

# Atlas Copco Geotechnical Drilling and Exploration



Atlas Copco Capital Markets Day, November 20, 2007

Hans Lidén, President Atlas Copco GDE

## Atlas Copco Geotechnical Drilling and Exploration



Atlas Copco GDE develops, produces and markets quality products and services for **exploration drilling** and **selected applications and markets within ground engineering**

Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---

---

## Application Areas

Find, identify and define natural resources

Investigate rock and soil conditions

Strengthen, seal and drain rock and soil

Ground construction support systems

Energy and waterwell drilling

Exploration products



Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---

---

## Application Areas

Find, identify and define natural resources

Investigate rock and soil conditions

Strengthen, seal and drain rock and soil

Ground construction support systems

Energy and waterwell drilling



Ground engineering systems

Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---

---

## Ground Engineering

A general outlook for the future development

### Urbanization is increasing, leading to expansion into unstable areas

*Tunnels are done in poor ground conditions, which increases the need for forepoling*

### Fast growing development areas in great need for infrastructure

*Need for new utility lines and underpasses increases the need of horizontal drilling*

### Environmental and safety concerns affect construction methods

*Tunnels are used instead of road cuts, which increases demand for ground stabilization etc.*

### Decreased access to pure water, increased energy demand

*Increased need for energy and water wells*

Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---

---

---

---

## Atlas Copco Geotechnical Drilling and Exploration

The makers of solid ground

Investigate rock  
and soil conditions

Strengthen, seal and drain  
rock and soil

Ground construction  
support systems

Energy and  
waterwell drilling



Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---

---

---

---

## Atlas Copco Geotechnical Drilling and Exploration

The makers of solid ground

Investigate rock  
and soil conditions

Strengthen, seal and drain  
rock and soil

Ground construction  
support systems

Energy and  
waterwell drilling



Atlas Copco

Atlas Copco Capital Markets Day, 30 November 2017

---

---

---

---

---

---

---


---

---

---

**Atlas Copco Geotechnical Drilling and Exploration**  
 The makers of solid ground

- Investigate rock and soil conditions
- Strengthen, seal and drain rock and soil
- Ground construction support systems**
- Energy and waterwell drilling



*Atlas Copco*

Atlas Copco Capital Markets Pty. | November 20, 2007

---

---

---

---

---


---

---

---

**Atlas Copco Geotechnical Drilling and Exploration**  
 The makers of solid ground

- Investigate rock and soil conditions
- Strengthen, seal and drain rock and soil
- Ground construction support systems
- Energy and waterwell drilling**



*Atlas Copco*

Atlas Copco Capital Markets Pty. | November 20, 2007

---

---

---

---

---

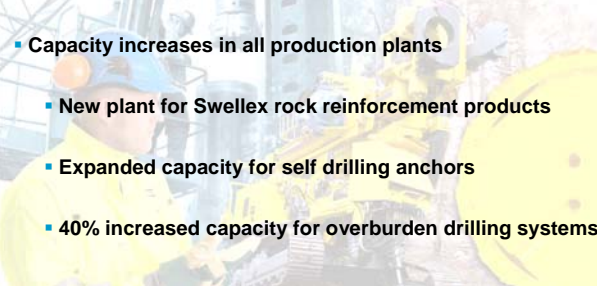
---

---

---

**Atlas Copco Geotechnical Drilling and Exploration**  
 Gearing up – capacity increases

- **Capacity increases in all production plants**
  - New plant for Swellex rock reinforcement products
  - Expanded capacity for self drilling anchors
  - 40% increased capacity for overburden drilling systems



*Atlas Copco*

Atlas Copco Capital Markets Pty. | November 20, 2007

---

---

---

---

---

---

---

---

### Atlas Copco Geotechnical Drilling and Exploration Gearing up – product development

- Large diameter piling systems

Poor ground requires more piling  
New constructions require more  
and larger piling



- Roofex deep mine bolt –  
also for construction in seismic areas



Atlas Copco Capital Markets Pte., 30 November 20, 2007

---

---

---

---

---

---

---

---

### Atlas Copco Geotechnical Drilling and Exploration The House the Ruth built (and Atlas Copco rebuilt)

Customer: Yankee Stadium (Skanska)  
Application: Foundation piling  
Challenges: High reliability needed  
Time constraints  
Method: Micropiling  
80 casings (324 mm)  
45 m depth, incl 6 m rock  
System used: Symmetrix



Atlas Copco Capital Markets Pte., 30 November 20, 2007

---

---

---

---

---

---

---

---

### Atlas Copco Geotechnical Drilling and Exploration Increasing customer capacity

Customer: Häkkinen, Finland  
Application: Foundation piling  
Challenges: 400 tons of weight  
Few  $\mu$  settlements allowed  
Method: 71 piles (711 mm) driven  
in granite bedrock  
System used: Symmetrix  
Time needed: 5 weeks



Atlas Copco Capital Markets Pte., 30 November 20, 2007

---

---

---

---

---

---

---

---

**Atlas Copco Geotechnical Drilling and Exploration**  
Interacting for superior productivity



Customer: Veidekke, Sweden  
Application: Tunneling  
Challenges: Sealing of tunnel with different rock conditions  
Tight schedule - efficiency  
Logistics  
Method: Mobile grouting production  
System used: Unigrout



Atlas Copco Capital Markets AB, 10 November 20, 2007

---

---

---

---

---

---

---

---

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



Atlas Copco Capital Markets AB, 10 November 20, 2007

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---