A world of warmth.
Our business concept is to provide producers and users of heating products with components and systems for electric heating appliances. We are a global player with a local presence on our domestic markets. We work closely with our customers as their partner, actively contributing to meeting their requirements.

Our aim is to reinforce our customers’ competitiveness through leading-edge product development. This takes place both via our own development facilities and via joint projects with customers. Quality and the capacity to meet demands will be the reasons why our customers choose us as their supplier.

We provide cost-effective, competitive products and services by means of high productivity and a high degree of own processing. Our objective is to be able to follow our customers’ expansion both geographically and in terms of products by means of our own steady growth.
We work in sectors with different needs and requirements, from manufacturers of small appliances like irons to the petrochemical industry, which requires large elements for its installations.

We organise our activities to meet the needs for components and systems for electric heating within each sector. This means that our technicians and sales persons have the skills to participate actively and creatively in the customer's development process.
## SMALL HOUSEHOLD APPLIANCES
- Grills
- Irons
- Deep fat fryers
- Fryers
- Waffle irons
- Warming
- Heated pressure cookers
- Kettles

## HOUSEHOLD WHITE GOODS
- Dishwashers
- Washing machines
- Tumble dryers
- Refrigerators
- Ovens
- Drying cabinets
- Mangles

## PROFESSIONAL EQUIPMENT
- Cooking pots
- Fryers/grills
- Ovens
- Warming
- Automatic drink dispensers
- Dishwashers
- Washing machines
- Tumble dryers
- Refrigerators and freezers
- Drying cabinets
- Deep fat fryers
- Steam generators

## COMFORT - AIR
- Radiators
- Conectors
- Air conditioning
- Air curtains
- Duct heaters
- Fan heaters
- Storage radiators
- Infrared heaters
- Frost protectors
- Sauna ovens
- Waterbed heaters

## COMFORT - LIQUID
- Water heaters
- Boilers
- High-pressure washers
- Heat pumps
- Instantaneous water heaters

## VEHICLES AND TRANSPORT
- Rear view mirror heaters
- Train heating systems
- Engine heaters
- Coupé heaters
- Gear heaters

## PROCESSES/PROJECTS
- Instantaneous water heaters
- Air heaters
- Explosion-proof equipment
- Desinfection equipment
- Galvanic baths
- Temperature control

## MAINTENANCE/SPARE PARTS
- Plastic extrusion equipment
- Vacuum tables
- Spare parts for white goods

## SPECIAL
- Frequency converters
- Brake resistors
- Medical equipment
- Power resistors
- Graphic/photographic industry
Applications

We develop and produce elements for a wide range of applications, everything from rear view mirrors for cars to process heaters. Our business concept is to be able to offer the optimal technology for a particular application. In order to be the right partner, within the group we carry on development work to produce new solutions for different applications, for example automatic drink dispensers. We can supply individual components or complete systems for electric heating. In some cases, the technologies we employ are used for applications other than heating, for example load resistors.
## Food Preparation
- Frying plates
- Surface grills
- Waffle irons
- Broilers
- Cookers
- Pizza ovens
- Baking machines
- Convection heaters for cooking/drying
- Warming plates
- Heated trolleys
- Warming cabinets
- Warming ovens
- Heated trays
- Deep fat fryers
- Heated pressure cookers
- Cooking pots

## Heating of Water and Beverages
- Instantaneous water heaters
- Dishwashers
- Washing machines
- Wash boilers
- Immersion water heaters
- Kettles
- Coffee machines
- High-pressure washers
- Steam generators

## Drying
- Tumble dryers
- Towel rails
- Dish dryers
- Irons
- Ironing machines

## Room Heating
- Radiators
- Convector and panel heaters (convection)
- Oil-filled radiators
- Forced air heaters
- Storage heaters
- Airborne central storage heating
- Duct heaters
- Ceiling heating
- Radiation heaters
- Frost protectors
- Heat exchangers
- Heat pumps
- Storage water heaters
- Boilers

## Individual Physical Comfort
- Sauna ovens
- Instantaneous water heaters for spas
- Electric pads
- Waterbeds

## Vehicles
- Engine heaters
- Coupé heaters (trains/cars)
- Gear heaters
- Oil heaters

## Defrosting/Tools
- Defrosters (freezers)
- Refrigerators
- Tool heating
- Bag sealers
- Binding systems

## Miscellaneous
- 48-h service range
- Misc. air elements
- Misc. water elements
- Misc. other liquid elements
- Photographic development
- Heating of satellite dishes
- Gas/pellet igniters
- Charcoal fire igniters
- Laboratory / health care equipment
- Pipes for heat exchangers
- Heating of office machines
- Power resistors
- Drying ovens
Technology

