Safety and Health
State of the Extractive Industry in Germany
Helmut Ehnes

OSH-Statistics
Branches of the StBG member companies

- Aggregates and quarries: 1682
- Gravel and sand: 1380
- Ready mixed concrete: 846
- Precast concrete/blocks: 1256
- Oil and gas: 109
- Lime and gypsum: 78
- Cement: 39

5,390 member companies

Average company size = 26 employees

Employees in the branches of the StBG

- Oil and gas: 7500
- Aggregates and quarries: 31500
- Gravel and sand: 28000
- Ready mixed concrete: 17500
- Lime and gypsum: 9500
- Cement: 8000
- Precast concrete/blocks: 1256

141,000 employees
### OSH-Statistics 2006/2007

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>accidents at work</td>
<td>12,634</td>
<td>12,266</td>
</tr>
<tr>
<td>-2,91%</td>
<td>-2,91%</td>
<td></td>
</tr>
<tr>
<td>notifiable accidents at work</td>
<td>6,115</td>
<td>5,791</td>
</tr>
<tr>
<td>-5,30%</td>
<td>-5,30%</td>
<td></td>
</tr>
<tr>
<td>new accident pensions</td>
<td>210</td>
<td>201</td>
</tr>
<tr>
<td>-4,29%</td>
<td>-4,29%</td>
<td></td>
</tr>
<tr>
<td>fatal accidents</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>-40%</td>
<td>-40%</td>
<td></td>
</tr>
<tr>
<td>notifiable accidents at work</td>
<td>49,14</td>
<td>46,32</td>
</tr>
<tr>
<td>per 1000 full-time-employees</td>
<td>-5,74%</td>
<td>-5,74%</td>
</tr>
<tr>
<td>suspected/reported occ. diseases</td>
<td>417</td>
<td>444</td>
</tr>
<tr>
<td>6,47%</td>
<td>6,47%</td>
<td></td>
</tr>
<tr>
<td>new pensions occ. diseases</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>-1,75%</td>
<td>-1,75%</td>
<td></td>
</tr>
</tbody>
</table>

### New Accident Pensions 1988 – 2007

![Graph showing new accident pensions from 1988 to 2007](image)
Notifiable Accidents per 1000 Fulltime-Employees

Notifiable Accidents per 1000 Fulltime-Employees

Notifiable Accidents per 1000 Fulltime-Employees
## New Accident Pensions 2007 caused by ...

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slip, trip, fall</td>
<td>26</td>
</tr>
<tr>
<td>Ladder</td>
<td>25</td>
</tr>
<tr>
<td>Trucks</td>
<td>19</td>
</tr>
<tr>
<td>Excavator</td>
<td>11</td>
</tr>
<tr>
<td>Falling, tumbling, tilting parts</td>
<td>9</td>
</tr>
<tr>
<td>Fork-lift</td>
<td>8</td>
</tr>
<tr>
<td>Concrete pumps</td>
<td>6</td>
</tr>
<tr>
<td>Fall from height</td>
<td>6</td>
</tr>
<tr>
<td>Heavy duty vehicle</td>
<td>5</td>
</tr>
<tr>
<td>Concrete plant</td>
<td>5</td>
</tr>
<tr>
<td>Conveyor belt</td>
<td>5</td>
</tr>
</tbody>
</table>

Remarkable Accidents 2007
Crash of a Drilling Machine

Dumper Crash - Safety Belt not Applied
- Pulled in while Cleaning Belt

- Pulled in while manually removing Rocks of Crusher
Thrown out after hitting Quarry Face – No Safety Belt available

Conveyor Belt – serious skin injury
Severe Burns by hot raw material (Cement Plant)

National OSH-Strategy in Germany (GDA)
National OSH-Strategy in Germany (GDA)

3 Main-Targets:
- Reduction of occupational accidents
- Reduction of muscoskeletal disorders
- Reduction of skin disease

Prevention activities for the Extractive Industry 2007/2008
### Targets Of Prevention

<table>
<thead>
<tr>
<th>Management aids</th>
<th>Incentive systems</th>
<th>Corporations</th>
<th>Events</th>
<th>Media</th>
<th>Personal contacts</th>
<th>Within the company</th>
<th>Contacts + Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems safety</td>
<td>Safety audits</td>
<td>Management magazine</td>
<td>Safety packages</td>
<td>Annual reports</td>
<td>Safety inspection</td>
<td>Safety engineers</td>
<td>Safety engineers</td>
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<tr>
<td></td>
<td>Safety inspections</td>
<td>Company physicians</td>
<td>Safety brochures</td>
<td>Annual reports</td>
<td>Safety support</td>
<td>Safety engineers</td>
<td>Safety engineers</td>
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<td>Company physicians</td>
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#### Contacts & Products

- Employers (SME)
- Insured
- Qualified employees for safety
- Safety representatives
- Company physicians
- Employee representatives
- Executives
- Employers (large concerns)

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### Education/Qualification
Per year: 6,000 participants in 300 courses

Forum protecT

- 2007/2008: Safe use of Vehicles (630 participants)

  26.-27. November 2008
  3.-4. Februar 2009
Symposium „Safety in Heat Exchanger Areas of Cement Plants“

Topics:
- State of Technology
- Derivate Fuels
- PPE

Motivation Video Project „Use of Personal Protective Equipment“

- Partners: Holcim, RAG, BBG, StBG
- Aim: Motivate to wear/apply PPE
- Ready to use: Spring 2009
Safety Management

Safety Management – Safety Seal

- 440 companies got our safety seal
- 8% of extractive industry in Germany
- The accident rate of companies having been audited is on average 54% lower than in the rest of companies
Safety Management

Forum protecT special „5 Years of Safety Seal“

- September 2008: (220 participants)

Safety Manual

- Relaunched Internet Presentation
- 5200 Folders and CD's distributed
Safety First - Video-based Training

Cooperation with Lafarge/Monier

- Slip, Trip and Fall
- Lifting and Carrying
  - Forklifters
- Portable Ladders
- Pedestrians and Vehicles

Health Initiatives

- 1,500 folders and Cd's distributed

Praxis-Guide „Silica Dust“

- Mailing in January 2008 (1,900 folders)
- Sold out in four weeks
- Updated reprint
- 9 seminars with approx. 350 participants
Fit for Job and Life-Video-Magazine

Topics:
- Skin
- Stress at work
- Physical fitness

Incentive Systems
**Bonus System**

_Do more, Get more!_

**Bonus For Investments In Health and Safety**

- Safe Technology
- Safety Management Systems
- Safety and Health Initiatives
- Health Prevention
- Less than average accidents
Bonus For Investments In Health and Safety

- Bonus max.: 30% of Investment/30,000 Euro
- Premias paid since 2005: 7.2 Million Euro
- Average Bonus: 2,200 Euro

Steinexpo 2008

STEINEXPO 2008

Do more, Get more!
at the Safepoint
Award Work Safety Health

Balance of 11 years:
• 3,559 Best Practice Ideas
• 117 Awards
• 770,000 Euros Awarded Money
Expectations and Recommendations for the Atlantic Alliance

- Recommendations for Design of Mobile Equipment in the Extractive Industry
- Recommendations for Design of Fixed Machinery in the Extractive Industry
- Recommendations for Education and Training in the Extractive Industry
- Active Use of quarry-Safety-website
Thank you for listening!
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