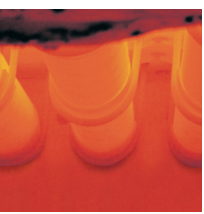
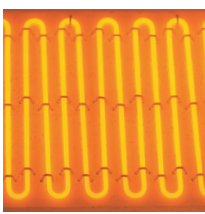
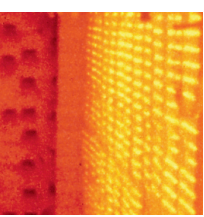
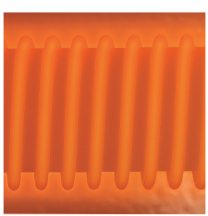
Kanthal®
The heating technology brand



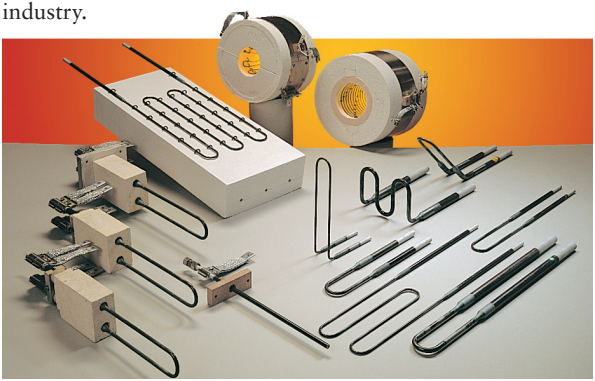




KANTHAL

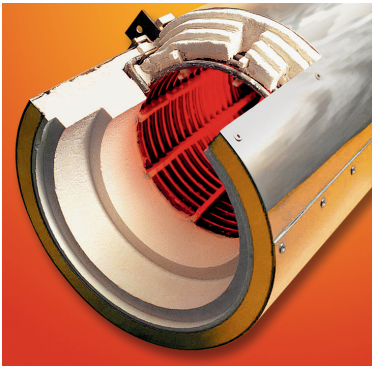
Kanthal® Super $MoSi_2$ heating elements and Superthal™ heating modules
High power and long life electric heating elements for use up to 1850°C (3360°F). Manufactured as ready-made elements, straight or bent in a broad range of standard dimensions.

Superthal heating modules with Kanthal Super elements and ceramic fiber in the form of half-cylinders, cylinders, panels or completely tailor made for use up to 1600°C (2910°F).

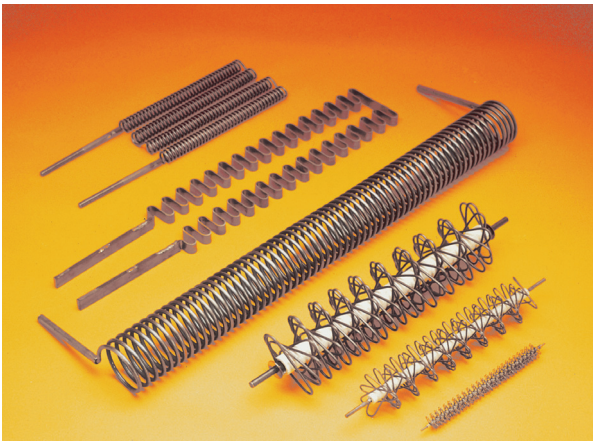
Used mainly in laboratory furnaces and production furnaces in the glass-, electronics-, steel-, ceramics and heat treatment industry.



Heating elements
Furnace systems and complete heating elements for semiconductor wafer and solar cell processing. Furnace rebuilds, upgrades and new replacement furnace systems to provide larger wafer processing capabilities.



Metallic elements
Ready-made furnace elements manufactured in workshops from Kanthal or Nikrothal® alloys for furnace temperatures between 50–1350°C (120–2460°F).



