

# BOB - Bleed treatment Olen Beerse

## State-of-the-art facility to recover valuable metals from bleed

Aurubis is investing around € 85 million in constructing an innovative and energy-efficient bleed treatment facility at its site in Olen (Belgium). In a hydrometallurgical process, BOB recovers valuable metals such as nickel and copper contained in electrolyte streams that are generated in metal production at the Aurubis sites in Beerse and Olen (both in Belgium). The facility comprises a complete tankhouse purification system that is known as bleed treatment.



# Commitment to sustainable growth and efficient production

Overall material flows make Olen the best strategic location for this project. BOB gives Aurubis more control over the multimetal value chain and optimizes Group-wide material flows by processing electrolyte streams from Beerse and Olen completely in-house. The state-of-the-art facility makes production faster, more efficient, and more sustainable, as it minimizes the loss of valuable metals and increases the responsible use of

resources. Integrating BOB into the Aurubis production processes is another important example of how Aurubis is significantly contributing to the European circular economy. The facility strengthens the Group's position as the world's most efficient and sustainable multimetal producer.

## The process chain

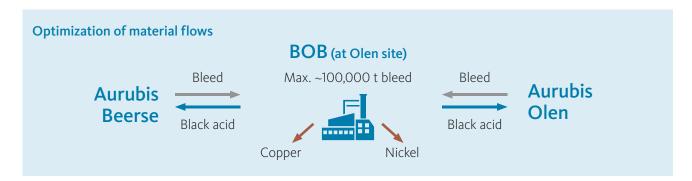
Valuable metals are recovered and impurities are removed from the bleed in a four-step process:

Recovery of copper by evaporation and crystallization

Recovery of copper by traditional electrowinning

Recovery of nickel by evaporation and crystallization

Removal of remaining impurities



#### Bleed:

Bleed refers to the part of tankhouse electrolyte that is continuously being purged: Some metals dissolve in electrorefining tankhouse electrolyte, so purging is necessary to keep the level of metals stable and under control. A mixture of water and sulfuric acid are added to the electrolyte to make up for the volume purged. BOB allows copper, nickel and impurities to be removed from the bleed.

## Black acid:

A mixture of mostly water and 60-70 % sulfuric acid remains once the metals have been recovered from the bleed. This mixture is called black acid. It may be diluted with water so it can again serve as electrolyte for the electrolysis process in the tankhouse.

### The project at a glance



#### Contact

## Aurubis AG