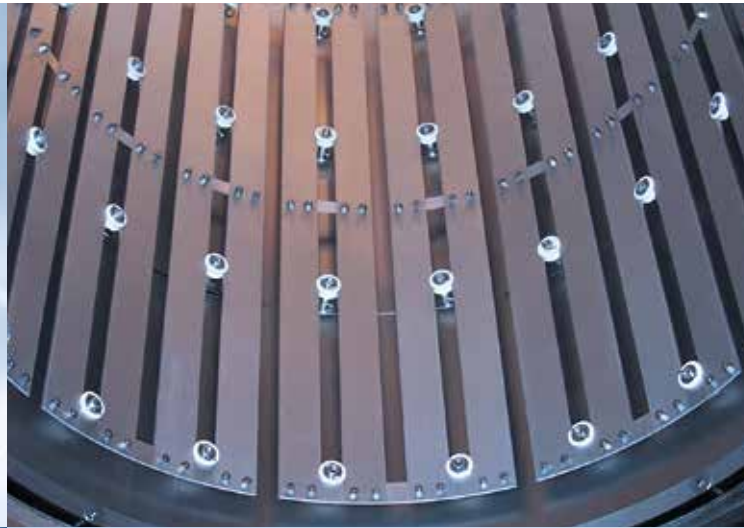




SPECIALIST IN INNOVATIVE
BORON NITRIDE PRODUCTS



HENZE BORON NITRIDE PRODUCTS AG

FOCUSED ON BORON NITRIDE

OUR MOTIVATION



In November 1993, I decided to set up my own company as a sales partner for Boron Nitride products. I only envisaged this to be a stop-gap arrangement. After a short interlude with a client of my original employer, it soon became clear that due to a recruitment freeze there was no going back.

The company grew slowly but steadily to what you see today, primarily due to my firm belief to always add value for our customers - this could easily be described as my approach to life.

Today, HENZE employs more than forty colleagues and has a promising product range to take us forward. The company is now successfully led in the second generation of family ownership by two of my sons - in the form of a small, non-listed, public limited company.

Peter Henze
Founder and Chairman of the Supervisory Board



My involvement in the family business was not an obvious decision. However, on completion of my studies, I was somehow drawn to HENZE. There is something special about looking after the family business together with my brother and developing it in line with our father's vision.

The company is not only underpinned by the specialist knowledge of our team and the use of state-of-the-art technology, but also the curiosity and courage to embrace new areas of activity. Boron Nitride is a unique material which is finding its use in the widest variety of applications – its potential to innovate is by no means exhausted. Therefore, I look forward to working with our superb and competent team to explore and discover new markets. Our colleagues are all highly motivated and share the belief in the potential of both this material and our company.

Christoph Henze
Board of Management



I have played an active part in the management of our family business since 2012 and particularly enjoy working closely with my brother, especially as we complement each other very well. HENZE is a dynamic, innovative company and will continue its positive development. We are continuously growing and building upon our strong team culture.

We have established a niche for our Boron Nitride products – and in the course of doing so, we have built up know-how and experience which is second to none. The most important components of this are our colleagues, whose significant contribution to our success is fully recognised. We therefore, not only want to be an attractive business partner to our customers and suppliers, but also an employee-focused company.

I would like to take this opportunity to thank everyone who has contributed to the success of our company – colleagues, supervisory board, business partners, suppliers and customers!

Matthias Henze
Board of Management

A large group of approximately 35 employees of Henze Boron Nitride Products AG are posed for a group photo. They are standing in two rows in front of a modern, light-colored building. The building's facade features the company name 'HENZE' in large, bold, dark letters, with 'BORON NITRIDE PRODUCTS' written in smaller letters below it. The employees are dressed in a mix of white polo shirts and dark trousers or jeans, with some wearing dark Henze-branded polo shirts. The scene is brightly lit, suggesting a sunny day, and the overall atmosphere is professional and team-oriented.

