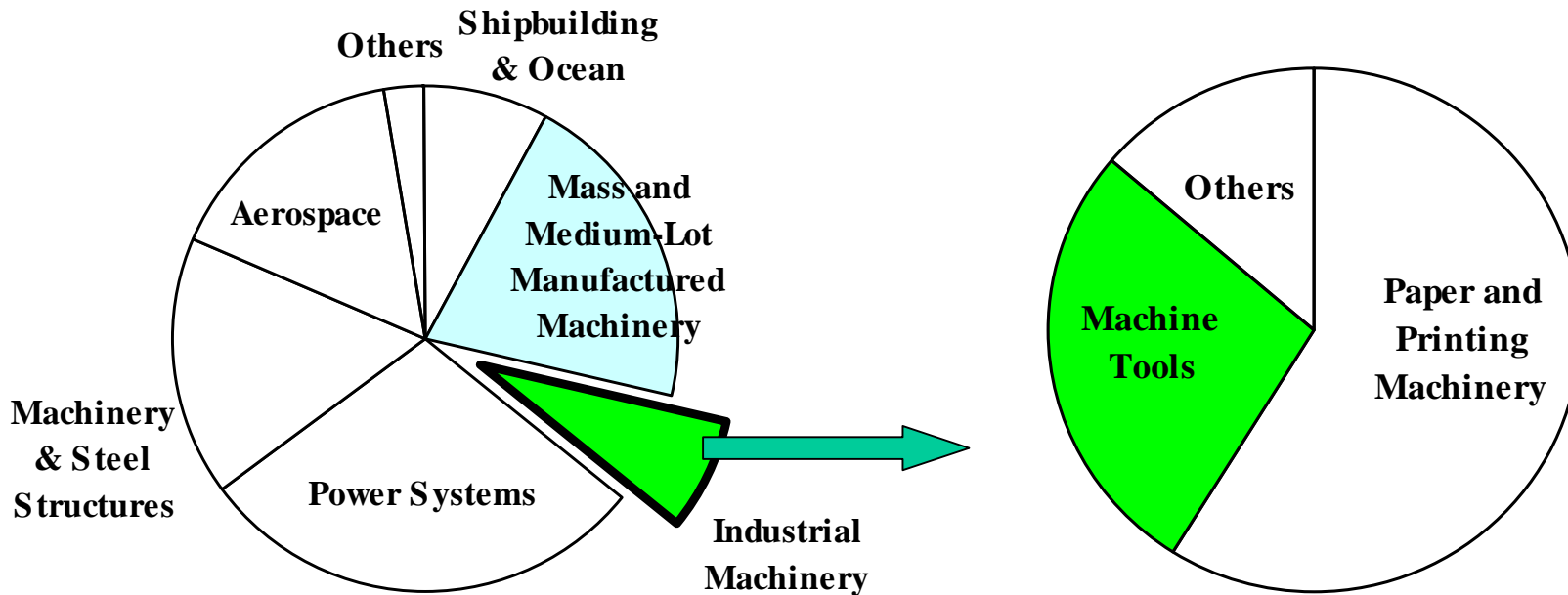

**Briefing session on Air-conditioning & Refrigeration Systems,
Paper & Printing Machinery and Machine Tool operations**

Section 3: Machine Tool Operations

September 27, 2007
Ken Watabe
Senior Vice President
General Manager,
Machine Tool Division

Positioning of machine tool operations



Net sales in 2006
(consolidated)

¥219.3 billion

(Figure for the entire
company: ¥3,068.5 billion)

Net sales in 2006
(consolidated)

Approx. 30%

(Figure for Industrial
Machinery: ¥219.3 billion)

Other areas: food packaging machinery, injection molding machinery, industrial washing machinery, etc.

A diverse range of products in line with users' needs

Micro milling machines



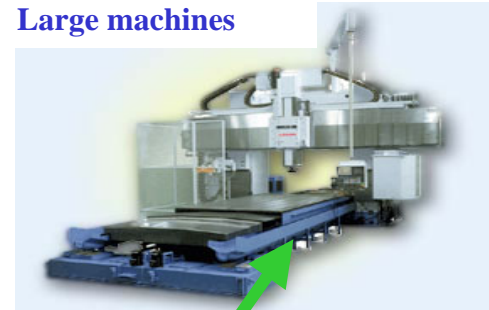
Special-purpose machines



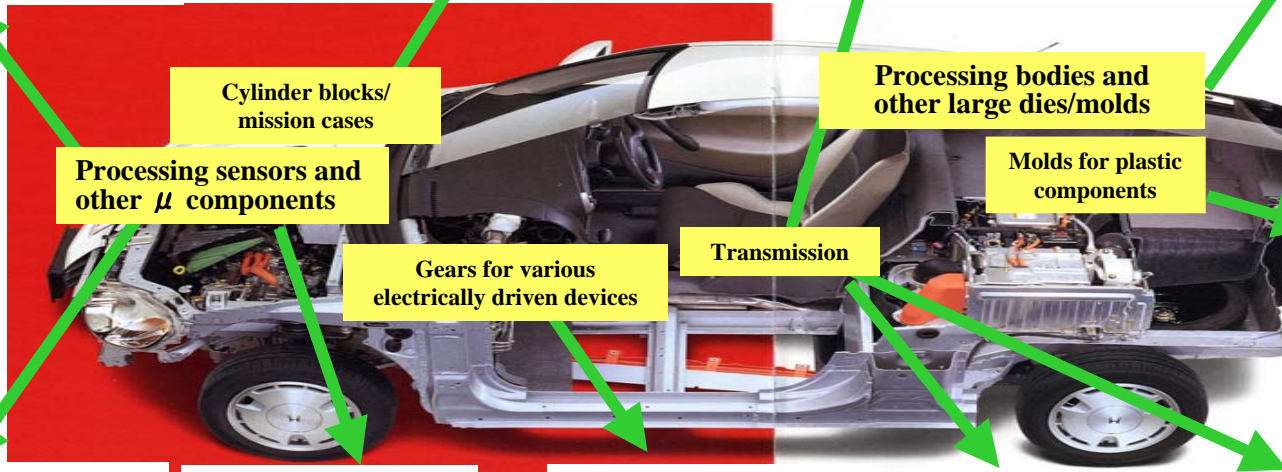
Gear cutting machines



Large machines



Machining centers



Transmission parts



Room temperature wafer bonding machines



Engine valves



Power transmissions



Precision cutting tools



Completing the restructuring of machine tool operations

Switching to a divisional system and integrating plants

April 2000: Switched to a single divisional system combining both production and sales

