World timber production

Comparison of demand and production of soft wood timber

North America and Western Europe are dominating the world-wide timber market with a share of 70% out of 320 Mio. m³

Quelle: Jaakko Pyörälä
Russia is using only a small part of the potential

2005: only 150 Mio. m³ of the timber growing used

Russia is China’s “repository”

Quelle: Jaakko Pyöry

SawTECH 2007

SawTECH 2007
Concentration in the sawmill industry

10 biggest sawmill industries of the world ranking according processed timber production (1.000 m³)

<table>
<thead>
<tr>
<th>Company</th>
<th>Country</th>
<th>Saw mills</th>
<th>Production*</th>
<th>Changes</th>
<th>Capacity*</th>
<th>Changes</th>
<th>Capacity per saw mill 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2006</td>
<td>2007</td>
<td>2006</td>
<td>2007</td>
<td></td>
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<tr>
<td>Weyerhaeuser</td>
<td>US</td>
<td>30</td>
<td>10.400</td>
<td>- 5%</td>
<td>10.700</td>
<td>- 5%</td>
<td>340</td>
</tr>
<tr>
<td>West Fraser</td>
<td>US</td>
<td>29</td>
<td>6.800</td>
<td>+ 40%</td>
<td>7.100</td>
<td>+ 37%</td>
<td>334</td>
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<tr>
<td>Cantor</td>
<td>CA</td>
<td>19</td>
<td>7.300</td>
<td>- 4%</td>
<td>7.800</td>
<td>+ 1%</td>
<td>416</td>
</tr>
<tr>
<td>StoraEnso Timber</td>
<td>FI</td>
<td>29</td>
<td>6.600</td>
<td>± 0%</td>
<td>7.700</td>
<td>± 0%</td>
<td>266</td>
</tr>
<tr>
<td>AbitibiBowater</td>
<td>CA</td>
<td>27</td>
<td>4.540</td>
<td>- 1%</td>
<td>5.000</td>
<td>± 0%</td>
<td>185</td>
</tr>
<tr>
<td>Kaufland Gruppe</td>
<td>DE/AT</td>
<td>5</td>
<td>3.100</td>
<td>+ 20%</td>
<td>4.100</td>
<td>+ 12%</td>
<td>920</td>
</tr>
<tr>
<td>Tolko</td>
<td>CA</td>
<td>16</td>
<td>3.700</td>
<td>- 5%</td>
<td>4.200</td>
<td>- 5%</td>
<td>400</td>
</tr>
<tr>
<td>Georgia Pacific</td>
<td>US</td>
<td>22</td>
<td>2.600</td>
<td>+ 19%</td>
<td>3.300</td>
<td>+ 18%</td>
<td>150</td>
</tr>
<tr>
<td>Tembec</td>
<td>CA</td>
<td>11</td>
<td>2.700</td>
<td>- 12%</td>
<td>2.900</td>
<td>± 0%</td>
<td>263</td>
</tr>
<tr>
<td>Arauco</td>
<td>CL</td>
<td>16</td>
<td>2.200</td>
<td>- 8%</td>
<td>3.800</td>
<td>± 0%</td>
<td>238</td>
</tr>
</tbody>
</table>

* 1.000 m³ = 1.62 m³

Source: Holzkurier 2007

Structural changes in the German sawmill industry

![Graph showing structural changes in the German sawmill industry](chart.png)

Source: VDS / Stat. Bundesamt
Processed timber – a global product
Logs - a local product

Log prices in 2003

Challenge - productivity
Challenge - productivity

Different ways of getting higher efficiency
- reduced cutting width
- higher feed speed in the line
- less down time

Efficiency – central filing room

CMPC Gruppe: four sawmills plus two wood processing works

- Capacity 75,000 m³, Processing works Coroel, 130 km
- Capacity 240,000 m³, Sawmill Constitución, 315 km
- Capacity 120,000 m³, Processing works Los Angeles, 0 km

Central sharpening shop, Los Angeles:
- 48 km to Sawmill Nacimiento
- 47 km to Sawmill Mulchen
- 28 km to Sawmill Bucalemu

Capacity:
- Sawmill Nacimiento: 400,000 m³
- Sawmill Mulchen: 420,000 m³
- Sawmill Bucalemu: 360,000 m³
Pilot project

Central filing room (CMPC) – opening
October 2005

Central filing room – layout (CMPC)
Centralization for more profitability

Profitability of the project < 15 month
total investment: 4 Mio. € (incl. buildings)

- Reduction of investment
- Increase of the quality and stability of the tools and of the processed timber
- Reduction of the down times in the mills
- Reduction of the tools costs
- Reduction of the costs of workforce
- Increase of the own value added by tipping of saws
- Increase of processed timber production
- Increase of the competence and know how of specifically trained operators
- Reduction of the energy and environmental costs

Training, Consulting
Partner ship for sawmills

VOLLMER will offer his experience in:

- Machines for tool maintenance
  - band saws
  - circular saws
- Design of the grinding room
- Training of tool maintenance
- Training of machine operating
- Service and machine maintenance

Partnership - one of the keywords for the future

The new technology and training center
Start: 1. January 2009
Thank you for your attention!