Investors Meeting (September 16, 2015)

Komatsu NTC's Operations

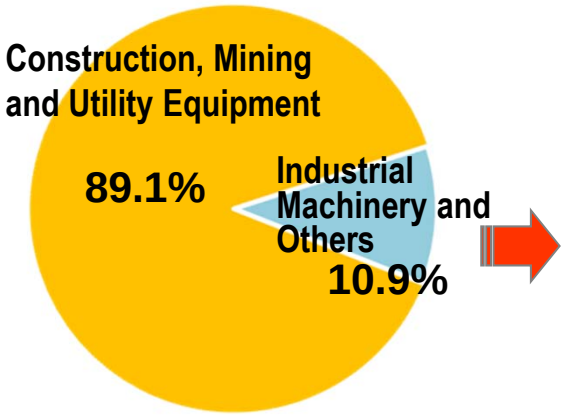
September 16, 2015

Masayuki Uegaki
Chairman of the Board
Komatsu NTC Ltd.

Komatsu's Industrial Machinery Business and Komatsu NTC (as of March 31, 2015)

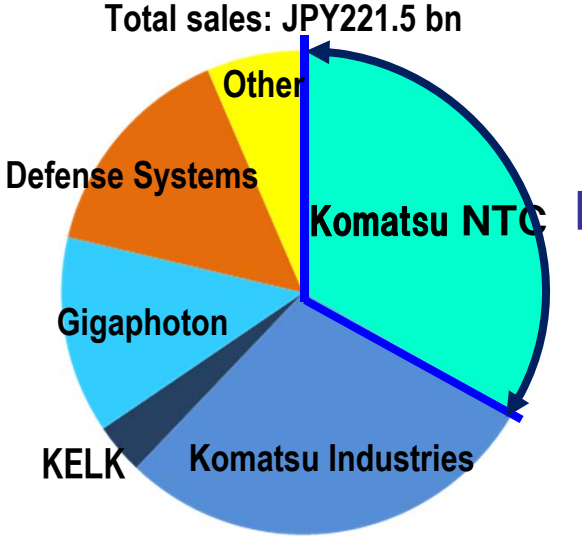
Breakdown of sales: Komatsu

Consolidated sales: JPY1,978.6 bn



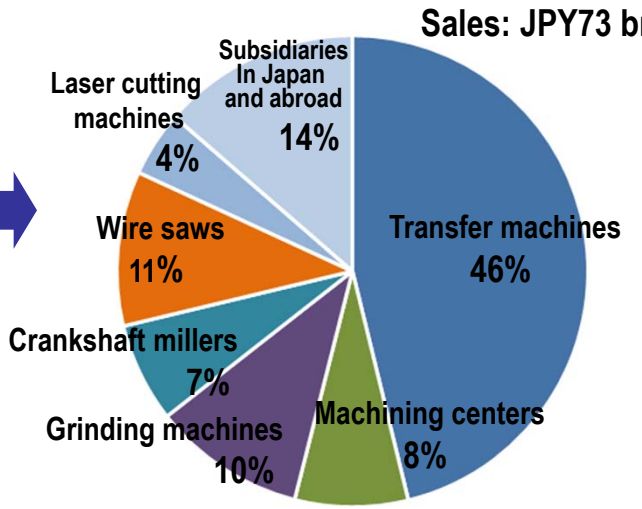
Breakdown of sales: Industrial Machinery and Others