- Established the Machine Tool Division, combining a main sales department and individual plants

October 2003: Consolidated plants

Closed Hiroshima Plant and integrated production into newly constructed plant in Ritto

- Increased production efficiency by consolidating high-performance precision equipment at Ritto
- Stepped up collaboration between materials, production and design and shortened development periods by discontinuing our two plant system

Reform within the divisional system

Accelerating decision making

- Implementing necessary measures as determined by the General Manager of the division on a timely basis, including consolidating operations at our Ritto Plant and increasing the area of plant buildings

Reconfiguring organizational management

- Establishing a cross-organizational structure by running Product CFT*
- Encouraging the transfer of authority and nurturing key personnel via a product responsibility system

Revitalizing the organization as a whole

- Mid-career recruitment of capable design and sales staff
- Career development for mid-level personnel based on overseas assignments

Making effective use of management resources

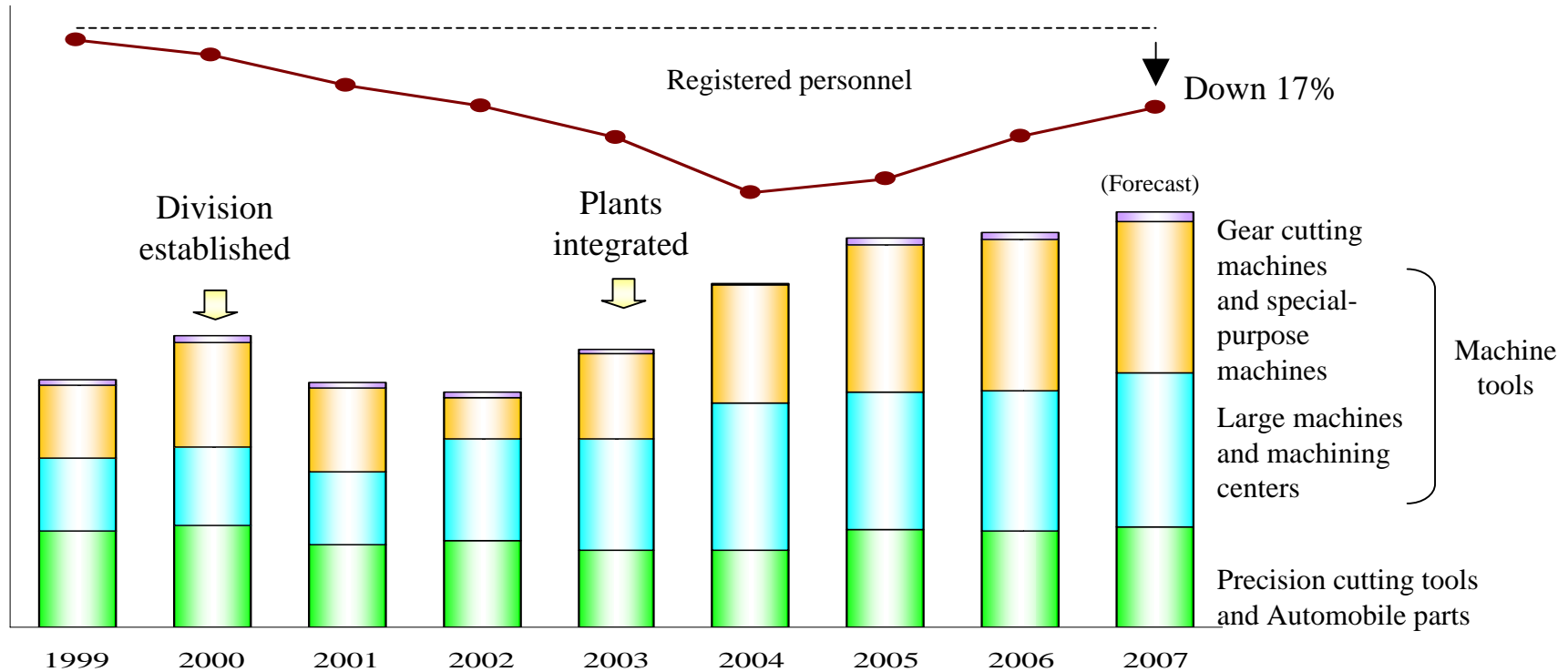
- Consolidating operations through selection and concentration and shifting personnel flexibly among products

Product development based on integrated production and sales

- Developing and selling products tailored to meet users' needs (gear cutting machines, large machines)

