DEKEMA

Der Ofen.™

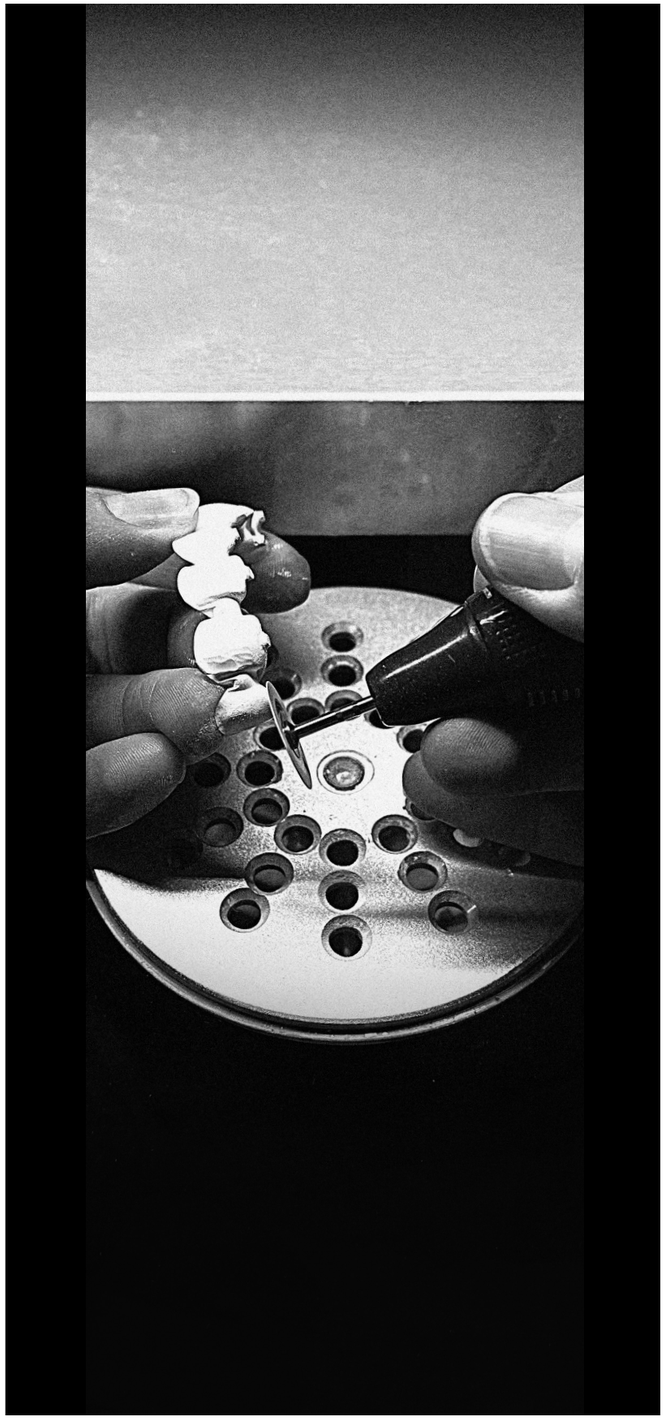


SINTER

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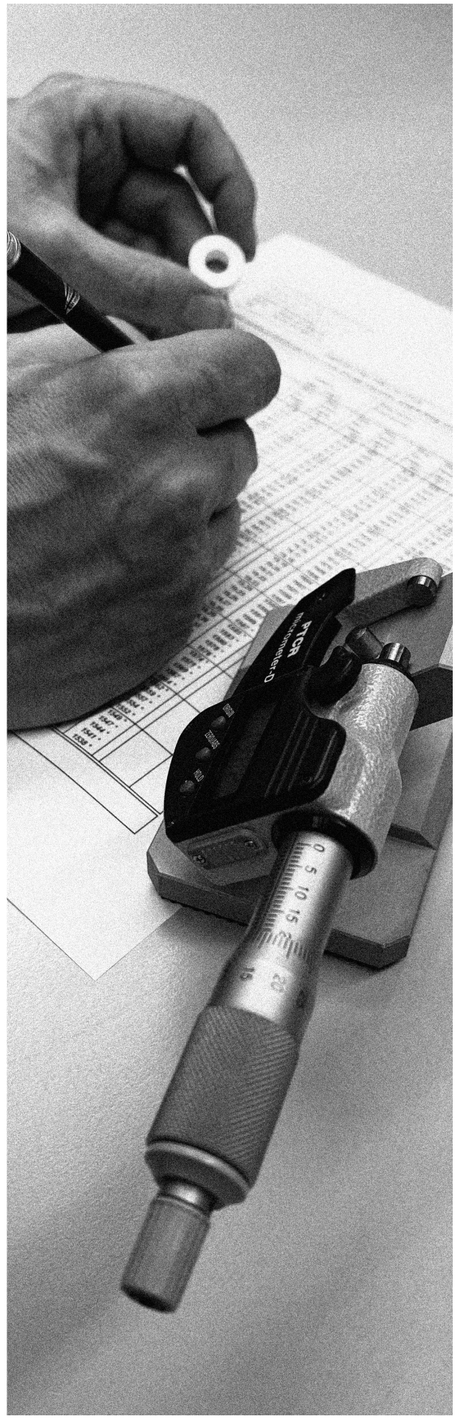
DEKEMA.
Passion.