Total sales: JPY221.5 bn



Breakdown of sales: Komatsu NTC

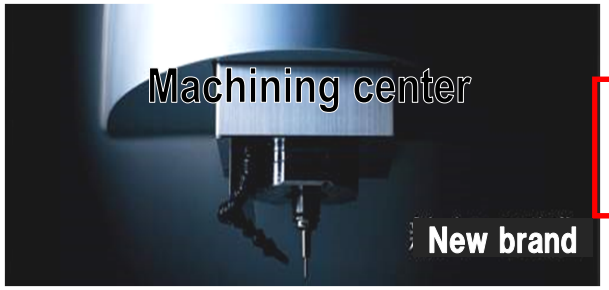
Sales: JPY73 bn

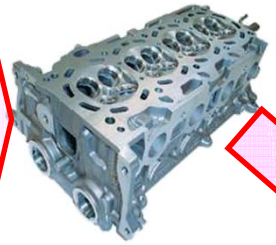


Komatsu NTC's History

	1940	1950	1960	1970	1980	1990	2000	2010
Japan		1950 Fukuno Steel Industry Co., Ltd.	1963年～ Toyama Machine Industry Co., Ltd.		1984年～ NIPPEI TOYAMA Corporation		2008年～ Komatsu NTC Ltd.	
		1951～ 富山機械工業(株)						
	1938～ Dai-Nippon Heiki (Co., Ltd.	1945年～ Nippei Industrial Co., Ltd.						
			1963年～ Komatsu Ltd. Began production of machine tools for construction equipment			1994年～2010年 Komatsu Machinery Corp.		
Abroad	USA: Sales and service subsidiary of machine tools				1984年～ NTC AMERICA Corp.			2015年～ Merged into Komatsu America Corp.
	Europe: Sales and service subsidiary of machine tools					1992年～ NIPPEI TOYAMA EUROPE GmbH		
	China: Sales and service subsidiary of machine tools					1996～ DALIAN BOHAI NIPPEI MACHINE TOOL Corporation		
	China: Sales and service subsidiary of machine tools						2004年～ NIPPEI TOYAMA SHANGHAI TRADING Co., Ltd.	
	Thailand: Sales and service subsidiary of machine tools						2005年～ NIPPEI TOYAMA (THAILAND) Co. LTD	
	India: Sales and service subsidiary of machine tools						2008年～ NIPPEI TOYAMA INDIA PRIVETE.,LTD	2015年～ Merged into Komatsu India
	China: Manufacturing, sales and service subsidiary of wire saw parts						2008年～ NIPPEI TOYAMA SHANGHAI TRADING Co., Ltd.	

Main Products

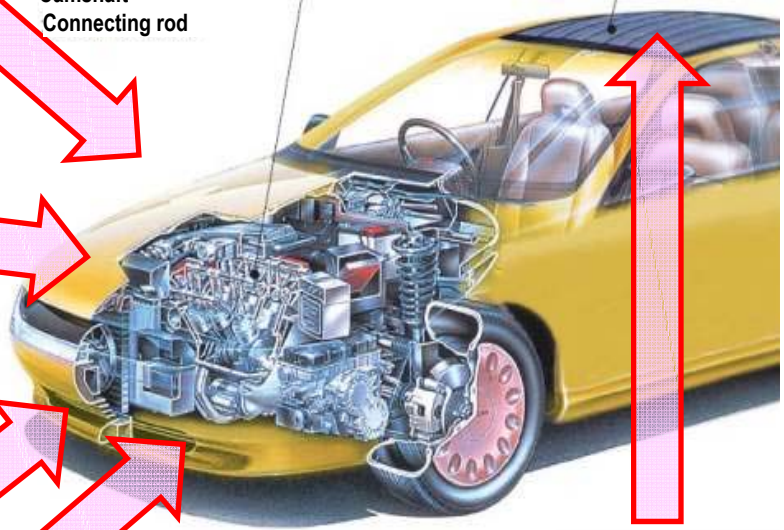




Engine-related parts

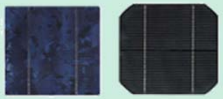
Cylinder head
Cylinder block
Crankshaft
Camshaft
Connecting rod

Solar panel



Our products make customer contributions in a variety of manufacturing processes of their automobiles.

