Internationalization Concept of ThyssenKrupp

**Concept**
- Penetrate growth markets
- Reach significant market position
- Use logistical advantages
- Address attractiveness of market for each Segment/BU
- Develop cross-Segment potential and share know-how and resources

**Organization**
- BU’s have the operative responsibility. We are supporting on a country specific basis, but do not have Regional Headquarters
- Group Representative Offices allow market penetration by providing country specific know-how and support
- Casa ThyssenKrupp acts as platform for sales and service activities in developing markets
- Regional Strategic Management Meetings are held to develop positioning of Group in local markets

ThyssenKrupp
Asia/Pacific: 91 Business Locations

- Japan 6 LC
- South Korea 5 LC
- China/Hong Kong 22 LC
- Taiwan
- India 9 LC
- Vietnam
- Philippines
- Thailand
- Malaysia 11 LC
- Singapore 11 LC
- Indonesia 1 LC
- Australia 12 LC

*= 14 Group Representations
LC = 77 Local Companies
ThyssenKrupp Locations in China

**Beijing**
- ThyssenKrupp AG Beijing Representative Office
- Thyssen Elevators Co. Ltd., Beijing Branch
- Giddings & Lewis Representative Office Beijing
- Giddings & Lewis Technical Service Center
- Hüller Hille GmbH, Office Beijing
- Uhde GmbH Representative Office
- Thyssen Mannesmann Trading, Beijing Office
- Triaton China Ltd., Beijing Office

**Shanghai**
- ThyssenKrupp AG Shanghai Representative Office
- Shanghai Krupp Stainless Co. Ltd.
- Krupp Presta HuiZhong Automotive Shanghai Co.
- Thyssen Elevators & Escalators (Shanghai) Co., Ltd.
- Thyssen Elevator Co. Ltd. (2 x)
- Thyssen Elevators (Shanghai) Co.
- Shanghai Fadal Machine Tool Co.
- Giddings & Lewis Rep. Office
- B+V Industrietechnik GmbH Shanghai Office
- Thyssen Mannesmann Handel Shanghai Office
- Shanghai Peiniger Corrosion Protection Engineering
- Protective Treatment Astel-Peiniger
- Peiniger International GmBH, Rep. Office
- Triaton China Ltd., Shanghai Office

**Dalian**
- ANSC-TKS Galvanizing Co Ltd.
- B+V Industrietechnik, Dalian Office

**Taiping**
- International Heat Treatment Ltd.

**Shenzen**
- Shenzhen Advance Specialist Treatment Engineering

**Xuzhou**
- Xuzhou Rothe Erde Slewing Bearing Co., Ltd.

**Chongqing**
- Thyssen Elevators Co. Ltd., Chongqing Branch

**Guangzhou**
- ThyssenKrupp AG Representative Office Guangzhou
- Thyssen Elevators Co. Ltd., Werk Zhongshan
- Thyssen Elevators Co. Ltd., Guangzhou Branch
- ThyssenKrupp Fördertechnik GmbH, Guangzhou Office
- B+V Industrietechnik GmbH, Guangzhou Office

**Wuhan**
- ThyssenKrupp Zhong-Ren Tailored Blanks

**Hong Kong AG**
- ThyssenKrupp AG Hong Kong Representative Office
- ThyssenKrupp VDM Hong Kong Ltd.
- Bongear Elevator Ltd.
- B+V Industrietechnik GmbH, Hong Kong Office
- Thyssen Asia Raw Materials Ltd.
- ASTEL Advance Specialist Treatment Engineering Ltd.
- Progressive-ASTEL Ltd. New Hong Kong
- Triaton China Ltd.
- German Steels Co. Ltd. (2 x)
- ThyssenKrupp Stainless Export (Hong Kong) Ltd.
- Thyssen Mannesmann Regional Rep. Office
- Neureuther Hong Kong Ltd.
ThyssenKrupp Market Position in China
Key figures today

- €1.1 bn sales with customers in China
- China holds number 6 position with respect to foreign market sales
- 2,800 local employees
- 22 local companies, 26 delegate offices and 4 Group Representations
- Thereof 10 production companies with 2,060 employees
ThyssenKrupp Sales with Customers in China (in €m)

