Harmonic Drive Systems Inc.

Presentation on Business Results for the 1st-Half of Fiscal Year Ending March 31, 2013

November 21, 2012

Performance Summary

1st-half consolidated results (versus original forecasts for the period)

	Original forecasts (announced May 15)			
	Amount	Percent (%)		
Net sales	9,900	100.0		
Operating income	2,000	20.2		
Ordinary income	2,080	21.0		
Net income	1,180	11.9		

1st-half FY ending Mar.31,2013					
Amount Percent (%)					
9,847	100.0				
2,216	22.5				
2,208	22.4				
1,202	12.2				

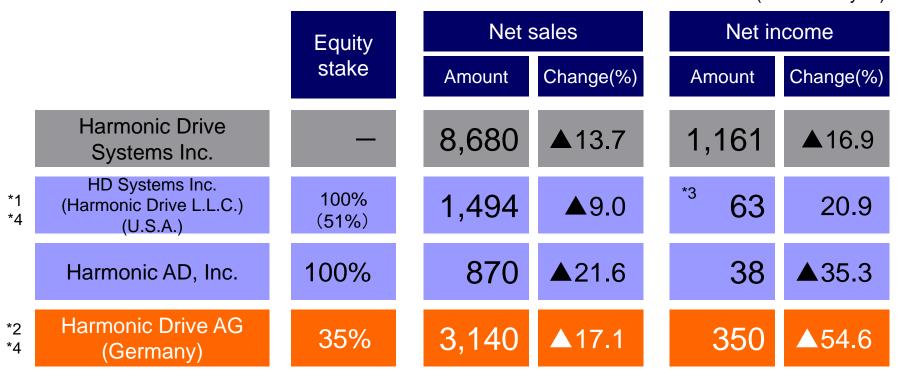
(millions of yen)					
Vs. original forecasts for the period					
Rate(%)					
A O E					
▲ 0.5					
10.8					
6.2					
4.0					
1.9					

1st-half consolidated results (year-on-year change)

	1st-half 1st-half				·	lions of yen)	
	FY ended M	ar.31,2012	FY ending M	FY ending Mar.31,2013		Year-on-year change	
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)	
Net sales	11,104	100.0	9,847	100.0	▲1,257	▲11.3	
Gross profit	4,783	43.1	4,188	42.5	▲ 595	▲ 12.5	
Operating income	2,771	25.0	2,216	22.5	▲ 554	▲20.0	
Ordinary income	2,925	26.3	2,208	22.4	▲ 716	▲ 24.5	
Net income	1,495	13.5	1,202	12.2	▲292	▲19.6	
EPS (yen)	48.98		39.39		▲ 9.59	▲19.6	
Capital investment	710		393		▲316	▲ 44.6	
Depreciation costs	455		506		51	11.2	
R&D costs	625		547		▲ 78	▲12.5	

Performance of main group companies for 1st-half of fiscal year ending March 31, 2013

(millions of yen)



Percent change(%) indicates increase or decrease from same period of previous fiscal year.

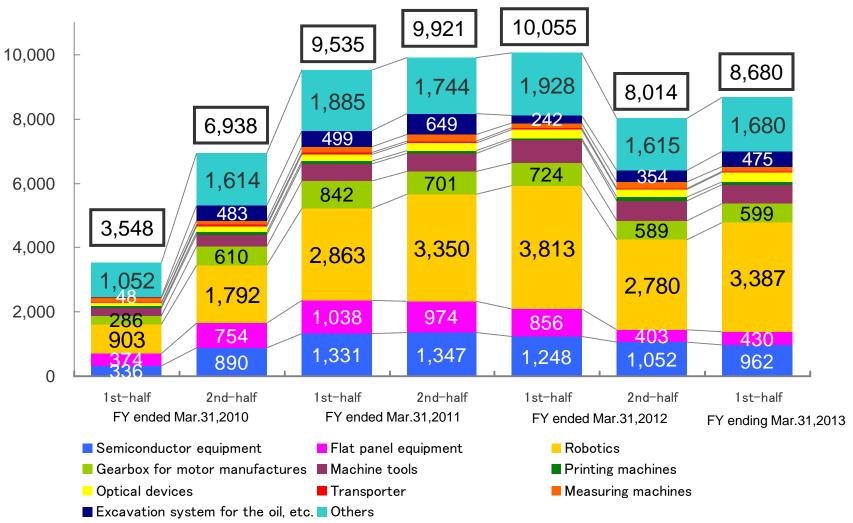
- *1 Exchange rates: Jan. Jun., 2011 1US\$ = 82.04 yen, Jan. Jun., 2012 1US\$ = 79.74 yen
- *2 Exchange rates: Jan. Jun., 2011 1€ = 114.98 yen, Jan. Jun., 2012 1€ = 103.45 yen
- *3 Net income of US subsidiaries (consolidated) is after excluding minority interests.
- *4 For overseas subsidiaries and affiliates, the fiscal year ends December 31.