* CFT: Cross Functional Teams

Business scale and personnel numbers



Personnel

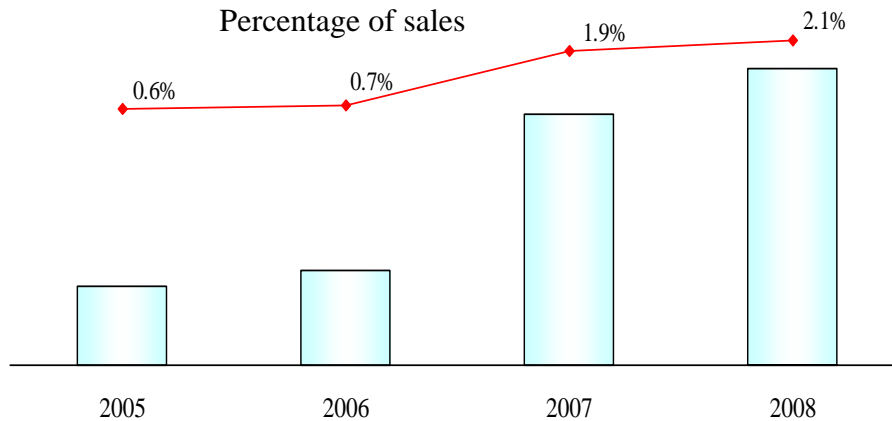
Personnel numbers down 17% in 2007 compared to 1999

Business scale

Orders up 60% in 2006 compared to 1999

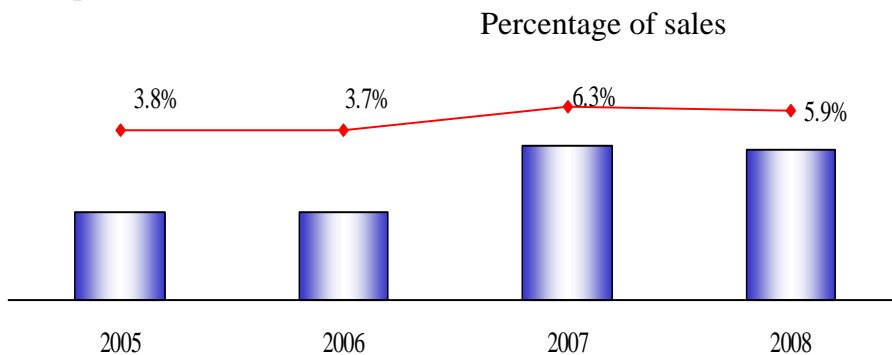
Trends in R&D and capital investment

[R&D Investment]



- Active investment in expanding series of machine tool products and new products

[Capital Investment]



- January 2007: Commenced investment in equipment to streamline engine valve production
- Continual replacement of equipment and facilities in order to boost internal production capabilities

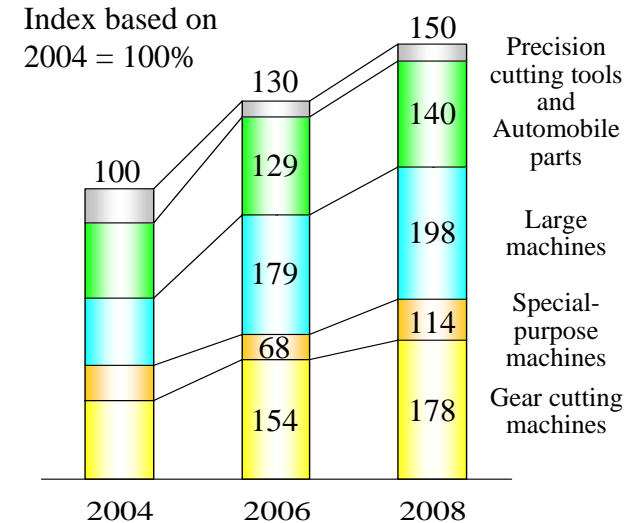
Initiatives as part of our 2006 business plan

◆ Concentrating management resources on growth areas, focusing on auto-related operations

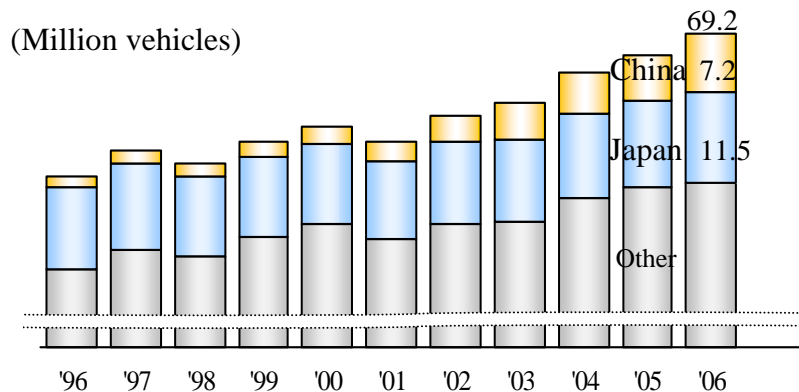
Focusing on four main products

- (1) Concentrating on **gear cutting machines, large machines and special-purpose machines**
 ⇒ Shifting personnel, expanding plants and replacing processing equipment and facilities in order to increase production capacity for these three products
- (2) Stepping up **precision cutting tools and automobile parts** operations as a stable source of revenue
 ⇒ Improving productivity by replacing production equipment and facilities and promoting new product development

Sales by product

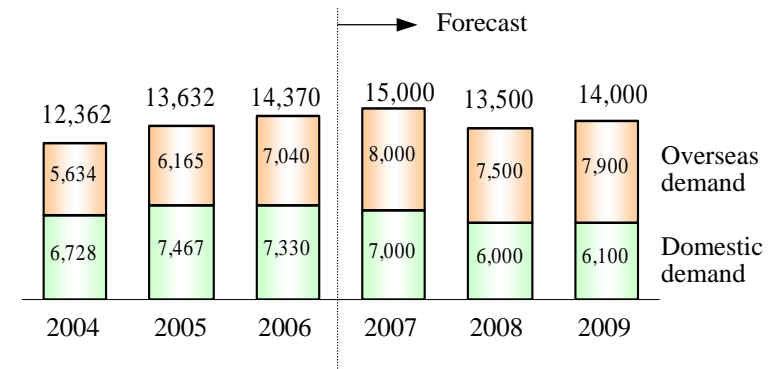


Global vehicle production



Trends in machine tool orders

(Japan Machine Tool Builders' Association forecasts)



