



Welcome to Boliden Rönnskär

CMD 21 November 2013

Åke Roos
General Manager
Rönnskär

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Åke Roos

General Manager, Boliden Rönnskär

- Born 1964
- Married with three children

- Technology Licentiate, Material Science 2001 Uppsala University
- Master of Science Mechanical Engineering 1988 Luleå University of Technology

- 1988 - 1999 Several management R&D positions within Sandvik
- 1999 - 2006 Production responsibility within Sandvik Tooling, global organization
- 2006 Global R&D manager, SMC
- 2009 Vice president, SMC, research, development and quality
- 2012 Vice president, Sandvik Rock Tools, production
- 2013 General Manager, Boliden Rönnskär

- Interests: Family, sports (downhill skiing, bandy, football, running), built two houses



Rönnskär development



1930

- Gold ore with high arsenic content
- Pilot plant including ore concentrator
- Environmental awareness
- Production started in 1930



2013

- Multi-feed copper smelter
- World leader in recycling of e-materials
- Developed logistics, own harbour, copper shuttle

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Rönnskär Today

Copper, lead and secondary smelter

- Main products – copper, gold, silver and lead
- World leader in e-scrap recycling – annual capacity 120,000 tonnes
- Unique capabilities: kaldo and fuming technologies
- Flexible smelter adapted to complex raw materials
- Processes Boliden's entire production of copper concentrate



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Rönnskär Today

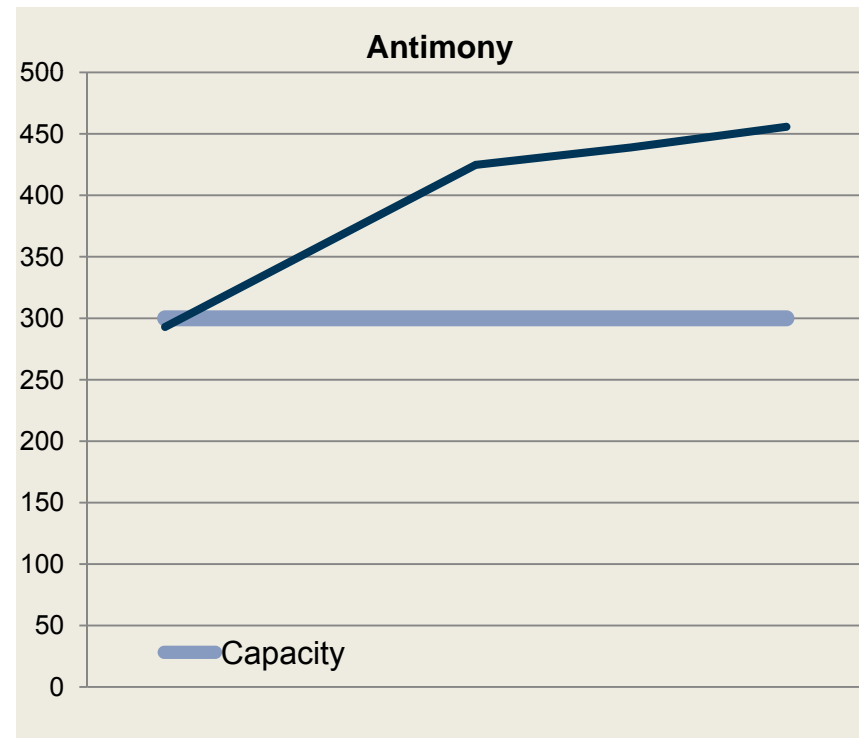
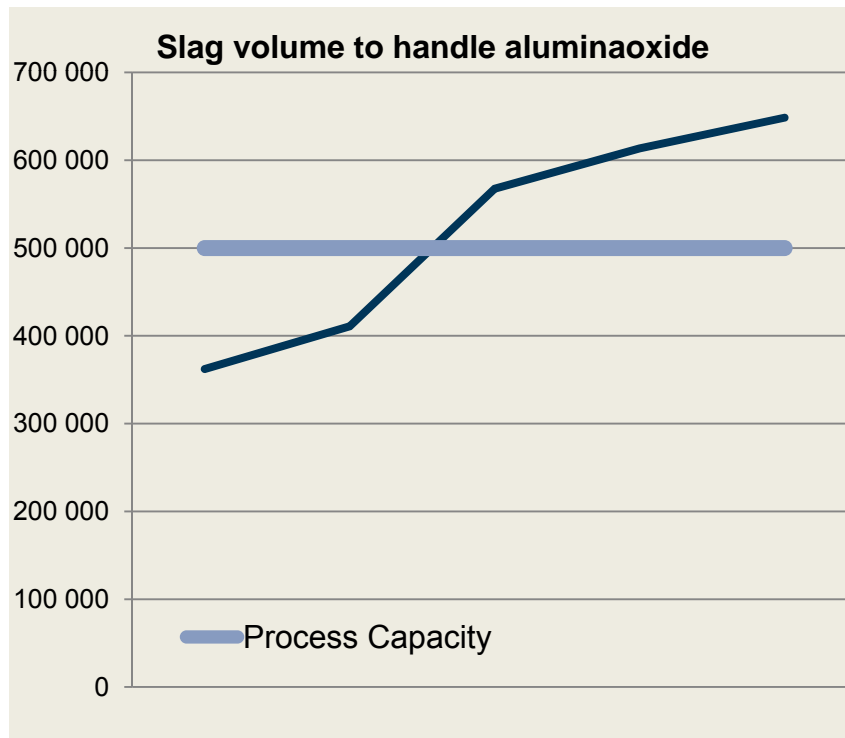
- Feed 2012
 - Copper conc. 624 kt
 - Lead conc. 27 kt
 - Tot second. 223 kt
- Production 2012
 - Copper 214 kt
 - Gold 12,5 tonnes
 - Silver 448 tonnes
 - Lead 19 kt
 - Zinc clinker 36 kt
 - Sulfuric Acid 553 kt