1st-half non-consolidated results

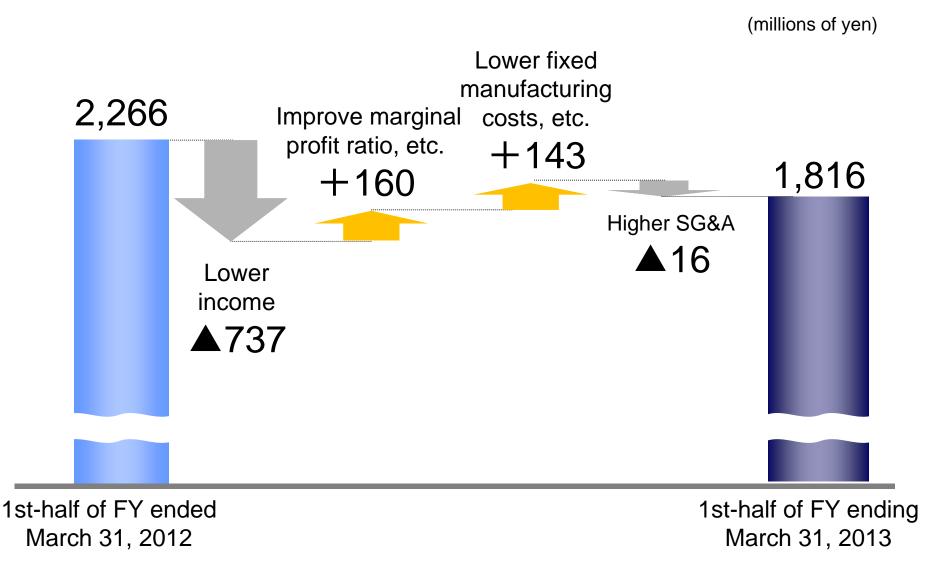
	(millions of yen)					
	1st-half FY ended Mar.31,2012		1st-half FY ending Mar.31.2013		Year-on-year change	
	Amount	Percent(%)	Amount	Percent(%)	Change	Rate(%)
Net sales	10,055	100.0	8,680	100.0	▲ 1,375	▲ 13.7
Gross profit	3,953	39.3	3,519	40.6	▲433	▲ 11.0
Operating income	2,266	22.5	1,816	20.9	▲ 450	▲ 19.9
Ordinary income	2,461	24.5	1,991	22.9	▲ 470	▲19.1
Net income	1,397	13.9	1,161	13.4	▲235	▲ 16.9
EPS (yen)	45.78		38.06		▲ 7.72	▲ 16.9
Capital investment	401		286		▲ 114	▲28.6
Depreciation costs	316		322		5	1.7
R&D costs	591		592		1	0.2

Net sales by application (non-consolidated)

(millions of yen)