Initiatives as part of our 2006 business plan

◇ Developing new lines of business

~ Entering the high growth field of micro devices in order to cultivate new markets ~

[Room temperature wafer bonding machine]

○ Room temperature wafer bonding machines

The world's first bonding machine capable of bonding wafers for use in acceleration sensors and other electronic integrated circuits on a mass production basis at room temperature

- Launched onto market in April 2006
- Promoting market cultivation through the development of larger models
- Scale of room temperature bonding machine market:
2005: ¥2 billion / 2008: ¥9 billion (forecast)



[μ V1 micro milling machines]

○ μ V1 micro milling machines

New series for machining precision components such as medical instrument, precision molds and optical lenses. Enables processes that have previously been done by hand to be machined

- Launched onto market in October 2006
- 5-axis machines developed to date, with work on the development of larger models also underway
- Scale of precision processing machine market: ¥8 billion (2006)



Initiatives as part of our 2006 business plan

◇ Establishing innovative production systems

1. Promoting design standardization and reducing manufacturing lead times through modularization

- Measures already implemented on E Series gear cutting machines and MVR Series large machines and currently ongoing on special-purpose machining cells

2. Increasing production efficiency through process analysis and assembly layout changes

- Improving methods from a new perspective based on process analysis using outside consultants

3. Replacing processing equipment and facilities to **manufacture key components in-house** and thereby maintain and improve levels of core technology

- One 5-face milling machine for large machine tool components newly installed, with the replacement of four aging machines also underway
- Replacement of overall engine valve production lines currently underway

4. Refining operational processes in order to improve quality levels

- Establishing e-Quality and e-Service systems, thereby enabling to manage customer and service data on a unified basis such as history of troubles and repairs to delivered machines and status of field service activities on a real time basis, thereby comprehensively improving product quality

Main product strategies

1. Gear cutting machines

- Improving our product lineup and establishing mass production systems with an eye to becoming the world's number one manufacturer

Product features

- Technical advantage over competition
 - Establishing completely dry cutting system**
- Manufacturing a full line of gear cutting machines

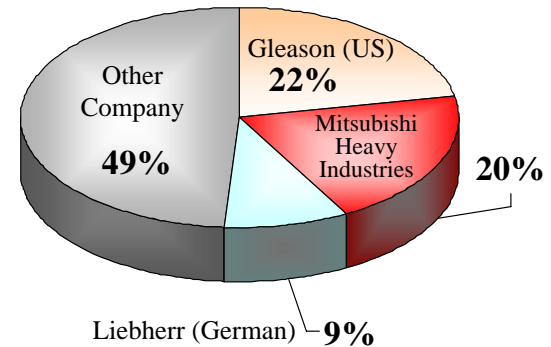
Developing new products that reflect users' needs

New user oriented **E Series** released in July 2004
ZE Series gear grinding machine released in October 2006

Future strategy

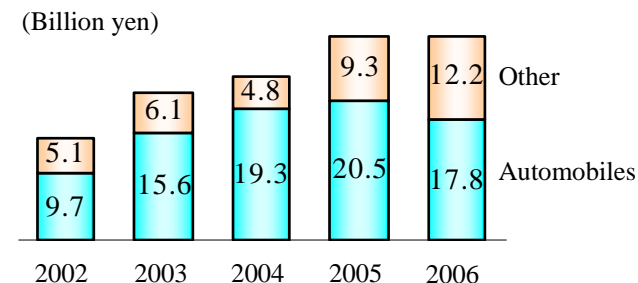
- Business development geared towards securing the number one share of the global market
 - ⇒ Development of gear finishing machines in line with demand for quieter luxury vehicles
 - ⇒ Tapping into Chinese, Southeast Asian and Indian markets, which are experiencing growing demand for automobiles and motorcycles

Global market share (estimated)



Mitsubishi Heavy Industries' share of domestic market: over 50%

Domestic market scale and auto industry demand



2. Large machines

- Establishing the Mitsubishi brand in order to secure the number one share of the domestic market

Launching new models

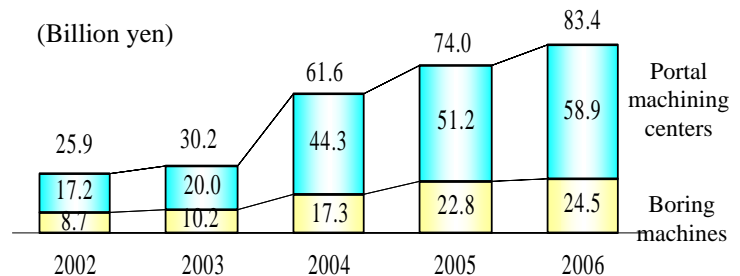
- **Launching the new MVR series to compete with portal machining center market leader Okuma (May 2003)**
- Adding machines with wider portal and die and mold machining series in order to enhance competitiveness (March & June 2004)
- Releasing the heavy machining MVR-Dx series and improving portal machine series (February 2007)

Further increasing sales

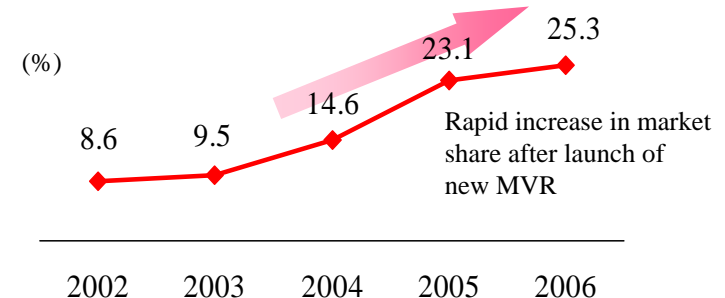
- Honing in on markets such as China and India based on growing demand for large machines as a result of worldwide infrastructure development
- Expanded plants and established a system capable of producing 16 machines per month
⇒ Aiming to establish a **system capable of producing 20 machines per month** through manufacturing innovation

