

**HOFFMANN**  
**MINERAL®**

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## A FAMILY BUSINESS WITH A UNIQUE RAW MATERIAL

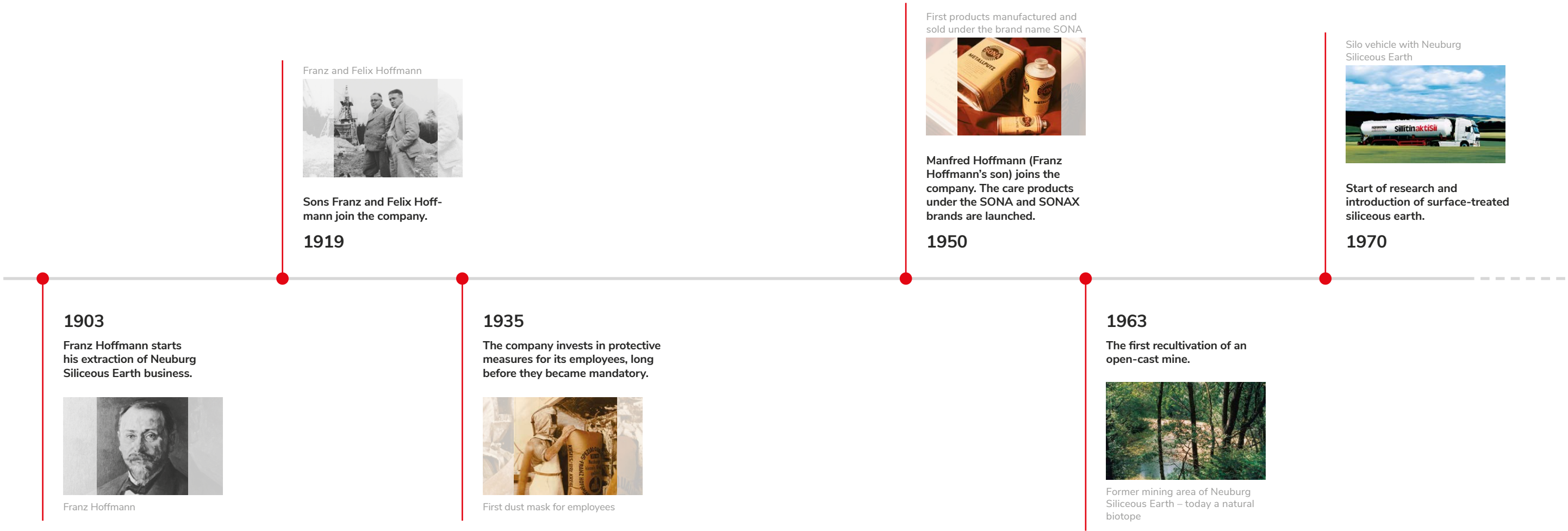
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Our raw material is almost 100 million years old. Respect for this unique material and protecting the natural environment are a matter of course among us employees. To achieve this, we also need reliable partnerships with customers and suppliers.