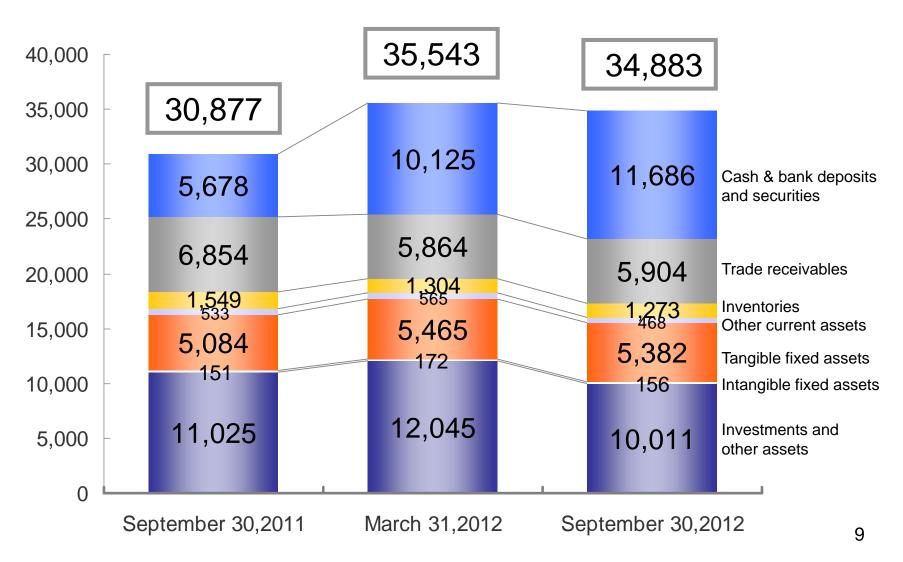


Factors in year-on-year change in 1st-half non-consolidated operating income



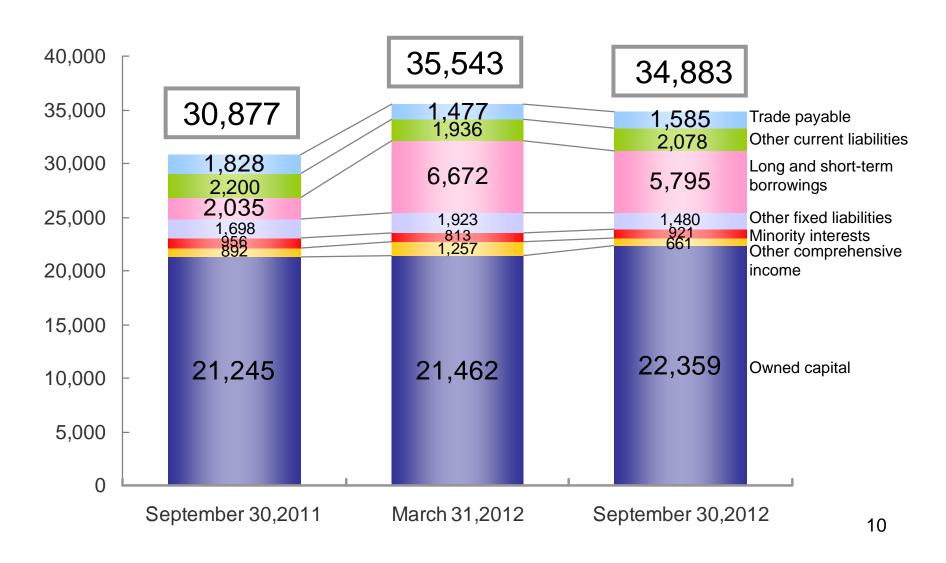
Status of consolidated assets

(millions of yen)



Status of consolidated liabilities and net assets

(millions of yen)



Status of consolidated cash flows

(millions of yen)	1st-half of FY ended Mar.31,2012	1st-half of FY ending Mar.31,2013
Cash flow from operating activities	310	2,493
Cash flow from investing activities	130	2,885
Cash flow from financing activities	▲ 772	▲ 1,224
Effect of exchange rate changes on cash and cash equivalents	4 6	18
Net increase (decrease) in cash and cash equivalents	▲ 337	4,173
Cash and cash equivalents at end of year	4,013	8,353

Performance Forecast for Fiscal Year Ending March 31, 2013

Revised consolidated results forecast for fiscal year ending March 31, 2013

(millions of yen)

	Original forecasts (announced May 15)			
	Amount Percent (%			
Net sales	20,400	100.0		
Operating income	4,400	21.6		
Ordinary income	4,500	22.1		
Net income	2,600 12.			

Revised forecasts (announced Nov. 13)				
Amount	Percent (%)			
18,500	100.0			
3,520	19.0			
3,530	19.1			
1,980	10.7			

Vs. original	Vs. original forecasts					
Change	Rate (%)					
▲ 1,900	▲ 9.3					
▲880	▲20.0					
▲ 970	▲ 21.6					
▲ 620	▲23.8					

Consolidated performance forecast for fiscal year ending March 31, 2013

(millions of yen)

	FY ended Mar. 31, 2012		Forec FY ending Ma		Year-on-ye	ar change
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	20,159	100.0	18,500	100.0	▲1,659	▲8.2
Operating income	4,333	21.5	3,520	19.0	▲813	▲18.8
Ordinary income	4,398	21.8	3,530	19.1	▲868	▲19.7
Net income	2,139	10.6	1,980	10.7	▲159	▲ 7.5
EPS (yen)	70.08		64.85		▲ 5.23	▲ 7.5
Capital investment	1,762		1,000		▲ 762	▲ 43.3
Depreciation costs	1,011		1,070		58	5.8
R&D costs	1,240		1,150		▲ 90	▲ 7.3

Capital investment amount are the amounts of tangible and intangible fixed assets acquired in the term. Assumed exchange rate for FY ending Mar.31, 2013 forecasts 1US\$ = ¥79.00 1€ = ¥102.00

Forecasts of main group companies for fiscal year ending March 31, 2013

(millions of yen)



Percent change(%) indicates increase or decrease from same period of previous fiscal year.