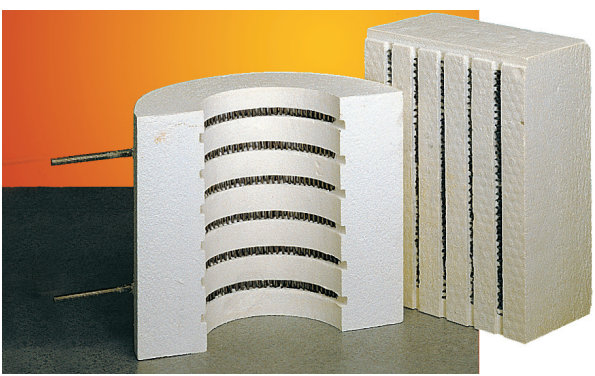
Technical ceramics
Wide product range of thermodielectric refractories where good mechanical strength, high electrical resistance and good thermal shock resistance are required.

Tubothal® metallic heating element
Powerful metallic element heaters for use inside all types of radiant tubes, ideally Kanthal APM™. Available in standard dimensions from 68 to 170 mm (2.68–6.7 in) diameter.

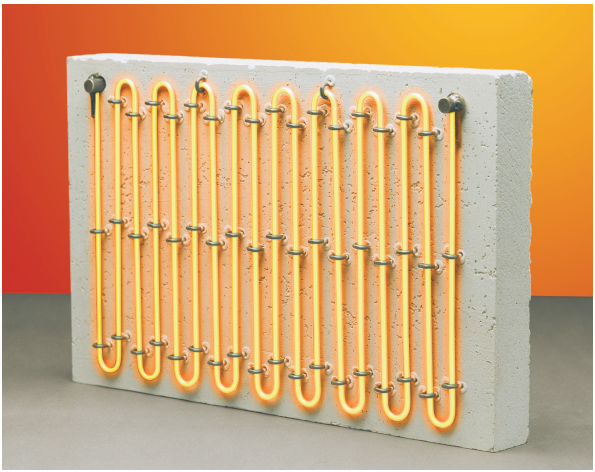
Tubes
Kanthal APM, Kanthal APMT™ and Sandvik® 253 MA and 353 MA extruded radiant tubes for gas- or electrically heated furnaces. Complete assemblies with inner tubes (gas) or suitable electric heating elements. Standard dimensions from 26 to 260 mm (1.02–10.2 in) outer diameter.

Kanthal® Globar® heating element
Heating elements in a broad range for use up to 1650°C (3000°F). Manufactured in straight, spiralled, single or multi-shank designs for a variety of heat treatment and melting furnaces. Kanthal Globar is the standard element for production of float-glass.

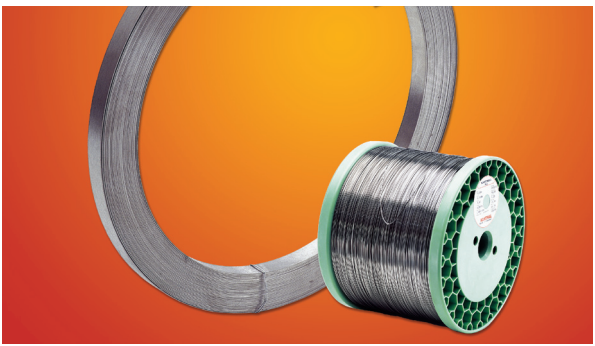
Fibrothal™ heating modules
A complete modular system comprising heating elements and insulation for furnaces and processes up to 1300°C (2370°F).



Moduthal™ heating modules
Prefabricated radiant heating modules designed to suit a wide range of thermal processing applications at element temperatures up to 1350°C (2460°F).

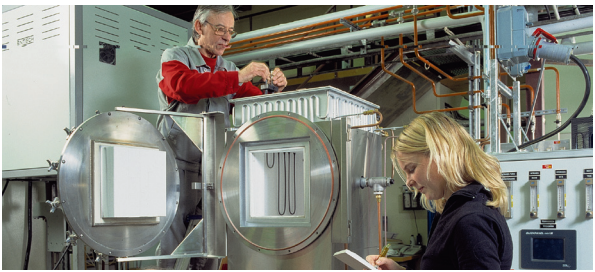


Thermocouple wire and strip
Thermocouple wire and thermocouple strip for use at temperatures up to 1260°C (2300°F). The Kanthal thermocouple wire is supplied with bright or oxidized surface according to standard or special EMF requirements.