It’s our ambition to further refine our already matchless dental sintering furnaces. We have decades of experience with every component of our products. Dental sintering furnaces by DEKEMA are made exclusively of high-quality materials and are superior in their class. As a fully independent German manufacturer, we top the highest quality expectations.

What are your benefits?
The best performance, reproducibility and quality are embedded in incredible ease of use.

„YOU HAVE TO DELIVER PERFECT WORK? DAY AFTER DAY? YOU CANNOT AFFORD A DIFFERENT PRODUCT.“

Experience the world of DEKEMA in your lab every single day. We offer the highest level of service. Fast support matters of course, as is the rapid and straightforward provision of replacement equipment and support for new developments. That’s what we all stand for, DEKEMA and our worldwide partners.



DEKEMA.
Claim.

The DEKEMA AUSTROMAT™ family is a result of a premium workmanship. The unique concept of the firing chamber, the intuitive user interface and its functionality, which sustains any worldwide comparison.

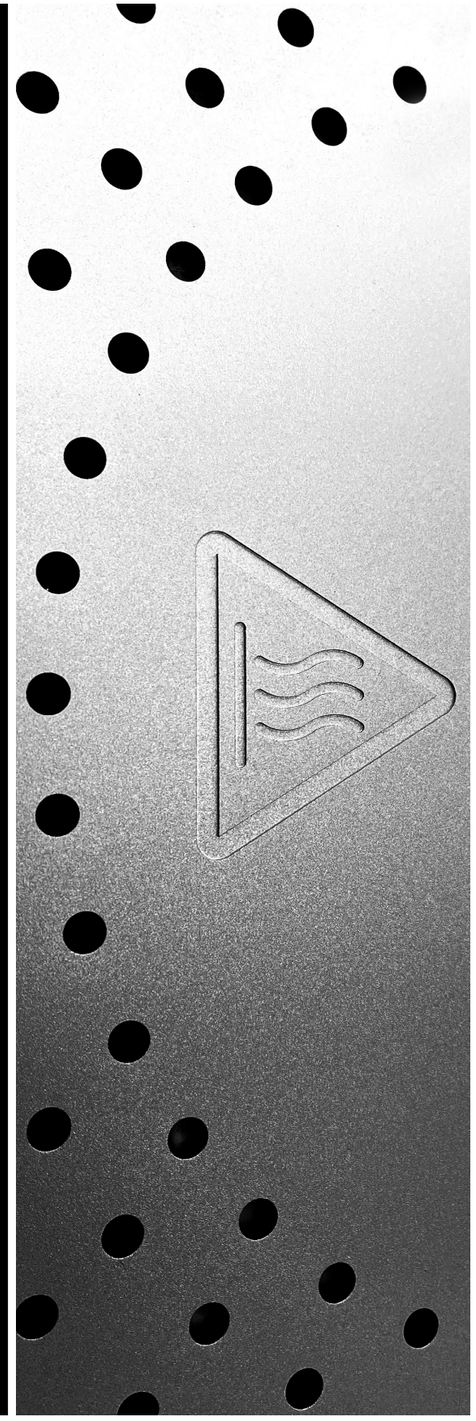
Perfect results – simple as never before.
Control your AUSTROMAT™ via the high-resolution touch screen, with your computer or your smartphone. We even provide solutions for a one-click cycle start. Don’t waste your time with programing, emphasize on your core business.

„AS SIMPLE AS POSSIBLE, AS DETAILED AS NECESSARY!“

Fine tuning necessary? Any time!
Up to five different input screens offer access to every single parameter, even during the program run.

Feels like home.
The user interface is consistent throughout all models. No matter which furnace you use, you immediately feel familiar and training has gone the way of the todo.

Everything is possible!
Do you prefer working with a computer mouse or a keyboard? Just connect them to the USB interfaces and get started.



DEKEMA. Manufacture.

100 % Made in Germany.

All DEKEMA furnaces are hand-crafted products of our German manufactory. Every single part is either manufactured inhouse or priorirized from specialized regional suppliers.

DEKEMA. Customize.