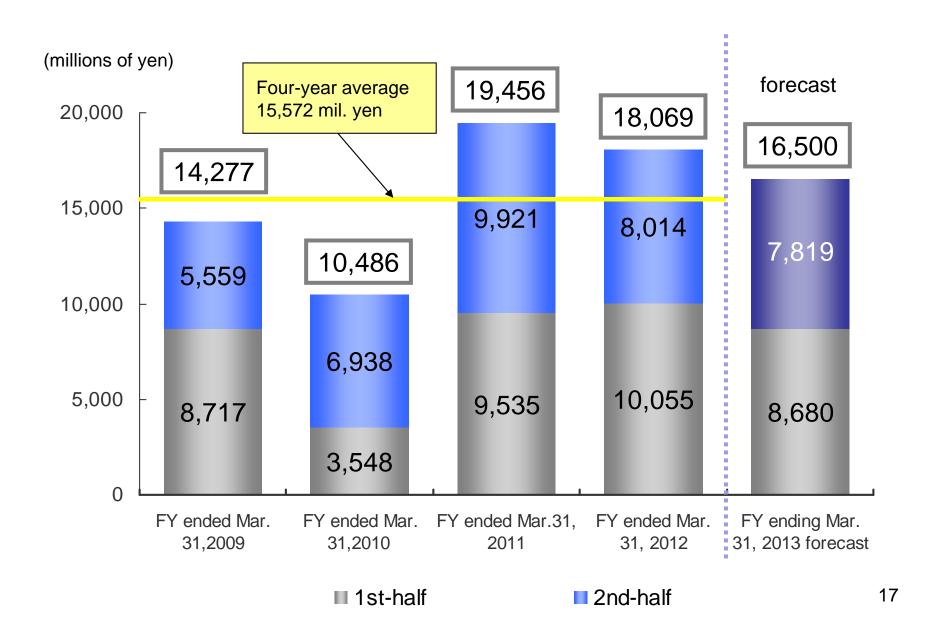
- *1 Exchange rates: Jan. Dec., 2011 1US\$ = 79.84 yen, Jan. Dec., 2012 1US\$ = 79.00 yen
- *2 Exchange rates: Jan. Dec., 2011 1€ = 111.12 yen, Jan. Dec., 2012 1€ = 102.00 yen
- *3 Net income of US subsidiaries (consolidated) is after excluding minority interests.
- *4 For overseas subsidiaries and affiliates, the fiscal year ends December 31.

Non-consolidated performance forecast for fiscal year ending March 31, 2013

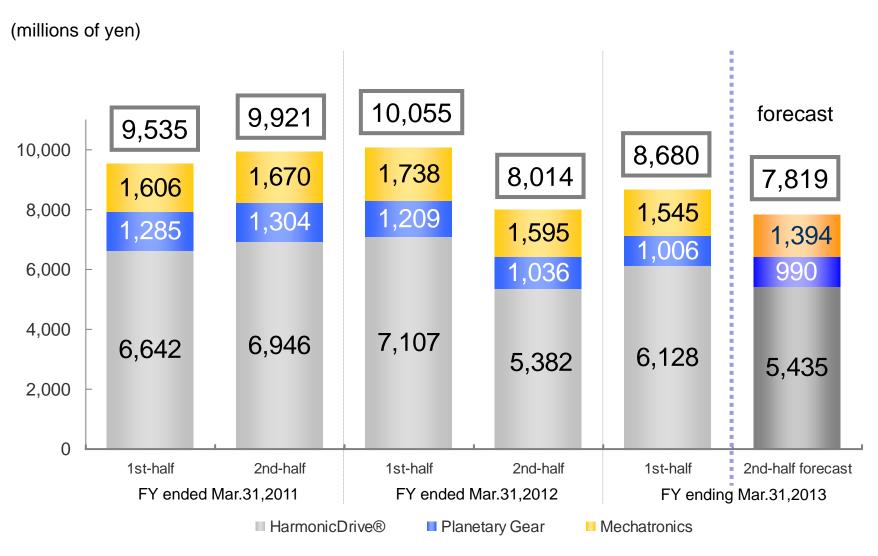
	FY ended Mar. 31, 2012			Forecasts FY ending Mar. 31, 2013		Year-on-year change	
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)	
Net sales	18,069	100.0	16,500	100.0	▲1,569	▲8.7	
Operating income	3,576	19.8	3,050	18.5	▲ 526	▲14.7	
Ordinary income	3,979	22.0	3,230	19.6	▲ 749	▲18.8	
Net income	2,213	12.2	1,950	11.8	▲263	▲ 11.9	
EPS (yen)	72.49		63.87		▲8.62	▲ 11.9	
Capital investment	1,139		800		▲339	▲ 29.8	
Depreciation costs	713		700		▲ 13	▲ 2.0	
R&D costs	1,219		1,220		0	0.1	

(millions of yen)

