ATLAS COPCO CREATES VACUUM TECHNIQUE

August 18, 2016
New Group structure from January 1, 2017
WHY SEPARATE BUSINESS AREA?

Vacuum Technique

- Vacuum is a growth area
- Vision is to become global market leader in vacuum solutions
- A dedicated organization can focus entirely on the vacuum business
- Compressor Technique can focus entirely on industrial compressor business
SUPPORTING A WIDE VARIETY OF INDUSTRIES

Revenues by business area

- Construction Technique: 14%
- Compressor Technique: 34%
- Mining and Rock Excavation Technique: 24%
- Industrial Technique: 14%
- Vacuum Technique: 14%

12 months ending June 2016 including Leybold and CSK (when acquired)
FIVE BUSINESS AREAS AND 28 DIVISIONS

A decentralized Group

Board of Directors

President and CEO

Group Management and corporate functions

Compressor Technique
- Compressor Technique Service
- Industrial Air
- Oil-free Air
- Professional Air
- Gas and Process
- Medical Gas Solutions
- Airtec

Vacuum Technique
- Vacuum Technique Service
- Semiconductor Service
- Semiconductor
- High Vacuum
- Industrial Vacuum

Industrial Technique
- Industrial Technique Service
- MVI Tools and Assembly Systems
- General Industry Tools and Assembly Systems
- Chicago Pneumatic Tools
- Industrial Assembly Solutions

Mining and Rock Excavation Technique
- Mining and Rock Excavation Service
- Underground Rock Excavation
- Surface and Exploration Drilling
- Drilling Solutions
- Rock Drilling Tools
- Rocktec

Construction Technique
- Construction Technique Service
- Specialty Rental
- Portable Energy
- Road Construction Equipment
- Construction Tools

Atlas Copco Group - New structure from January 1, 2017
BUSINESS AREAS

June 2016, 12 months figures – restated

COMPRESSOR TECHNIQUE
- Revenues MSEK 35 828
- 22.9% EBIT-margin
- 67% ROCE
- 42% Service
- 15 095 Employees

VACUUM TECHNIQUE
- Revenues MSEK 10 465
- 20.0% EBIT-margin
- 15% ROCE
- 24% Service
- 3 989 Employees

INDUSTRIAL TECHNIQUE
- Revenues MSEK 14 526
- 22.4% EBIT-margin
- 31% ROCE
- 29% Service
- 6 050 Employees

MINING AND ROCK EXCAVATION TECHNIQUE
- Revenues MSEK 24 899
- 17.5% EBIT-margin
- 31% ROCE
- 70% Service/consumables
- 11 135 Employees

CONSTRUCTION TECHNIQUE
- Revenues MSEK 14 663
- 12.5% EBIT-margin
- 13% ROCE
- 34% Service/rental
- 5 502 Employees
VACUUM TECHNIQUE

Quarterly order intake, revenues and operating margin – restated

- Key figures are available on: [http://www.atlascopcogroup.com/investor-relations](http://www.atlascopcogroup.com/investor-relations)
COMPRESSOR TECHNIQUE

Quarterly order intake, revenues and operating margin – restated

- Key figures are available on: http://www.atlascopco.group.com/investor-relations
VACUUM TECHNIQUE

Vacuum products

Exhaust management systems

Semiconductor

Flat panel displays

Solar panels

Metallurgy

Food & beverages

Packaging

Conveying and assembly

…and more
FACTS IN BRIEF

**Edwards / Vacuum solutions division 2015**

- Headquarters: Burgess-Hill, UK
- Employees (2015): 3 903 + 759 add. workforce
- Revenue (2015): MSEK 9 955

**Business description**

- A leading developer and manufacturer of vacuum products, exhaust management systems and related services
  - Strong presence in the semiconductor industry

**Products**
FACTS IN BRIEF

Leybold overview

- Headquarters: Cologne, Germany
- Employees: > 1 600
- Revenue (2015): MCHF 360 (MSEK 3 100)
- Business description
  - Leader in industrial vacuum with significant presence in high vacuum