We develop, produce and sell a number of technologies within the product area of electric elements. Our range of technologies guarantees that customers always get the best solution. By using our know-how and equipment for various technologies, we can develop new solutions that reinforce our customers’ competitiveness. We also have technology and products in temperature control and heat exchange, for example.
Traditional elements in diameters 6.0 to 21.0 mm. Lengths from 140 to 7200 mm. Material AISI 304, 321, 316L, Incoloy 800, 825. Temperature up to 940°C. Cartridge heaters, diameter 3.3-20.0 mm. Aluminium profiles for convection and radiation. Vulcanised tubular heating elements.

Thick film elements in AISI 304, temperature max. 500°C. Foil elements in PVC, max. 70°C, polyester, max. 110°C, polyimide, max. 230°C, silicone, max. 230°C, micanite, max. 400°C. Custom connections.

Self-adjusting function. Adjustment of power via air flow. Connection voltage 110-240 V and 12-36 V. Curie point 50°C-320°C.

Rapid heating. Adjustment by thermostat and overheating protection. Band heaters max 700°C with 4,5W/cm².

Micanite elements, ceramic elements, enamelled elements/resistors. Surface power 3-4 W/cm² at max. 350°C. Max. 7 W/cm² with good thermal conductivity and a good fit. Operating temperature max. 700°C. Aluminium housed brake resistors.

Plastic cables, max. 70°C, self-adjusting, max. 120°C, parallel, max. 120°C, silicone, max. 120°C, PTFE, max. 200°C, glass-fibre, max. 450°C, high-temperature, max. 800°C. Dimensions: diameter 3.8 to 5x28 mm plus 7x4 mm. Max. power 40 W/m and, for high-temperature, up to 350 W/m.

Material: Ceramic, quartz glass, quartz glass with halogen. Temperature 150-2400°C depending on the material.

Thermostats, thermal cut-offs, temperature control integrated in tubular heating elements, regulators and sensors, terminal boxes.

Components for element production, heat exchangers, heat treatment, furnace brazing, stainless pipes.
The Group

The Element group is one of three business areas of NIBE Industrier, listed on the Stockholm stock exchange since 1997, with a vision to create a world-class heating company. The other two business areas are Energy Systems - producer of electrical heating devices; and Stoves – producer of wood burned stoves and inserts for domestic use. Each business area has its own operative management working under its own responsibility for results. Financing, currency management, company acquisitions, new establishments, financial management, personal policy are coordinated at the group level.

The Business Area

The Backer Group produces and sells components and systems for electric heating under the brand names Backer, Meyer, Eltop, FER, REBA, FACSA, Danotherm and Calesco. Tubular heating elements are the biggest product group of the business area. The basic technology has remained the same for a long time, but the products have gradually been optimized in terms of technical performance, quality and production costs. As a result of acquisitions in recent years, the range has been expanded with new technologies, including foil elements, printed elements, explosion-proof elements, cartridge elements, etc.

The market consists of industrial users and component users who need electric heating or power resistors. We are the market leader in northern Europe and one of the leading producers in the world. Our objective is to have local presence on our domestic markets, supplemented by units for special products and cost-effective production units for large production runs in low-cost countries. Our local presence is a joint benefit when developing country specific product applications together with our customers. At group level we have a coordinating R&D department and a high-tech laboratory adding to the strengths of the Backer Group.

The Backer Group has production units in Sweden, Norway, Finland, Poland, the Czech Republic, the UK, Italy, Spain, China and Mexico. Backer produces and sells different types of elements, for, among others, liquid heating, air heating, defrosting, tool heating and process heating.

The Calesco Division has its production units in Sweden and Poland. The division produces and sells products including foil elements for heating in, for example, medical and healthcare equipment, car rear view mirrors and waterbeds as well as applications within telecommunications, the military and surveillance.

Danotherm has its production units in Denmark and Poland. Danotherm specializes in design and production of power- and brake resistors sold to the frequency converter market, industrial robots and wind energy, among others.