

NON FERROUS METAL INDUSTRY

Innovative solutions for
scarce resources

Nonferrous metals are part of many electronic and industrial applications. These include copper, zinc, lead, nickel, magnesium, aluminium and precious and base metals. Only refining can give them their maximum purity and quality, a process that needs a lot of energy. Fortunately, nonferrous metals can be recycled with only a fraction of this energy and without sacrificing quality. Today, the nonferrous metal industry in Germany extracts about 50 percent of its total production from so-called secondary raw materials, thereby affording a key contribution to the sustainability and sparing use of natural resources.

BEROA utilises innovative refractory technologies and its extensive range of products and services to promote the efficient use of scarce resources. These services include the engineering, the selection, specification and delivery of materials, the generation of heat-transfer analyses, drawings, bill of materials, maintenance plans, maintenance and heating up instruction, installation and installation instruction, etc.

Our outstanding competence finds testimony in countless installations. We provide refractory linings e. g. for:

Ferroalloy furnaces

rotary kilns electric arc furnaces for ferronickel, ferromanganese and ferrochromium.

Zinc industry

smelters distillation columns (New Jersey retorts) zinc oxide furnaces.

Copper industry

ASARCO furnaces slag purification furnaces anode furnaces converters flash smelters ISA smelters.

Raw materials

pelletising plants calciners for zinc, copper, gold alumina calcining titanium oxide rotary kilns fluidised bed plants.

Worldwide partner for the basic industry

TECHNOLOGIES

- Refractory design for many aggregates such as calciners or melting furnaces
- Turnkey refractory linings including design, material supply, erection and supervision.
- Full management of smelter revamps including demolition and installation.
- Turnkey supply and erection of steel and reinforced concrete chimneys.
- Permanent maintenance of smelting plants.
- Own technology for suspended roofs of electric furnaces.
- Consultancy and inspection including videoendoscopy and termographic camera.
- Efficiency energy technologies including energy monitoring, electrical control, heat use optimization and waste heat recovery, furnace optimization service, steam pressure recovery project, compressed air network global optimization and retrofit, air and flue gas quality monitoring system, water treatment plant.



SOME CUSTOMERS

ATLANTIC COPPER

AURUBIS

BEFESA ZINC

BOLIDEN

B.U.S. VALERA

FERROPEM

KME

LA FARGA LACAMBRA

MEXICANA DE COBRE

NEXANS

NEWCREST

OCEANA GOLD

ORBITAS

OUTOTEC

SMS SIEMAG

TIOXIDE

TREFIMETAUX

UMICORE

XTRATA

REFERENCE

CUSTOMER - AURUBIS/ATLANTIC
COPPER/MEXICANA DE COBRE

LOCATION - Germany, Spain, Mexico

PROJECT - Revamping of flash
smelter

INSTALLATION - IDOMINION
- BEROA was able to complete
successfully, using multinational
teams, three flash furnace revamps
in three different countries either
keeping or even reducing the
shutdown schedule

COMPLETION - October 2013

