AUSTROMAT baSiC®
The AUSTROMAT baSiC® high-temperature furnace by DEKEMA® is equipped with two silicone carbide heating elements that produce sintering temperatures up to 1,560°C; these heating elements are distinguished by their unique robustness and longevity. The bottom part of the two-part firing chamber is manually drawn out by a drawer for loading and unloading. The drawer must be closed for the lift to join or separate the two halves of the firing chamber. All components of the AUSTROMAT baSiC® firing chamber consist of highly pure materials and provide very homogenous temperature distribution for sintering without discoloring the sintered object. The temperature is checked and controlled by two thermocouples made of platinum/platinum-rhodium. About 25 units can be placed on the sintering platform. The AutoDry® system in conventional DEKEMA® ceramic furnaces enables precise drying starting at 80°C in the AUSTROMAT baSiC® and also quickly and precisely cools the sintered objects. Depending on the employed materials, the sintering time can be shortened to 90 minutes including the cooling time. Related programs are either preprogrammed in the factory, or they can be downloaded from the DEKEMA database via the internet. The AUSTROMAT baSiC® requires little space due to its compact design and the sandwich insulation.

The central display on the USB terminal is used to choose between 10 stored programs and provides information on the status of a running program. The programs are started by pressing a button on the USB terminal.

Changes may be made while the program is running using a web browser. A JAVA™-capable browser is all that is needed to contact the AUSTROMAT baSiC® through either an open or user assignable IP address. Secure access via a password offers numerous possibilities for adding to, or changing the saved programs on either a PC or MAC. The unrestricted programming allows the individual program sequences to be arranged as desired. Existing programs from the AUSTROMAT® μSiC® can also be used without being changed. By incorporating the AUSTROMAT baSiC® into your network environment, the furnace software can be diagnosed online and updated. A backup and recovery function via the USB interface reliably protects against data loss. Firing programs can also be retrieved or read out via the USB interface. In addition, the programs that are run can also be recorded on a USB stick or accessed via FTP online. The programs that are run can be logged more easily with the additional of the free program X-DREAM®, and if there is an Internet connection, an e-mail with a detailed log as an attachment is automatically sent to a maximum of three e-mail recipients.

The AUSTROMAT baSiC® automatically identifies the available electrical voltage supply connection and can run off of standard wall sockets (use of a dedicated electrical circuit is recommended). With its shortened sintering cycle of 90 minutes and improved process reliability, the AUSTROMAT baSiC® is the perfect addition for laboratories with small milling units or for large milling centers.

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Setup: Units, language, date, time, screen settings, network, general code, furnace ID, acoustic signal, drying temperature, heating settings, lift settings, check program, oxidation, temperature calibration, printer, quality management, diagnosis data, login data, back/recovery, and much more.

DEKEMA® AutoDry®: Simulates object temperature measurement and automatically regulates the distance between the firing chamber and the firing object with the vibration-free lift for precise drying and cooling phases.

Automatic self-test: Internal test routines continuously monitor the temperature while the program is running.

Check program: An automatic diagnosis routine is integrated for all system components to determine the service intervals.

Network: JAVA™ technology for use via IE*, Firefox, Opera, Safari etc.; supports cable-connected devices with automated IP address (DHCP); FTP client/server, OPC server support, X-DREAM®

Connections: USB and Ethernet (RJ45)

Scope of delivery: AUSTROMAT basiC®, USB terminal, operating instructions

Technical data: 100-240 V/50-60 Hz, max. 2000 W (settable)

Dimensions: 55 cm x 51 cm x 45 cm (width x height x depth), approx. 45 kg

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value range</th>
<th>Interval</th>
<th>Unit/description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature in the firing chamber</td>
<td>50 to 1560</td>
<td>1</td>
<td>°C</td>
</tr>
<tr>
<td>Lift position</td>
<td>0 to 9</td>
<td>1</td>
<td>open to closed</td>
</tr>
<tr>
<td>Time</td>
<td>1 to 64000</td>
<td>1</td>
<td>s</td>
</tr>
<tr>
<td>Acoustic signal</td>
<td>1 to 9</td>
<td>1</td>
<td>Number of tones</td>
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<tr>
<td>Temperature change rate</td>
<td>1 to 100*</td>
<td>1</td>
<td>°C/min</td>
</tr>
<tr>
<td>Time-controlled temperature change</td>
<td>50 to 1560</td>
<td>1</td>
<td>°C/time interval</td>
</tr>
<tr>
<td>Time-controlled lift movement</td>
<td>1 to 9</td>
<td>1</td>
<td>Lift position/time interval</td>
</tr>
<tr>
<td>AutoDry</td>
<td>50 to 1000</td>
<td>1</td>
<td>°C</td>
</tr>
<tr>
<td>...and much more</td>
<td></td>
<td></td>
<td>individual parameters and programms</td>
</tr>
</tbody>
</table>

*depending on the temperature in the firing chamber
• High temperature sintering furnace
• Temperature range from 50°C to 1560°C
• SiC heating elements
• No discoloration
• No contamination
• Energy saving
• Single units sintering in 90 minutes including cooling times*
• Unlimited programming possibilities via web browser
• More than 100 sets, each for 10 programs
• AutoDry® system
• Aluminium frame, anodized silver
• Small footprint (22in x 20in x 18in)

* Restrictions may apply