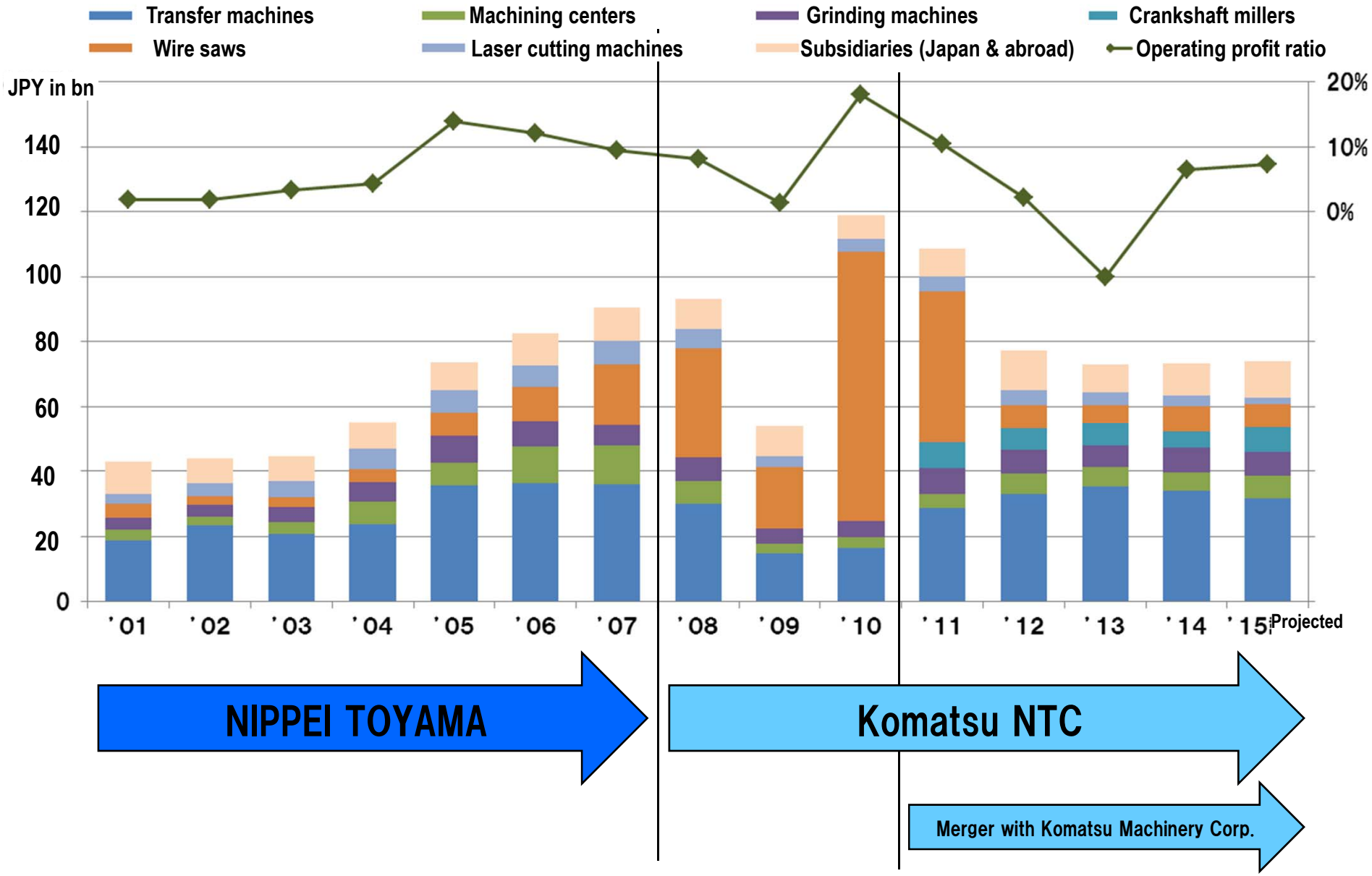
Share of Products

Products	Machining	Sales of 2014	Share	Competitor
Transfer machines	Cylinder heads Cylinder blocks 	JPY33.9bn	35% (Machining of cylinder heads and blocks)	Japan: JTEK, Enshu, Horkos Overseas: GROB, COMAU, MAG
Grinding machine	Crankshafts Camsnafts 	JPY7.7bn	20% (Use-specific grinders)	Japan: JTEKT Overseas: LANDIS, JUNKER
Machining center	Engine parts 	JPY5.7bn	10% (Machining of engine parts)	Japan: DMG Mori, Mazak, MAKINO (many others) Overseas: DMG, HAAS, Tongtai Machine & Too (many others)
Crankshaf t miller	Crankshafts Camshafts 	JPY5bn	50% (Crankshaft millers)	Japan: Horibe Machinery, (grinder makers) Overseas: HELLER, BOEHRINGER
Wire saw	Silicon wafers 	JPY7.8bn	60% (Solar panels)	Japan: Yasunaga, 、Toyo Advanced Technologies, Takatori Overseas: MEYER BURGER