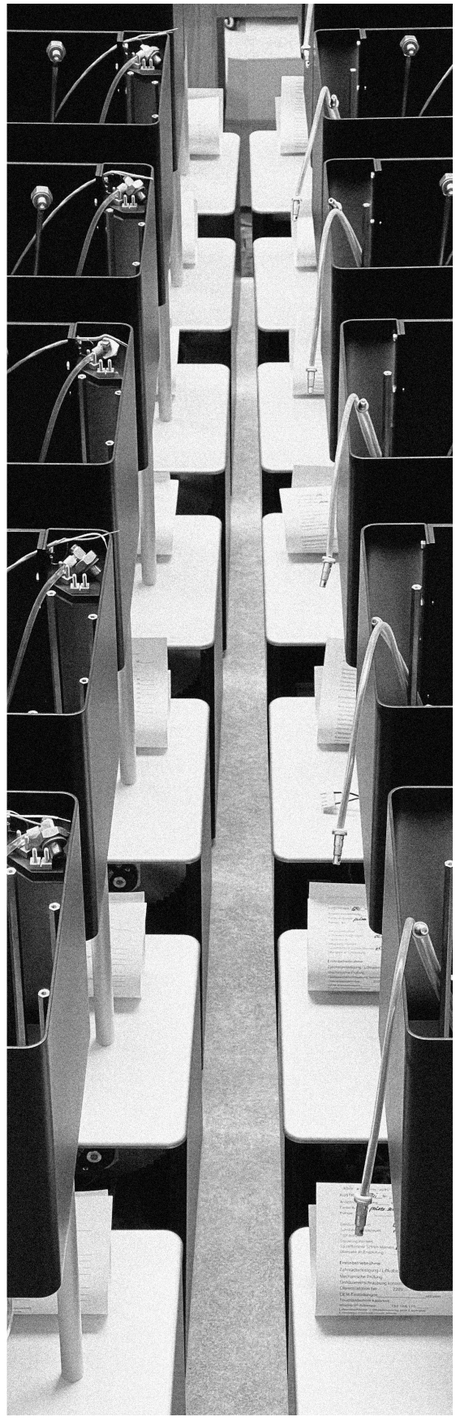
You would like to individualize your furnace? Let your equipment reflect your personality. An individual screensaver, your logo, or your corporate color – DEKEMA customizes your AUSTROMAT™.

DEKEMA. Housing.

- Convection cooling integrated by design without separate fan
- Corrosion-free and lightweight aluminum housing
- Surface texture in matt silver or matt black

DEKEMA. Lift system.

- Vibration-free lift movement
- Durable, maintenance-free stainless steel mechanical parts
- Individually selectable drying position



DEKEMA. Firing chamber.

- Designed decades ago – used for decades – refined over decades
- Unsurpassed harmonic energy distribution
- Fiber insulation – pure quality and high precision execution

DEKEMA. Fiber insulation table.

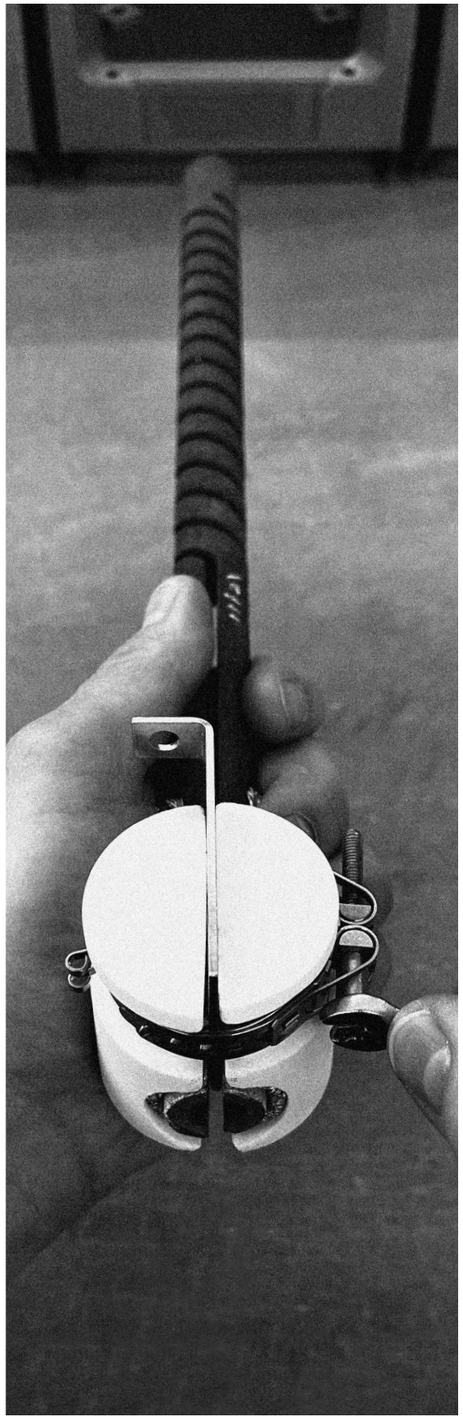
- Patented multi-compound fiber insulation table
- High-purity insulation for high temperature and thermal shock resistance

DEKEMA. Tray system.

- Patented tray system for easy handling and piling
- Sintering in several levels
- Thermal shock resistant

DEKEMA. SiC heating elements.