Value of orders in the large machine industry

(Japan Machine Tool Builders' Association statistics)



Domestic share (estimated)



3. Special-purpose machines

- Expanding business based on specific product strategies for each target market

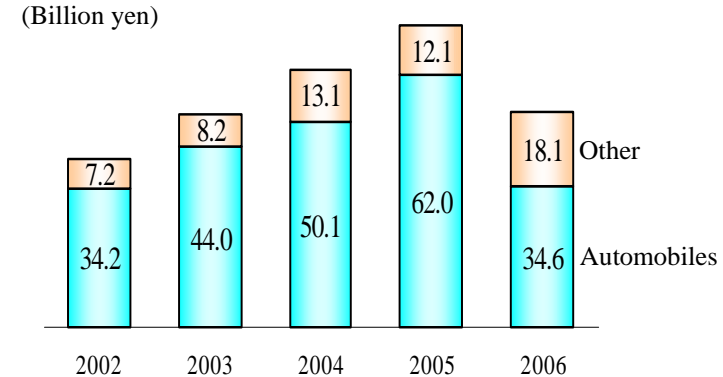
Clarifying target markets and product strategies

- Specializing in the market for centralized processing equipment
 - Retaining loyal customers through initiatives such as engineers participating in customers' equipment plans
- Promoting standardization and modularization
 - **Reducing the number of different components** through standardization and **promoting parametric design** in order to boost cost competitiveness

Securing highly profitable orders

Promoting packaged orders, including transfer system and test cutting as well as cells

Domestic market scale and auto industry demand



* Decline in 2006 due to reduced capital investment on behalf of domestic auto manufacturers

4. Precision cutting tools and Automobile parts

- Stabilizing business through overseas development in growth markets

Precision cutting tools

- Attracting new customers through new product development
- **Expanding product deployment through supplementing products with local manufacturing company acquired in June 2005**

Engine valves

- **Establishing highly productive lines through investment in streamlining equipment, thereby improving cost competitiveness**
- Securing new orders through concept-in from the development stages of auto manufacturers
 - Talks for big orders currently underway with companies such as Mazda, Hino and Kubota
- **Establishing an optimum production system in conjunction with engine valve manufacturing joint venture in China**

Power transmissions

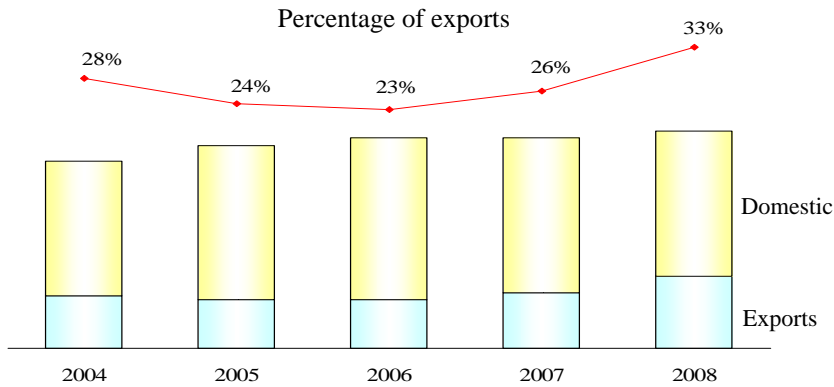
- Increasing our scale of operations by moving into the mass production market
 - Business development in new markets based on **planetary roller gear products**

Increasing exports and stepping up overseas operations

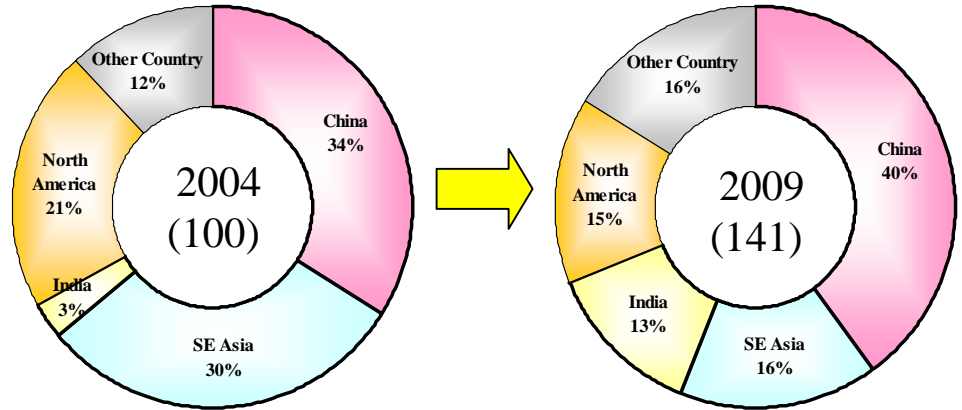
- ◇ Concentrating management resources and increasing exports, based around China, India and Southeast Asia as priority markets
 - Increasing orders in line with the global expansion of the auto industry
 - **Getting involved in overseas investments of Japanese manufacturers by making the most of the strong relationship with them**
 - **Expanding our local sales networks in order to increase orders from local capital and interaction with native users**
 - Promoting increased sales on the back of growing demand for infrastructure development
 - Assigning more personnel to priority markets in order to promote locally based sales and service activities
 - Improving presence through having showrooms at local bases
 - (1) China
Tapping into the market via specialty machine tool sales companies and improving service capabilities
 - (2) India
Attracting loyal customers through collaboration with leading distributors
 - (3) Southeast Asia
Assigning rotational employees to our base in Thailand and establishing a direct sales system