MANFRED HOFFMANN  
| MANAGING DIRECTOR

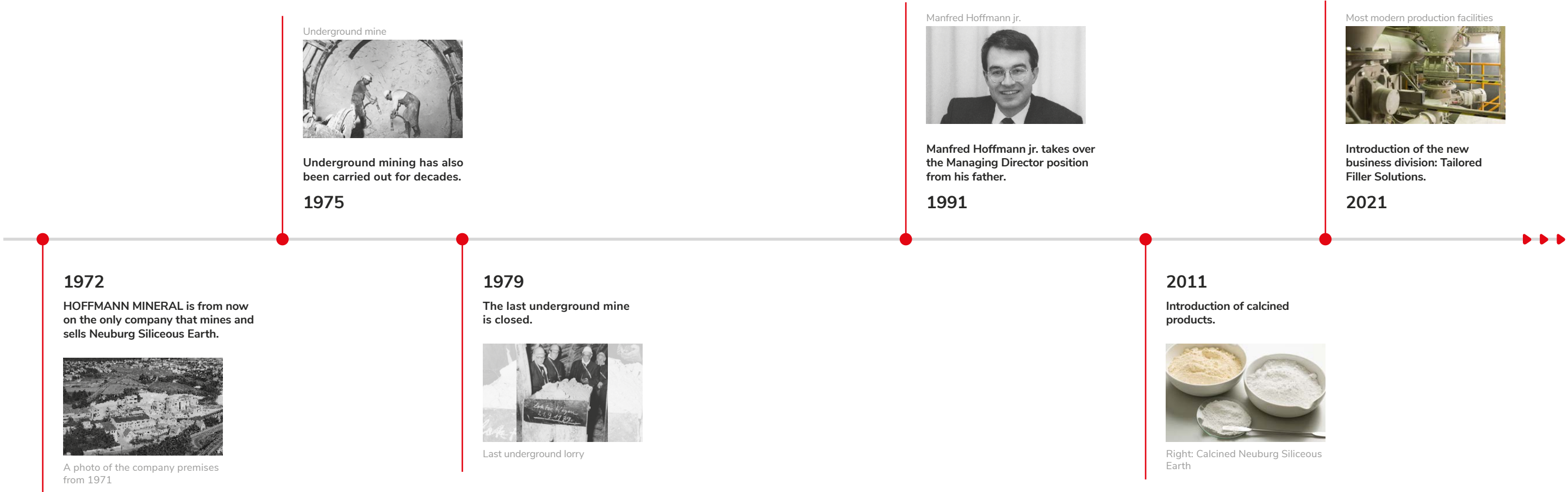


# HOFFMANN MINERAL – A SUCCESS STORY





# HOFFMANN MINERAL – A SUCCESS STORY



Underground mine



Underground mining has also been carried out for decades.

1975

Manfred Hoffmann jr.



Manfred Hoffmann jr. takes over the Managing Director position from his father.

1991

Most modern production facilities



Introduction of the new business division: Tailored Filler Solutions.

2021



Last underground lorry



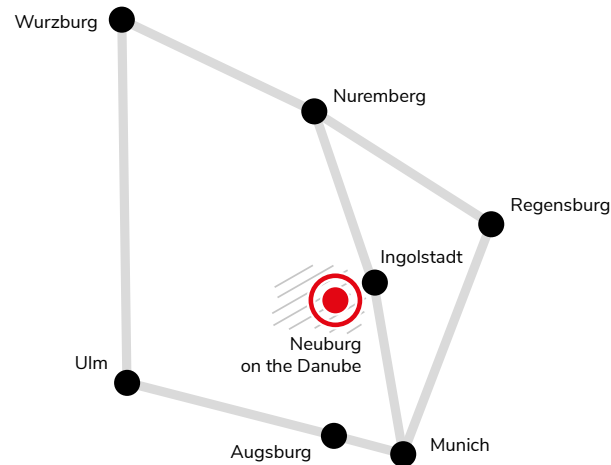
Right: Calcined Neuburg Siliceous Earth

# PRODUCTS – MADE IN GERMANY

The group of companies continues growing and invests in the updating of its plant and buildings. In recent years, for example, HOFFMANN MINERAL has built warehouses for hazardous materials, raw materials, packaging and a plant for the continuous surface modification of raw materials, providing the biggest leverage for implementing large production campaigns. A highly efficient combined heat and power plant to generate electricity and use the waste heat to dry the

silica, makes a significant contribution to CO<sub>2</sub> savings.

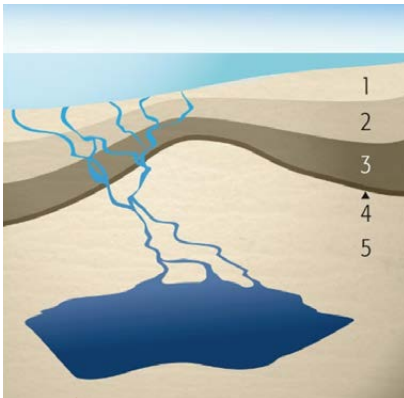
In 2019, a new plant for the further processing of powdered raw materials went into operation. This offers numerous possibilities for new and innovative toll manufactured products in the discontinuous process. Thus, a reliable production of surface-treated products is guaranteed for the coming years.



