

#### Metals for modern life





**REFINED LEAD INGOTS** are produced from lead concentrate at the primary copper and lead smelter Rönnskär, located in Skellefteå Sweden. The material contains minimum 99.97% lead and is characterized by its low content of silver and bismuth.

Boliden's lead production is fully integrated meaning that we can source all lead concentrate from our internal mines. The annual production capacity of primary lead at Rönnskär exceeds 25,000 metric tonnes.

The primary lead is casted into ingots weighing 42.5 kg. It is LME approved under the brand name BOLIDEN 9997.

#### OUR PROMISE

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

On time deliveries are a natural part of our promise to 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.

By becoming Boliden's partner, we want to help you add value to your customers and work with you for a more sustainable future.



Brussels nomenclature 78011000

## Did you know that ...

The majority of Boliden's lead production is sold to the battery industry, with a smaller percentage sold to the construction industry.

### **Technical Specification**

**Ingot shape:** 610 x 124 x 75 mm

**Ingot weight:** 44 kg

Unit load: 25 pigs secured by two straps

**Unit shape:** 628 x 628 x 375 mm

Unit weight 1 120 kg
Unit volume: 0,148 m3

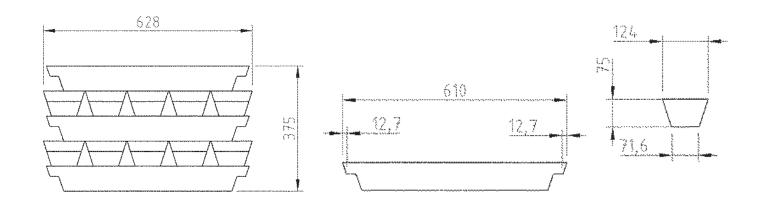
Ingot marking: "99.97" indicating minimum lead

content and Boliden logo type

Unit marking: Cast number and weight

Physical properties: Melting point 327,5 °C

Chemical composition	Analysis 5410CS		
Bi	150	250	ppm
Ag	10	25	ppm
As	5	5	ppm
Cd	0,5	0,5	ppm
Cu	2	10	ppm
Fe	5	10	ppm
Ni	1	1	ppm
Sb	5	5	ppm
Sn	10	10	ppm
Zn	2	2	ppm



# 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 six mines and five smelters in Sweden, Finland, Norway and Ireland and has a total of approximately 5,700 employees. Our core expertise is in exploration, mining, smelting and recycling.

Boliden's main metals are zinc and copper, but the production of lead, nickel, gold, silver and other products is also of considerable importance for our profitability. The annual turnover is approximately SEK 50 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-, nickel-, 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.