1997-2002 growth +23% p.a. (CAGR)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>384</td>
</tr>
<tr>
<td>1998</td>
<td>331</td>
</tr>
<tr>
<td>1999</td>
<td>342</td>
</tr>
<tr>
<td>2000</td>
<td>364</td>
</tr>
<tr>
<td>2001</td>
<td>645</td>
</tr>
<tr>
<td>2002</td>
<td>1,088</td>
</tr>
</tbody>
</table>
### ThyssenKrupp Sales in Asia/Pacific 2001/02

Total €2,187 m

<table>
<thead>
<tr>
<th>Country</th>
<th>Sales €m</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>6</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>15</td>
</tr>
<tr>
<td>Vietnam</td>
<td>16</td>
</tr>
<tr>
<td>Thailand</td>
<td>25</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30</td>
</tr>
<tr>
<td>Philippines</td>
<td>31</td>
</tr>
<tr>
<td>Singapore</td>
<td>48</td>
</tr>
<tr>
<td>Japan</td>
<td>92</td>
</tr>
<tr>
<td>South Korea</td>
<td>101</td>
</tr>
<tr>
<td>Australia</td>
<td>127</td>
</tr>
<tr>
<td>Malaysia</td>
<td>148</td>
</tr>
<tr>
<td>Taiwan</td>
<td>204</td>
</tr>
<tr>
<td>India</td>
<td>256</td>
</tr>
<tr>
<td>China/Hong Kong</td>
<td>1,088</td>
</tr>
</tbody>
</table>
Growing Importance of China in Asia
ThyssenKrupp’s position in China as share of Asian business development

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees (%)</th>
<th>Sales with Customers (%)</th>
<th>Sales of Local Group Co. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/02</td>
<td>37%</td>
<td>50%</td>
<td>26%</td>
</tr>
<tr>
<td>00/01</td>
<td>25%</td>
<td>39%</td>
<td>19%</td>
</tr>
<tr>
<td>99/00</td>
<td>17%</td>
<td>25%</td>
<td>13%</td>
</tr>
</tbody>
</table>
### Sales with Customers in China by Segments 2001/2002

<table>
<thead>
<tr>
<th>Segment</th>
<th>Sales (€m)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>337</td>
<td>31</td>
</tr>
<tr>
<td>Automotive</td>
<td>37</td>
<td>4</td>
</tr>
<tr>
<td>Elevator</td>
<td>81</td>
<td>7</td>
</tr>
<tr>
<td>Technologies</td>
<td>298</td>
<td>27</td>
</tr>
<tr>
<td>Materials</td>
<td>306</td>
<td>28</td>
</tr>
<tr>
<td>Serv</td>
<td>29</td>
<td>3</td>
</tr>
<tr>
<td>Σ</td>
<td>1,088</td>
<td>100</td>
</tr>
</tbody>
</table>

All Segments are present. In the future, main focus on expansion of Automotive and Elevator.
**Focusing on Asia and China**

- East and Southeast Asia will stay the most dynamic regions in the future – stable growth of GDP and per capita income
- China is No. 1 destination of Foreign Direct Investment in Asia
- China’s economic weight in Asia is steadily growing
- China’s WTO accession will give even more economic drive
- China is aiming at an ASEAN Free Trade Zone under its leadership
ThyssenKrupp has a Clear Preference for China

- Market size
- Market dynamics
- Good perspective in automotive, steel, and construction/infrastructure industries
- Reservoir of well educated laborforce
- Political stability and support

ThyssenKrupp
ThyssenKrupp Steel in China
Key figures 2001/2002

Sales

- €337 m with local customers
- represents 31% of the Group’s sales
- increase by 59% p.a. since 1996/1997
- companies in China generated €78 m (note: SKS close to completion phase 1)

Organization

- 359 employees in 5 subsidiaries/offices
- represents 14% of the Group’s employees
**Market Potential for Carbon Steel in China**

- More and more large OEMs establish or expand production sites in China
- Significant increase in share of local content in the automotive production
- Demand for high quality steel from the automotive industry: e.g. hot dip galvanized or tailored blanks (high margin market for ThyssenKrupp)
- Other industries are of less importance for Carbon Steel since lower quality steel offers too low margins
Customer Base for Carbon Steel in China: Main Focus on Automotive Production

### Western Europe / NAFTA

<table>
<thead>
<tr>
<th>Year</th>
<th>Units (million)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>17.2</td>
<td>+11.4%</td>
</tr>
<tr>
<td>2008</td>
<td>19.2</td>
<td></td>
</tr>
</tbody>
</table>

