

# Products

for High Performance Applications

## **Our Philosophy**



"Tradition, progress, a commitment to high quality and satisfied customers have secured the success of our business for more than 60 years."

We are one of the leading German manufacturers of insulating materials offering high thermal and electrical resistance. Over the years, we have continuously expanded the range and capacity of insulating materials by introducing new products with enhanced properties. At our production facilities, we manufacture a comprehensive line of high quality products to meet the most demanding of requirements.

Our aim is to increase your competitiveness by offering you outstanding products and services. This is because successful and satisfied customers form the basis of our own success. This commitment is also shared by our longstanding partners who have helped to make SEGLIWA products available throughout the world.

We look forward to the beginning of a mutually beneficial partnership with you!







## YOU CAN RELY ON US

#### **Our Strengths**

We use our expertise in the area of defined material properties when working together with our customers to create customized solutions for a broad array of applications in the area of thermal and electrical engineering.

The core areas of our production include machining, compression molding, lamination, stamping, cutting and tube winding.

Thanks to our highly qualified and customer-oriented employees, we are able to continuously expand our expertise, secure the consistent high quality of our products and provide optimal support to our customers.

## **Our Quality Assurance**

Laboratory facilities allow us to optimize our inspections of raw materials and production processes and to thereby ensure the high standards of quality that are necessary to meet the most demanding of requirements.

This aim is also backed up by the certified quality management system (as per DIN EN ISO 9001) that we have maintained for years.

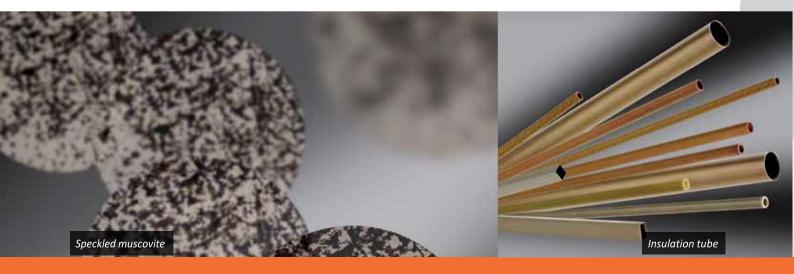
The basis for the quality of our products is formed by our optimal production processes and the know-how and dedication of our employees.

#### **Our Solutions**

Standard or customized? Innovative or conventional? These are some of the details we'll work out together with you on the basis of your requirements.

Thanks to our comprehensive materials competence and our understanding of what is technically feasible, we are in a position to offer you expert advice and to devise solutions that meet your exact needs.

In the context of doing so, we place special emphasis on cost-effectiveness and well-targeted and timely implementation.

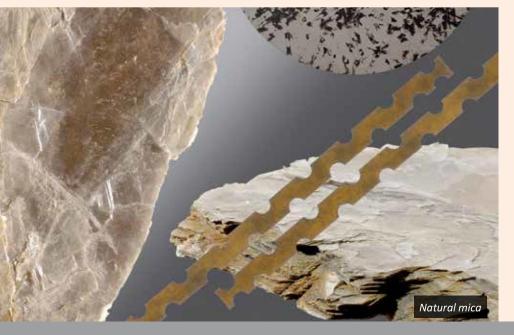


## MICA – AN INSULATING MATERIAL WITH EXTRAORDINARY PROPERTIES

The SEGLIWA product range has included mica for more than 60 years. Mica's outstanding thermal, electrical, mechanical and chemical properties make it one of the most effective insulation materials. Of the various kinds of mica that are used for industrial applications, we carry muscovite and phlogopite.

## Mica's outstanding properties:

- Excellent transparency
- Acid and oil resistance
- High compressive and bending strength
- Excellent dielectric strength
- High thermal resistance
- Mechanical cleavability up to 1/100 mm



## **Applications:**

- Window for filling level displays and armatures
- Insulation in electrical monitoring systems
- Thermally conductive pads for transistors
- Insulation in electrical devices from various industrial sectors
- In calcinated form for refractometers
- Mica capacitors

Owing to its excellent properties and various production forms, mica has become an indispensable material for many industrial applications, especially in the area of electrical engineering.

