

Harjavalta



Boliden Harjavalta Oy

Boliden Harjavalta smelts copper concentrates, refines copper and smelts nickel concentrates on a tolling basis. Boliden Harjavalta has operations in Harjavalta and Pori. Copper anodes produced at the smelter in Harjavalta are refined into copper cathodes at the copper refinery in Pori. The total number of personnel is approximately 400.

Operational Excellence

Boliden Harjavalta has skilful personnel and it operates in a network of business partners. Production processes represent the best available techniques (BAT) and are effective with a high recovery of metals. All the operations are certified according to the Quality, Environmental, Energy as well as the Occupational Health and Safety Standards ISO 9001, ISO 14001, EN 16001 and OHSAS 18001.

The cleanest method of producing copper

The flash smelting method, used and developed at Harjavalta, is used for processing both copper and nickel concentrates. The flash smelting process has an excellent energy efficiency combined with low emissions to the environment. Process waste materials are minimized by recycling them to the earlier process stages. Sulphur is recovered as sulphuric acid.

Electrolytic refining of copper

Copper anodes are refined into cathode copper with an average purity of 99.998 %. Boliden Harjavalta's cathode copper meets the stringent requirements of the LME (London Metal Exchange) Grade A copper.

In addition to cathode copper, also gold and silver are produced at Boliden Harjavalta.

Annual production capacities

Smelting of copper concentrates	720 000 tonnes
Smelting of nickel concentrates	250 000 tonnes
Anode copper	210 000 tonnes
Cathode copper	155 000 tonnes
Sulphuric acid	750 000 tonnes
Liquid sulphur dioxide	60 000 tonnes
Gold	6 000 kg
Silver	40 000 kg

Operation with social responsibility

Our environmental performance is top class in international comparison. Our injury frequency is low compared to that of other metal producers and metal industry. Boliden Harjavalta feels responsible for continuous improvement in all its operations and aims to be a forerunner in environmental and safety matters.

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

www.boliden.com



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.