We will develop DANTOTSU product in each product category, promote further differentiation from Competitors by applying ICT-deployed LCC-reduction technologies, and become indispensable partners of customers.

Profitability

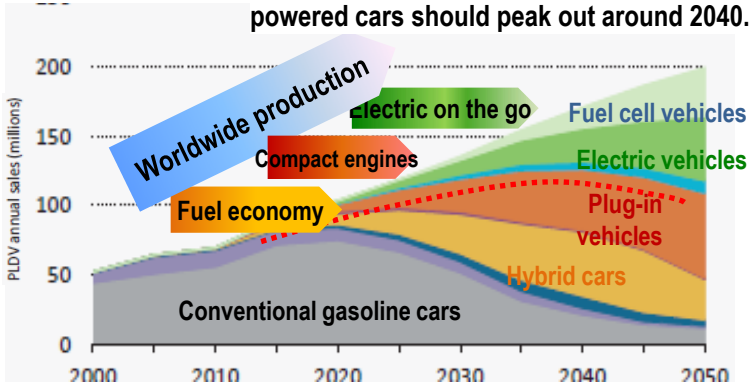
Sales and operating profit by product



Machine tools

◆ Global demand for automobiles by powertrain

If the trend continues as it is today, gasoline-powered cars should peak out around 2040.

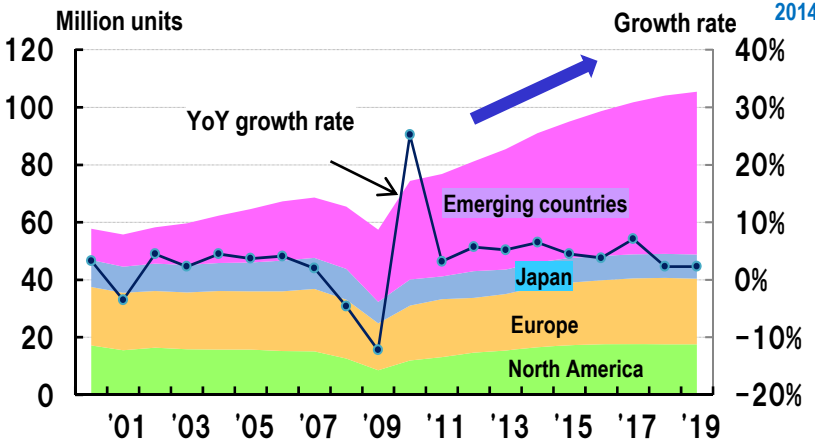


Source: "Energy Technology Perspective 2012," IEA

Increase of emission regulation-compliant cars→ Compact engines, hybrids, electric vehicles ⇒Increase in capital investment related to powertrain (engines and drive units)