HENZE
BORON NITRIDE PRODUCTS

WE ARE HENZE

A dynamic, highly motivated team and a modern material that promises a great deal:

Henze Boron Nitride Products AG is the leading specialist in innovative products manufactured from hexagonal Boron Nitride. The difference? Our far-reaching experience!

MOTIVATION AND PASSION

Henze Boron Nitride Products AG is a young and dynamic family business. Founded by Peter Henze in 1993, the company initially focused on the marketing and sales of third party manufactured Boron Nitride semi-finished products. Shortly afterwards, manufacturing was brought in-house. From 2004, the development and production of Boron Nitride powders and suspensions has created a wide variety of market opportunities.

Today HENZE employs a team of 40. We develop, consult and manufacture innovative products for a wide range of industrial applications. Our high performance Boron Nitride powders, suspensions, sprays, dispersions and ceramic precision-machined components are used today as coatings, release agents, fillers, lubricants as well as structural components in the high temperature sector.

Henze BNP is now a well established leading specialist in this field and continues to flourish into the next generation. Our focus over the last 20 years has been providing solutions to our customers with top quality of hexagonal Boron Nitride products, which now puts us firmly at the leading edge of application engineering. With the support of our loyal and highly qualified specialists, we are able to confidently draw upon our expertise and wide ranging experience.

Our clients value us as their business partner and our ability to effectively support their needs. They profit from our advice and know-how in an ongoing dialogue, that often leads to completely new and customer specific developments. Our quick decision making processes, flexibility, as well as our ability to think outside of the box are key.

Our modern support infrastructure is also characterised by innovation, be it IT, the workplace environment or the transparency in all of our various operating departments. A flat hierarchy and quick decision making lead to maximum flexibility to the benefit of our customers. At the same time, this emphasises the value we place on our team as we owe our success to their combined know-how and continued motivation.

Last but not least, our corporate responsibilities also extend to the environment. We source our energy exclusively from renewable energy and compensate our carbon consumption by heating our premises with natural gas using Gold Standard Carbon Credits. When sourcing our raw materials, we pay close attention to the quality requirements and our waste materials are almost 100% recycled.

*A successful generation change:
Christoph Henze, Matthias Henze, Peter Henze - left to right*



OUR PRODUCTS

Boron Nitride is a versatile all-rounder with unique properties. HENZE refines this high performance ceramic material into products used in a wide variety of applications.



HIGHER PERFORMANCE FOR YOUR PROCESSES



HeBoSint® – Components made of sintered Boron Nitride

Technical ceramics manufactured from sintered Boron Nitride are in particular demand in various high temperature applications.

We manufacture these to your exact requirements: using the latest state-of-the-art machining centres to the required quality and with the specified physical properties. Parts can be produced in a seemingly endless variety of shapes and sizes. Plus a multitude of other complex geometries.

Due to the high purity of the raw materials we use for our HeBoSint® products, the end product ensures process security, reducing breakdowns and downtime. Being a non-oxide ceramic, HeBoSint® offers significant application specific advantages over oxide ceramics.

- ▶ chemical resistance to and not wetted by the vast majority of molten metals, glasses and salts
- ▶ good release properties
- ▶ temperature resistant in air to an excess of 900 °C, under vacuum or in inert conditions to above 2000 °C
- ▶ low thermal expansion
- ▶ high thermal conductivity
- ▶ excellent electrical insulation, also at high temperatures
- ▶ outstanding thermal shock resistance



HeBoCoat® – Boron Nitride Coatings

These liquid Boron Nitride coatings are used in high temperature sectors for a variety of applications. Our Boron Nitride suspensions and sprays are available as lubricants, release agents or for surface protection - in a variety of viscosities and concentrations, water or ethanol based and depending on the application a range of binding agents. HeBoCoat® products excel due to their ease of use, safe handling, release properties, optimum coating formation and adhesion. They reduce tool wear and increase productivity due to reduced equipment downtime.