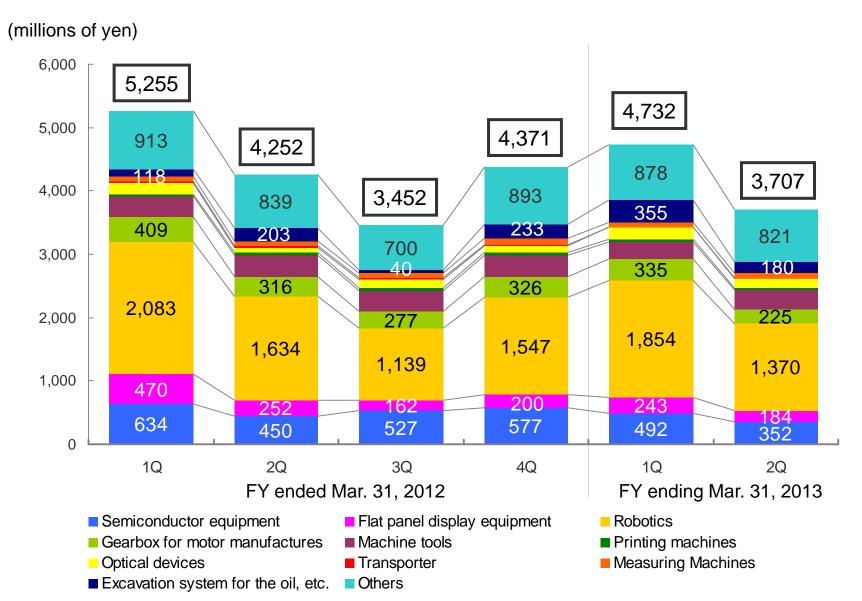
Sales trend line (non-consolidated)



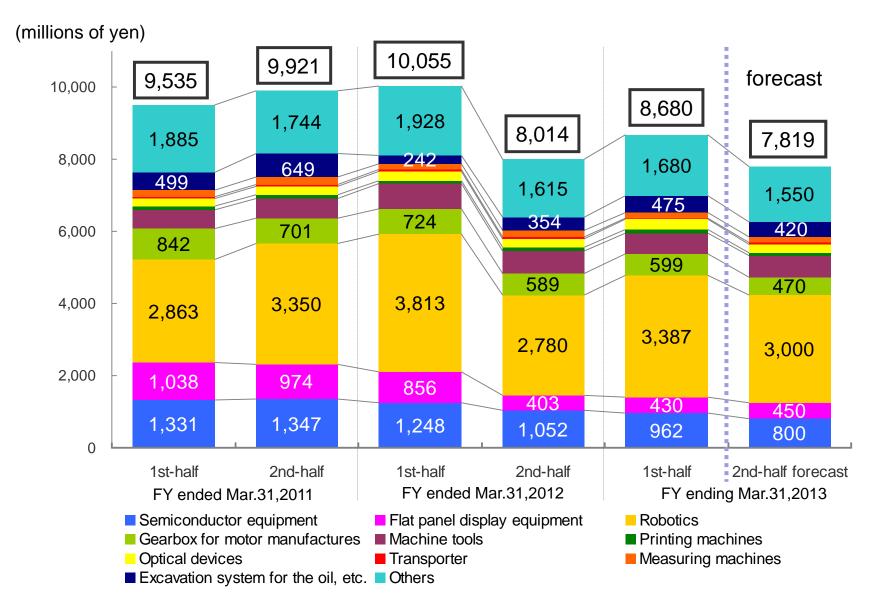
Sales trend line by product (non-consolidated)



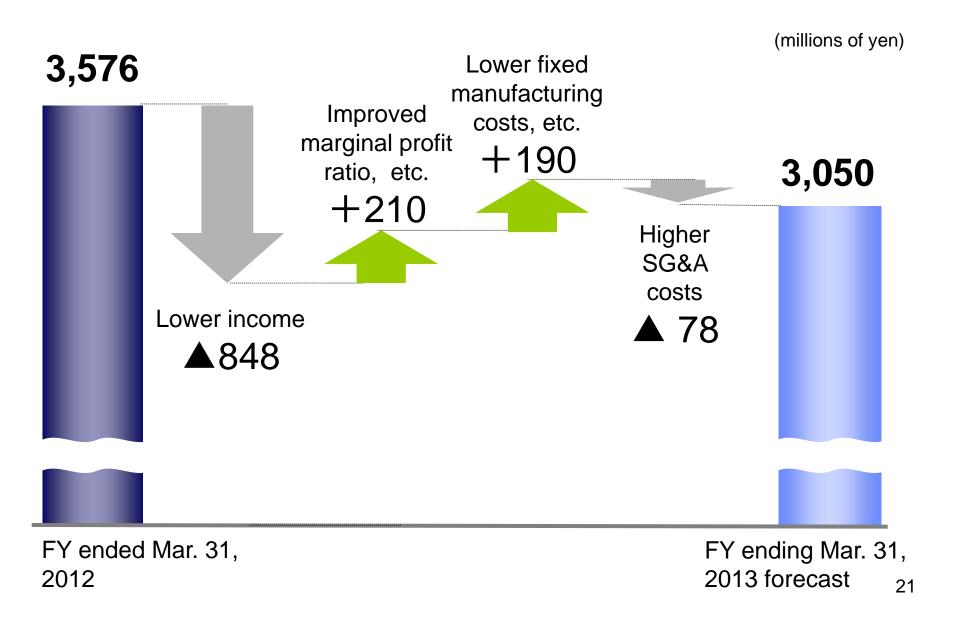
Non-consolidated bookings by application (quarterly)