### NAFTA

<table>
<thead>
<tr>
<th>Year</th>
<th>Units (million)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>16.8</td>
<td>+7.5%</td>
</tr>
<tr>
<td>2008</td>
<td>18.0</td>
<td></td>
</tr>
</tbody>
</table>

### China

<table>
<thead>
<tr>
<th>Year</th>
<th>Units (million)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>3.2</td>
<td>+88.1%</td>
</tr>
<tr>
<td>2008</td>
<td>6.1</td>
<td></td>
</tr>
</tbody>
</table>

Source: J.D. Power-LMC, 1st quarter 2003
### HDG Consumption and Domestic Production in China

in m tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand</th>
<th>Domestic Production</th>
<th>Import</th>
<th>Import Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>4.61</td>
<td>1.52</td>
<td>3.1</td>
<td>67%</td>
</tr>
<tr>
<td>2003</td>
<td>5.80</td>
<td>2.25</td>
<td>3.6</td>
<td>61%</td>
</tr>
<tr>
<td>2004</td>
<td>6.20</td>
<td>3.36</td>
<td>2.8</td>
<td>46%</td>
</tr>
<tr>
<td>2005</td>
<td>6.40</td>
<td>4.72</td>
<td>1.7</td>
<td>26%</td>
</tr>
</tbody>
</table>

🔥 Strategic goal: ThyssenKrupp focuses on high value products for the automotive industry and is going to participate in local production.
Downstream Expansion in China: Hot Dip Galvanizing Line

- New Production Facility Tagal in Dalian, China
- 50/50 Joint Venture
  - ThyssenKrupp Stahl, Germany
  - Angang New Steel Co. Ltd. (ANSC), China
- Capacity: 400,000 t p.a., 193 employees
- US$ 180 million investment
- Start of production: September 2003
- Customers: automotive industry in Northern China (80%) and appliance sector (20%)
- Further production facilities investigated
First Production Site for Tailored Blanks in China

- ThyssenKrupp Zhong-Ren Tailored Blanks, Wuhan
- 51/49 Joint Venture
- ThyssenKrupp Tailored Blanks, Germany (51%)
  - Wuhan Zhong-Ren Rui Zhong Auto Component
  - Industry, China (49%)
- Capacity: 15,000 t p.a.
- US$ 5 million investment
- Start of production: October 2002
- Customers: OEMs (VW/Audi, Ford, Citroën, GM)
- Further investments investigated
## Globalization Strategy of ThyssenKrupp Stainless

<table>
<thead>
<tr>
<th>Strong position in Europe</th>
<th>Globalization means for ThyssenKrupp Stainless regionalization of primary production facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- securing and optimizing</td>
<td></td>
</tr>
<tr>
<td>Endangered position in export markets</td>
<td></td>
</tr>
<tr>
<td>- new local capacities</td>
<td></td>
</tr>
<tr>
<td>- trade barriers</td>
<td></td>
</tr>
<tr>
<td>- low profile of business ties</td>
<td></td>
</tr>
</tbody>
</table>
### Market Potential for Stainless Flat in China

Biggest market volume and highest growth for cold rolled flat

<table>
<thead>
<tr>
<th>Region</th>
<th>Market Volume</th>
<th>Population</th>
<th>kg/capita</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAFTA</td>
<td>1.7 m tons</td>
<td>0.4bn</td>
<td>4.3</td>
<td>5.9%</td>
</tr>
<tr>
<td>Europe</td>
<td>3.1 m tons</td>
<td>0.4bn</td>
<td>8.3</td>
<td>4.8%</td>
</tr>
<tr>
<td>China</td>
<td>2.2 m tons</td>
<td>1.3bn</td>
<td>1.7</td>
<td>7.7%</td>
</tr>
<tr>
<td>Asia</td>
<td>5.2 m tons</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* until 2010
**Project Structure of SKS**

- **Phase 1**
  - CRM 1 / BA-line 72,000 t/a CR
  - Sales 135 $m
  - 1998
  - Today oscillating around breakeven
  - Profitable by 2006
  - ROCE 14% by 2010

- **Phase 2**
  - Part 1: CRM 2+3 and 1 Cold A+P line
    - +218,000 t/a CR
    - =290,000 t/a CR in total
  - Part 2: CRM 4 / Hot A+P Line
    - + ~100,000 t/a CR
    - = ~390,000 t/a CR
  - Sales 515 $m

