

## // THE BOLIDEN STUDY

### STUDY OF BURNER FLAMES - WITH AND WITHOUT EUROAD

Boliden Rönnskär, located in northern Sweden, is one of the world's most efficient copper smelters. The plant receives deliveries of copper and lead concentrates from its own mines and from external suppliers.

A test was carried out at the site in 2015, with and without EuroAd in various types of fuel, oil and diesel. Regardless of fuel, significant reductions in oil consumption, lower emissions and more stable fire conditions were noted.

#### BURNER FLAME WITHOUT EUROAD



The picture shows the burner flame at the start of the experiment at 175 l/h, without EuroAd.

#### BURNER FLAME WITH EUROAD



**Conclusion:** We can see that the flame from fuel with EuroAd is longer, hotter, more concentrated and efficient. Which leads to lower oil consumption and lower emissions.

#### EXTRACTS FROM THE BOLIDEN REPORT

"The operators at the energy center considered there was significantly less maintenance on the burners during the trial period. (...) The efficiency was calculated for a reference run during the reference period as well as trial run during the trial period, where the result showed a 7 percent increase "

**The Energy Center**  
(Two burners, heating oil 5)

"The result showed an 8.5 percent decrease in oil consumption"

**The Lead Refinery**  
(Nine burners, heating oil 1)


"During the drying process, oil consumption was reduced by 9 percent compared with the reference period"


**The Anode**  
(One burner, heating oil 1)

"Consumption per megawatt hour is 11.2 percent lower with EuroAd fuel compared with standard oil"


**The Renström Mine**  
(Heating oil WRD)

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