- DEKEMA specific, high purity SiC (silicon carbide) heating elements
- Homogeneous temperature distribution
- No discoloration
- Robust and durable
- Highest energy efficiency



DEKEMA. Highlights.

DEKEMA IoT (Internet of Things)
Just register your DEKEMA furnace at DEKEMA online and profit from a secure backup of the process data and fast service to minimize downtime.

DEKEMA online
More than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics in our database – and more are added every day.

Load and play – it doesn't get easier than this!

DEKEMA online service
Our DEKEMA online service is available twenty-four-seven. Register at www.dekema.com, save time and get the best service and support.

myDEKEMA
The installed VNC server provides remote access to your device, only through your active clearance, in case of questions. This reduces downtime and eliminates shipping your furnace or arranging service dates on-site.

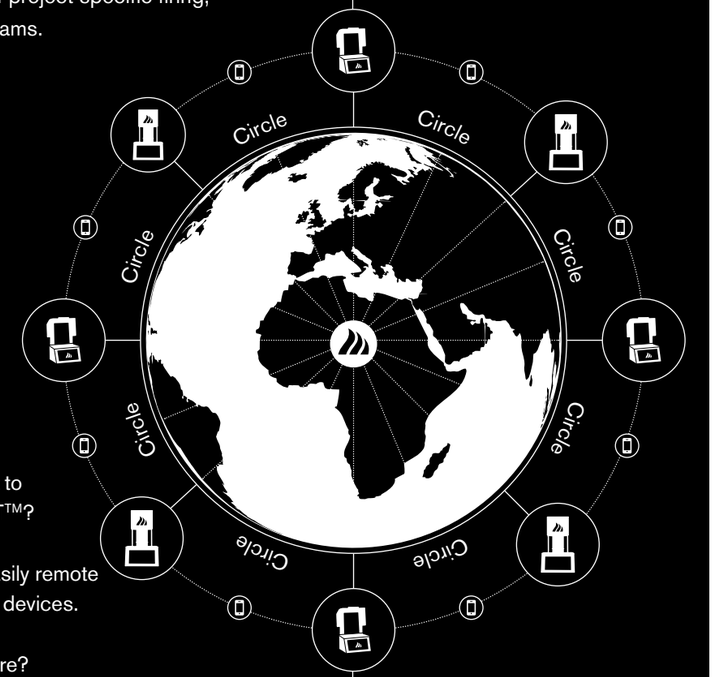
DEKEMA Connect
Connect your AUSTROMAT™ to the internet. Benefit from almost unlimited possibilities in operation, programing, control, and maintenance of your AUSTROMAT™.

OPC and OPC UA
OPC – proven technology for communication between automation systems.
OPC UA – an advanced, platform-independent and secure architecture that enables seamless connection of different devices and supports real-time data transmission.

DEKEMA Check
Internal test routines during the program run monitor all relevant parameters. An automatic diagnosis routine has been integrated for all substantial components to determine the service intervals.

Welcome to the Circle.

DEKEMA Circle
The DEKEMA Circle connects all of your DEKEMA devices. You profit from online software updates and backups, internet database connection, remote control, and the automatic transfer of project-specific firing, pressing and sintering programs.



„JUMP INTO THE DEKEMA CIRCLE – YOU WON'T STEP BACK."

Enjoy control
You're in a meeting and want to supervise your AUSTROMAT™? With the DEKEMA Circle and your smartphone, you easily remote control your AUSTROMAT™ devices. Is the firing already finished? Did you adjust the temperature? Find all information you require, whenever you want, wherever you are.

Houston, we have a problem!
You have questions – we have the answer. With an internet connection, our support can access the furnace remotely – if you allow us to! By analyzing your QM data, we troubleshoot from any place, anywhere, anytime. We want you to be operational.



„IT ALL BEGAN WITH A CERAMIC FURNACE. TODAY YOU RECEIVE THE MAGNUM OPUS.“

Dr. Stephan Miller, CEO

Be inspired by our magna opera

AUSTROMAT™

SINTER

664 / 664*i*™

The little one.

AUSTROMAT™ 664

- DEKEMA patented high-temperature precision thermocouple design, suitable for speeding without overshooting temperature
- DEKEMA patented tray system with up to 2 levels (Ø 2,56" per level), invented for speeding or easy handling of up to 40 units
- No contamination and no discoloration
- Absolutely clean – no purge cycles necessary
- Nonstop – start subsequent cycles immediately
- DEKEMA AutoDry™
- Access to more than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics through DEKEMA online

