World Construction Machinery

Industry Study with Forecasts for 2013 & 2018

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# Table of Contents

## EXECUTIVE SUMMARY

## MARKET ENVIRONMENT

- **General** .......................................................... 4  
- **World Economic Overview** .................................. 5  
- **Recent Economic Performance** .............................. 6  
- **World Economic Outlook** .................................... 8  
- **World Population Overview** .................................. 12  
- **Population** ......................................................... 12  
- **Urban Population** .............................................. 14  
- **World Construction Outlook** .................................. 15  
- **Nonbuilding** ...................................................... 18  
- **Residential Building** .......................................... 20  
- **Nonresidential Building** ....................................... 22  
- **Pricing Patterns** .................................................. 24  
- **Technology Trends** ............................................. 27  
- **Used Machinery** .................................................. 30  
- **Legal & Regulatory Environment** ............................ 31

## SUPPLY & DEMAND

- **General** .......................................................... 33  
- **Regional Overview** ............................................. 34  
- **Demand** ........................................................... 34  
- **Production** ....................................................... 40  
- **International Trade** ............................................. 43  
- **Demand by Product** ............................................ 46  
- **Cranes, Excavators & Draglines** ............................. 48  
- **Loaders** ........................................................... 50  
- **Off-Highway Trucks & Tractors** ............................. 53  
- **Mixers, Pavers & Related Equipment** ....................... 56  
- **Loaders, Rollers & Related Equipment** ...................... 58  
- **Parts & Attachments** ........................................... 60  
- **Rental & Leasing Markets** .................................... 62

## NORTH AMERICA

- **General** .......................................................... 65  
- **Overview** ......................................................... 65  
- **Supply & Demand** .............................................. 67  
- **United States** .................................................... 69  
- **Canada** ............................................................ 75  
- **Mexico** .............................................................. 79

## WESTERN EUROPE

- **General** .......................................................... 85  
- **Overview** ......................................................... 85  
- **Supply & Demand** .............................................. 87  
- **Germany** .......................................................... 91  
- **France** .............................................................. 95  
- **United Kingdom** ................................................ 100  
- **Italy** ................................................................. 105  
- **Spain** ............................................................... 110  
- **Netherlands** .................................................... 115

## ASIA/PACIFIC

- **General** .......................................................... 141  
- **Overview** ......................................................... 141  
- **Supply & Demand** .............................................. 144  
- **China** ............................................................... 147  
- **Japan** ............................................................... 154  
- **India** ............................................................... 159  
- **South Korea** .................................................... 163  
- **Australia** .......................................................... 168  
- **Indonesia** .......................................................... 173  
- **Taiwan** .............................................................. 178  
- **Other Asia/Pacific** ............................................ 183

## OTHER REGIONS

- **Latin America** ................................................... 194  
- **Brazil** .............................................................. 199  
- **Chile** ............................................................... 203  
- **Other Latin America** .......................................... 208  
- **Eastern Europe** .................................................. 217  
- **Russia** .............................................................. 221  
- **Poland** ............................................................. 226  
- **Other Eastern Europe** ......................................... 231  
- **Africa/Mideast** .................................................. 241  
- **Turkey** .............................................................. 245  
- **Other Africa/Mideast** ......................................... 250

## INDUSTRY STRUCTURE

- **General** .......................................................... 260  
- **Industry Composition** ......................................... 261  
- **Market Share** ..................................................... 264  
- **Product Development & Manufacturing** .................... 268  
- **Marketing & Distribution** ..................................... 270  
- **Cooperative Agreements** ..................................... 271  
- **Financial Requirements** ....................................... 282  
- **Mergers & Acquisitions** ....................................... 283