- **Phase 3**
  - Melt Shop
  - Hot Band Production
  - 2006

Approved Investment Volume: 1.43 bn US$
incl. Land, Financing Cost and Working Capital
## ThyssenKrupp Automotive in China
### Key figures 2001/2002

<table>
<thead>
<tr>
<th><strong>Sales</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• €36.7 m with local customers</td>
<td></td>
</tr>
<tr>
<td>• represents 4% of the Group’s sales</td>
<td></td>
</tr>
<tr>
<td>• increase by 66% p.a. since 1996/1997</td>
<td></td>
</tr>
<tr>
<td>• companies in China generated €26.2 m</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Organization</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• 188 employees in 2 joint ventures</td>
<td></td>
</tr>
<tr>
<td>• represents 6% of the Group’s employees</td>
<td></td>
</tr>
</tbody>
</table>
Competitive Advantages of Local Production in China for ThyssenKrupp Automotive

- Increasing market attractiveness (size, growth, competition)
- Expanding presence of OEMs with long existing supply relationships to ThyssenKrupp
- Margin and price differentiation possible
- Cost of labor and materials attractive
Market Attractiveness of Automotive Production in China: Size
(in million units)

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (in million units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>12,346</td>
</tr>
<tr>
<td>Japan</td>
<td>10,168</td>
</tr>
<tr>
<td>Germany</td>
<td>5,468</td>
</tr>
<tr>
<td>France</td>
<td>3,698</td>
</tr>
<tr>
<td>China</td>
<td>3,239</td>
</tr>
<tr>
<td>Korea</td>
<td>3,192</td>
</tr>
</tbody>
</table>

Already in 2002, China is 5th biggest automotive production site in the world
China has been forecasted as the fastest growing car market worldwide

Source: J. D. Power-WMC, 1st quarter 2003

ThyssenKrupp
Market Attractiveness of Automotive Industry in China: Competition

○ Existing large number of local suppliers is based on historical development and regional protectionism

○ OEMs require suppliers to be more involved in their production and new model development. This requires stronger R & D capabilities and higher quality

○ 70% reduction in the number of suppliers is expected by 2010 due to market restructuring

○ More of our traditional customers set up or expand production sites in China (e.g. VW/Audi, DaimlerChrysler, BMW, Ford)
Krupp Presta Huizhong Automotive

<table>
<thead>
<tr>
<th>Location</th>
<th>Shanghai, China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>€19 m</td>
</tr>
<tr>
<td>Employees</td>
<td>68</td>
</tr>
<tr>
<td>Products</td>
<td>Steering columns</td>
</tr>
<tr>
<td>Founded</td>
<td>2000</td>
</tr>
<tr>
<td>Customer</td>
<td>VW/Audi in China</td>
</tr>
</tbody>
</table>
## Liaoyang K.S. Automotive Spring Company Ltd.

<table>
<thead>
<tr>
<th>Location</th>
<th>Liaoyang, in North East China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>€7.2 m</td>
</tr>
<tr>
<td>Employees</td>
<td>120</td>
</tr>
<tr>
<td>Products</td>
<td>Coil Springs, Stabilizer Bars, Torsion Bars</td>
</tr>
<tr>
<td>Founded</td>
<td>1995</td>
</tr>
<tr>
<td>Customers</td>
<td>VW/Audi and others in China</td>
</tr>
</tbody>
</table>

VW Bora

ThyssenKrupp
Further Growth for ThyssenKrupp Automotive in China

- Our joint ventures are economically successful in every dimension.
- Due to the attractiveness and growth rate of the automotive industry as well as customers’ expansion plans, ThyssenKrupp Automotive is actively pursuing opportunities in the Chinese market.
- New Joint Ventures are planned, such as:
  - ThyssenKrupp Tallent Chassis for suspension systems and modules
  - ThyssenKrupp Budd Systems with a new production company for suspension systems
  - ThyssenKrupp Gerlach joint venture for engine components
ThyssenKrupp Elevator in China
Key figures 2001/2002

Sales
- €80.5 m with local customers
- represents 7% of the Group’s sales
- increase by 33% p.a. since 1996/1997
- companies in China generated €78 m

Organization
- 761 employees in 3 subsidiaries/joint ventures
- represents 30% of the Group’s employees
Market Size: Number of New Elevator Installations Worldwide and in Asia

Worldwide: 255,000 units

- Asia 40%
- Latin America 5%
- Middle East 4%
- Europe 38%
- North America 13%

Asia: 102,000 units

- Others 25%
- China 34%
- South Korea 12%
- Japan 29%
Historic Market Growth for New Installations in China

CAGR +5.43 % p.a.