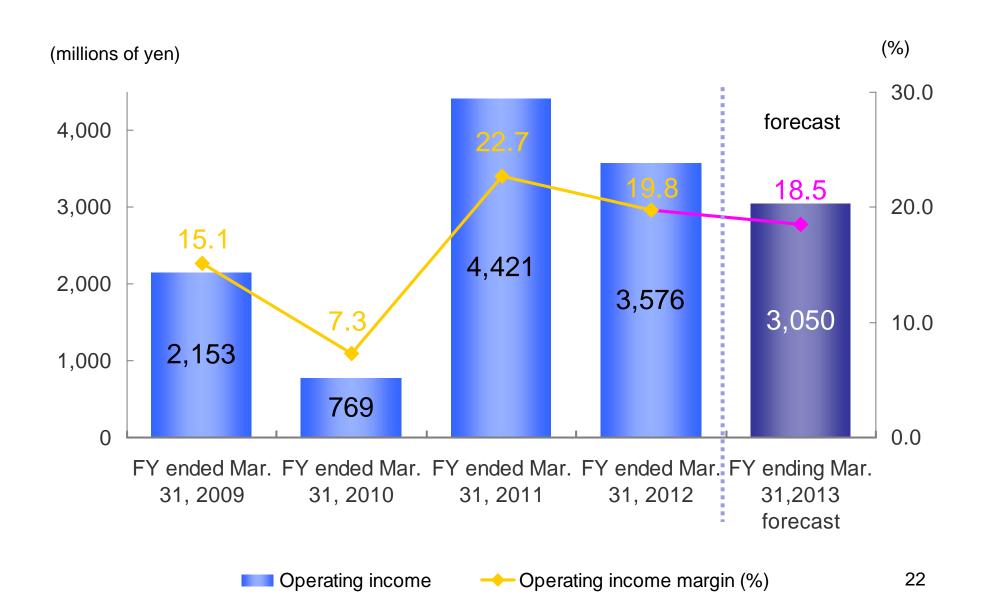
Non-consolidated net sales by application (premise for 2nd-half forecasts)



Factors in year-on-year change in non-consolidated operating income (fiscal year ending March 31, 2013 forecast)



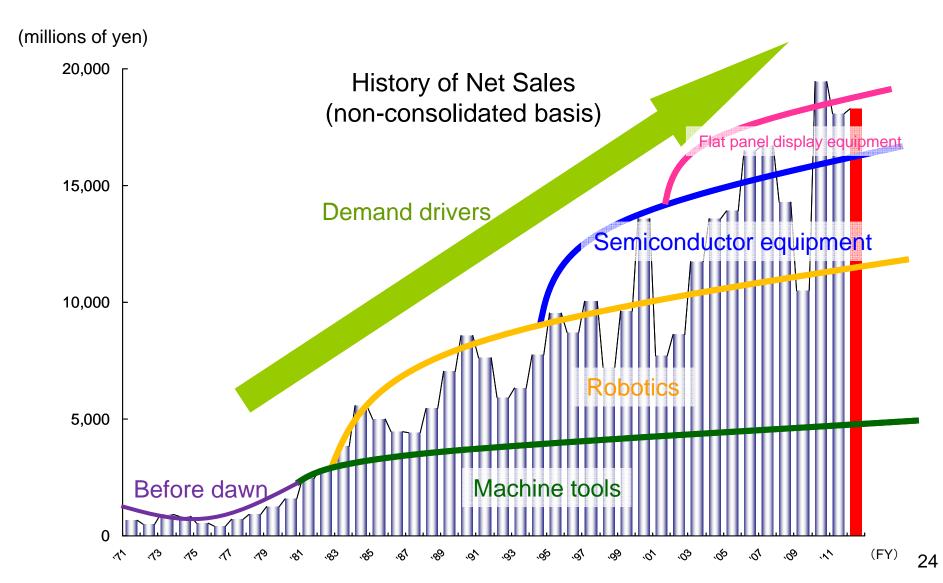
Trends in operating income (non-consolidated)





Dip in short-term demand cycle

Emerging nation demand losing steam; Europe's problems persist



Medium-term outlook for external environment

- 1. Stiffer competition and ups and downs for electronics firms
- 2. Weakening of domestic manufacturing industry bases
- 3. Japan's traits as a nation and manufacturing craft



Our management foundation

- ■Global markets are our target
- Accumulation of hard-to-imitate technologies and skills
- Financial strength to withstand short-term demand fluctuations For these reasons, the external environment does not present major obstacles to medium-term growth of our business.

