

Atlas Copco Underground Rock Excavation



Atlas Copco Capital Markets Day, November 20, 2007

Patrik Nolåker, President

Underground Construction

Transport applications



- Road tunnels
- Railway tunnels
- Subways

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Hydropower applications



- Head race tunnels
- Tail race tunnels
- Surge shaft
- Power house

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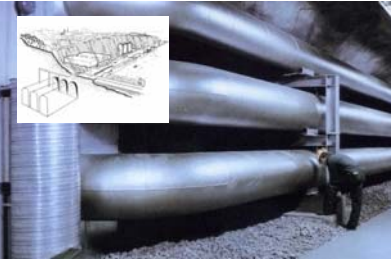
Water applications



- Sewage treatment plants & tunnels
- Storm water surge tunnels
- Water supply and purification plants
- District heating
- Irrigation

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Underground Construction Storage applications

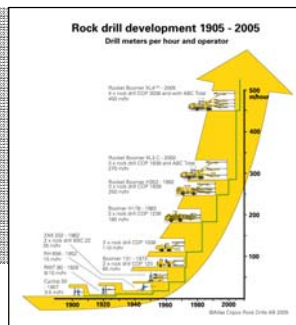


- Oil and gas
- Food and wine
- Nuclear waste

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Underground Construction Productivity



- 1905 The first rock drill
- 1952 The "Swedish Method"
- 1962 Mechanization
- 1973 The hydraulic rock drill
- 1998 RCS PC control system
- 2005 COP 3038

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Underground Construction Productivity



- World Record at Sauda Hydro Power Project in Norway, May 2007
- 165 m advance in one week on a single face

165 metres in one week: The AF Skandinavia team – from left, Service Engineers John Gunnar Eggerud, Frode Dyrland and Tor Rognli and Ken Ove Basgård, Tunnel Manager. Photo: Ingvil Bakka/Ryfylke.

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Underground Construction Productivity – three key elements

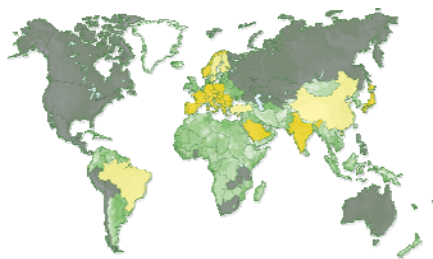


- The rock drill – COP3038
- The boom – BUT45
- The rig control system – RCS
 - PC based network control system
 - Superior "instant" process control
 - Automation options

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Underground Rock Excavation Underground construction

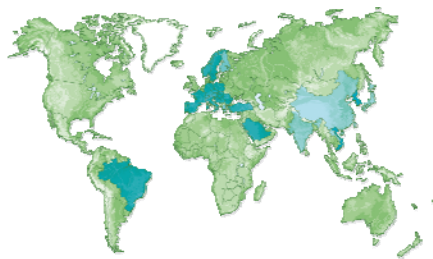


- Important markets**
- Markets for underground construction
 - Markets for underground mining and underground construction
 - Markets for underground mining

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Underground construction Market shares – most important markets



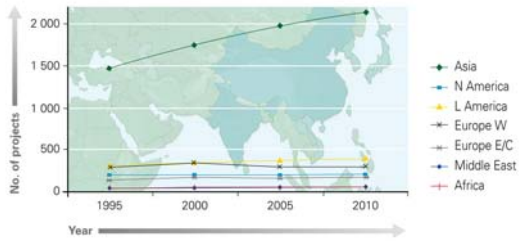
- Atlas Copco market shares for URE construction products**
- Above 50%
 - 25%-50%

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Future growth markets



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Safety and ergonomics



- Operators environment
 - Liftable cabin
 - Automated operation

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Total solutions



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Underground Construction

Our strength for the future



- Strong growth, especially in far east
- Strong local presence
- Always in the lead
- Total solutions

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We are committed to your superior productivity through interaction and innovation.

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