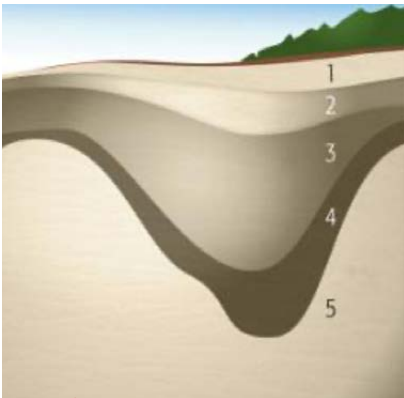


# A RAW MATERIAL WITH A HISTORY

Our Neuburg Siliceous Earth is a raw material with a history. It all began 95 million years ago! At that time, large parts of southern Germany were covered by the sea and in a bay of what is now Bavaria, the various layers of Neuburg Siliceous Earth were deposited on limestone sediments from the younger Jurassic period. After the sea receded, the limestone strata collapsed, forming the so-called karst funnels into which the siliceous earth fell and was preserved. This is how a unique raw material was formed and it is not to be found anywhere else in the world!



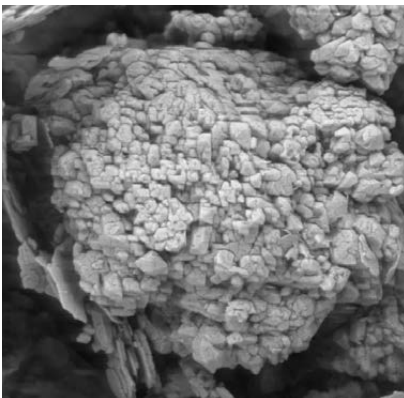
Karstification 70 million years ago



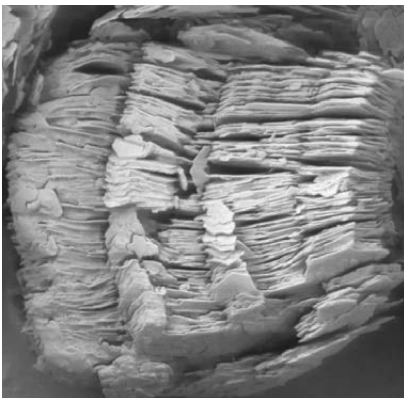
1 Overburden, 2 Fine sand,  
3 Siliceous Earth, 4 Clay,  
5 Limestone



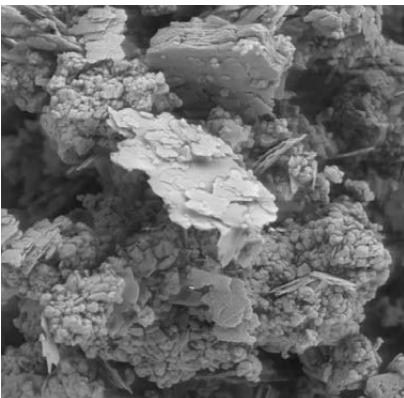
Bays 95 million years ago



Neuburg Silica



Kaolinite



Neuburg Siliceous Earth

The classic Neuburg Siliceous Earth is a naturally formed combination of corpuscular Neuburg Silica and lamellar kaolinite: a loose mixture impossible to separate by physical methods. Due to its natural formation, the silica has a round grain shape and consists of aggregated primary particles of about 200 nm in size. This unique structure is responsible for a relatively high specific surface area and oil absorption, which result, besides rheological activity, also in a whole range of application properties.

# FROM THE **RAW EARTH** TO THE PROCESSING

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I enjoy being with HOFFMANN MINERAL, because here even in open-cast mining the feeling of being together goes much deeper.

