Superthal™ heating modules
High power reflectors

Modular heaters for extra high power
Superthal™ High power reflector is a new compact fiber insulated modular heater with Kanthal® Super molybdenum disilicide (MoSi2) heating elements integrated. It is designed for a power of up to 110 kW/m² (10 kW/ft²) at 1650°C (3000°F).

The standard size is 600 x 600 mm (23.6 x 23.6 in), and multiple units can easily be joined together in different configurations in rows or squares.

The high power reflector can be operated horizontally and is easy to install and connect to a standard power supply.

Applications
Wherever a concentrated very high and clean power at temperatures of up to 1650°C (3000°F) is needed, for instance in:

Typical applications:
• Single billet heating up to 1350°C (2460°F)
• Aluminum melting furnaces
• Ladle heaters

SPECIAL FEATURES
• Reduced energy consumption
• Precise temperature control
• Uniform temperature distribution
• High power concentration
**Technical information**

**Specifications**
The module consists of special Kanthal® Super MoSi₂ heating elements integrated in ceramic fiber and supported by a steel sheet.

Hooks are pre-mounted for hanging the module in straps.

The contact straps are ready to be connected to the power supply.

**Product name**
Superthal™ High power reflector.

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**Properties**

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Width</td>
<td>600 mm (23.6 in)</td>
</tr>
<tr>
<td>Depth</td>
<td>600 mm (23.6 in)</td>
</tr>
<tr>
<td>Height</td>
<td>230 mm (9.1 in)</td>
</tr>
<tr>
<td>Power</td>
<td>40 kW</td>
</tr>
<tr>
<td>Voltage</td>
<td>66 V at 1650°C (3000°F)</td>
</tr>
<tr>
<td>Current</td>
<td>605 A at 1650°C (3000°F)</td>
</tr>
<tr>
<td>Power density</td>
<td>110 kW/m² (10 kW/ft²)</td>
</tr>
<tr>
<td>Element temperature</td>
<td>up to 1650°C (3000°F)</td>
</tr>
<tr>
<td>Element type</td>
<td>Kanthal Super special, 12/24</td>
</tr>
</tbody>
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**Sandvik Group**
The Sandvik Group is a global high technology enterprise with 47,000 employees in 130 countries. Sandvik’s operations are concentrated on three core businesses: Sandvik Tooling, Sandvik Mining and Construction and Sandvik Materials Technology – areas in which the group holds leading global positions in selected niches.

**Sandvik Materials Technology**
Sandvik Materials Technology is a world-leading manufacturer of high value-added products in advanced stainless steels and special alloys, and of medical implants, steel belt-based systems and industrial heating solutions.

Kanthal is a Sandvik owned brand, under which world class heating technology products and solutions are offered. Sandvik, Kanthal and Superthal are trademarks owned by Sandvik Intellectual Property AB.

**Quality management**
Sandvik Materials Technology has quality management systems approved by internationally recognized organizations. We hold, for example, the ASME Quality Systems Certificate as a materials organization, approval to ISO 9001, ISO/TS 16949, ISO 17025, and PED 97/23/EC, as well as product approvals from TÜV, JIS and Lloyd’s Register.

**Environment, health and safety**
Environmental awareness, health and safety are integral parts of our business and are at the forefront of all activities within our operation. We hold ISO 14001 and OHSAS 18001 approvals.

Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice.

This printed matter is only valid for Sandvik material. Other material, covering the same international specifications, does not necessarily comply with the mechanical and corrosion properties presented in this printed matter.