Progress with overseas business

Export figures (Non-consolidated)

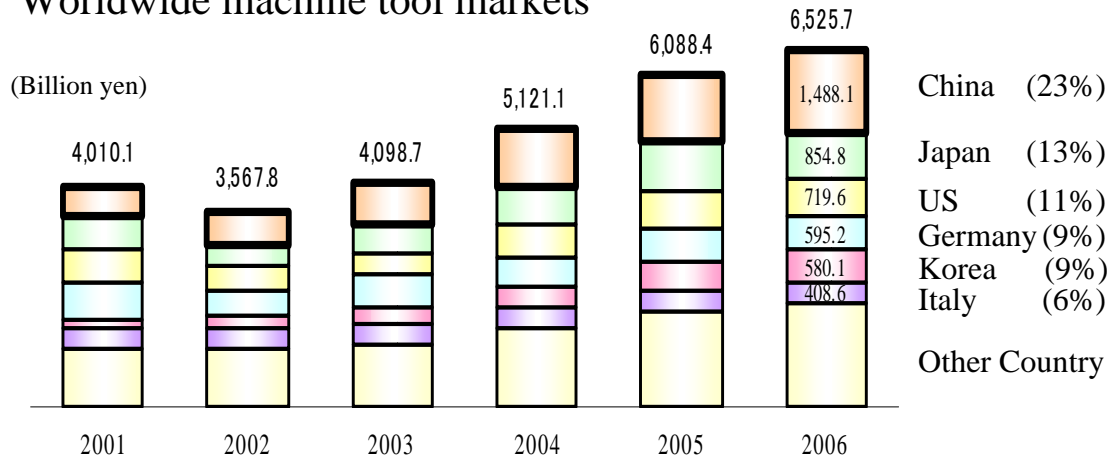


Export orders by region (Non-consolidated)