STEFAN SCHMID  
| TEAM LEADER FOR OPEN-CAST MINING





# RESPONSIBLE MINING

Even when the extraction of Neuburg Siliceous Earth is particularly environmentally friendly, it always constitutes an encroachment on the environment. For several decades now, HOFFMANN MINERAL has planned the subsequent reintegration of a new mine into the respective ecosystem before it is put into operation, to minimize detrimental effects.

In cooperation with the mining authority, forest rangers, nature conservation officers and owners, economic interests are reconciled with ecological requirements. For all layers, only natural materials are used for backfilling. The precious humus is put aside separately during excavation so that it can be used later for recultivation.



Excavation is carried out with state-of-the-art machinery



Siliceous Earth excavation area in the west of Neuburg



# A NEW CHANCE FOR THE ENVIRONMENT

With a passionate commitment and the use of considerable funds, completely new biotopes are being created. Here we use a concept combining recultivation and renaturation measures. Recultivation describes the restoration of a cultivated landscape after the extraction of raw materials. Renaturation calls for a natural landscape in its

original sense, as it existed before human intervention. For this purpose, we leave the individual areas to be colonised by nature, on its own. This creates not only forests and useful agricultural land, but also habitats and retreats for rare animal species and plants. A new chance for the diversity found in nature!



Recultivated areas provide a new habitat for a variety of species



## A SPECIAL PRODUCT

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I ensure that customers get what they need.  
It is good to know that they always get outstanding  
quality from HOFFMANN MINERAL.

PETER PLOCH  
| PRODUCTION EMPLOYEE



# FROM RAW EARTH TO A VALUABLE FINE PRODUCT

Essentially, our entire processing procedure is a separation process – only about 30 % of the raw earth extracted is a fine product we can use. A process that carefully preserves the structure, separates the fine material from sand and other stone and rock particles.

In a first step, the raw material is dispersed in water to separate it from stone fragments. This is followed by separating the sand fragments and classifying the finest components according to different grain sizes, in the hydrocyclone unit. The slurry obtained is thickened and drained in filter presses. Then natural-gas powered turbine dryers remove the residual moisture from the material. Following this, it is pulverised and ready for shipping or surface treatment.





# APPLICATIONS OF THE NEUBURG SILICEOUS EARTH

## ELASTOMERS

automotive, machine and equipment construction, cable and electrical industry, construction industry

## THERMOPLASTICS

films, housing and impact resistant molded parts, automotive interior trim, 3D printing

## PAINTS AND VARNISHES

metal coatings, wood and film coatings, plastic coatings, construction coatings and decorative paints

## REACTIVE RESINS, ADHESIVES AND SEALANTS

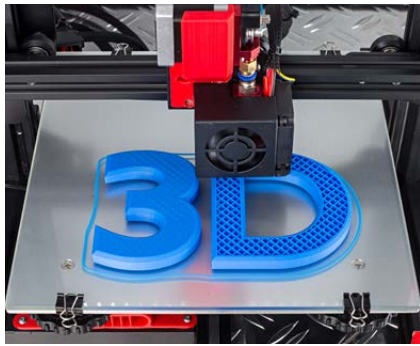
thick film systems, 2K polyurethane applications, plastisols, adhesives, 3D printing

## POLISHING AND CLEANING AGENTS

car care, household cleaner, metal polishes, industry polishes

## OTHER INDUSTRIES

welding electrodes, construction chemicals, coatings, industrial linings, carriers for active substances, cosmetic and body care





