



On the road to a greener future

Leading the way in sustainable mining
and tunneling solutions.

At Sandvik, we believe that responsible
practices and innovative design can shape
a greener future for our industry.



Sustainable solutions are central to the growth of our business, and our customers' businesses

A key priority in developing sustainable solutions is reducing emissions. Our goal is to achieve net-zero across our value chain while supporting our customers on their own sustainability journey.

This includes advancing the electrification of mining and rock processing equipment, as well as implementing software solutions that optimize manufacturing, reduce energy consumption, and enhance efficiency and productivity.

Driving sustainability from within

At the heart of our product innovation lies a deep commitment to sustainable manufacturing. Our factories play a key role in this journey, reflecting a proactive approach to reducing our environmental impact while maintaining the highest standards of quality and efficiency.

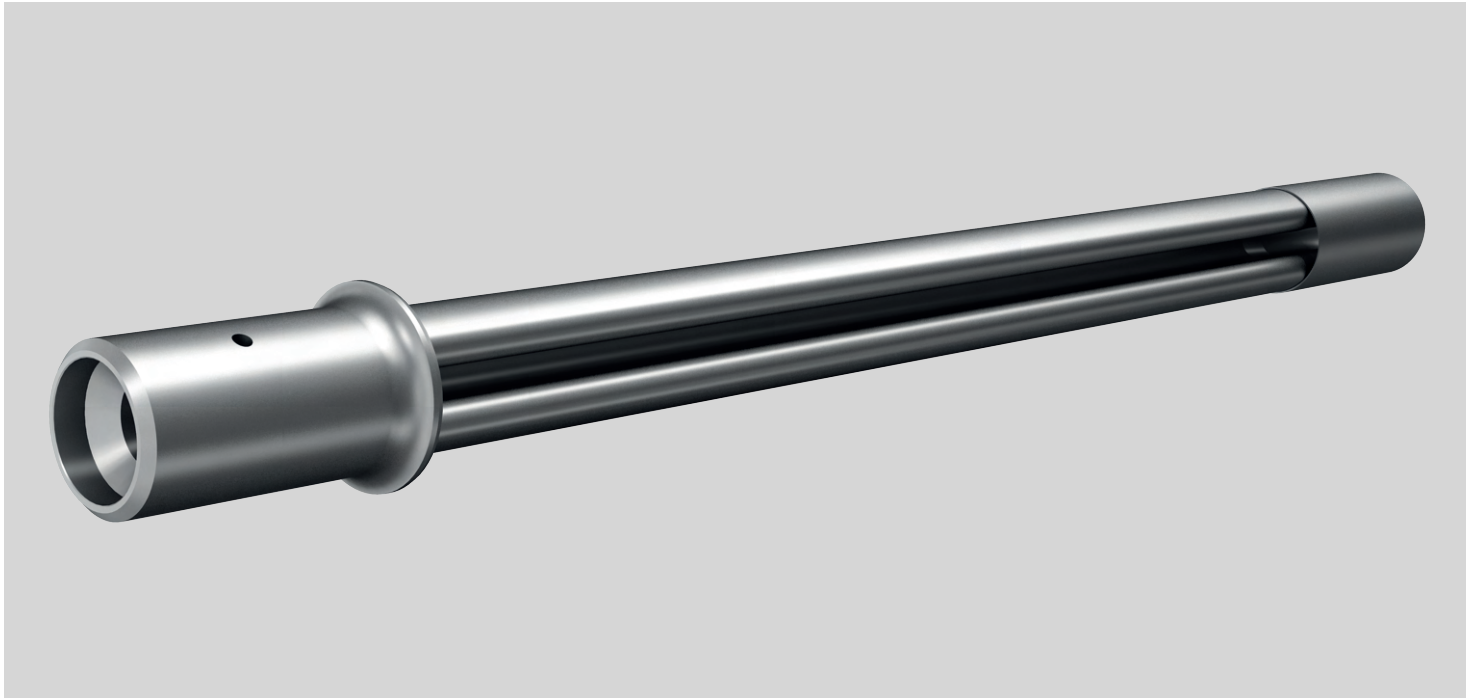
Our key sustainability initiatives:

- **Green energy-powered stoves**
We use electric stoves powered by clean energy to reduce emissions during production.
- **Certified renewable electricity**
50% of our electricity comes from certified renewable sources, ensuring transparency and accountability.
- **Solar energy integration**
We've implemented solar panels that generate 15% of our current electricity consumption.
- **Clean manufacturing technology**
Our process minimizes carbon footprint through synergy between raw materials and clean production methods.
- **Electrification of vehicles**
We're transitioning to electric vehicles – 100% of forklifts and 20% of vans are already electric.
- **Recycled & renewable steel**
We collaborate with certified steel suppliers to ensure the lowest emissions factor available. Our steel for Omega-Bolt® Auracore is recycled and produced using Electric Arc Furnace and Compact Strip Production, powered by 100% renewable electricity with a Guarantee of Origin.

