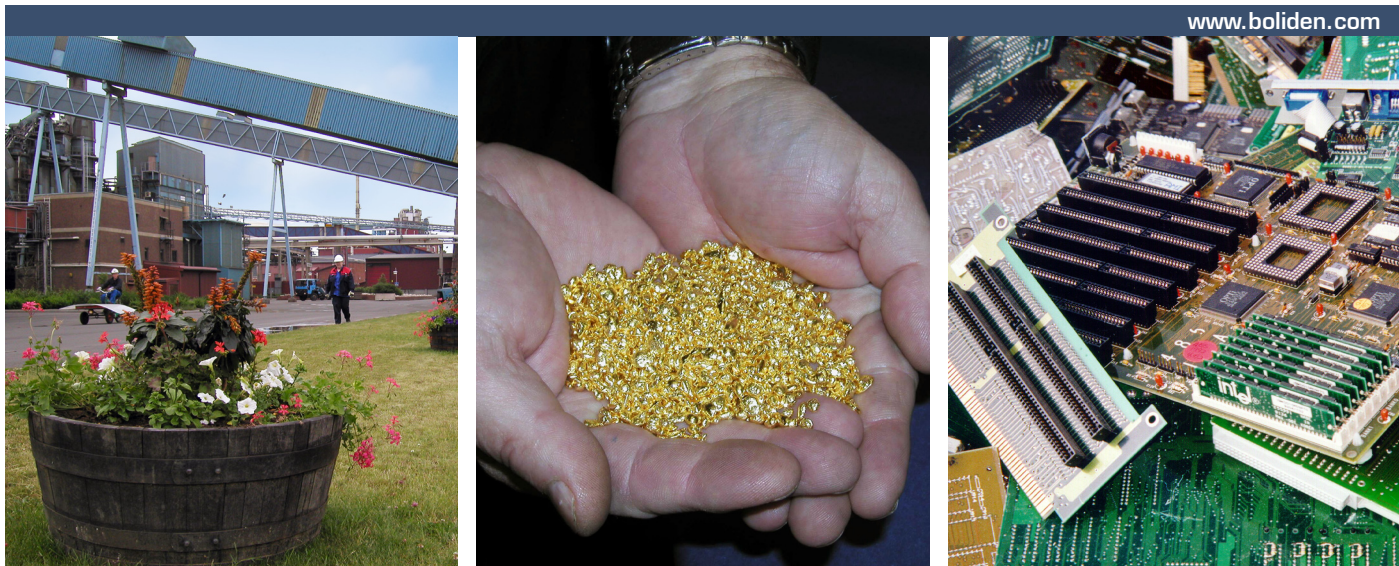


# Rönnskär



[www.boliden.com](http://www.boliden.com)

## History

The Rönnskär smelter in Skelleftehamn (see map on reverse page) was built between 1928 and 1930 to process ore from the Boliden mine, which was discovered in 1924. The ore contained gold, copper and silver, among others. The ore was exported to other smelters in the USA and Germany during the first years, but the volumes they could take were limited by the complexity of the ore.

In 1927 it was decided to build a smelter on a site that would cause the minimum of problems for the surrounding area and offer good potential for building a port and railway and for recruiting personnel. Two islands outside Skelleftehamn were chosen, which were filled to form a single island and then joined to the mainland. Copper production began in 1930.

## Rönnskär today

Today, Rönnskär is one of the world's most efficient copper smelters and largest facilities for the recycling of copper and precious metals. Metals and chemicals are extracted from mined concentrates (75 %) and various recycling materials (25 %). The main products are copper, lead, gold, silver and zinc clinker. Rönnskär has approximately 830 employees, of which 100 are women.

The recycling materials are mainly metal residues from brass foundries and steel mills, and various kinds of metal scrap such as shredded electronic scrap from computers and mobile phones. In 2010, 30 % of copper production derived from recycling, as did 66 % of gold and 80 % of zinc production.