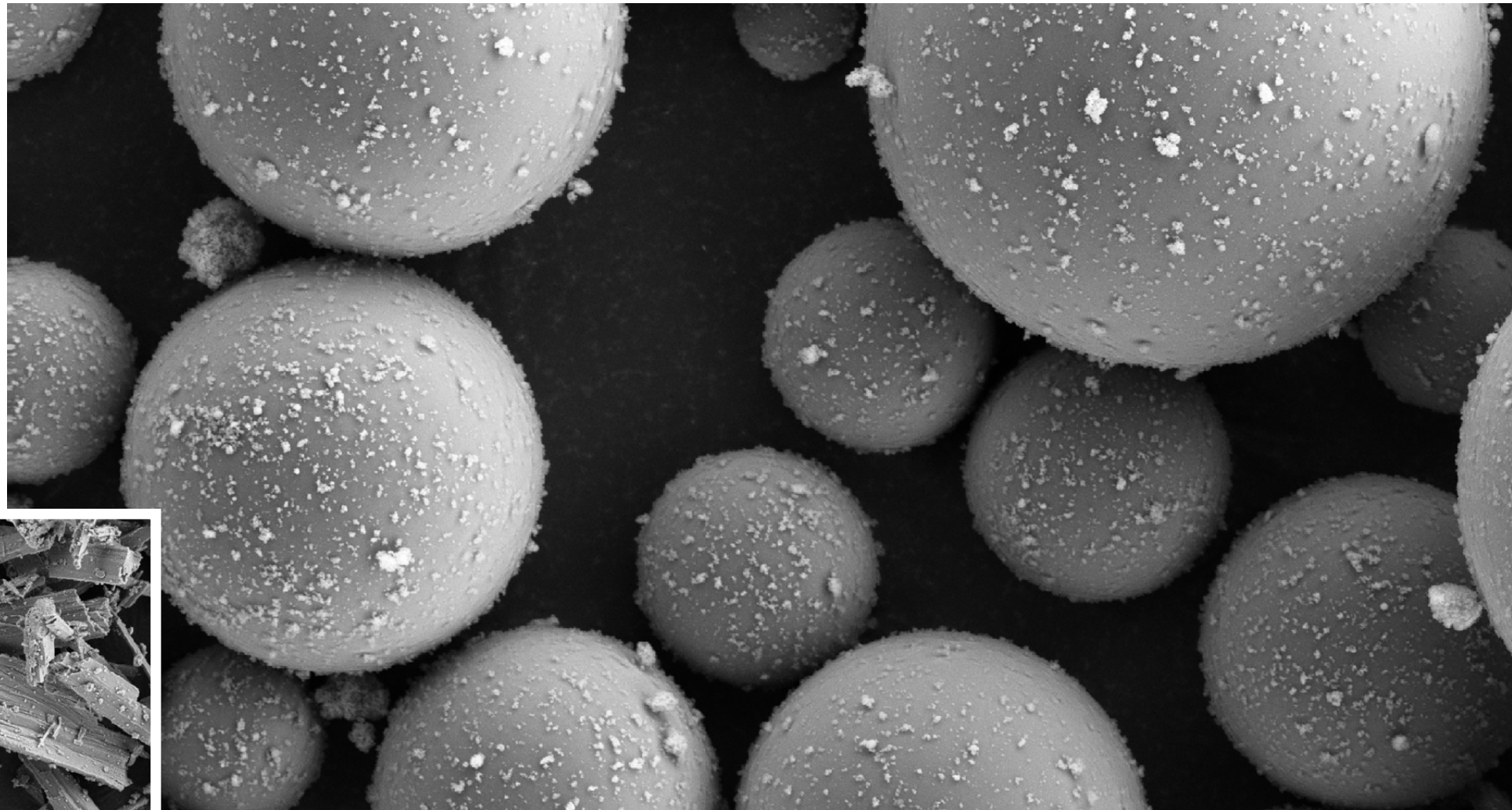
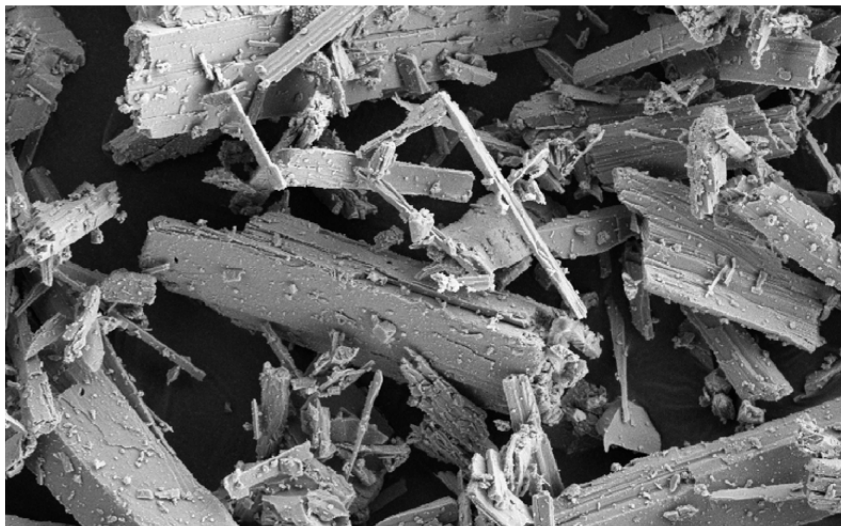
# THE TAILORED FILLER SOLUTIONS

