

IRON-SILICATE FINES PROCESS

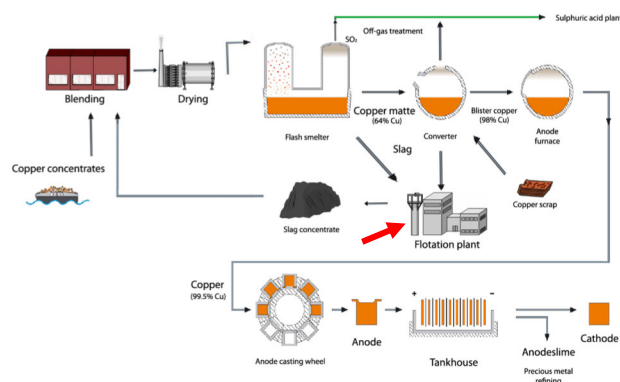
ORIGIN

Aurubis Bulgaria Iron-silicate Fines is a secondary material produced in the process of treatment of copper slags. Copper slags are result of copper concentrates metallurgical processing at Aurubis Bulgaria copper smelter, in Pirdop, Bulgaria.

After slags removal from flash, convertor, and anode furnaces, slags are treated by mechanical crushing, milling and flotation at the Aurubis Bulgaria Slag Flotation Plant.

In this process, we recover the residual copper, and produce Iron-silicate Fines.

The Iron-silicate Fines are stored in depot and shipped to customers.



APPLICATION

Iron-silicate Fines main characteristic is its content of iron minerals. The FE is in form of pure Fe and Fe₃O₄ and Fe₂O₃ form.

Cement: Fayalite is used by the cement industry as additive in the clinker production, where fayalite would add Fe units needed in the cement formula.

Building material: Utilized in the building materials production, like bricks, tiles, and asphalt.

Iron-silicate Fines are fine, hard sand, which is utilized in the road bed.



CHARACTERISTICS

CHEMICAL

FE	46.0 %
SIO ₂	26.0 %
AL ₂ O ₃	3.5 %
CAO	1.5 %

PHYSICAL

Gravity	3.8g/q.cm
Density	2.4g/q.cm
Color	Anthracite
Form	Sand/Powder

MINERAL

Magnetite, Fayalite,
Peroxene,
Iron phases II and III

GRAIN SIZE

< 200 micron

