low thermal conductivity coefficient.
- Door system adjusted on the furnace frame by pressure, allowing for complete sealing. Electrically and thermally insulated door handle.

ACCESSORIES

- Extraction Chimney: Self-extraction design to eliminate smoke in processes that produce smoke in a considerable amount or when smoke extraction is advisable due to the nature of the process. Chimney outlet connection to a smoke bell or to the exterior by end user.
- Forced air extraction chimney: Specially designed for a forced self-extraction to evacuate smoke fastat resistance in refractory insulation of very low thermal conductivity coefficient.
- Bottom trays: Interchangeable, temperature uniform, with rim to protect against spilling, fusion or adherence of materials.

SPECIFICATIONS

Fully customized solutions by request
We reserve the right to change technical specifications

Code	Reference	Inner dimensions mm			Outer dimensions mm			Volume Liters	Power Kw	Voltage V	Maximum Temperature ° C	Maximum Temperature ° C on work limited	Maximum Temperature ° C Continuous	Net Weight Kgr	Termo-couple	Control Type	Heating Elements	Heating Zones
		H	W	D	H	W	D											
300200310	MF3-104	100	150	200	600	430	425	3	2,2	220	1000	950	900	60	K	Digital	Wire Kanthal	4
300200910	MF9-102	150	200	300	660	480	525	9	2,5	220	1000	900	-----	65	K	Digital	Wire Kanthal	2
300400910	MF9-104	150	200	300	660	480	525	9	3,3	220	1000	950	900	70	K	Digital	Wire Kanthal	4
300401210	MF12-104	150	200	400	660	480	625	12	3,3	220	1000	950	900	80	K	Digital	Wire Kanthal	4
300201210	MF12-144	150	200	400	660	480	625	12	3	220	1400	1300	1200°C	75	S	Digital	Wire Kanthal	4
300202210	MF22-102	200	280	390	750	580	625	22	3,5	220	1000	900	-----	95	K	Digital	Wire Kanthal	2
300402210	MF22-104	200	280	390	750	580	625	22	5,5	220	1000	950	900	100	K	Digital	Wire Kanthal	4
300400312	MF3-124	100	150	200	600	430	425	3	3,3	220	1200	1150	1100	60	K	Digital	Wire Kanthal	4
300200912	MF9-122	150	200	300	660	480	525	9	3	220	1200	1100	-----	65	K	Digital	Wire Kanthal	2
300400912	MF9-124	150	200	300	660	480	525	9	5,5	220 220 III 380 III	1200	1150	1100	70	K	Digital	Wire Kanthal	4

Code	Reference	Inner dimensions mm			External dimensions mm			Volume Liters	Power Kw	Voltage V	Maximum Temperature ° C	Maximum Temperature ° C on work limited	Maximum Temperature ° C Continuous	Net Weight Kgr	Termo-couple	Control Type	Heating Elements	Heating Zones
		H	W	D	H	W	D											
300401212	MF12-124	150	200	400	660	480	625	12	5,5	220 220 III 380 III	1200	1150	1100	80	K	Digital	Wire Kanthal	4
300201212	MF12-122	150	200	400	660	480	625	12	4	220	1200	1100	-----	75	K	Digital	Wire Kanthal	2
300202212	MF22-122	200	280	390	750	580	625	22	4,5	220	1200	1100	-----	95	K	Digital	Wire Kanthal	2
300402212	MF22-124	200	280	390	750	580	625	22	8	220 220 III 380 III	1200	1150	1100	100	K	Digital	Wire Kanthal	4
300400313	MF3-134	100	150	200	600	430	425	3	3,3	220	1300	1250	1100	60	S	Digital	Wire Kanthal	4
300200913	MF9-132	150	200	300	660	480	525	9	3	220	1300	1250	-----	65	S	Digital	Wire Kanthal	2
300400913	MF9-134	150	200	300	660	480	525	9	5,5	220 220 III 380 III	1300	1250	1100	70	S	Digital	Wire Kanthal	4
300401213	MF12-134	150	200	400	660	480	625	12	5,5	220 220 III 380 III	1300	1250	1100	80	S	Digital	Wire Kanthal	4
300201213	MF12-132	150	200	400	660	480	625	12	4	220	1300	1250	-----	75	S	Digital	Wire Kanthal	2
300202213	MF22-132	200	280	390	750	580	625	22	4,5	220	1300	1250	-----	95	S	Digital	Wire Kanthal	2
300402213	MF22-134	200	280	390	750	580	625	22	8	220 220 III 380 III	1300	1250	1100	100	S	Digital	Wire Kanthal	4
	MF30-104	250	280	390	800	580	625	30	8	220 220 III 380 III	1000	950	900		K	Digital	Wire Kanthal	4
	MF30-124	250	280	390	800	580	625	30	8	220 220 III 380 III	1200	1150	1100		K	Digital	Wire Kanthal	4
	MF30-134	250	280	390	800	580	625	30	8	220 220 III 380 III	1300	1250	1100		S	Digital	Wire Kanthal	4

