IMERYS GRAPHITE & CARBON
Company Profile

TIMREX® Graphite
TIMREX® Coke
TIMREX® Dispersion

C-NERGY™ Carbon Black
C-NERGY® Graphite
SUPER P® Carbon Black

ENSACO® Carbon Black
TIMROC® Silicon Carbide

www.imerys-graphite-and-carbon.com
Imerys Graphite & Carbon has a strong tradition in carbon manufacturing, with its first manufacturing operation founded in 1908. Today, Imerys Graphite & Carbon facilities produce and market a large variety of synthetic and natural graphite powders, conductive carbon blacks and water-based dispersions of consistent high quality. Imerys Graphite & Carbon belongs to Imerys, the world leader in mineral-based specialties for industry.

Quality is a serious matter for Imerys Graphite & Carbon. Adhering to a philosophy of Total Quality Management and continuous process improvement, all Imerys Graphite & Carbon manufacturing plants comply with ISO 9001:2015. Our quality control systems are designed to improve efficiency and ensure customer satisfaction. Our structure guarantees a continuous control of operations as well as the monitoring of all process parameters.

Innovations to power everyday life is our aspirational vision. Innovation is an integral part of Imerys Graphite & Carbon’s strategy and a key element of the company’s internal growth. Imerys Graphite & Carbon invests significant resources in R&D to develop solutions tailored to each customer, to meet their expectations and anticipate their needs. Each year, Imerys Graphite & Carbon introduces new products on the market. In addition to “continuity” innovations, resulting from improvements to the existing range, “disruptive” innovations are based on the development of new concepts.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>1908</td>
<td>Officine del Gottardo is founded in Switzerland</td>
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<td>1917</td>
<td>LONZA G.V. is acquired by IMETAL and becomes TIMCAL Ltd.</td>
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<td>1924</td>
<td>TIMCAL acquires the Carbon Black activities in Willebroek (Belgium)</td>
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<td>1939</td>
<td>TIMCAL completes the acquisition of 85% of the shares of the natural graphite producer Rennie Jing Yuan Graphite Co. Ltd. in Inner Mongolia (China)</td>
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<td>1954</td>
<td>TIMCAL changes name and becomes Imerys Graphite &amp; Carbon</td>
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<td>1994</td>
<td>TIMCAL changes name to IMERYS; TIMCAL and Stratmin are combined into TIMCAL Group</td>
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<tr>
<td>2002</td>
<td>TIMCAL proudly celebrates 100 years of production in its Swiss plant and begins another century of innovation and excellence</td>
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Imerys Graphite & Carbon is committed to Imerys’ Sustainable Development Charter, where high standards in terms of social and environmental behaviour are essential in the management of its activities. Imerys Graphite & Carbon recognizes its role and responsibility as a corporate citizen, and as such is concerned with the protection of the environment for present and future generations. Imerys Graphite & Carbon complies with all applicable laws and regulations in all countries where it is present.

Imerys Graphite & Carbon has a core value to protect the health & safety of its employees and offers a safe working environment at all locations.
To promote our economic, social and cultural advancement with enthusiasm, efficiency and dynamism by offering value, reliability and quality to ensure the lasting success of our customers.

Innovations to power everyday life

Headquartered in Switzerland, Imerys Graphite & Carbon has a global presence, with production facilities and sales offices located in key markets around the world. The Group’s industrial and commercial activities are managed by an experienced multinational team of around 500 employees from many countries in four continents.
Our Solutions

Imerys Graphite & Carbon produces a variety of specialty synthetic and natural graphite powders, conductive carbon blacks, silicon-carbon composites, calcined petroleum cokes, aqueous dispersions and silicon carbide, with a common keyword: consistency. Our products are manufactured under stringent process control conditions, from the raw material stage through to the end product.

As we own our raw material sources, we are today the only player that can offer a complete range of products with security of supply, integrated with our innovative technologies, and sustainable processes.

Our teams of Marketing and Science & Technology specialists cooperate with our customers, in order to fully understand their needs and provide them with customized solutions.