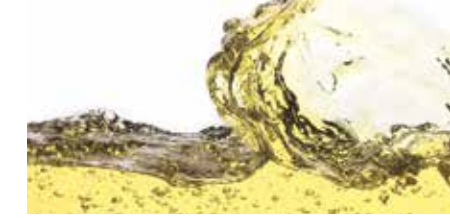
- ▶ oxidation resistant in air to 900 °C, in inert conditions to above 2000 °C
- ▶ optimum release and lubricating effect
- ▶ high temperature resistance
- ▶ not wetted by the vast majority of molten metals, glasses and salts



HeBoFill® – Boron Nitride Powder

HeBoFill® encompasses a broad spectrum of Boron Nitride powders in a variety of purities, grain sizes and crystallinities. This allows their performance to be optimised for individual applications. It includes release agents and lubricants for the aluminium extrusion sector, in hot forming of metals and shaping, or to increase the thermal conductivity when used as a filler in polymers.

- ▶ high temperature resistance
- ▶ high thermal conductivity
- ▶ excellent release agent and lubricant
- ▶ high electrical insulating potential



HeBoLub® – Lubricant Additive

The combination of fine hexagonal Boron Nitride particles and a high grade base oil make HeBoLub® a unique lubricant additive. The liquid oil dispersions containing Boron Nitride reduce component friction and wear. They produce smooth sliding surfaces for engines, gear boxes and other machinery with quieter operation while improving their efficiency.

- ▶ excellent lubricating and sliding properties
- ▶ easy to mix in the vast majority of oils and oil-soluble lubricants
- ▶ good thermal conductivity
- ▶ excellent lubricating properties at low and high temperatures
- ▶ good penetration and surface wetting
- ▶ lowest filter blockage due to very fine particle sizes
- ▶ retains stability over time
- ▶ high contact pressure resistance
- ▶ available in different solid contents

A photograph of two male technicians in white lab coats working in a factory. The technician on the left, who has a beard and is wearing white gloves, is holding a small, light-colored component. The technician on the right, who has a mustache, is looking at the component with a focused expression. In the background, there is a large industrial machine with a control panel featuring a screen and various buttons. The scene is brightly lit, emphasizing the precision and technical nature of the work.

PRECISION – AT EVERY STAGE

Extensive know-how, coupled with years of experience, state-of-the-art technology, attention to detail in manufacture, inspired by challenges and our in depth production capabilities.

QUALITY PRODUCTS WITH A FLAIR FOR DETAIL

Our production capabilities are built on the combined specialist knowledge of our professional engineers and skilled technicians. Our loyal team is highly experienced in handling these materials, which we continually pass on to future generations.

With the modern machining centres we have at our disposal, we continually invest in state-of-the-art technology so that we

are able to manufacture highly complex precision components. Thus, we can fulfil customers specific geometries in a range of quantities from small batches upwards.

Diligence in manufacture is our highest priority. Here at HENZE, we work with precision and care to prevent any damage to the delicate parts. The result is a high quality end product manufactured from the best raw materials – something our clients have become accustomed to.

*Machining precision components
using state-of-the-art technology, know-how and
drawing on considerable experience.*



Quality starts with procurement and we source our raw materials exclusively from accredited manufacturers. Our excellent business relationship with all major Boron Nitride raw material suppliers allow us to offer a very broad product portfolio. Our in-house laboratory and test facility assure the consistent quality of our products. Thanks to our well stocked inventory and anticipation of market demands, we are able to manufacture and ship at

short notice. Our highly competent and flexible team will respond quickly and professionally – offering value for money, reliability and on time delivery. Give us a try!



WHAT DRIVES US

Hexagonal Boron Nitride – is its potential exhausted? Certainly not!

Together with our customers, we are motivated by curiosity and our desire to develop further.

This, when coupled with our wide ranging experience in the application of this material is driving innovation and new applications forward.

A PASSION FOR INNOVATION

It all started with the sales and marketing of semi-finished Boron Nitride products. This was followed by in-house manufacture. In the meantime, HENZE has significantly evolved and strengthened its Boron Nitride product range.