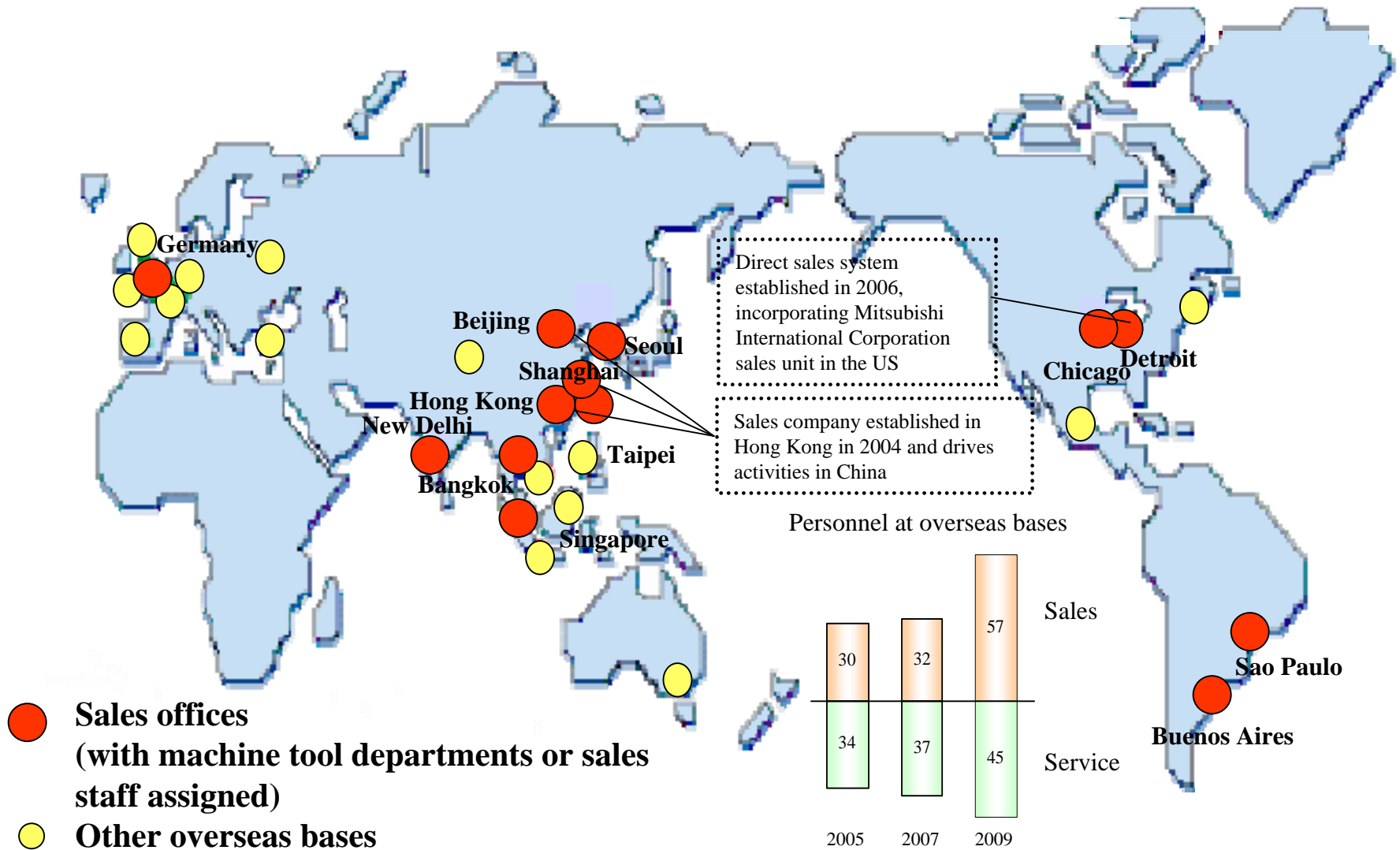
Index based on 2004 = 100%

Worldwide machine tool markets



Demand for machine tools is soaring in China

Overseas machine tool sales offices

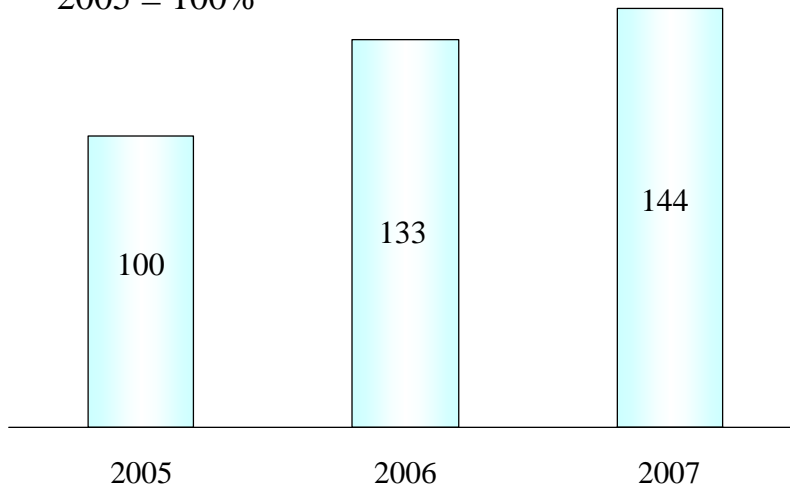


Progress in the Chinese market

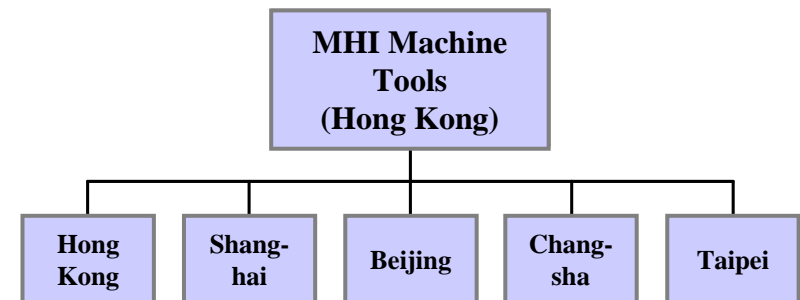
- China is growing into the world's largest machine tool market
 - ⇒ December 2004: Established MHI Machine Tools HK Ltd., improved sales and service system and increased orders.

Turnover

Index based on
2005 = 100%



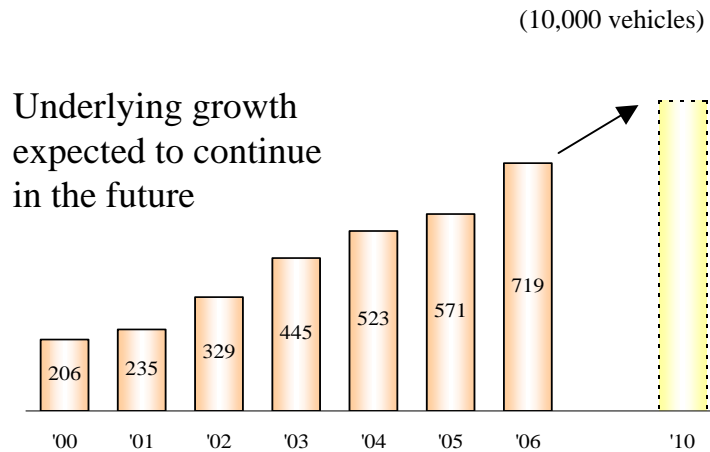
Sales and service system



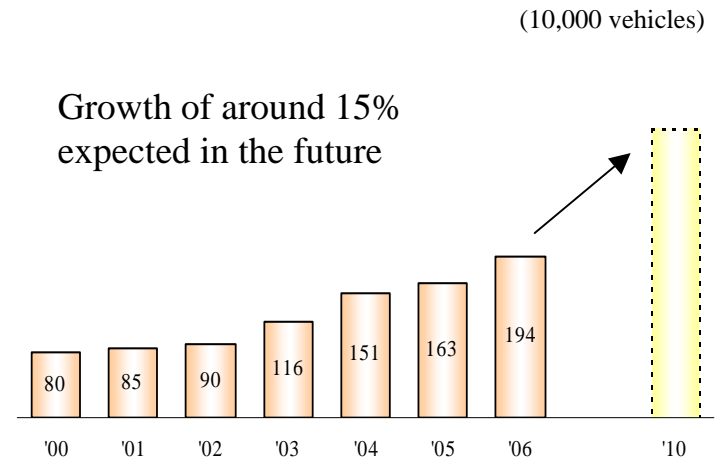
Progress with overseas precision machinery operations

- Establishing production bases for precision cutting tools and engine valves in India and China, where the auto industry is experiencing rapid growth
- (1) India: Acquisition of SRP Tools, the country's largest gear cutting tool manufacturer
 - (2) China: Establishment of an engine valve manufacturing joint venture

Vehicle production in China



Vehicle production in India



Outline of cutting tool production base in India

- (1) Company name: Mitsubishi Heavy Industries India Precision Tools, Ltd. (MHI-IPT)
- (2) Established: May 2005 (acquisition completed)
- (3) Location: Ranipet, Tamil Nadu (130km from Chennai)
- (4) Capital: ¥174 million
- (5) Staff assigned from Mitsubishi Heavy Industries:
President and Vice President in charge of finance
- (6) Business activities:
Production and sales of hobs, shaper cutters, shaving cutters and broaches for gear cutting machines