<table>
<thead>
<tr>
<th>Year</th>
<th>Elevators</th>
<th>Escalators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>29,000</td>
<td>5,000</td>
</tr>
<tr>
<td>1996</td>
<td>29,700</td>
<td>5,300</td>
</tr>
<tr>
<td>1997</td>
<td>29,500</td>
<td>4,800</td>
</tr>
<tr>
<td>1998</td>
<td>30,100</td>
<td>4,650</td>
</tr>
<tr>
<td>1999</td>
<td>32,500</td>
<td>5,950</td>
</tr>
<tr>
<td>2000</td>
<td>35,500</td>
<td>5,950</td>
</tr>
<tr>
<td>2001</td>
<td>39,000</td>
<td>6,500</td>
</tr>
<tr>
<td>2002</td>
<td>42,000</td>
<td>7,000</td>
</tr>
</tbody>
</table>

Source: China Elevator Association
Expected Market Dynamics

- Joining WTO, hosting 2008 Olympic games and planning huge investments into infrastructure projects, the Chinese market will keep a momentum of increase during the next years.

- As a result, China has been forecasted as one of the fastest growing construction markets worldwide (7.5% p.a until 2008), effecting Elevator sales.
All main competitors entered the Chinese market before ThyssenKrupp Elevator did.

Different from other markets, new installations are profitable and service is very low-priced. Proactive service is still considered unnecessary.
Strategic Position of ThyssenKrupp Elevator in China

- Starting up in China was difficult for everybody. Being a small contender was not the worst position to be in. After restructuring, we had a successful turnaround - in the last 3 years, the number of sold units were doubled each year.

- In a very competitive market, ThyssenKrupp Elevator was able to win against market trends continuously.

- Market penetration is planned with dual strategy: joint ventures (production and service) and own sales companies.

- Elevator will offer market adequate products and will increase local product sourcing.
ThyssenKrupp Technologies in China
Key figures 2001/2002

Sales
- €297.5 m with customers
- represents 27% of the Group’s sales
- increase by 18% p.a. since 1996/1997
- companies in China generated €1.5 m

Organization
- 868 employees in 2 subsidiaries (joint venture of Rothe Erde with 848 employees operating since June 2002)
- represents 34% of the Group’s employees
Strategic Positioning of ThyssenKrupp Technologies in China

- Building the world’s first commercial Transrapid line in Shanghai is a success story and meets with the Chinese attitude towards innovative technologies. We have earned respect, and the unique project will be finalized in line with expectations.

- Further development of a Transrapid transport-system requires increased local content and technology transfer. Local joint venture partners are being identified.

- Market opportunities depend on automotive investments of OEMs and local suppliers, particularly for Production Systems.

- China is the world largest cement and an important fertilizer market particularly for Plant Technology.
ThyssenKrupp Materials in China
Key figures 2001/2002

Sales
- €306 m with local customers
- represents 28% of the Group’s sales
- increase by 21% p.a. since 1999/2000
- companies in China generated €23.9 m

Organization
- 65 employees in 3 subsidiaries/offices
- represents 3% of the Group’s employees
ThyssenKrupp Serv in China
Key figures 2001/2002

Sales
- €29.3 m with local customers
- represents 3% of the Group’s sales
- increase by 107% p.a. since 1999/2000
- companies in China generated €38.3 m

Organization
- 312 employees in 7 subsidiaries/offices
- represents 12% of the Group’s employees

ThyssenKrupp
Conclusion

- We perceive ourselves as a Global Player, but prudence seems to be a good recipe when moving into emerging markets
- When strategic opportunities arise, we do move significant resources (e.g. SKS)
- Our China strategy is paying off and we are harvesting the fruits

Today

- we understand the market better
- we have a very differentiated approach to business development of each BU
- we start small, but with competent partners
- we adapt products and services to local market conditions
- we realize that local sourcing is necessary for price competitive bidding

ThyssenKrupp