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The TAILORED FILLER SOLUTIONS expand our portfolio to give customers the opportunity to differentiate themselves from the competition with tailored products for existing applications.

Furthermore, we will apply our entire expertise at HOFFMANN MINERAL in this new business division that we can offer our customers the best-fitting filler materials. We use our know-how in Neuburg Siliceous Earth and transfer it to new base materials and combine it with innovative modifications to make further improvements.

In close cooperation with our Research & Development and Application Technology, we develop products that the market needs and which give our customers a head start.





# THE TOLL MANUFACTURING

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HOFFMANN MINERAL is a future-oriented enterprise: innovation and flexibility are just as important as quality and customer service.

MICHAEL PLATHNER  
| HEAD OF TOLL MANUFACTURING/COATING

# A SPECIAL KIND OF **FULL SERVICE**

We are the experts when it comes to mining, processing and refining Neuburg Siliceous Earth. Our work certainly does not stop there. When it comes to solving a very special raw material problem, we are there for our customers with in-depth expertise.

When our customers have questions regarding application technology, we help them with our know-how gained through decades of experience. We, as a contract manufacturer, are also happy to provide support in the event of technical production bottlenecks, using our own production facilities. We guarantee continuous quality assurance, appropriate storage and on-schedule delivery.





## DESIGNING ORDER PROCESSING TO BE TARGET-ORIENTED

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At HOFFMANN MINERAL, cooperation is highly valued. Partnerships based on trust and reliability make every challenge a little smaller.

BERNHARD RIEDELSHEIMER  
| ORDER PROCESSING EMPLOYEE

# OPTIMALLY PACKED FOR EFFICIENT TRANSPORT

We also have a lot to offer when it concerns packaging and shipping. Speed and flexibility are our maxims. When it comes to delivery deadlines we are happy to demonstrate what speed means. We are always flexible, offering a wide variety of packaging types and container sizes. All products are, of course, available in low-dust packaging. Possible options include paper bags, EVA bags and Big Bags – whatever best meets your requirements.

Of course, we can also deliver loose or direct in silo trucks. The right packaging can also be vitally important for health and safety at work. The best solutions remain silos or big bags. If the discharge spigots are encapsulated and therefore dust-tight, there are no problems with possible dust pollution from leaked material, during the filling process. Our plastic bags are just as safe, assuming that the bags can also be processed in your plant.





# LOOKING INTO THE FUTURE

At HOFFMANN MINERAL we believe there is always room for improvement in how we do things. Our response to the rapid changes in the market is to act with foresight. This means that perfecting our diverse product range is one of the fundamental tasks of our Research and Development department.

Optimizing our production processes in terms of quality and efficiency is also a constant challenge for our work processes. In our range of activities, our primary focus lies in the toll manufacturing sector. Here is where customers really benefit from our know-how, extensive experience and creativity.



# A MATERIAL WITH INFINITE POSSIBILITIES

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As a member of the Application Technology Department,  
I am proud to be able to provide our customers with advice  
and support on application issues, whenever required.