◆ Demand for automobiles by region

Source: IHS Automotive 2014/6/30



Production shift: Japan, USA & Europe → Emerging countries

Average annual growth of 5% worldwide but declining rate of growth

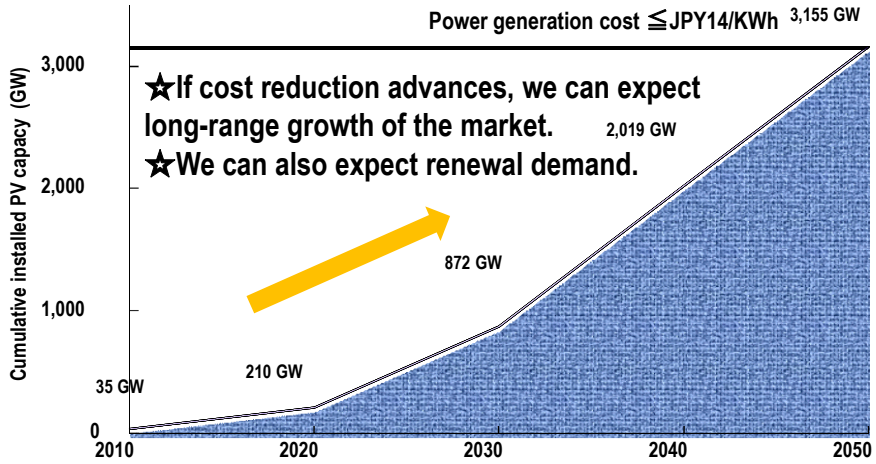
⇒ Steady capital investment related to automobile production

Wire saws

◆ Long-range projection of solar cells

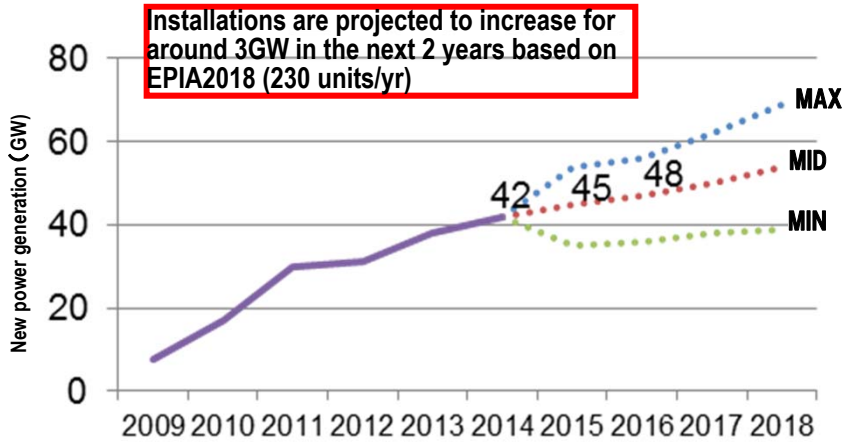
[Preconditions]

Power generation cost ≦JPY14/KWh



Source: Technology Roadmaps Solar Photovoltaic Energy (May 2010), IEA

◆ Short-term projection (solar panel installations)



Lost supply-demand balance resulting from a sudden surge of installations restrained capital investment. Recently, demand has finally begun to catch up with supply, making the future bright.

Tasks

Businesses	Machine tools	Wire saws
1) Growth of existing businesses 2) Structural reforms	**Standardization (modularization), shortening lead-time from orders received to shipment**	
	Expansion of parts and service operations	
	Reinforcement of operations in China, Asia, North America and Europe	
	Structural reforms: Improvements of SVCs and fixed costs, reinforcement of price and SVM management, and improvement of OVCs (claim expenses)	
Growth based on innovation 1) Product development and differentiation	**Development and launch of industry pacesetting DANTOTSU products by emphasizing environmental conservation, ICT, economy and safety**	
	Development of products designed to meet next-generation powertrains (energy savings and compactness)	Development of next-generation products (by incorporating technologies designed to substantially cut down customers' production costs)
2) Expansion of business domain	**More applications of core technologies and products and business expansion in the supply chain**	
	Proposals to improve customers' productivity through ICT applications, and preventive maintenance	Development of new markets : Middle East, India, Southeast Asia