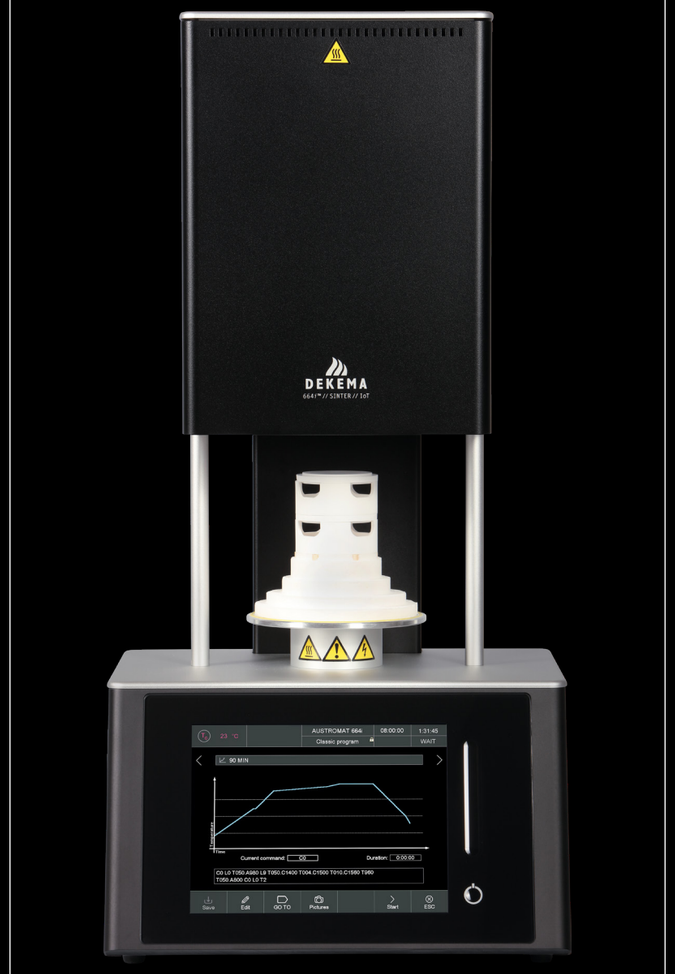
*optional

Applications	with vacuum	without vacuum
Fire	–	–
Press	–	–
Sinter	–	✓
Glaze	–	✓
Crystallize	–	✓
Infiltrate	–	–

DEKEMA. Efficiency.

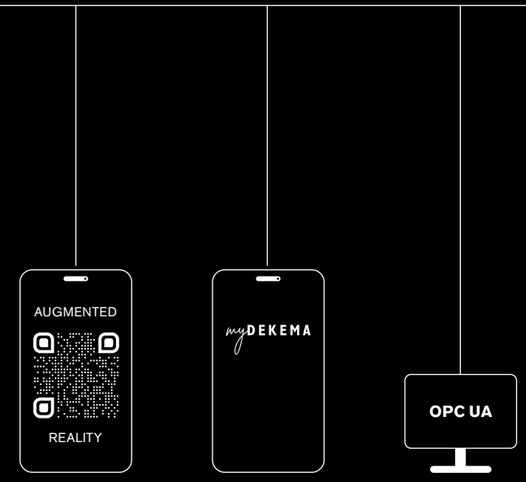
The high-quality SiC heating technology ensures a brilliant result. No necessity of purge cycles due to the absolutely clean chamber. The super fast cycles and the non-stop sintering raises efficiency and profit significantly.

AUSTROMAT™ 664*i*™



+++ Serie *i* features +++

- 10,4" color touch screen display
- DEKEMA Internet database furnace connection
- Internet program streaming
- Cloud management in the DEKEMA Circle
- IoT (Internet of Things): If the DEKEMA furnace is registered at DEKEMA online, you benefit from a secure backup of the process data and fast service
- Quality management: Recording of process data
- USB functionalities: Transfer of firing and press programs, photos, QM files and printouts; backup and update
- Ethernet interface
- Online: Backup and update



included included optional

DEKEMA. Accessories. AUSTROMAT™ 664 / 664*i*™

Software Package for AUSTROMAT™ 664 Art. No. 101933

Activation of the following functions: database access, VNC, FTP, quality management and OPC.



AUSTROMAT™ 664
Temperature upgrade kit (max. temp. 1.560 °C) Art. No. 105619

Activation of the max. temperature of 1.560 °C.
Prerequisite for the subsequent activation of the temperature upgrade kit is the activation of the software package.



Heating element, SiC hanging, set with cable Art. No. 105413

Heating element made of SiC, in set with installation accessories for use in sintering furnaces with hanging radiators.



Thermocouple, for hanging heating elements Art. No. 106652

Thermocouple for use in sintering furnaces with hanging heating elements.



CALIBRITE™ sinter set Art. No. 106907

The CALIBRITE™ sinter set in a convenient storage case includes the DEKEMA micrometer screw with stand and guide for the accurate PTC ring mounting, 15 PTC rings and the QR code for the online calibration tutorial and online calculator.



CALIBRITE™ sinter PTC Art. No. 106906

15 PTC rings for precise temperature calibration of sintering furnaces incl. access to the DEKEMA online calibration calculator.