## New Kaldo plant for recycling of electronic scrap

In spring 2010, Boliden's board approved a SEK 1.3 billion investment in a new Kaldo plant for recycling metals from

e-scrap at Rönnskär. The investment also includes the construction of a new facility for unloading and sampling e-scrap. The project is expected to be completed within 18 months, with the new facilities coming on line at the turn of the year 2011/2012. Rönnskär already recycles some 45,000 tonnes of e-scrap annually, and the expansion project will triple this figure to 120,000 tonnes – making Rönnskär the world's biggest recycler of e-scrap.

## Part of a sustainable society

Continuous environmental improvements are being made in order to achieve long-term sustainable development and prevent damage to people's health and the environment. To this end, action programmes designed to reduce yearly emissions into the air and water, cut the smelter's energy consumption and reduce the number of workplace accidents, are being implemented. A zero tolerance philosophy with regard to accidents at work has been adopted.

Rönnskär is certified in accordance with standards governing management systems for energy (ELS), the environment (ISO 14001), quality (ISO 9001), and the work environment (OHSAS). A certification makes it easier for customers, suppliers and the outside world to evaluate the company's work on quality and environmental issues, etc.

## Production 2010

Copper	190,497 tonnes
Lead	17,013 tonnes
Gold	12,450 kg
Silver	385,684 kg
Zinc clinker	36,950 tonnes
Sulphuric acid	501,873 tonnes
Liquid sulphur dioxide	42,876 tonnes

## Boliden produces metals that make modern life work

Computers, mobile phones, cars, buildings, bridges. Metals form an important part of many of the things that we regard as necessary to make modern life work. Boliden's task is to meet society's demand for high quality base and precious metals.

Boliden is a leading European metals company whose core competence is in the fields of exploration, mining, smelting and recycling. Boliden's main metals are zinc and copper. Other important metals extracted include lead, gold and silver.

The number of employees is approximately 4,400 and the turnover amounts to approximately SEK 37 billion annually. The shares are listed on NASDAQ OMX Stockholm, segment Large Cap and on the Toronto Stock Exchange in Canada.

# Boliden Group

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## Business Area Mines

Business Area Mines conducts exploration, mining and milling operations in Sweden and Ireland. The main products are zinc and copper concentrate, but the ores also contain gold, silver and lead. The exploration activities are primarily carried out in the vicinity of existing mining areas.

The Business Area is also responsible for internal and external sales of concentrates.

**Aitik (Sweden)** – mines and mills copper ore to produce copper concentrate with a precious metals content.

**Boliden Area (Sweden)** – mines and mills ores to produce zinc, copper, copper/gold and lead concentrates.

**Garpenberg (Sweden)** – mines and mills ores to produce zinc, copper/precious metals and lead concentrates.

**Tara (Ireland)** – mines and mills ores to produce zinc and lead concentrates.

## Business Area Smelters

Business Area Smelters refines metal concentrates to produce zinc and copper metals and the by-products lead, gold, silver and sulphuric acid. It also produces aluminium fluoride and refines nickel concentrate.

The Business Area is also responsible for purchasing raw materials, both concentrates and recycling materials, and for metal sales.

**Kokkola (Finland)** – smelts and refines zinc concentrates from Boliden's own mines as well as from third parties.

**Odda (Norway)** – smelts and refines zinc concentrates from Boliden's own mines as well as from other mines in

Europe and zinc clinker from Rönnskär. Kokkola's and Odda's main products are pure zinc and zinc alloys. Odda also produces aluminium fluoride.

**Harjavalta/Pori (Finland)** – smelts copper concentrates, refines copper and smelts nickel concentrates on a tolling basis. The main products are copper, gold and silver.

**Rönnskär (Sweden)** – smelts and refines copper and lead concentrates from Boliden's own mines as well as from third parties and smelts and refines a variety of secondary raw materials. The main products are copper, lead, zinc clinker, gold and silver.

**Bergsöe (Sweden)** – recycles scrap lead batteries from the entire Nordic region. The lead is refined, alloyed and cast in ingots. The main products are pure lead (99.97 %) and alloys according to customer specifications.