Omega-Bolt® Auracore

Inflatable rock bolts of low
carbon emission steel

The Omega-Bolt® 120 Auracore is a next-generation inflatable rock bolt designed for superior adaptability, load-bearing capacity, and sustainability. Engineered with low-carbon steel from recycled and renewable sources, it maintains high mechanical strength while significantly reducing environmental impact.



Environmental Impact

The standard Omega-Bolt® emits 11.76 kg of CO₂, while the **green Omega-Bolt® Auracore emits just 4.08 kg** — the equivalent of 322.5 hours of laptop use.

Key Advantages

- Produced using steel from recycled and renewable sources, manufactured with 100% renewable electricity
- Designed for immediate load-bearing capacity, reducing wait times after installation
- Optimized for deformation absorption, with elongation properties supporting ground movement in challenging conditions
- Demonstrates resistance to blasting vibrations and can be used in water-bearing boreholes, making it adaptable to varying underground environments
- Does not require additional grouting materials, simplifying installation and minimizing material usage

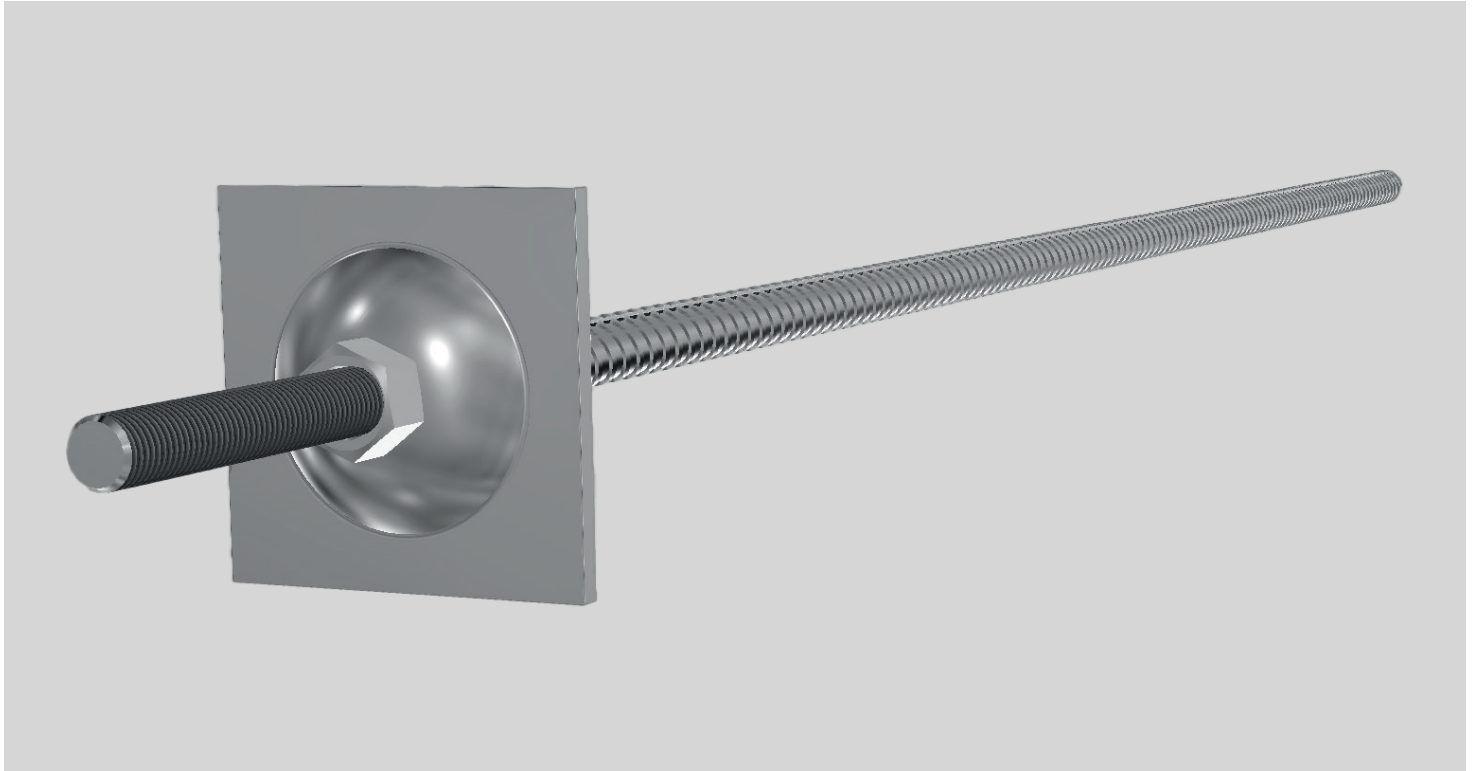
Applications

- Tunneling and underground mining stabilization
- Deformation control in weak rock formations
- Water-bearing and blast-sensitive environments

Rebar Bolts SN

Fully grouted low-carbon steel rock bolts

Rebar Bolts are essential in underground reinforcement, providing long-term stability by fully embedding the tension member in grout. The SN ECO version is developed with low-carbon steel, reducing environmental impact while maintaining high load-bearing capacity.