Tweezers, DEKEMA logo Art. No. 105236

Furnace tweezers for safe handling of firing objects.



DEKEMA. Accessories. AUSTROMAT™ 664 / 664*i*™

Firing table ring, Ø 65 mm, 28 mm height Art. No. 105138

Firing table ring, Ø 65 mm, 28 mm height, spacer for sintering planes.



Insulating table, Ø 65 mm sintering plane Art. No. 105169

Insulating table for use in sintering furnaces with Ø 65 mm sintering planes.



Firing table, basis trough, Ø 65 mm Art. No. 105139

Firing table basis trough, Ø 65 mm, can be used on both sides, flat and low trough, for sintering.



SinterPlace set, Ø 65 mm Art. No. 105835

SinterPlace set, Ø 65 mm, set, consisting of insulating body, firing table ring, Ø 65 mm and tongs, for depositing the firing table basis trough.



Sintering beads, Micro Pearls (200 g) Art. No. 105262

Sintering beads for distortion-free sintering of objects in the firing table basis hybrid Ø 100 mm and firing table basis trough Ø 65 mm.



Fuse (10 pieces), 5 x 20 mm, 16 A, 230 V Art. No. 100512

Fuse (10 pieces), 5 x 20 mm, 16 A, 230 V, for high temperature furnaces.



AUSTROMAT™

SINTER

DMAT

674 / 674*i*™

The big one.

AUSTROMAT™ 674

- Already prepared for ultrafast cycles below 1 hour
- DEKEMA patented high-temperature precision thermocouple design, suitable for speeding without overshooting temperature
- DEKEMA patented tray system with up to 2 levels (Ø 3,94'' per level), invented for speeding or easy handling of up to 80 units
- No contamination and no discoloration
- Absolutely clean – no purge cycles necessary
- Nonstop – start subsequent cycles immediately
- DEKEMA AutoDry™
- Access to more than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics through DEKEMA online



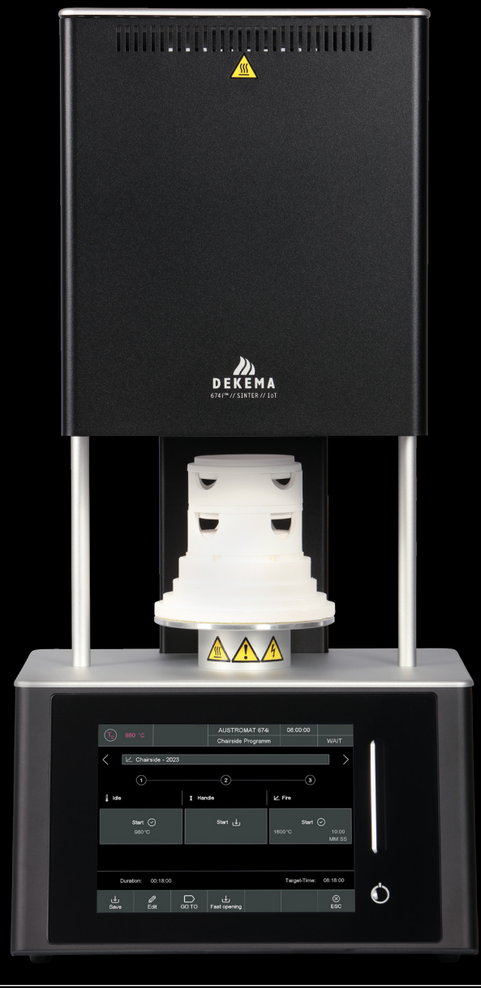
Applications	with vacuum	without vacuum
Fire	–	–
Press	–	–
Sinter	–	✓
Glaze	–	✓
Crystallize	–	✓
Infiltrate	–	–

DEKEMA. Efficiency.

The high-quality SiC heating technology ensures a brilliant result. No necessity of purge cycles due to the absolutely clean chamber. The super fast cycles and the non-stop sintering raises efficiency and profit significantly.

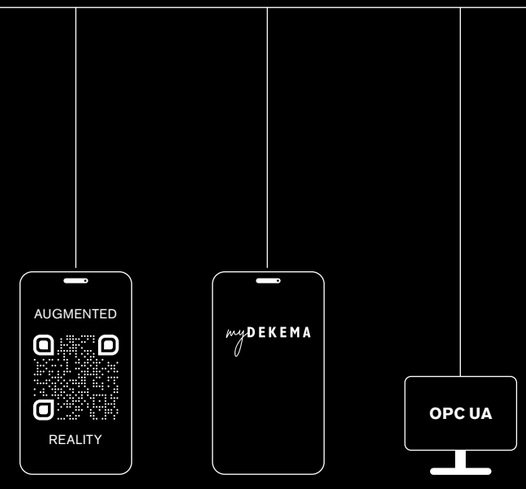
*optional

AUSTROMAT™ 674*i*™



+++ Serie *i* features +++

- 10,4'' color touch screen display
- DEKEMA Internet database furnace connection
- Internet program streaming
- Cloud management in the DEKEMA Circle
- IoT (Internet of Things): If the DEKEMA furnace is registered at DEKEMA online, you benefit from a secure backup of the process data and fast service
- Quality management: Recording of process data
- USB functionalities: Transfer of firing and press programs, photos, QM files and printouts; backup and update
- Ethernet interface
- Online: Backup and update