Reform Project for Operations: Systems

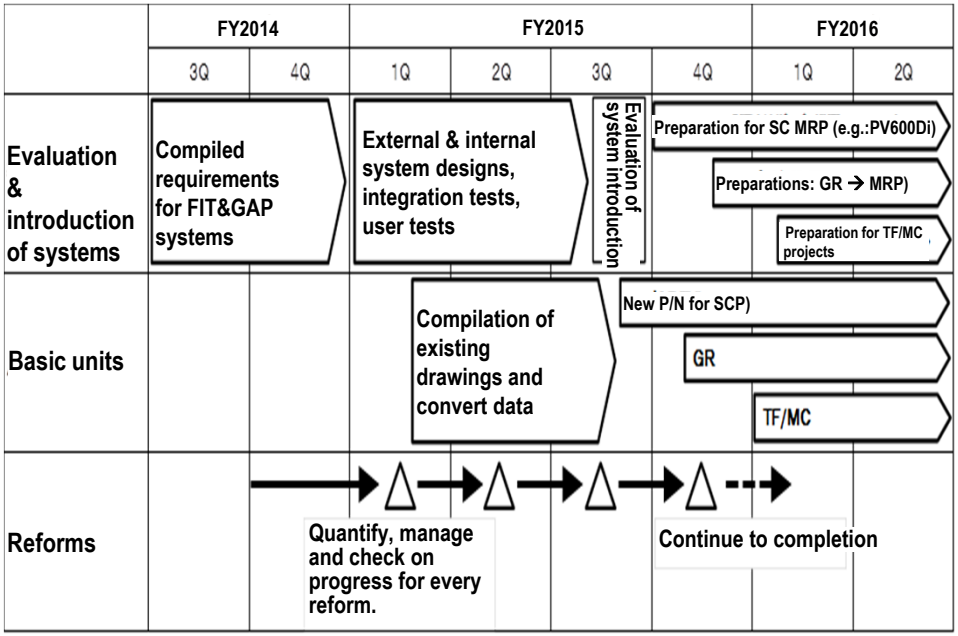
1. Concepts

1) Culture of term-end and month-end to that of each day (standardization)
2. From emphasis on results to emphasis on planning and process)
3) Simplification of commercial distribution, direct links of operations

2. Systems

	Founding --	1970 --	1990 --	2001 --
Komatsu	Item control ⇒	Mfg. of parts (Use of basic units) ⇒	New sales and production planning (Use of product mix) ⇒	BaaN (Globalization)
NTC	Item control	⇒		BaaN (2016 --)

3. Schedule



4. Organizational framework

Chairman (Project leader)
Executive officers + 10 full-time members + 80 sub-team members from departments

Advice

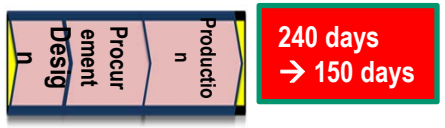
- Awazu Plant
- Kanazawa Plant
- Information Strategy Division (Quolica)

5. Targets

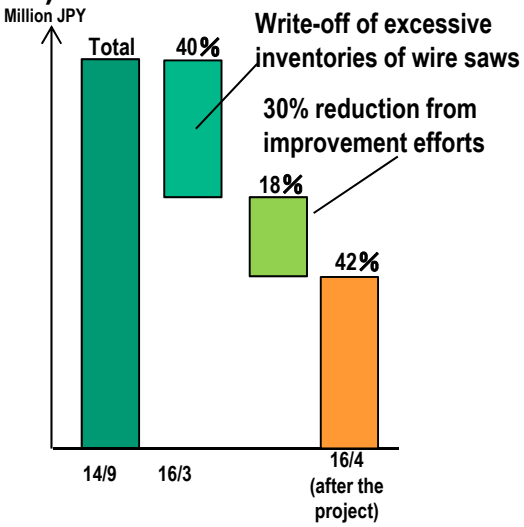
1) To shorten lead-time

(Transfer line)