## COMPANY PROFILES

- **Astec Industries** .................................................. 289  
- **Atlas Copco** ....................................................... 293  
- **BEML Limited** ................................................... 295  
- **Caterpillar Incorporated** ...................................... 297  
- **Changsha Zoomlion Heavy Industry** ......................... 302  
- **Deere & Company** ............................................... 304  
- **Doosan Infracore** ............................................... 306  
- **Flostran** ............................................................ 310  
- **FIAT SPA** .......................................................... 313  
- **GAZ OAO** .......................................................... 317  
- **Godbersen-Smith Construction** ............................... 318  
- **Doosan Infracore** ............................................... 320  
- **Guangxi Liugong Machinery** .................................. 322  
- **Herrenknecht AG** ............................................... 323  
- **Hitachi Limited** .................................................. 325  
- **Hyundai Heavy Industries** .................................... 329  
- **JCB Limited** ....................................................... 331  
- **Kobe Steel** ........................................................ 333  
- **Komatsu Limited** ............................................... 337  
- **Kubota Corporation** ............................................. 343  
- **Liebherr-International AG** .................................... 345  
- **Lonking Holdings** ............................................... 348  
- **Manitou BF** ........................................................ 350  
- **Manitowoc Company** .......................................... 352  
- **Mitsubishi Heavy Industries** .................................. 356  
- **Oshkosh Corporation** .......................................... 358  
- **Palfinger AG** ...................................................... 361  
- **SANY Heavy Industry** ......................................... 363  
- **Schwing GmbH** ................................................... 365  
- **Sumitomo Heavy Industries** ................................... 367  
- **Tadano Limited** ................................................... 370  
- **Tata Motors** ....................................................... 372  
- **Terex Corporation** ............................................... 374  
- **Volvo AB** ........................................................... 380  
- **Wirtgen Group** ................................................... 383  
- **Xiamen XGMA Machinery** ..................................... 385  
- **Xuzhou Construction Machinery** ............................. 386  
- **Other Companies Mentioned in Study** ....................... 388

## List of Tables/Charts

### EXECUTIVE SUMMARY

1. Summary Table ...................................................... 3

### MARKET ENVIRONMENT

1. World Gross Domestic Product by Region ............... 11
2. World Population by Region ................................. 13
3. World Urban Population by Region ......................... 15
4. World Construction Expenditures by Type & Region .... 17
5. World Nonresidential Construction Expenditures by Region ... 18
6. World Residual Building Construction Expenditures by Region ... 20
7. World Nonresidential Building Construction Expenditures by Region ... 22
8. World Construction Machinery Price Indices ................. 26
9. World Construction Machinery Prices ......................... 26

(continued on next page)
List of Tables/Charts

SUPPLY & DEMAND

1 World Construction Machinery Demand by Region 37
2 World Construction Machinery Shipments by Region 42
3 World Construction Machinery Net Exports by Region 45
4 World Construction Machinery Demand by Product 47
5 World Crane, Excavator & Dragline Demand by Type & Region 50
6 World Loader Demand by Region 53
7 World Off-Highway Truck & Tractor Demand by Region 56
8 World Mixer, Paver & Related Equipment Demand by Region 58
9 World Grader, Roller & Related Equipment Demand by Region 60
10 World Construction Machinery Parts & Attachments Demand by Region 62

ASIA/PACIFIC

1 Asia/Pacific -- Economic Indicators 143
2 Asia/Pacific -- Construction Machinery Supply & Demand 147
3 China -- Economic Indicators 150
4 China -- Construction Machinery Supply & Demand 153
5 Japan -- Economic Indicators 155
6 Japan -- Construction Machinery Supply & Demand 158
7 India -- Economic Indicators 160
8 India -- Construction Machinery Supply & Demand 163
9 South Korea -- Economic Indicators 165
10 South Korea -- Construction Machinery Supply & Demand 168
11 Australia -- Economic Indicators 170
12 Australia -- Construction Machinery Supply & Demand 173
13 Indonesia -- Economic Indicators 175
14 Indonesia -- Construction Machinery Supply & Demand 178
15 Taiwan -- Economic Indicators 180
16 Taiwan -- Construction Machinery Supply & Demand 182
17 Other Asia/Pacific -- Economic Indicators 185
18 Other Asia/Pacific -- Construction Machinery Supply & Demand 188
19 Other Asia/Pacific -- Construction Machinery Supply & Demand by Country 189