Mica splitting and fine mica are processed together with various resins to form high quality insulation materials. Our mica products are manufactured using cutting edge resin systems and continuously optimized technologies. ical Insulation Materials





# MICA PRODUCTS - EXCEPTIONAL AND ENVIRONMENTALLY FRIENDLY

Product	Application
Heater micanite	<ul> <li>Heating wire coils</li> <li>Insulation of metallic parts in electrically heated industrial equipment, household appliances and high performance resistors</li> <li>Intermediate layers, washers and spacers in electrical equipment</li> </ul>
Formed micanite	<ul> <li>Formed parts</li> <li>Filling for the hollow spaces in the coils and rods of high voltage machines</li> </ul>
Flexible micanite	<ul> <li>Voltage-proof wrapping in electric machines</li> <li>Intermediate layers in the coils of electric machines</li> <li>Base layers in generator rods</li> <li>High temperature resistant gaskets</li> <li>Industrial furnace liners</li> </ul>
Mica foil	<ul> <li>Insulation of coils and interconnections in high and low voltage machines and generator rods</li> <li>Production of press molded parts</li> </ul>
Mica tape	<ul> <li>Rubiflex: Insulation of winding heads and switches in high voltage electric machines</li> <li>Rubifol: Insulation of profile wire</li> <li>Rubitherm: Hot press molding (resin rich technology)</li> <li>Pyroflex: Insulation of conductors in flame resistant safety wire</li> </ul>
Semicavolt tubes and profiles	<ul> <li>Insulation of conductor rods</li> <li>Carriers and shields for resistance conductors used for heating purposes</li> <li>Insulation of bolts in resistors</li> <li>Feeds to slip rings in slip ring assemblies</li> <li>Induction heating systems, heating chambers and hot-air devices</li> </ul>

## **Our Materials**



## LAMINATES – A WIDE RANGE OF INDUSTRIAL APPLICATIONS

Laminates are durable plastic sheets of resin-bonded paper, resin-bonded fabric and resin-bonded glass mats. Laminates distinguish themselves in terms of their extreme durability and excellent mechanical and electrical resistance. We supply both semi-finished products and finished products that meet the customer's exact specifications.

### Our range of products:

- Resin-bonded paper
- Melamine laminated paper
- Laminated cotton fabric
- Laminated glass fabric
- Laminated glass mats
- Laminated tubes and rods

## Main applications:

- Electrical industry, ranging from energy production to energy distribution and powertrain technology
- Systems and machine construction
- Traffic engineering
- Chemicals industry

## **COMPRESSED LAMINATED WOOD** – OUTSTANDING PROPERTIES



Compressed laminated wood is made of layers of wood veneer that are coated or impregnated with a synthetic resin and then pressed together under high pressure and temperature. Owing to its special material properties, compressed laminated wood is used primarily in the transformer industry and as a means of thermal insulation in machines and electrical systems.

#### The advantages:

- Excellent electrical and thermal insulation
- Lightweight
- Excellent oil absorption
- High mechanical strength (especially bending strength)
- Wear-resistant



## MINERAL REINFORCED MATERIALS – HIGH THERMAL RESISTANCE

Our range of mineral reinforced products includes insulating materials that are used primarily for thermal and electrical insulation in the steel and glass industry as well as in the production of industrial furnaces, machines, household appliances and heating systems. Instead of the now banned asbestos fibers, the production of mineral reinforced materials is based on various mineral, glass and aramid fibers as well as mica.

#### Product

#### Application

CALIN Insulation paper

CALAN Insulating cardboard

CALIT Insulating plates

SEWITHERM Insulation plates

SEWISIL Sealing material

CANOL Cold adhesive Insulation and sealing in system, machine, furnace and device construction

Gaskets, expansion joints, drain and furnace liners

Material for furnace construction, foundries, glass works and other thermal engineering production facilities

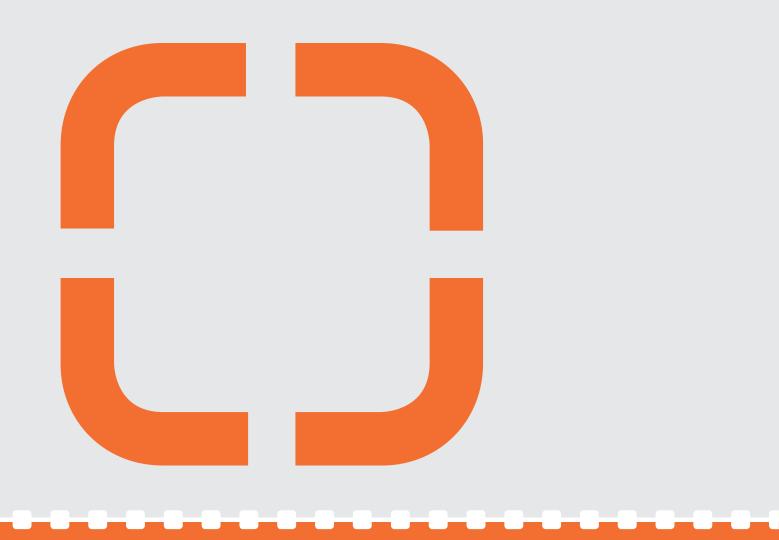
For demanding electrical and mechanical requirements in thermal engineering production facilities

Sealing and insulation to meet demanding high pressure, electrical and thermal requirements

Bonding of materials made of calcium silicate, fiber cement and ceramics







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