Customer service
If you are looking for ways to improve your productivity, optimize the quality of your end-product or design an entirely new heating solution, we can help you.

We not only offers a complete range of products to generate heat, but of equal importance is the technical and commercial service we extend to our customers. Examples of this includes advice on choice of material, design of elements, trouble-shooting, design and manufacturing of complete heating systems, development of new elements and alloys, installation service and follow-up.



Heating alloys
Kanthal and Nikrothal resistance heating alloys for temperatures up to 1425°C (2600°F).

Appliance wire Ø 0.12–2 mm (0.0047–0.078 in), ribbon: The heating source in most electric household appliances such as ovens, toasters, hair dryers, washing machines etc.

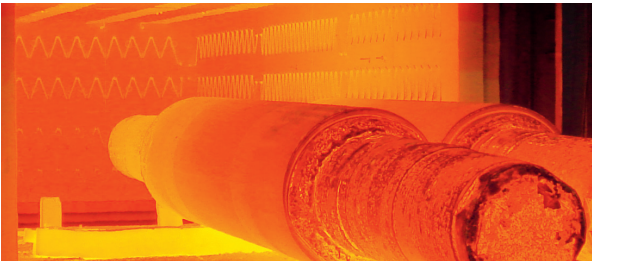
Industrial wire Ø 1–12 mm (0.039–0.47 in), strip: Heating elements in industrial furnaces and processes.

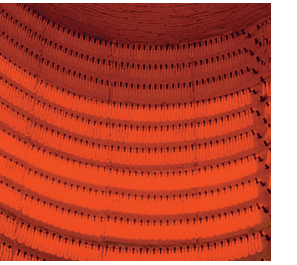
Kanthal – the heating technology brand
Sandvik, of which Kanthal is a brand, is a world-leading manufacturer of products and services based on advanced metallic and ceramic materials.

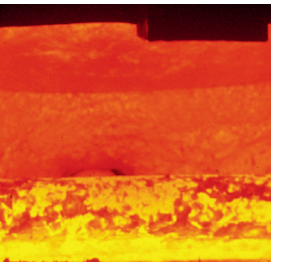
Kanthal is a world-leading brand in the area of heating technology. Based on a long tradition of innovation and R&D, Kanthal products are used in a variety of applications, primarily for generation, measurement and control of heat.

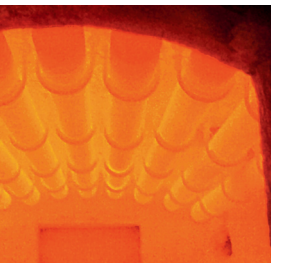
Utilizing Sandvik's worldwide sales and logistics network, the Kanthal portfolio offers a wide range of highly engineered as well as standard products and technical services that can help you exceed your expectations.

Applications
Kanthal products are used to heat domestic appliances, laboratory- and industrial furnaces and different industrial processes.









Kanthal history
The Kanthal brand is based on the company AB Kanthal that was founded in 1931 by Hans von Kantzow in Hallstahammar, Sweden. The business idea was to market and further develop his invention – the Kanthal iron-chromium-aluminum (FeCrAl) resistance heating alloy.

The Kanthal FeCrAl alloy was invented almost by accident. A forgotten sample in a furnace resulted, after years of development work, in a completely new resistance material based on this alloy. After the market introduction in 1931, the Kanthal alloy outperformed the existing nickel-chromium (NiCr) alloys and Kanthal expanded rapidly on the world market.

In the late 1990s Sandvik became majority shareholder in Kanthal. Today Kanthal is the brand for Sandvik's heating technology products and services. The original Kanthal FeCrAl alloy is still a product in our portfolio, although improved in a number of aspects. It is now part of a complete product range of heating technology products and resistance materials that covers almost all applications and temperatures.

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, Superthal, Nikrothal, Tubothal, Globar, Fibrothal and Moduthal are trademarks owned by Sandvik Intellectual Property AB. 253 MA and 353 MA are trademarks owned by Outokumpu.

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S-KA015-B-ENG, 0-B-4-3, 06.2011. Printed in Sweden.