OTHER REGIONS

1 Latin America -- Economic Indicators 196
2 Latin America -- Construction Machinery Supply & Demand 198
3 Brazil -- Economic Indicators 200
4 Brazil -- Construction Machinery Supply & Demand 203
5 Chile -- Economic Indicators 205
6 Chile -- Construction Machinery Supply & Demand 207
7 Other Latin America -- Economic Indicators 210
8 Other Latin America -- Construction Machinery Supply & Demand 212
9 Other Latin America -- Construction Machinery Supply & Demand by Country 213
10 Eastern Europe -- Economic Indicators 218
11 Eastern Europe -- Construction Machinery Supply & Demand 221
12 Russia -- Economic Indicators 223
13 Russia -- Construction Machinery Supply & Demand 226
14 Poland -- Economic Indicators 228
15 Poland -- Construction Machinery Supply & Demand 231
16 Other Eastern Europe -- Economic Indicators 233
17 Other Eastern Europe -- Construction Machinery Supply & Demand 236
18 Other Eastern Europe -- Construction Machinery Supply & Demand by Country 237
19 Africa/Mideast -- Economic Indicators 242
20 Africa/Mideast -- Construction Machinery Supply & Demand 245
21 Turkey -- Economic Indicators 247
22 Turkey -- Construction Machinery Supply & Demand 250
23 Other Africa/Mideast -- Economic Indicators 252
24 Other Africa/Mideast -- Construction Machinery Supply & Demand 255
25 Other Africa/Mideast -- Construction Machinery Supply & Demand by Country 256

NORTH AMERICA

1 North America -- Economic Indicators 66
2 North America -- Construction Machinery Supply & Demand 69
3 United States -- Economic Indicators 71
4 United States -- Construction Machinery Supply & Demand 74
5 Canada -- Economic Indicators 76
6 Canada -- Construction Machinery Supply & Demand 79
7 Mexico -- Economic Indicators 81
8 Mexico -- Construction Machinery Supply & Demand 84

WESTERN EUROPE

1 Western Europe -- Economic Indicators 87
2 Western Europe -- Construction Machinery Supply & Demand 90
3 Germany -- Economic Indicators 92
4 Germany -- Construction Machinery Supply & Demand 95
5 France -- Economic Indicators 97
6 France -- Construction Machinery Supply & Demand 100

INDUSTRY STRUCTURE

1 Construction Machinery Sales for Selected Manufacturers, 2008 263
2 Cht World Construction Machinery Market Share by Company, 2008 264
3 Selected Cooperative Agreements 273
4 Selected Acquisitions & Divestitures 285
5
Global demand to increase 5.3% yearly through 2013

World demand for construction machinery is projected to increase 5.3 percent per year through 2013 to $140 billion. This represents a moderation from the 2003-2008 pace, reflecting a slowdown in worldwide economic and construction expenditure growth. Nonetheless, gains in the global construction equipment market will still be quite healthy. Rising urban population levels, ongoing industrialization efforts and increased investment in public infrastructures will cause world construction spending to rise, stimulating demand for new equipment. The adoption of more stringent emissions standards in Canada, the US and the European Union will make construction machinery more expensive in those areas, adding to the value of the global market.

Mixers, pavers to be fastest growing segment

Mixers, pavers and related equipment is expected to be the fastest growing product segment through 2013. Ongoing industrialization efforts in many developing countries will continue to sustain high levels of road and infrastructure-related construction, boosting sales of these types of products. Additionally, as global construction spending slows, contractors will be more likely to purchase some of the low-cost machines in this segment while opting to rent or lease more expensive product types. Loaders, which are extremely versatile, will also post above-average gains as global nonbuilding construction and mining activity expands.

Developing Asian markets to experience fastest growth

The developing Asia construction equipment market, including India, China, Indonesia and South Korea, will experience the fastest growth through 2013. China alone will account for one-third of all new global product demand between 2008 and 2013. North America is projected to be the second fastest growing market. In the US (where demand will advance from a weak 2008 base), sales of construction equipment will be fueled by a surge in residential construction activity. Mexico and Canada will also make substantial contributions to advances in regional demand. Eastern Europe, the Africa/Mideast region, Latin America and Western Europe will see below-average growth, as construction expenditures in these areas grow at a much slower pace than between 2003 and 2008. In addition, the delayed onset of the 2008 global recession will mean that demand in many of these nations is rising from a relatively high 2008 base (in contrast to the US), which will limit the potential for growth through 2013.