The inspiration for new products often comes from our customers who are looking for something other than standard solutions.

This is why we work closely with our customers to develop tailor-made Boron Nitride products that meet their specific requirements. Thus, providing our clients with the technical and commercial edge that they are looking for.

To complement this, we work with industrial partners and research institutes in parallel with our own small scale in-house laboratory

experiments. We undertake on-site tests with our customers. In most cases, all this allows us to draw on the experimental results and our experience to quickly define the important parameters.

Subsequent in-house manufacture service ensures not only prompt delivery, but also consistent quality.

*Boron Nitride products – a steady stream of new ideas.
A challenge we enjoy!*





PLEASE GET IN TOUCH!

When it comes to hexagonal Boron Nitride, all roads lead to HENZE.

Unsure of which product is the best? Work with us to find the correct solution.

With us you are in good hands.

GOOD ADVICE – GOOD RESULTS

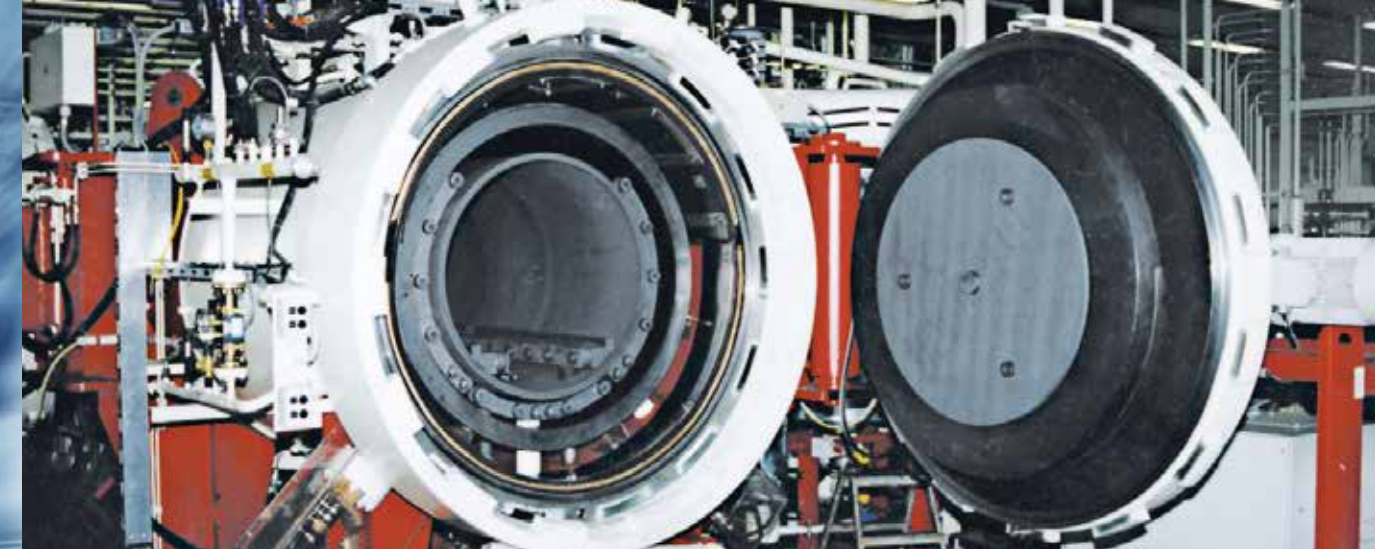
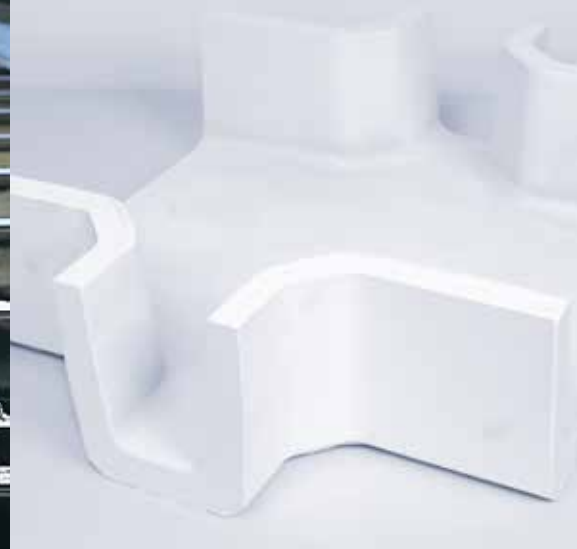
*Your needs – our know-how.
Together, we'll find fresh solutions.*