Products

- DRYVAC: Dry Compressing Screw Pumps
- TURBOVAC iX: Mechanical Turbomolecular Pumps
- TRIVAC: Rotary Vane Vacuum Pumps
- SOGEVAC: Rotary Vane Vacuum Pumps
- RUVAC: Roots Vacuum Pumps
- TURBOSTREAM: Turbo radial Blowers
- SCROLLVAC: Dry Compressing Scroll Vacuum Pumps
- SCREWLINE: Dry Compressing Screw Vacuum Pumps
- COOLVAC: Cryo pumps
- TMP MAG Line: Turbomolecular Pumps
- TMP Classic Line: Turbomolecular Pumps
- SYSTEMS: Standardized & customized
FACTS IN BRIEF

CSK overview

- Headquarters: Gyeonggi-do, South Korea
- Employees: 400
- Revenue (2015): BKRW 124.5 (MSEK 870)
- Business description
  A leading supplier of exhaust management and delivery systems in the Korean market, focused on semiconductor market

Products

- Exhaust management systems
  - Burn & Wet
  - Plasma & Wet
  - Thermal & Wet
  - Wet

- Delivery systems

Atlas Copco Group - New structure from January 1, 2017
VACUUM – A GROWING MARKET

**Miniaturization**
- Moore’s law
- Next generation technologies

**Scientific OEMs**
- Point of Use spectrometry (simplification)
- Bigger system requirements

**Electrical**
- Lithium Ion batteries
- Electric vehicle applications

**New processes**
- EUV lithography
- Advanced packaging

**450 mm transition**
- Increasing complexity
- Consolidation

**LED/Solar**
- LED and general lighting
- 'Green technology'

**Industrial / Process**
- Freeze drying
- Food processing
- Pharmaceuticals and Healthcare

**OLED**
- Significant investment
- Hyper growth market

**Integrated Systems**
- Enabling rapid technology deployment
- Time to 1st wafer

**Device proliferation**
- Mobility and connectivity
- Electronics as necessity

**Vacuum Technique**

**Increasing vacuum intensity**

**New vacuum applications**
# VACUUM TECHNIQUE

<table>
<thead>
<tr>
<th>Typical operating pressure</th>
<th>Rough, process and industrial vacuum</th>
<th>Semiconductor</th>
<th>High and ultra high vacuum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 bar - 10^{-6} mbar</td>
<td>10^{-3} - 10^{-6} mbar</td>
<td>10^{-3} - 10^{-11} mbar</td>
</tr>
</tbody>
</table>

**Applications main classifications**

- **Rough vacuum**  
  Packaging, printing, pick-up and conveying, medical etc.
- **Process vacuum**  
  Chemicals, petrochemicals, pharmaceuticals, plastics, food and beverage, textile, paper, etc.
- **Industrial vacuum**  
  Metallurgy, vacuum heat technology, laser technology, electron tubes, light bulbs, industrial leak detection, automotive, etc.
- **Semiconductor process vacuum**  
  TFT-LCD display
- **Thin film**  
  LED, Glass/web/optical coating, data storage, surface coatings, display coatings, solar, etc.
- **Instrument**  
  Mass spectrometer, electron microscope, metrology, leak detection, analysis, etc.
- **R&D**  
  Universities, laboratories, scientific research, space simulation, etc.

**Main brands used**

- **Leybold**
- **Edwards**
- **Atlas Copco**
- **Quincy**
- **Edwards**
- **CSK**
- **Edwards**
- **CSK**
- **Leybold**
- **Gamma**
VACUUM TECHNIQUE
Including Leybold and CSK

Revenues by region

North America 24%
South America 1%
Europe 19%
Asia/Australia 54%
Africa/Middle East 2%

Revenues

2014 2015 12 months June 2016 12 months June 2016 incl. Leybold and CSK

Vacuum Technique, restated
Leybold
CSK

Revenues by region including Leybold and CSK (when acquired)

Atlas Copco Group - New structure from January 1, 2017
COMMITTED TO SUSTAINABLE PRODUCTIVITY.