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ASIA/PACIFIC

South Korea: Supply & Demand

Shipments of construction machinery from facilities in South Korea were $3.8 billion in 2008, accounting for about nine percent of Asia/Pacific regional output. Manufacturers based in the country offer a variety of technologically advanced construction machinery products and increased 7.4 percent per year from 2003 to 2008, as sales of construction equipment in South Korea and in key export markets grew at a considerable pace. As a major exporter, the nation had a trade surplus equivalent to 55 percent of total production in 2008. A rise in imports due to increasing domestic demand moderated the improvement in South Korea’s trade position. Important markets for construction machinery manufactured in the country include Brazil, China, India, Russia, Saudi Arabia, the United Arab Emirates and the US.

In 2008, the market for construction equipment in South Korea totaled $1.7 billion. The intensity of product use in the country in per capita terms is well above Asia/Pacific region levels, but trails regional norms when gauged against indicators like construction spending and GDP. Product sales grew 4.7 percent per year from 2003 to 2008, well below the average regional rate. Minor increases in nonbuilding and nonresidential building construction encouraged demand, while a somewhat larger decline in residential construction activity offset some of those market gains.

Industry shipments from South Korea are forecast to grow 7.8 percent per annum to $5.5 billion in 2013, accelerating slightly from the 2003-2008 rate of growth and outpacing production gains for the Asia/Pacific region as a whole. Locally-based manufacturers will benefit from substantially higher levels of domestic demand and favorable conditions in important export markets, such as South Korea. Doosan Infracore, for instance, is building a new factory in Gunsan for the production of excavators and wheel loaders; it is due to be completed in 2010. Hyundai Heavy Industries

TABLE VI-9

<table>
<thead>
<tr>
<th>Item</th>
<th>1998</th>
<th>2003</th>
<th>2008</th>
<th>2013</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>46.2</td>
<td>47.8</td>
<td>48.5</td>
<td>49.1</td>
<td>49.5</td>
</tr>
<tr>
<td>per capita GDP</td>
<td>1.7</td>
<td>2.0</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Gross Domestic Product (bil 2007$)</td>
<td>747</td>
<td>1017</td>
<td>1250</td>
<td>1475</td>
<td>1810</td>
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<tr>
<td>% construction</td>
<td>23.7</td>
<td>20.5</td>
<td>16.8</td>
<td>16.1</td>
<td>15.7</td>
</tr>
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<td>Construction Expenditures (bil 2007$)</td>
<td>177.3</td>
<td>208.2</td>
<td>209.8</td>
<td>237.4</td>
<td>284.6</td>
</tr>
<tr>
<td>Nonbuilding</td>
<td>64.6</td>
<td>76.3</td>
<td>79.1</td>
<td>88.8</td>
<td>111.0</td>
</tr>
<tr>
<td>Residential Building</td>
<td>50.6</td>
<td>58.5</td>
<td>54.6</td>
<td>62.4</td>
<td>68.8</td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td>62.1</td>
<td>73.4</td>
<td>76.1</td>
<td>86.2</td>
<td>104.8</td>
</tr>
<tr>
<td>$ machinery/capita</td>
<td>21.2</td>
<td>28.2</td>
<td>35.1</td>
<td>46.0</td>
<td>61.8</td>
</tr>
<tr>
<td>$ machinery/000$ GDP</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>$ machinery/000$ construction</td>
<td>5.5</td>
<td>6.5</td>
<td>8.1</td>
<td>9.5</td>
<td>10.8</td>
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<td>Construction Machinery Demand (mil $)</td>
<td>980</td>
<td>1350</td>
<td>1700</td>
<td>2260</td>
<td>3060</td>
</tr>
<tr>
<td>% South Korea</td>
<td>6.2</td>
<td>6.0</td>
<td>4.2</td>
<td>3.9</td>
<td>3.8</td>
</tr>
<tr>
<td>A/P Construction Machinery (mil $)</td>
<td>15700</td>
<td>22660</td>
<td>40700</td>
<td>57500</td>
<td>80500</td>
</tr>
</tbody>
</table>