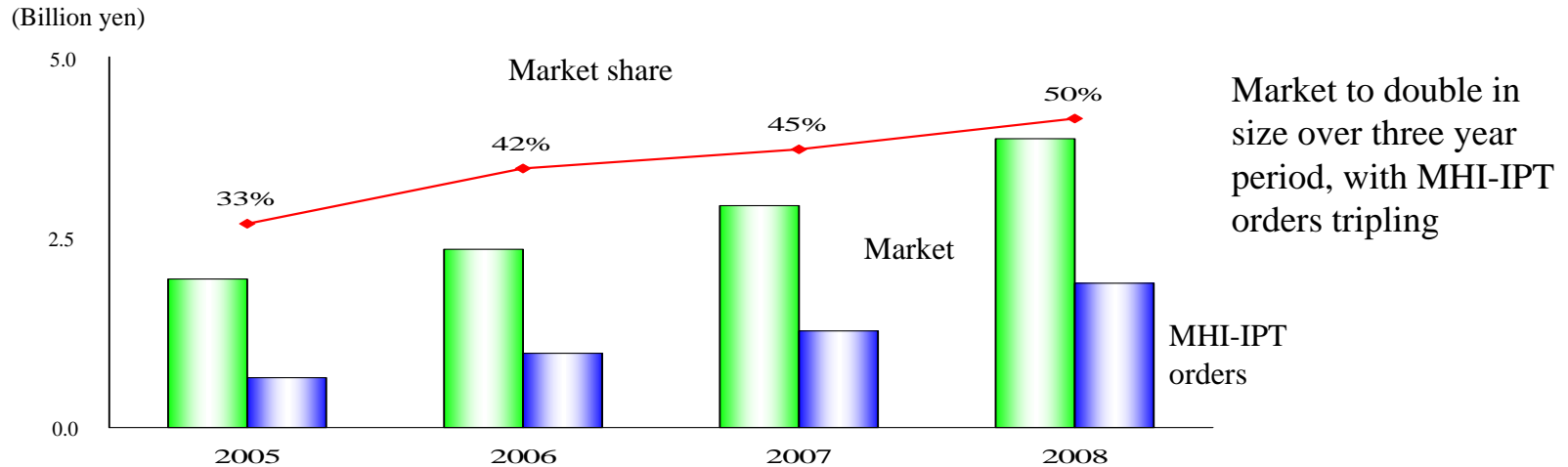


Plans to increase our share of the Indian market through further improvement of product competitiveness with Mitsubishi Heavy Industries' latest dry cutting and other technology

- (7) Investment in increased production:
Plans to use increase in capital in July 2006 to expand plant by 70%, add 83 items of production equipment and double production. Facilities to commence operations from August 2007 onwards

Business scale and current initiatives

Share of the Indian market (forecast) and the value of orders received by MHI-IPT



- As a result of capital investment to double production capacity, the first facilities commenced operations in August 2007. The second facilities are currently being installed.
- Increasing orders from manufacturers expanding production, including Maruti Suzuki and TATA
- Establishing a service center in northern India to help increase sales
- Expansion into nearby European market

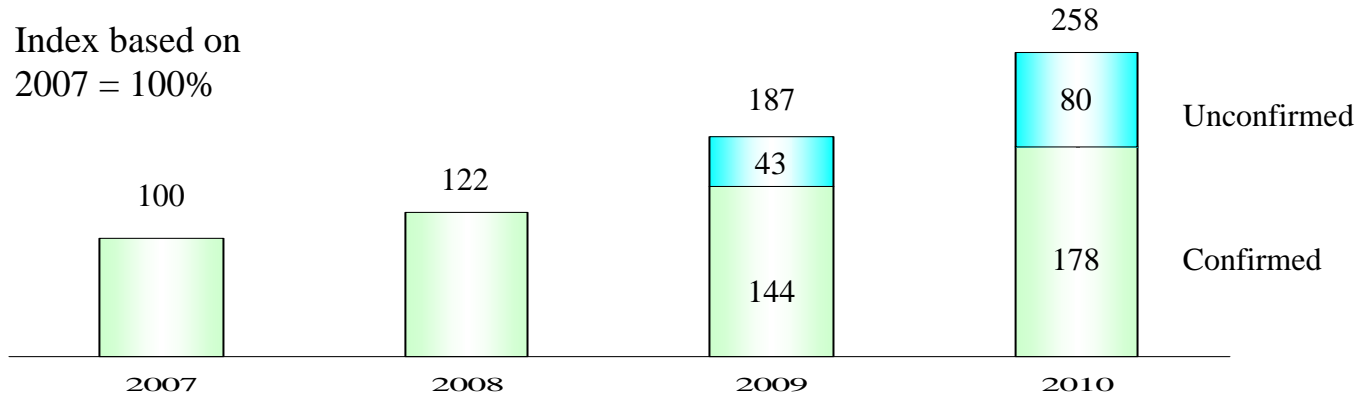
Outline of engine valve joint venture in China

- (1) Company name: Shenyang Aerospace Xinguang Mitsubishi Heavy Industries Engine Valves Co., Ltd. (Xinguang Mitsubishi Engine Valves)
- (2) Established: Hunnan New District, Shenyang, Liaoning
- (3) Capital: Approx. ¥1.1 billion
- (4) Investment ratio:
Shenyang Aerospace Xinguang Group: 35%
Mitsubishi Heavy Industries Group: 65%
- (5) Staff assigned from Mitsubishi Heavy Industries:
President and General Manager of administration
and manufacturing departments
- (6) Plant operations: Commenced in April 2006
Production capacity: 10 million valves
- (7) Technology transfer:
Installation and establishment of integrated production system based on extensive automation, from cutting materials through to processing, inspections and final shipment



Sales figures and current initiatives

Sales figures for Xinguang Mitsubishi Engine Valves



- Increasing orders by incorporating manufacturers, especially Japanese manufacturers, from the development stages of new engine onwards.
- Active capital investment in line with loyal customers increasing production
- Establishing optimum production systems for individual valves based on specialization in conjunction with our Ritto Plant
- Entry into European and American engine manufacturers