Environmental Impact

The standard Rebar Bolt emits 4.176 kg of CO₂, while the **green Rebar Bolt emits just 3.69 kg** — equivalent to 20 hours of laptop use.

Key Advantages

- Manufactured with consideration for environmental impact, following standardized assessments such as Life Cycle Analysis (LCA)
- Designed for strong bonding with grout, ensuring effective rock stabilization
- Engineered to function reliably across different borehole conditions, helping maintain installation consistency
- Features optimized rib geometry, which can enhance bond strength in fully grouted applications
- Compatible with mechanized installation systems, aligning with modern tunneling and mining operations

Applications

- Mine and tunnel reinforcement requiring long-term stability
- Fully grouted systems for high-strength applications
- Projects requiring reliable load transfer and optimized adhesion

Cable Bolt 15.2 mm

High Strength Rock Reinforcement

Cable bolts are essential in underground reinforcement, providing long-term stability by transferring loads effectively into the surrounding rock mass. Manufactured from **stress-relieved, low relaxation, high-strength 7-wire steel strand (Ø15.2 mm)**, they can be supplied plain or with bulbs to enhance bonding with grout.



Environmental Impact

The standard Cable Bolt generates around **1,340 kg of CO₂**, while the recycled Cable Bolt — thanks to an **85% steel recycling rate** — has a significantly lower net impact, equivalent to about **2,000 hours of laptop use**.

Key Advantages

- Manufactured with consideration for environmental impact, supported by a certified **Environmental Product Declaration (EPD)** based on **Life Cycle Assessment (LCA)**
- Designed for **strong bonding with grout**, with customizable bulb frequency and diameter to suit site-specific geological conditions
- Engineered to function reliably with **ultimate load capacity up to 298 kN (bolt)** and 255 kN (system), ensuring long-term ground stabilization
- Features **bulged strand cages (Ø26–34 mm)** that enhance bond strength in fully grouted applications
- Compatible with **fully mechanized cable bolting rigs**, supplied in customized reels for efficient installation in modern mining operations

Applications

- Mine and tunnel reinforcement requiring **long-term stability**
- Fully grouted systems for **high-strength applications**
- Projects requiring **reliable load transfer and optimized adhesion**

Mining Mesh LE

Low-Emission Welded Rock Mesh

Mining mesh plays a critical role in rock reinforcement by stabilizing loose rock and distributing loads to rock bolts. Traditional mesh solutions can be resource-intensive, but Mining Mesh LE is designed to reduce environmental impact while maintaining exceptional strength.



Environmental Impact

Standard mesh emits 72.6 kg of CO₂, while the **low-emission Mining Mesh emits only 19.38 kg of CO₂** — equivalent to 2,234 hours of laptop use.

Key Advantages

Lower Carbon Footprint – The Low Emission (LE) version has a verifiably lower CO₂ footprint than standard mining mesh, achieved through optimized material selection and an energy-efficient production process

- Third-party verified reduction in CO₂ footprint compared to conventional mesh, with the Low Emission (LE) version showing a lower carbon footprint than the standard version
- Designed for dynamic loads, ensuring effective energy absorption in rock reinforcement applications
- Available in black steel or hot-dip galvanized options, offering flexibility based on environmental conditions
- Engineered for efficient handling and installation, with weight and structure optimized for underground operations

Applications

- Mine and tunnel reinforcement
- Rockfall prevention in underground environments
- Compatible with various rock bolt systems

Face Plates

Durable load-distributing components for rock reinforcement

Face plates are essential in underground reinforcement, ensuring long-term stability by evenly distributing the load from anchors onto the rock surface. Designed for compatibility with **Omega-Bolts®** and other rock bolts, they eliminate the need for spherical seat washers. Manufactured from **S235JR steel as standard** (with S355 and other grades available on request), they provide durability and reliability in demanding mining and tunneling environments.



Environmental Impact

The standard Face Plate generates around **1,510 kg of CO₂**, while the recycled Face Plate — assuming an **85% steel recycling rate** — has a much lower net impact, equivalent to about **2,250 hours of laptop use**.

Key Advantages

- Manufactured with consideration for environmental impact, supported by a certified **Environmental Product Declaration (EPD)** based on **Life Cycle Assessment (LCA)**
- Optimized **shape and geometry** (square or round) tailored to various anchoring systems, ensuring effective load transfer
- **Dome-shaped convex profile** reinforces the plate structure and improves anchor system performance
- Designed with **precisely matched central mounting holes** for secure installation with rock bolts
- Made from **high-strength steel** with resistance to deformation and harsh operating conditions, ensuring long-term reliability

Applications

- Mine and tunnel reinforcement requiring safe and reliable load distribution
- Support systems where even force transfer is critical to prevent rock falls
- Projects demanding durable, adaptable plates optimized for specific anchor systems

Are you ready to make the change?

Explore our sustainable solutions today!



All dimensions, weights, quantities, and specifications are those applicable at the time of this publication and may be amended from time to time. Please contact your local representative for final confirmation of any key specifications.