CHART VIII-1

WORLD CONSTRUCTION MACHINERY MARKET SHARE BY COMPANY, 2008
($108.0 billion)

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Chelyabinsk Tractor Plant-Uraltrac Limited
Three Lenin Prospect
Chelyabinsk 454007
Russia
7-351-775-17-60
http://www.chtz-uraltrac.ru

Annual Sales: $145 million (estimated)
Employment: 21,000 (estimated)

Key Products: vibrating rollers, wheel and other loaders, bulldozers, tractors, hinged machines, pipelayers, mini machines and attachments

Chelyabinsk Tractor Plant (ChTZ)-Uraltrac is an open joint-stock company that manufactures tractors and engines. The Company’s products are used in oil, gas, metal mining, construction and other industrial applications.

The Company is involved in the world construction equipment industry through the manufacture of such products as vibrating rollers, wheel and other loaders, tractors, hinged machines, bulldozers, pipelayers, mini machines and attachments. For example, vibrating rollers, which are marketed primarily under the VIBROROLLER brand name, are suitable for compacting soil in roadbeds, dams and other applications. ChTZ-Uraltrac also makes diesel engines for construction and other equipment. The Company maintains a 2.1-million-square-meter plant in Chelyabinsk, Russia, as well as an office in Moscow, Russia. Furthermore, ChTZ-Uraltrac’s products are sold via a network of dealers in Russia, the Commonwealth of Independent States, Bulgaria, Estonia, Lithuania, Poland, the Czech Republic, Hungary, Sudan, India and Mongolia. Moreover, the Company exports its products to Europe, Africa, the Middle East and Southeast Asia.

“Demand for construction machinery in South Korea is forecast to expand 5.9 percent annually through 2013 to $2.3 billion, accelerating relative to the 2003-2008 pace but trailing sales advances regionwide. Growth in the construction equipment market will be spurred by a pickup in nonbuilding, nonresidential and residential construction activity. New Songdo City, due to be completed in 2014, is one of the most important projects scheduled for the 2008-2013 period. Notable features of the project include ...”

--Section VI, pg. 167
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Other Studies

World Mining Equipment
This study analyzes the global mining equipment industry. It presents historical demand data for the years 1998, 2003 and 2008, and forecasts for 2013 and 2018 by equipment type (e.g., crushing, pulverizing and screening; underground mining; drills and breakers; mineral processing; surface mining), application (metal, mineral, coal), world region and major national market. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

World Elevators
Global elevator and related product demand will rise 4.3% annually through 2013. Demand will be driven by ongoing farm mechanization efforts as rural incomes rise and labor is lost to urban migration. Tractors and harvesting machines will remain key segments while parts and attachments grow the fastest. This study analyzes the $63.7 billion world elevator industry, with forecasts for 2013 and 2018 by product, service, market, world region and for 16 countries. It also evaluates market share and profiles industry players.

Agricultural Equipment in China
Demand for agricultural equipment in China is projected to grow 6.8% yearly through 2012. Gains will be driven by ongoing farm mechanization efforts as rural incomes rise and labor is lost to urban migration. Tractors and harvesting machines will remain key segments while parts and attachments grow the fastest. This study analyzes the $65 billion yuan agricultural equipment industry in China, with forecasts for 2012 and 2017 by product and regional market. It also evaluates market share and profiles industry players.

World Oilfield Equipment
Global oilfield equipment demand will reach $85 billion by 2012, as growth accelerates from a slowdown in 2009. The best opportunities exist in Brazil, China and Kazakhstan, as well as in the offshore regions of Western Africa. Fixed-cutter drill bits and advanced well logging equipment will grow the fastest. This study analyzes the world oilfield equipment industry, with forecasts for 2012 and 2017 by product, world region and for 23 countries. It also evaluates market share and profiles industry players.

World Material Handling Products
Global demand for material handling products will grow 5% annually through 2012, with the strongest gains in rapidly developing areas such as China and India. Growth in the nondurable goods sector will outpace the larger durable goods manufacturers market. Advanced/automated products will grow the fastest. This study analyzes the $104.6 billion world material handling product industry, with forecasts for 2012 and 2017 by type, market, world region and 37 countries. It also evaluates market share and profiles industry players.