High-temperature vacuum sintering furnace

**Type FS I - inductively heated**

High-temperature vacuum sintering furnace vertical loading

<table>
<thead>
<tr>
<th>Standard types</th>
<th>Ø Heating conductor [mm]</th>
<th>Height heating conductor [mm]</th>
<th>Useful volume [dm³]</th>
<th>Heating power [kW]*</th>
<th>Load [J]**</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS I 800/1600-2500</td>
<td>800</td>
<td>1600</td>
<td>850</td>
<td>600</td>
<td>500</td>
</tr>
<tr>
<td>FS I 850/850/2400-2500</td>
<td>850</td>
<td>2400</td>
<td>850</td>
<td>1200</td>
<td>900</td>
</tr>
</tbody>
</table>

* T = 2500°C; gas atmosphere Ar, N₂

Owing to their induction heating system, induction-heated high temperature furnaces are used when a large furnace volume and working temperatures up to 2500 °C are needed.

The constant release of energy of the induction-heated graphite susceptor makes it possible to achieve an excellent uniformity of temperature even at high temperatures of more than 2500 °C.

The higher investment costs for such furnaces in comparison to resistance-heated furnaces are compensated by the far higher life time of induction furnaces. It is the aim of our specialists to adjust these highly advanced plants carefully to their individual task. Each furnace is designed and optimised in close cooperation with the customer.

Functions:

- Standard working temperature: 2500 °C
- Standard vacuum: 5 × 10⁻² mbar
- Furnace gas: Ar / N₂ (and others, on request)
- Debinding, removal of temporary binders as option for combination process
- Fast cooling system, insulation opening, gas circulation as option
- Special sizes and functions on request
- Special furnaces for composite materials e.g. C/C or C/SiC
- Custom-built solutions for graphite purification

Experience and competence in high-performance materials

Challenge us - we find your solutions!