included | included | optional

DEKEMA. Accessories. AUSTROMAT™ 674 / 674*i*™

Software Package for AUSTROMAT™ 674 Art. No. 101933

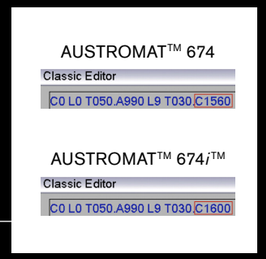
Activation of the following functions: database access, VNC, FTP and quality management.



AUSTROMAT™ 674
Temperatur-Upgrade-Kit (max. Temp. 1.560 °C) Art. No. 105619

Prerequisite for the subsequent activation of the temperature upgrade kit is the activation of the software package.

AUSTROMAT™ 674*i*™
Temperatur-Upgrade-Kit (max. Temp. 1.600 °C) Art. No. 106723



Heating element, SiC hanging, set with cable Art. No. 105413

Heating element made of SiC, in set with installation accessories for use in sintering furnaces with hanging radiators.



Thermocouple, for hanging heating elements Art. No. 106652

Thermocouple for use in sintering furnaces with hanging heating elements.



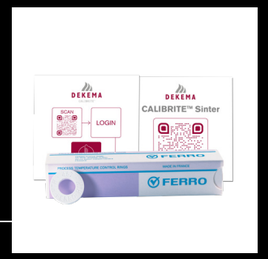
CALIBRITE™ sinter set Art. No. 106907

The CALIBRITE™ sinter set in a convenient storage case includes the DEKEMA micrometer screw with stand and guide for the accurate PTC ring mounting, 15 PTC rings and the QR code for the online calibration tutorial and online calculator.



CALIBRITE™ sinter PTC Art. No. 106906

15 PTC rings for precise temperature calibration of sintering furnaces incl. access to the DEKEMA online calibration calculator.



Gripper, DEKEMA logo Art. No. 101921

Gripper for safe handling of sintering accessories with Ø 100 mm.



DEKEMA. Accessories. AUSTROMAT™ 674 / 674*i*™

SinterPlace set, Ø 100 mm Art. No. 105836

SinterPlace set, Ø 100 mm, set, consisting of insulating body, firing table ring, Ø 100 mm, 36 mm height and pliers, for secure placement of the firing table Basis Hybrid.



Firing table ring, Ø 100 mm, 36 mm height Art. No. 105317

Firing table ring, Ø 100 mm, 36 mm height, standard spacer for sintering planes.



Firing table ring, Ø 100 mm, 28 mm height Art. No. 105462

Firing table ring, Ø 100 mm, 28 mm height, low spacer for sintering planes.



Firing table, basis hybrid, Ø 100 mm Art. No. 105648

Firing table basis hybrid, Ø 100 mm, can be used on both sides, low trough and with numbered cavities, for sintering.



Sintering beads, Micro Pearls (200 g) Art. No. 105262

Sintering beads for distortion-free sintering of objects in the firing table basis hybrid Ø 100 mm and firing table basis trough Ø 65 mm.



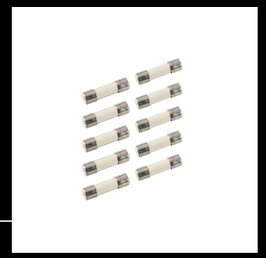
Insulating table, Ø 100 mm sintering plane Art. No. 105381

Insulating table for use in sintering furnaces with Ø 100 mm sintering planes.



Fuse (10 pieces), 5 x 20 mm, 16 A, 230 V Art. No. 100512

Fuse (10 pieces), 5 x 20 mm, 16 A, 230 V, for high temperature furnaces.



DEKEMA. Technical data.

	AUSTROMAT™ 664	AUSTROMAT™ 664*i*™	AUSTROMAT™ 674	AUSTROMAT™ 674*i*™
Size (W x H x D)	15,08'' x 30,71'' x 13,50''	15,08'' x 30,71'' x 13,50''	15,08'' x 30,71'' x 13,50''	15,08'' x 30,71'' x 13,50''
Weight	46 lbs	51 lbs	53 lbs	55 lbs
Power consumption	220 – 240 V / 50 – 60 Hz	220 – 240 V / 50 – 60 Hz	220 – 240 V / 50 – 60 Hz	220 – 240 V / 50 – 60 Hz
Maximum power consumption	2.000 W	2.000 W	2.000 W	2.000 W
Maximum sintering temperature	1.530 °C / 1.560 °C optional	1.560 °C	1.530 °C / 1.560 °C optional	1.560 °C / 1.600 °C optional

DEKEMA. Device equipment.