MICHAEL AUFMUTH  
| APPLICATION TECHNOLOGY EMPLOYEE



”



# THE CHALLENGE AS DRIVING FORCE

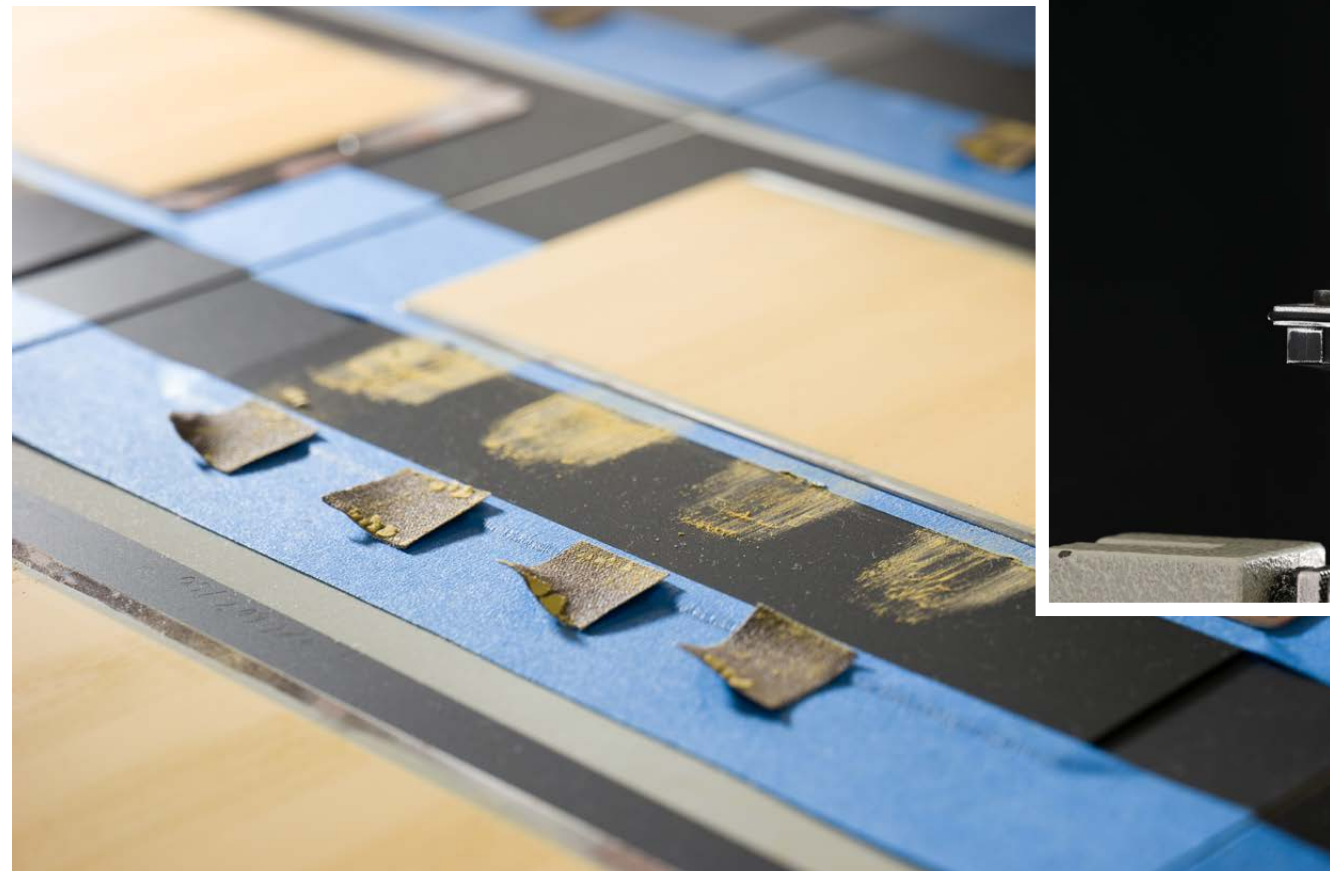
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Time never stands still especially in the field of Application Technology. HOFFMANN MINERAL began to expand its expertise in this area at an early stage. Application technology was therefore established as early as 1986, in the form of a technology centre for elastomer applications and was supplemented by a paints and varnishes laboratory in 1988. To this day, experts from here are called upon when it comes to technical questions concerning fillers and their effects.