For further information, feel free to contact us, or visit our website: www.imerys-graphite-and-carbon.com

- **Primary synthetic graphite powders**
  - Isotropic & anisotropic
  - Coarse, medium, fine, ultra fine
  - High & very high purity

- **Natural flake graphite powders**
  - Flake
  - Purified
  - Expanded
  - High crystallinity
  - Coarse, medium, fine, ultra fine
  - High purity

- **Conductive carbon blacks**
  - Granulated
  - Powder

- **Water-based dispersions**

- **Coke powders**
  - Coarse, medium, fine

- **Silicon carbide**

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**Carbon Materials**
- Natural Flake Graphite
- Synthetic Graphite
- Carbon Black

**Research & Developments Centers**
- Product Development
- Application Development
- Scientific Support to Customers

**APPLICATIONS**
- Mobile Energy
- Polymers
- Engineering Materials
- Refractories & Metallurgy

**Innovative Sustainable solutions**

**Security of supply**

**Synergies**

**Customization**

**Added Value Processes**
- Exfoliation
- Mixing
- Sieving
- Milling
- CVD Coating
Primary synthetic graphite is produced by a unique highly controlled graphitization process. By a careful adjustment of the key process parameters a wide range of synthetic grades, meeting the different customers’ requirements, can be manufactured. The Imerys Graphite & Carbon process assures narrow specifications and unequalled consistent quality, thanks to the monitoring of all processing stages.

Imerys Graphite & Carbon mines graphite from its own sources in Lac-des-Îles, Canada, and sources graphite from selected mines around the world. Further processing for high value-added products is done in our processing plants in Terrebonne (Canada), Bodio (Switzerland) and Kitakyushu (Japan). All TIMREX® natural graphite powders are thoroughly controlled in our laboratories to ensure quality, consistency and total customer satisfaction.

The Imerys Graphite & Carbon carbon black process was developed in 1980 and has been commercially exploited since 1982. The process is based on partial oil oxidation of carbochemical and petrochemical raw materials. The major difference with other partial combustion carbon blacks technologies lies in the aerodynamic and thermodynamic conditions.

This leads to a material with almost no sieve residue on the 325 mesh sieve and allows the highest possible purity. The granulation process has been developed to achieve a homogeneously consistent product maintaining an outstanding dispersibility, characterised by very low crushing strength that guarantees the absence of larger and harder agglomerates. The process enables the production of «low surface area conductive carbon blacks and very high surface area conductive carbon blacks».

Dispersions are solvent-free, aqueous dispersions containing carbon powders. Each member of this family is tailor-made for a specific final application in the most diverse branches of industry, such as electrically conductive coatings, release agents and corrosion protection.

Imerys Graphite & Carbon provides calcined petroleum coke with well defined texture and consistent particle size distribution from selected and approved sources.

Silicon carbide is one of the hardest existing materials and is characterized by a high resistance to temperature fluctuations. TIMROC® silicon carbide is used in abrasives, refractories, metallurgy and slip-resistant floorings.
Imerys Graphite & Carbon is committed to producing and marketing highly specialized, environmentally friendly carbon-based materials for a variety of industrial fields such as Mobile Energy, Engineering Materials, Polymers and Refractories & Metallurgy.

Our Markets

**APPLICATIONS**

Mobile Energy
- lithium-ion batteries
- alkaline batteries
- zinc-carbon batteries
- fuel cells
- supercapacitors
- lead acid batteries

Engineering Materials
- powder metallurgy & hard metals
- friction materials
- carbon brushes
- graphite foils
- pencils
- powders for industrial lubricants
- catalysts
- synthetic diamonds

Polymers
- electrically & thermally conductive plastics
- conductive rubbers
- power cables
- self lubricating polymers
- filled PTFE
- conductive coatings

Refractories & Metallurgy
- flow control refractories
- crucibles
- magnesia carbon bricks
- molten metal toppings
### Brands and Markets

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