PR SERIES

VERTICAL PANTOGRAPH SIDE DOOR · STURDY DESIGN · BRICK INSULATION (23/26)

High Quality 24/7 Continuous-T° Muffle Furnaces · 1000°C - 1200°C - 1300°C

STANDARD FEATURES

- CE manufactured
- Maximum operating temperature:
1000°C - 1200°C - 1300°C
- Compact and lightweight
- 24/7 continuous work capability
- 4 heating plates with KANTHAL AF
- Low thermal mass insulation
- Built with low density ceramic bricks and ceramic fiber
- Double insulation includes air chamber
- Outer case in painted metal sheet (inox optional)
- Rear ventilation via ceramic chimney
- Ceramic tray included
- Thermocouple type K or S
- Spare parts easily replaceable by end user



FURNACE CONTROLS

- Lower front control panel
- Solid state relay
- General safety switch
- General safety contactor
- **PAD Digital control**
 - PID parameters
 - Non-volatile memory
 - Microprocessor-based temperature controls
 - Alarm

CONTROL OPTIONS

- 1 program / 8 segments programmer
- 4 program / 15 segments programmer
- Programmers up to 64 segments
- Data logger and programmer communication by Ethernet/ RS232

SAFETY SHUT-OFF

- Thermocouple break shut-off
- Turns off upon door opening

ACCESSORIES

- Interchangeable temperature-uniform trays with rim
- Refractory ceramic tray
- Incoloy stainless steel tray
- Smoke chimney
- Forced smoke chimney
- Safety alarm Class II. Over-temperature protection
- Inlet gas entry
- Flow meter box
- and more, ask for our full assortment!

PR SERIES

VERTICAL PANTOGRAPH SIDE DOOR · STURDY DESIGN · BRICK INSULATION (23/26)

High Quality 24/7 Continuous-T° Muffle Furnaces · 1000°C - 1200°C - 1300°C

CHARACTERISTICS

- Reinforced construction, metal case with chrome-phosphatizing base protection and external finish with heat-resistant metal paint.
- Refractory parts engineered to resist extreme temperature changes, and specific ceramic paste types applied according to temperature and work fatigue of each part.
- Heat resistance in refractory insulation of very low thermal conductivity coefficient.
- Pantograph side door allows for a complete clear opening, protecting workers from ceramic block heat radiation. Pressure-adjusted door system, allowing for complete sealing. Half-opened door mode for a quick smoke evacuation. Electrically and thermally isolated door handle.

BASIC ACCESSORIES

- Extraction Chimney: Self-extraction design to eliminate smoke in processes that produce smoke in a considerable amount or when smoke extraction is advisable due to the nature of the process. Chimney outlet connection to a smoke bell or to the exterior by end user.
- Forced air extraction chimney: Specially designed for a forced self-extraction to evacuate smoke fast at resistance in refractory insulation of very low thermal conductivity coefficient.
- Bottom trays: Interchangeable, temperature uniform, with rim to protect against spilling, fusion or adherence of materials.

SPECIFICATIONS

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	H	W	D	H	W	D										
10PR/200	100	150	200	505	460	560	3	2,2	220	1000	950	900	90	K	4	Digital
10PR/300	150	200	300	700	550	800	9	3,3	220	1000	950	900	98	K	4	Digital
10PR/400	200	280	390	750	600	900	22	5,5	220	1000	950	900	180	K	4	Digital
12PR/200	100	150	200	505	460	560	3	3,3	220	1200	1150	1100	90	K	4	Digital
12PR/300	150	200	300	700	550	800	9	5,5	220 220 III 380 III	1200	1150	1100	98	K	4	Digital
12PR/400	200	280	390	750	600	900	22	8	220 220 III 380 III	1200	1150	1100	180	K	4	Digital
12PR/450	250	280	400	750	600	900	22	8	220 220 III 380 III	1200	1150	1100	180	K	4	Digital
12PR/500	250	350	500	820	700	1000	43	8	220 220 III 380 III	1200	1100	1000	250	K	4	Digital
12PR/600	250	350	600	820	700	1100	52	8	220 220 III	1200	1100	1000	300	K	4	Digital
13PR/200	100	150	200	505	460	560	3	3,3	220	1300	1250	1100	90	S	4	Digital
13PR/300	150	200	300	700	550	800	9	5,5	220 220 III 380 III	1300	1250	1100	98	S	4	Digital
13PR/400	200	280	390	750	600	900	22	8	220 220 III 380 III	1300	1250	1100	180	S	4	Digital
13PR/450	250	280	400	750	600	900	22	8	220 220 III 380 III	1300	1250	1100	180	S	4	Digital