Bulk Materials

Group Executive Vice President Christian Jepsen
Agenda

- Presentation of Bulk Materials
  - Who are we
  - What we do
  - How we do it
- Industry drivers & outlook
- Strategic initiatives
Bulk Materials Division in brief …

- Division consist of:
  - Several business units consolidated into **Bulk Materials Handling** (BMH)
  - Three Product companies:
    - **FLSmidth MAAG** (drive solutions & gear technology)
    - **FLSmidth Automation** (process control & electrification)
    - **FLSmidth Airtech** (Air Pollution Control)
- Global presence with **3,100** employees
- Consolidated revenue of DKK 5bn 2011
- **Global customer base** in all six focus industries
## Bulk Materials Division

<table>
<thead>
<tr>
<th>Bulk Materials (DKK m)</th>
<th>Full-year 2009</th>
<th>Full-year 2010</th>
<th>Full-year 2011</th>
<th>Expected trend in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order intake</td>
<td>3,386</td>
<td>4,457</td>
<td>5,842</td>
<td>Increasing</td>
</tr>
<tr>
<td>Revenue</td>
<td>4,152</td>
<td>3,917</td>
<td>5,005</td>
<td>Increasing</td>
</tr>
<tr>
<td>EBITDA</td>
<td>360</td>
<td>301</td>
<td>276</td>
<td></td>
</tr>
<tr>
<td>EBITA*</td>
<td>328</td>
<td>264</td>
<td>225</td>
<td></td>
</tr>
<tr>
<td>EBITA-ratio</td>
<td>7.9%</td>
<td>6.7%</td>
<td>4.5%</td>
<td>Strongly increasing</td>
</tr>
<tr>
<td>EBIT</td>
<td>283</td>
<td>235</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>EBIT-ratio</td>
<td>6.8%</td>
<td>6.0%</td>
<td>2.9%</td>
<td></td>
</tr>
</tbody>
</table>

*) Definition of EBITA: Earnings before amortisation and write-down of intangible assets
BMH was created based on the successful merger between legacy brands MVT and KOCH in Germany adding companies in USA and South Africa.

BMH brings to FLSmidth the complete range of materials handling technology that will allow our customers to:

- Convey raw and bulk material
- Provide stacking, blending, storage and stockyard management
- Port facilities for import and export of bulk material
Bulk Materials Handling – Global structure

- Business Unit Wadgassen, Germany
- Business Unit Spokane, USA
- Business Unit Boise, USA
- Business Unit Johannesburg, South Africa

Headquarter and Global Technical Center
- Wadgassen
- Global Management
- Technology
- Proposal and Sales Support
- Product Engineering
- Research and Development

Regional Business Units:
- Regional BMH Business India
- Regional BMH Business Australia
- Regional BMH Business Latin America
- Regional BMH Business Brazil
- Regional BMH Business South East Asia

Technology

Sales & Execution
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- **Strategic initiatives**
“To-Within-From” Flow sheet applications for BMH
Conveying

- In Pit conveyors
- Overland conveyors
- In Plant conveyors
- Pipe conveyors
- Apron and belt feeders
- Drag Chains
Stacking, Blending, Tailings and Stockyard management

- Mobile stacking
- Heap Leach systems
- Boom spreader
- Portable conveyors
- Stackers
- Reclaimer
- Bucket wheel
- Train loading - unloading
Port facilities for import/export

- Ship Loaders
- Ship Unloaders
- Transfer systems
- Pneumatic unloaders
- Screw unloaders
- Conveying systems
Bulk Material Handling in summary

FLSmidth Bulk Material Handling offers globally:

- State of the art BMH technology
- All engineering trades required
- Manufacturing/fabrication
- Civil works
- Erection & commissioning
- Operational services
- Maintenance services
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Customer base

- Mining companies
  - Global diversified miners
  - Regional miners
  - Local miners
  - Junior miners
- Global Engineering companies
- Mining service companies
- Utilities
- Steel Producers
- Cement
Bulk Material Handling Competitive Landscape

FLSmidth

Metso
Outotec

FAM
Weir

Takraf
Delkor

ThyssenKrupp

Sandvik

Atlas Copco
Boart Longyear

Terex

Astec

Komatsu

Joy Global
CAT/Bucyrus

Various Chinese Equipment suppliers
Unique Value Proposition

- Innovative solutions
- One Source
- Create Customer Value
- Sustainable solutions
- EPC offering
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Today’s industry drivers

- Industrialization and Urbanization
- Depletion/deeper ore bodies
- Cost effective solutions
  - CAPEX
  - OPEX (Total cost of ownership)
  - Safety
- Environmental sustainable solutions
- Customer’s exercising supply chain management (Tier 1)
- Full local service provider
Industry Outlook