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The Challenge

- Capacity to remove impurities limits production volume
- Rapid change in incoming raw material composition - Process Balance
- Several projects on-going
- Priorities
 - Control – increase recoveries and stop inventory build
 - Direction – absorb intermediates
 - Inventory – level back to normal



Plant Tour

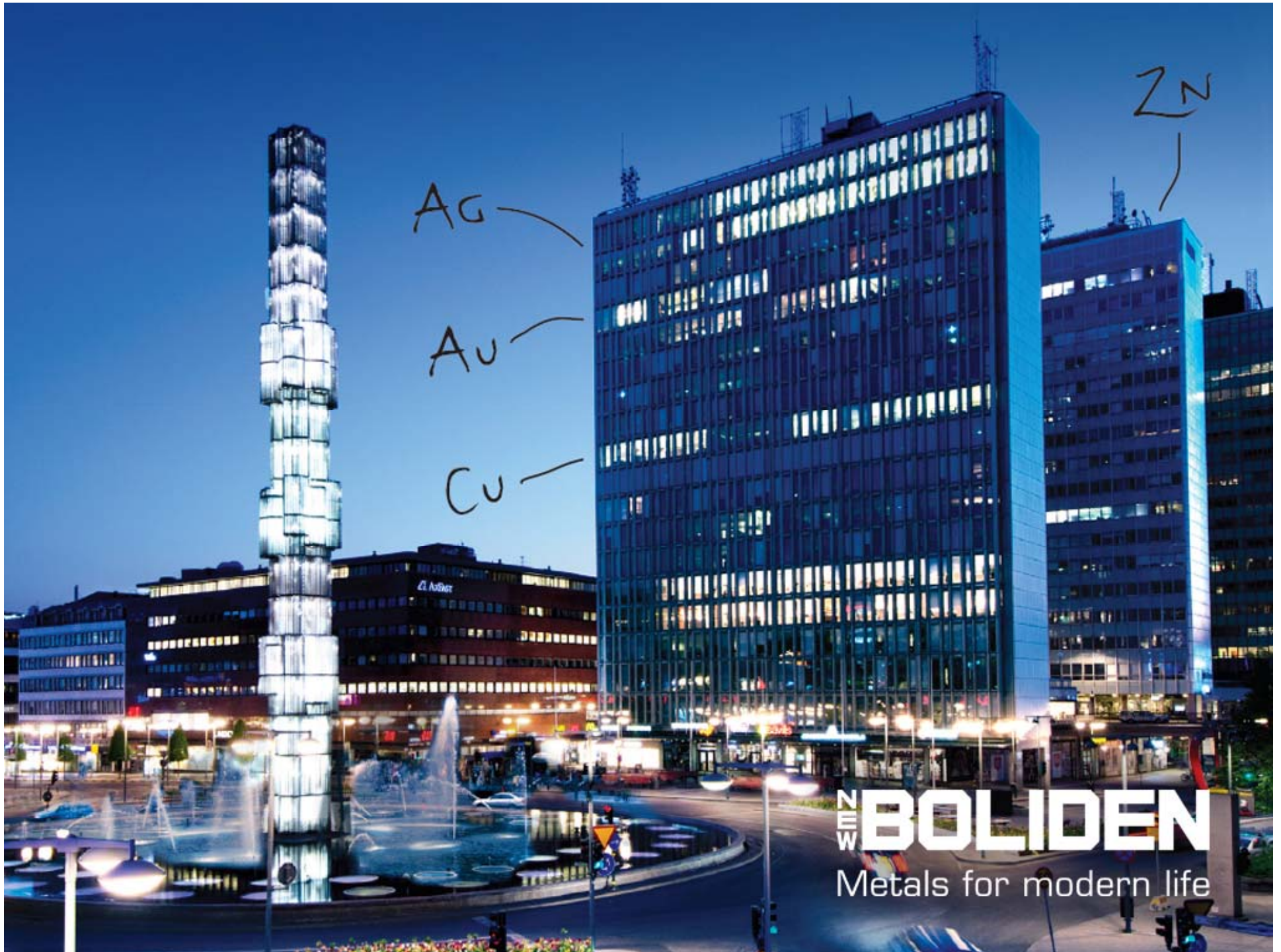
- Safety film
- No photos
- Safety equipment
 - Protective coat, glasses, helmet
 - Earphones
- Plant tour
 - 3 groups, separate buses
 - Copper production (1)
 - PM plant (2)
 - Unloading/Sampling (3)
 - E-kaldo plant (4)
- Lunch



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Ag

Au

Cu

Zn

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Metals for modern life