## THE RANGE OF SERVICES INCLUDES:

- Testing and evaluation of new internal development products
- Supporting customer developments and, in the event of problems, taking over part of a project.

A wide range of manufacturing, application and testing equipment is available for this purpose, supplemented where necessary by external facilities at institutes and universities.



## BEST RESULTS THROUGH QUALITY TESTING

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“We believe in always keeping quality in our minds. In this way, we actively support our customers in realising their ideas. I like to face this challenge every day anew.”

JONAS KURZ  
| QUALITY MANAGEMENT EMPLOYEE



# MEETING THE HIGHEST REQUIREMENTS UNDER CERTIFICATION

Quality comes first in our minds and actions, so that we can always meet our customers' requirements in the best possible way.

The success of our mission statement is reflected in many years of certification according to ISO 9001, ISO 14001, ISO 45001 and ISO 50001. We strive to continuously develop our standards and verify them through accredited certification companies within the scope of regular monitoring and repeat audits. We see the increased demands of the various management system standards as a constant incentive.

**Purity requirements we have met:** Our product range includes a large number of products that meet the purity requirements according to various national and international regulations for food and drinking water contact materials. The products can therefore be safely used as fillers for plastics, rubber, cellophane, paper, cardboard, paperboard, varnishes and paints used in the food sector.





# OUR CORPORATE RESPONSIBILITY

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## TRAINING

As a medium-sized company, we are very interested in passing on our knowledge to the next generation. We have a wide range of apprenticeships which means we are able to train qualified junior staff in several areas.

## OCCUPATIONAL SAFETY

We attach great importance to providing a safe work environment. Maintaining a clean workplace and proper functioning extraction systems are essential for dealing with dust and chemicals. In addition, our occupational health and safety management is certified according to the ISO 45001 standard. This helps to reduce the risk of health hazards and accidents in the workplace.

## RISK MANAGEMENT

Risk management is an essential part of our process-oriented management system. The aim is to comprehensively analyse, evaluate and minimise all external and internal risks. To do this, we all raise awareness and create a framework - from the company strategy and the value chain to finance and corporate management.





# OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT

## NATURE AND ENVIRONMENT

The extraction of the Neuburg Siliceous Earth at Neuburg on the Danube is a good example of successful cooperation between nature conservation organisations and a company. Protection of species and operational interests are reconciled so that important habitat types on stockpiles and in open-cast mines are available at the right time of the year. In this way, numerous endangered pioneer species find the replacement habitat they need for their continued existence. Particularly noteworthy are the yellow-bellied toad, natterjack toad, crested newt and the sand lizard. A large number of special insects and plants also have habitats here that are no longer available in the wider area.

## SUSTAINABILITY

HOFFMANN MINERAL is proud of the successes it has achieved through decades of experience in recultivation, renaturation and the creation of biotopes. We always try to reduce waste, recycle valuable materials in an appropriate manner and properly dispose of what can no longer be recycled. We use appropriate techniques to reduce or avoid waste water volumes and pollution. In the manufacturing process, we ensure that emissions are kept as low as possible. Unavoidable waste air flows are cleaned according to state-of-the-art technology. It's not only experts that have praised our commitment – in 2005, we were awarded the Municipal Environment Award by the city of Neuburg on the Danube.



# IMPRINT

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## Publisher

**HOFFMANN MINERAL GmbH**  
Muenchener Straße 75  
DE-86633 Neuburg on the Danube

Telefon: +49 8431 53-0  
Fax: +49 8431 53-330  
E-Mail: [info@hoffmann-mineral.com](mailto:info@hoffmann-mineral.com)

[www.hoffmann-mineral.com](http://www.hoffmann-mineral.com)

## Concept and design

**rösslerconsult**  
[www.roesslerconsult.net](http://www.roesslerconsult.net)