In our business, sound advice is key – Boron Nitride products stimulate discussion: Which powder is best for my application? Which geometries are possible for precision machined sintered components? Which additives would be sensible in a particular make-up?

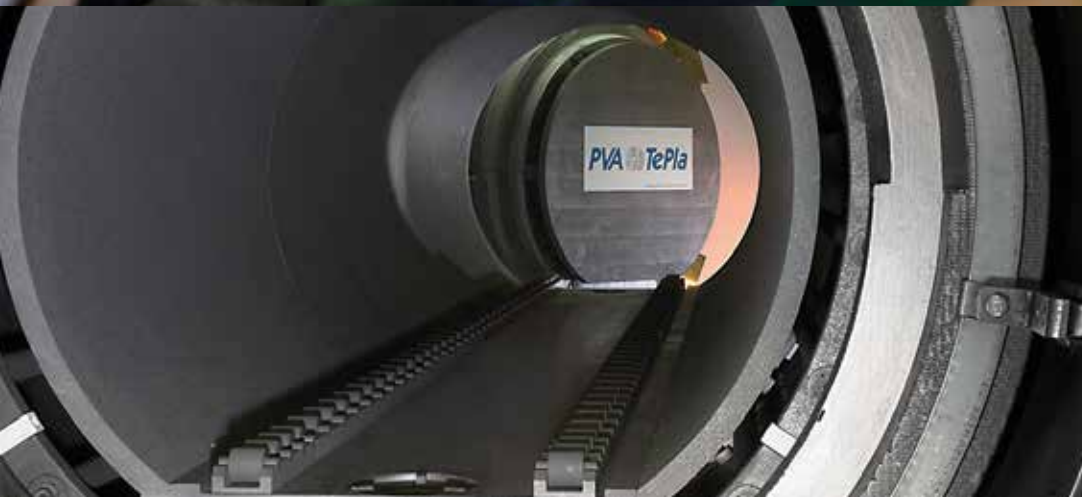
Our experts would be delighted to visit you to get the best overview of your needs. Practical solutions as well as new developments often arise from such on-site discussions.

Let our longstanding know-how in the manufacture and application of Boron Nitride come to your advantage – it will be invaluable. Our experience is second to none – from the beginning, our sole focus has been Boron Nitride. This is our unique strength.



ONE MATERIAL - MANY POSSIBILITIES

The advantages speak for themselves: HENZE Boron Nitride products are used in numerous industry sectors. A number which continues to grow.



BORON NITRIDE IN SERVICE



HENZE Boron Nitride products are currently being supplied to more than 30 industrial sectors.

Without question, this material has significant further application potential. The following sectors represent the principal application areas:

- ▶ High Temperature Furnaces
- ▶ PVD and Plasma Systems
- ▶ Aluminium Extrusion
- ▶ Foundry Engineering
- ▶ Welding and Soldering (including automotive applications)
- ▶ Sintering and Powder Metallurgy
- ▶ Metrology
- ▶ Solar Technologies and Photovoltaics
- ▶ Polymer Engineering
- ▶ Metal Forming
- ▶ Research and Development
- ▶ Lubrication and Tribology

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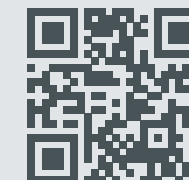
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