**Global urban migration**

- **Source:** UN Department of Economic & Social Affairs

**Global Iron Ore Production**

Source: USGS Data, EIA, BP, national Minstry of Mining, FLSmidth, EIA Analysis
Commercial and strategic industry focus

FLSmidth

Cement
Non-Ferrous
Bulk Materials
Customer Service

Commercial Focus
Cement
Minerals Processing
Material Handling
All aftermarket parts and O&M

Strategic Industry Focus
Cement
Copper
Iron Ore
All focus industries

Gold
Coal
Fertilizer Minerals
## Material processed in major mining segments

<table>
<thead>
<tr>
<th>Segment</th>
<th>Processed (mill tons)</th>
<th>Annual Production (mill tons)</th>
<th>BMH technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>8,000 (40% of total)</td>
<td>6,800 (60% of total)</td>
<td>Conveying/Stockyard/Port</td>
</tr>
<tr>
<td>Cement</td>
<td>4,500</td>
<td>3,000</td>
<td>Conveying/blending</td>
</tr>
<tr>
<td>Copper</td>
<td>3,000</td>
<td>18</td>
<td>Conveying/tailings/Port</td>
</tr>
<tr>
<td>Iron ore</td>
<td>3,000</td>
<td>1,700</td>
<td>Stacking/reclaiming/Port</td>
</tr>
<tr>
<td>Gold</td>
<td>1,400</td>
<td>0,0025</td>
<td>Conveying/tailings</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,000</strong></td>
<td><strong>11,500</strong></td>
<td></td>
</tr>
</tbody>
</table>
Coal

- Coal is the world’s largest solids bulk commodity
- World coal output in 2010 was approx. 7bn tons
- 40% of world’s electricity produced on coal. China and India’s future needs require additional 3bn tons
- 70% of world’s steel produced on coal. India and China’s steel industries will require a doubling of world production
- 60% expected increase in use of coal over the next 20 years
- Coal will last for at least the next 120 years
- Australia, India, Africa, USA, Russia, Mongolia, Indonesia

Source: World coal institute
Industry Strategy

Industry strategy Coal

Strategy to grow:

- Technology:
  - In Pit Crushing and Conveying
  - Develop Port facilities
  - Tailings management
  - Bundling solutions
  - Improved value propositions

- Other:
  - Acquire process know-how
  - Increase footprint
  - O&M opportunities
  - Supercenters

- Synergistic acquisitions
The One Source strategy in coal

- Stock yard, conveying and loading (Bulk)
- Complete Package of Automation (Bulk)
- Island or Complete Package EPC/EPCM (Cement)
- Customer Service and O&M (Customer Services)
Iron Ore

- One of the world's primary industries (Iron + Steel), where consumption is closely related to level of industrialization.

- Most of the world’s iron ore production is exported, which creates opportunities in material handling and port handling.

- Iron ore handling is a solutions market.

- Brazil, Australia, India, Africa, Russia.
Industry strategy Iron Ore

Strategy to grow:

- **Technology:**
  - Tailings management
  - Port facility solutions
  - Bundling solutions
  - Improved value proposition

- **Other:**
  - Acquire Process Know how
  - Supercenters
  - O&M capabilities

- **Synergistic acquisitions**
Fertilizer Minerals

- World population is anticipated to grow from 6.9bn (2010) to 10.0bn in 2050 (UN) which means that 30% more food will be required.

- As a consequence, more fertilizers will be required to produce the same amount of food from reduced arable land.

- Fertilizer is produced from phosphates and potash, both of which are facing decreasing ore concentrations which requires additional processing and conveying.

- Phosphate rock production is foreseen to grow 3-4% annually.

- Morocco, Jordan, Russia, Canada, USA, Brazil.
Industry strategy in Fertilizer

Strategy to grow:

- Technology:
  - Tailings management
  - Port facilities
  - Bundle solutions
  - Improved value propositions

- Other:
  - Supercenters
  - O&M
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Three key strategic themes

- We build our strategy around three themes:
  - Customer intimacy
  - Product leadership
  - Operational excellence

- Our approach will be balanced and interlinked

- We will align our solutions with our customers’ needs
Key initiatives supporting growth

1. **Customer Intimacy**
   - Strengthen footprint in several key markets
   - Execute industry strategies
   - Enable One Source offering in all key industries
   - Coordinate across the FLSmidth matrix (systems)

2. **Operational Excellence**
   - Continue to improve business procedures
   - Establish EPC capabilities in key markets
   - Further utilization of Chennai support
   - Continue to expand global sourcing

3. **Product Leadership**
   - Need to engage with customers to understand future needs
   - Focus on product development and leverage IPR
   - Allocate the necessary resources to support innovation
   - Acquire technology/process know-how