Drivers of mid-term management plan achievement

Keys to medium-term growth

- Management giving top priority to quality and safety
- 2. Strengthening of core technologies
- 3. Wider choice of product variations
- 4. Stepped up sales expansion in Asia

Stepped up sales expansion in Asia

China

Sales expansion mainly through sales subsidiaries (also use of sales agents)

- New product sales expansion
- Technology services
- Marketing

Focus markets:

- Industrial robots
- Machine tools
- Semiconductor manufacturing equipment

Singapore

Use of machine parts trading firm for sales expansion

 New product sales expansion

Focus markets:

- Machine tools
- FPD manufacturing equipment



South Korea

Sales expansion using tech-savvy sales agents

- New product sales expansion
- Customized product orders

Focus markets:

- Machine tools
- Semiconductor manufacturing equipment
- FPD manufacturing equipment

<u>Taiwan</u>

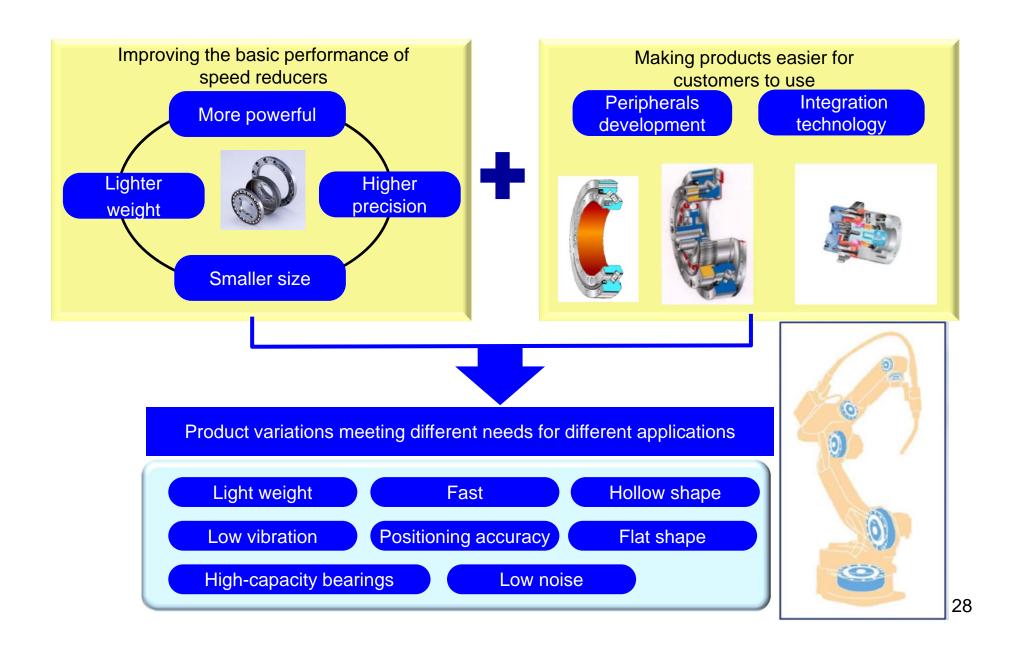
Use of machine parts trading firm for sales expansion

 New product sales expansion

Focus markets:

- Machine tools
- FPD manufacturing equipment

Wider choice of product variations



New product: Lightweight HarmonicDrive®

Lightweight Harmonic Drive®

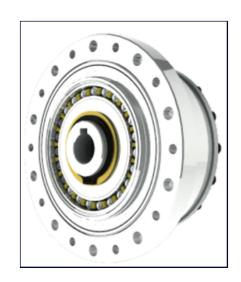
Achieves 20–30% lighter reducer weight at same torque capacity (compared to our previous products)



- Improved load capacity due to lighter-weight (more compact) robots
- > Shorter robot cycle time due to lightweight
- Lower energy use due to lightweight

■ Target markets

- Industrial robots
- > Service robots
- Semiconductor manufacturing equipment
- New applications, new markets





New product: High-torque planetary gear reducer

HPGP Series HarmonicPlanetary®

Achieves around 33% greater torque at same weight and dimensions (compared to our previous products)

■ Advantages

- More compact equipment possible
- > Shorter cycle time
- Longer lifetime
- Lower energy use due to lightweight