	AUSTROMAT™ 664	AUSTROMAT™ 664*i*™	AUSTROMAT™ 674	AUSTROMAT™ 674*i*™
Housing: Aluminum	●	●	●	●
Corporate Design customization	optional	optional	optional	optional
Touchscreen	7,5'', color	10,4'', color	7,5'', color	10,4'', color
USB interface / Ethernet interface	● / optional	●	● / optional	●
DEKEMA specific SiC heating element: high purity heating elements made of SiC (silicon carbide), firing at high temperatures, no discoloration	●	●	●	●
Multi-compund fiber insulation: Multilayer insulation for sintering at high temperatures	●	●	●	●
DEKEMA AutoDry™	●	●	●	●

DEKEMA. Software features.

	AUSTROMAT™ 664	AUSTROMAT™ 664*i*™	AUSTROMAT™ 674	AUSTROMAT™ 674*i*™
DEKEMA Internet database access for registered users	✓	✓	✓	✓
DEKEMA Internet database furnace connectivity	optional	✓	optional	✓
Internet program streaming	–	✓	–	✓
DEKEMA Circle: Data Management in the Cloud	–	✓	–	✓
IoT (Internet of Things: If the DEKEMA furnace is registered at DEKEMA online you profit from a secure backup of the process data and fast service to minimize downtime.)	–	✓	–	✓
myDEKEMA: VNC-Viewer for remote control	optional	✓	optional	✓
QM (quality management): Record of process files	optional	✓	optional	✓
USB: Transferring sintering programs (dds)	✓	✓	✓	✓
USB: Transferring fotos (jpeg)	✓	✓	✓	✓
USB: Storage of QM files (dfl)	optional	✓	optional	✓
USB: Storage of Printouts	✓	✓	✓	✓
USB: Backup / Update	✓	✓	✓	✓
Online: Backup / Update	optional	✓	optional	✓
VNC-Server: VNC viewer for remote control of the DEKEMA furnace on the PC	optional	✓	optional	✓
OPC: Industrial standardised connection for data exchange between different systems	optional	✓	optional	✓
OPC UA: Secure, manufacturer-independent interface for Industry 4.0 and IoT communication	–	optional	–	optional
Programing languages	Classic	Classic, Professional, Chairside	Classic	Classic, Professional, Chairside

DEKEMA. Accessories.

	AUSTROMAT™ 664	AUSTROMAT™ 664*i*™	AUSTROMAT™ 674	AUSTROMAT™ 674*i*™
Heating element, SiC hanging, set with cable (Art. No. 105413)	✓	✓	✓	✓
Thermocouple, for hanging heating elements (Art. No. 106652)	✓	✓	✓	✓
Calibration set high temperature	✓	✓	✓	✓
CALIBRITE™ sinter set (Art. No. 106907)	optional	optional	optional	optional
CALIBRITE™ sinter PTC (Art. No. 106906)	optional	optional	optional	optional
Insulating table, Ø 65 mm sintering plane (Art. No. 105169)	✓	✓	–	–
Firing table ring, Ø 65 mm, 28 mm height (Art. No. 105138)	✓	✓	–	–
Firing table, basis trough, Ø 65 mm (Art. No. 105139)	✓	✓	–	–
SinterPlace set, Ø 65 mm (Art. No. 105835)	optional	optional	–	–
Insulating table, Ø 100 mm sintering plane (Art. No. 105381)	–	–	✓	✓
Firing table ring, Ø 100 mm, 36 mm height (Art. No. 105317)	–	–	✓	✓
Firing table ring, Ø 100 mm, 28 mm height (Art. No. 105462)	–	–	optional	optional
Firing table, basis hybrid, Ø 100 mm (Art. No. 105648)	–	–	✓	✓
SinterPlace set, Ø 100 mm (Art. No. 105836)	–	–	optional	optional
Sintering beads, Micro Pearls (200 g) (Art. No. 105262)	optional	optional	optional	optional
Fuse (10 pieces), 5 x 20 mm, 16 A, 230 V (Art. No. 100512)	optional	optional	optional	optional
Tweezers, DEKEMA logo (Art. No. 105236)	✓	✓	–	–
Gripper, DEKEMA logo (Art. No. 101921)	–	–	optional	optional
Software Package for AUSTROMAT™ 664 or AUSTROMAT™ 674 (Art. No. 101933)	optional	✓	optional	✓
Temperature upgrade kit (max. temp. 1.560 °C) (Art. No. 105619)	optional	✓	optional	✓
Temperature upgrade kit (max. Temp. 1.600 °C) (Art. No. 106723)	–	–	–	optional

DEKEMA

Der Ofen.™

DEKEMA Dental-Keramiköfen GmbH

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