↓Shorten lead-time



2) Reduction of inventories



3) Reduction of administrative manpower

4) Others

- Shorten the turnover period of WIP.
- Promotion of modularization designs

Lead-time Reduction Efforts: Modularization of Customer-specific Parts

As customer-specific parts require individual responses, they are a big bottleneck for us to improve lead-time, quality and costs.

Modularization

We will first standardize the models and promote modularization at the time of model changes.

1) Design manpower: -25%

- Reduce design manpower for customer-specific parts by modularizing side and front covers, panels, control panel, ducts, etc.

3) Quality improvement

- Improvement of design quality by means of evaluation and inspection in advance

4) Cost reduction

- Reduction of SVCs by means of cost reduction in advance
- Reduction of design expenses

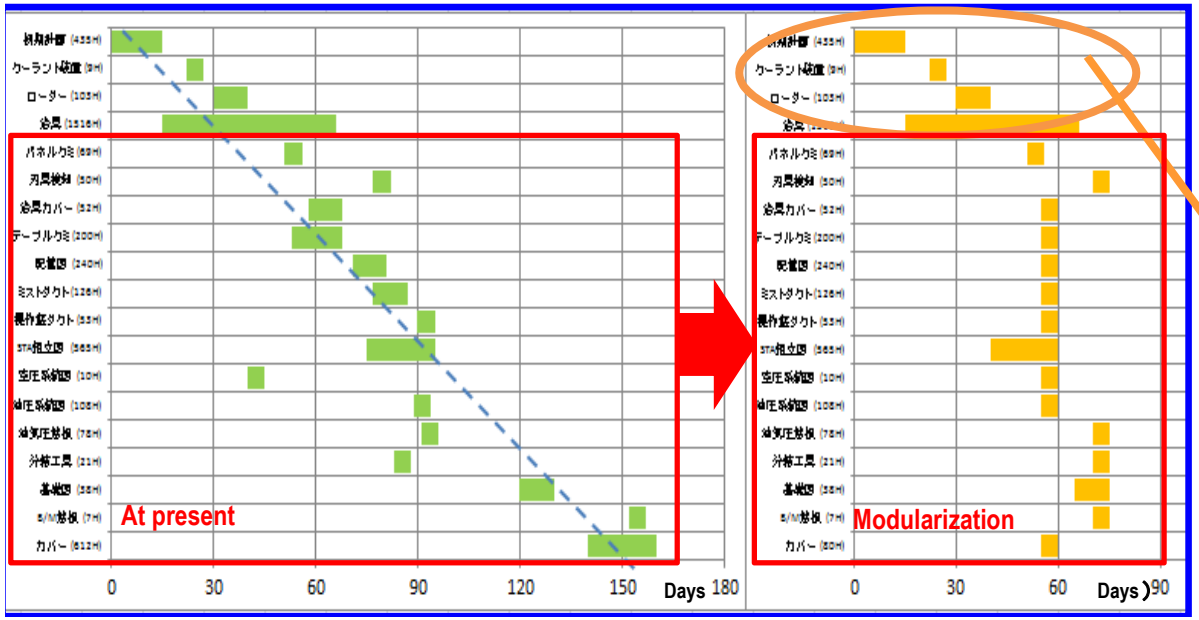
Future tasks

Develop database of jigs and tooling

Automatic generation of tooling

Further reduction of design manpower for customer-specific parts

2) Design lead-time: 5 months → 2.5 months



Thank you for your interest in Komatsu NTC.