■ Target markets

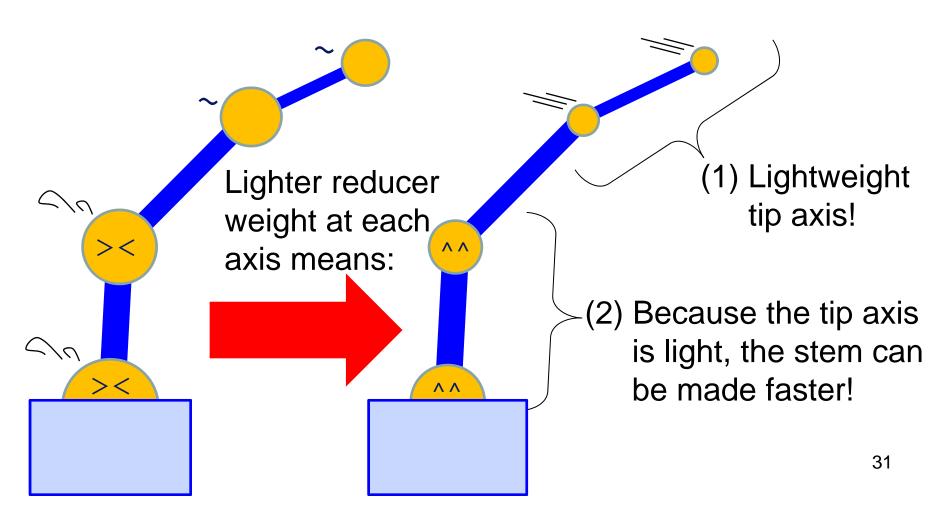
- Industrial robots (hand axis, running axis)
- Semiconductor manufacturing equipment
- Machine tools





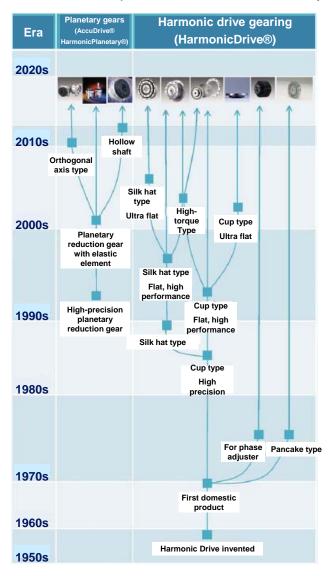
The benefits of lightweight reducers

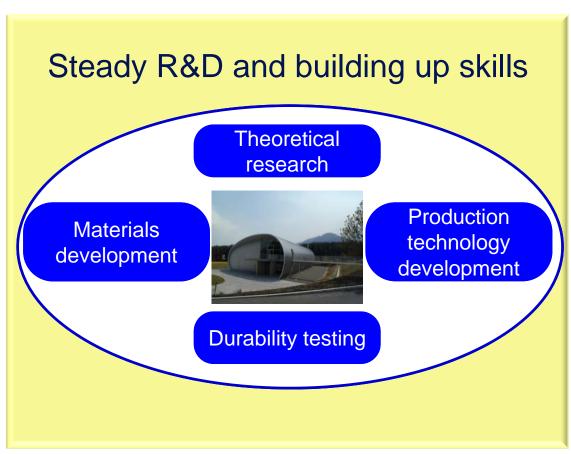
Enable motor downsizing at the reducer stem, along with greater robot speed and load capacity!



A never-ending upward spiral of technology and skills

■HDS and speed reducers over the years

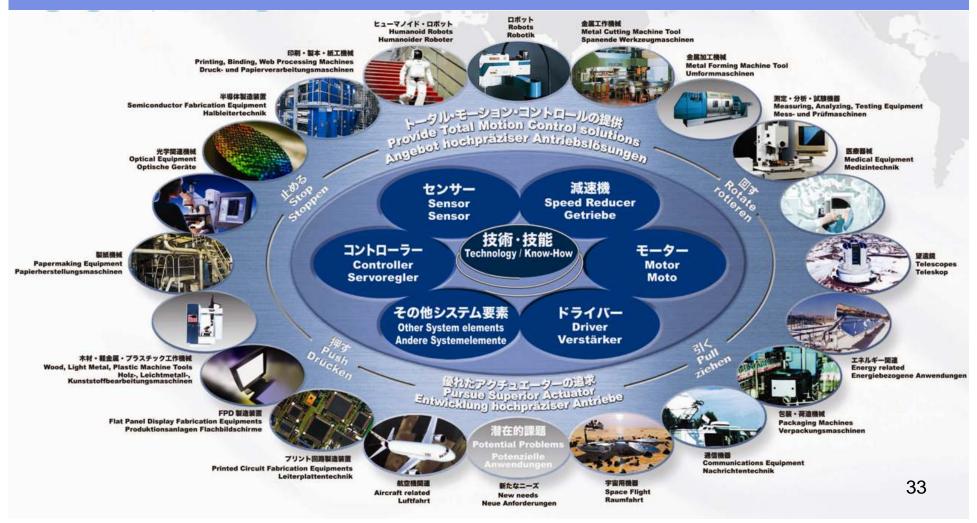




Total Motion Control

Business domain

Providing the value of Total Motion Control in precision control fields



The performance targets and other numerical data presented herein are forecasts based on information available to the HDS Group at the time this material was prepared, and are subject to the influence of uncertainties including those in the economic and competitive environment. Actual performance may therefore differ materially from the forecasts given in this material.

Harmonic Drive Systems Inc.

For more information:

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