



# Underground Rock Excavation

Lars Engström



*Atlas Copco*

The Atlas Copco logo consists of the company name in a blue, italicized serif font, centered between two horizontal blue bars.

**Our Business**

Capital Markets Day  
September 21, 2004

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**Our Products in Use**

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**Our Products in Use**

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## Our Products in Use



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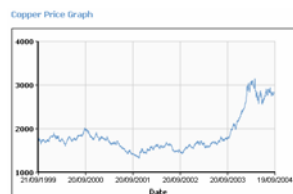
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## Demand Drivers

### Metal demand/prices/stock



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## Demand Drivers

### Infrastructure & Energy projects

- Tunnels
  - Roads, Railways and Subways
- Hydropower
- Storage
- Installations
- Sewage



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## Our Customers

### Underground Mines



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## Our Customers

### Underground Construction



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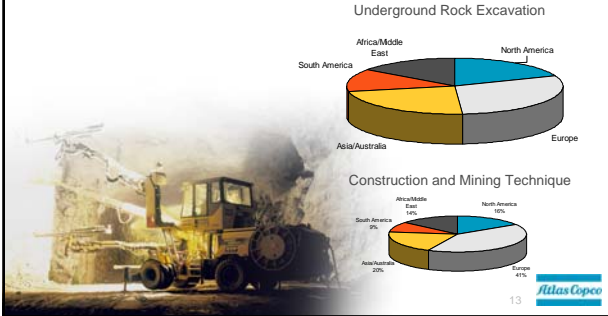
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## Our Revenue Distribution

by region



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## Our Competitors

- Tamrock
- Elphinstone (CAT)
- Furukawa
- Boart

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## Our Vision

### Underground Rock Excavation

- To be First in Mind, First in Choice in the industry of underground rock excavation
- Our products and solutions have, and are perceived as having, the most value creating performance in the industry

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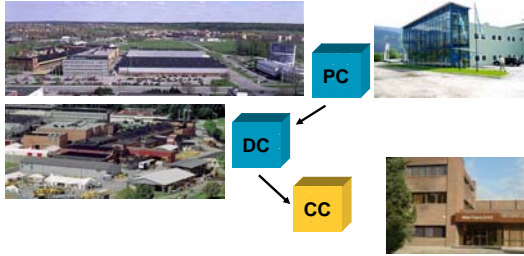
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## Our Structure



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## Trends in the Market

- More productive equipment
- More intelligent products
- Customer & Supplier consolidation
- Supplier Integration forward – After Market performance contracts
- Preferred suppliers



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## The intelligent drill rig

*Ex. The Rocket Boomer L3C*

- 1 Cabin including air condition
- 6 wheels
- 2 compressors
- 15 hydraulic pumps
- 9 hydraulic motors
- 52 hydraulic cylinders
- 33 computer CPUs
- 3 computer screens
- Approx. 2 200 m hydraulic hoses



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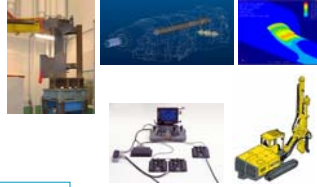
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## Rock Excavation Technology Centre

- Applied research centre
- Industrial design
- Rock Drill design
- Product design
- System design



- 170 people engaged in R&D
- 4-5% of sales reinvested in R&D

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## R&D Philosophy

- New products and solutions, the driving force in the organic growth
- Increased productivity
- Safety
- Extend the product offer based on modular design concept
- Develop intelligent product concept



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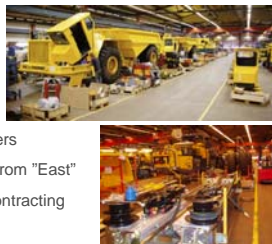
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## Production/Procurement Philosophy

- Flow orientation
- Short delivery times
- Final assembly
- Limited number of suppliers
- Close co-operation with suppliers
- Labour intensive components from "East"
- Capacity peaks through sub-contracting



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## Distribution Philosophy

- "Machines can never stop"
- Central Distribution Center in Örebro
- Local stocks as required
- Supply Chain Management focus



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## Sales & Marketing Philosophy

- Direct sales operation
- Key customer management
- Strategic alliance approach
- Performance contracts
- Global After Market concept



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## Atlas Copco Wagner



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**Wagner Product Development plan**

- New product range – investment of 200 MSEK over five years.
- Newly developed and upgraded vehicles will form a complete product range of approx. 15 vehicles



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