

# Silver



**SILVER** like gold, is an important subsidiary metal in terms of Boliden's production process as several of our mines have ores that contain significant amounts of silver. Our silver production totals around 600 MT per year.

Silver production takes place in Rönnskär, Sweden and Harjavalta, Finland. The silver produced by Rönnskär contains min. 99.99 per cent silver and is approved by the London Bullion Market Association (LBMA). Roughly 25 per cent of the silver extracted comes from recycling electronic scrap. The purity grade at Harjavalta is minimum 99.97 per cent.

In both refineries pure silver is extracted in the form of granules. The advantage of using granules is that they are easy to weigh and handle.

The thermal and electrical conductivity of silver is superior to that of all other metals making it favored in electrical and electronics industries. In addition, silver is being increasingly used in the manufacture of consumer goods, alloys, batteries and chemicals.

#### **OUR PROMISE**

With a strong customer commitment we want to ensure you will receive silver which meets your needs in quality.

On time deliveries are a natural part of our promise which will support you in your production planning.

Sustainability is an integral part of Boliden's operations and management. The basis for this work is that all of our operations are conducted in accordance with legislative provisions and permits in the countries in which we operate.



**Brussels nomenclature 71069110**

## Did you know that ...

The name silver originates from the Old English Anglo-Saxon word 'seolfor'. The symbol for silver 'Ag' is from the Latin word 'argentum'. Argentina was named after this precious metal.

## Technical Specification Granules

**Origin:** Rönnskär, Sweden  
**Standard:** LBMA  
**Purity grade:** min. 99,99 %

**Origin:** Harjavalta, Finland  
**Purity grade:** min. 99,97 %



## Technical Specification Bars

**Origin:** Rönnskär, Sweden  
**Standard:** LBMA  
**Weight:** 1000 oz (31,1 kg)  
**Bar Length:** 346/ 333 mm  
**Bar Width:** 144/ 131 mm  
**Bar Height:** 74 mm  
**Purity grade:** min. 99,99 %

**Marking:** Rönnskär (origin), fineness 999,9 indicating purity grade, Boliden logo type, cast number and year

### Physical properties

Melting point	962,1 °C
Density	10,5g/cm <sup>3</sup>



## The Boliden Group

Metals are an ever-present and vital component of society. Boliden extracts minerals and produces high quality metals in a cost-efficient way. The work – from exploration to customer delivery – is characterised by care for people, the environment and society.

The Boliden Group operates four mines and five smelters in Sweden, Finland, Norway and Ireland and has a total of approximately 4,900 employees. Our core expertise is in exploration, mining, smelting and recycling.

Boliden's main metals are zinc and copper, but the production of lead, gold, silver and other products is also of considerable importance for our profitability. The annual turnover is approximately SEK 37 billion.



## Our value chain

**Exploration** Successful exploration is vital to long-term metal production. The exploration is conducted in the vicinity of existing mines and in new areas in order to find new deposits.

**Mines** Zinc-, copper-, lead-, gold- and silver-bearing ores are mined in Boliden's mining areas. The ore is processed to metal concentrate, the majority of which is delivered to smelters within the Group.

**Smelters** Boliden's smelters refine metal concentrates and other raw materials, such as electronic scrap, to produce both pure metals and customised alloys.

**Customers** Our products are mainly sold to industrial customers in Europe. Most of the zinc is sold to steel companies, while the copper is supplied to manufacturers of for example wire rod.