





November 26, 2008

(JASDAQ 6890)

http://www.ferrotec.co.jp/

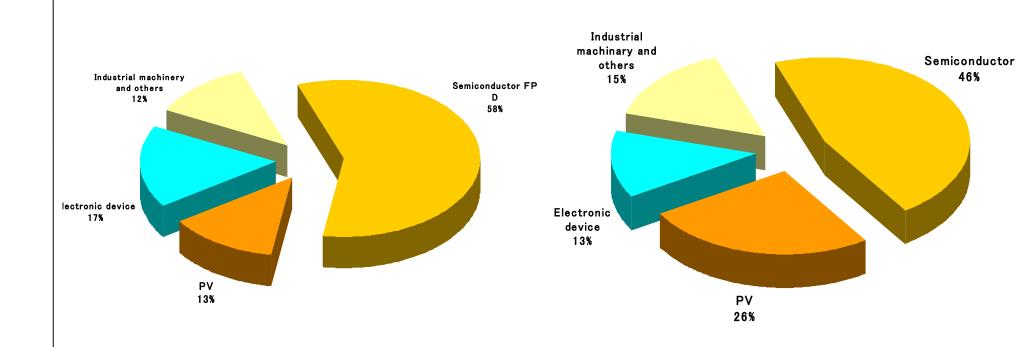
- 1. This 1st half results cover six months period from April to September of Ferrotec, and six months period from Jan. to June of consolidated subsidiaries and affiliated companies included in investment profit loss in equity method.
- 2. These materials were prepared for the purpose of providing information regarding the company's results of operations for the 1st half of the fiscal year ending March 31, 2009. These materials were prepared based on information available as of Nov. 14, 2008. All opinions, forecasts and other forward-looking statements are based on management's judgments in accordance with materials available at that time and may be changed without prior notice.

Sales by industry sector



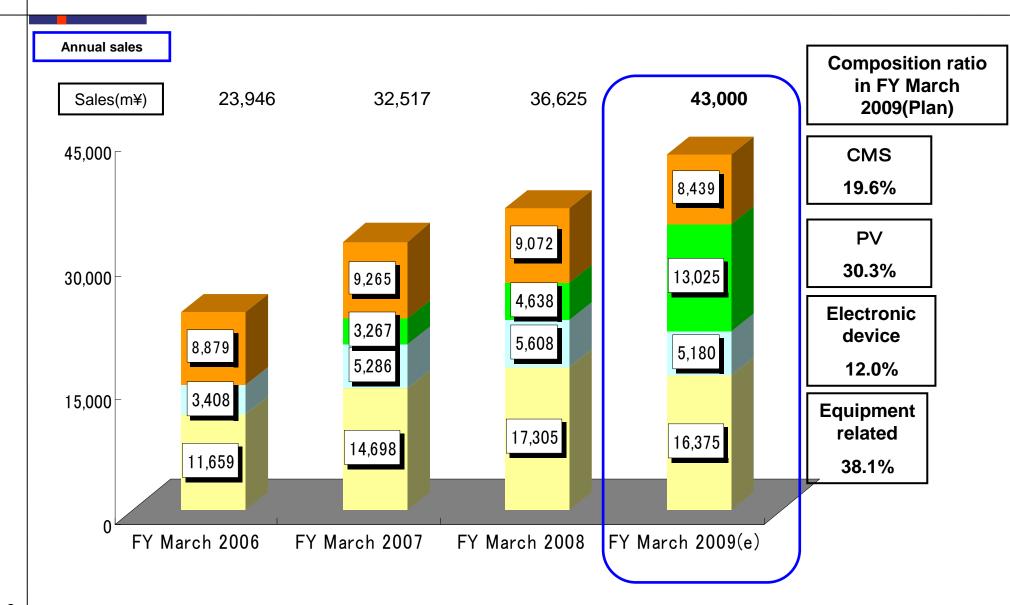
The first half of FY March 2008
Sales 17.9 billion yen

The first half of FY March 2009
Sales 19.5 billion yen



Sales trend by segment

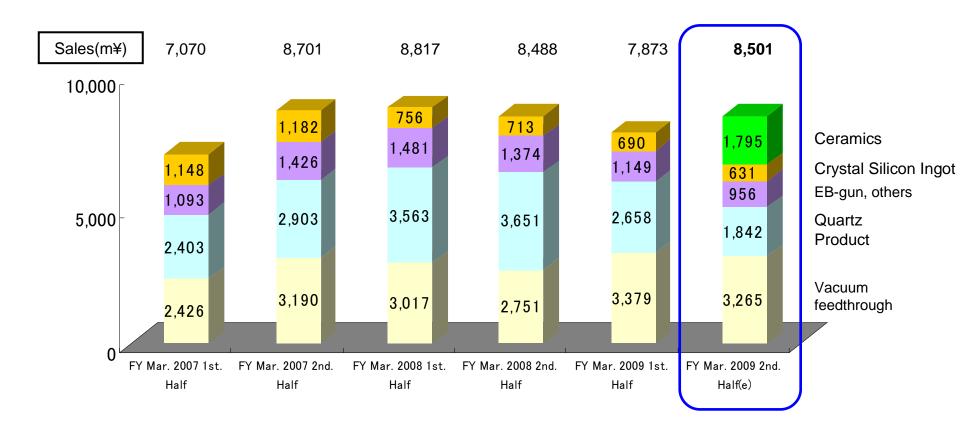




Equipment related business : Sales by product

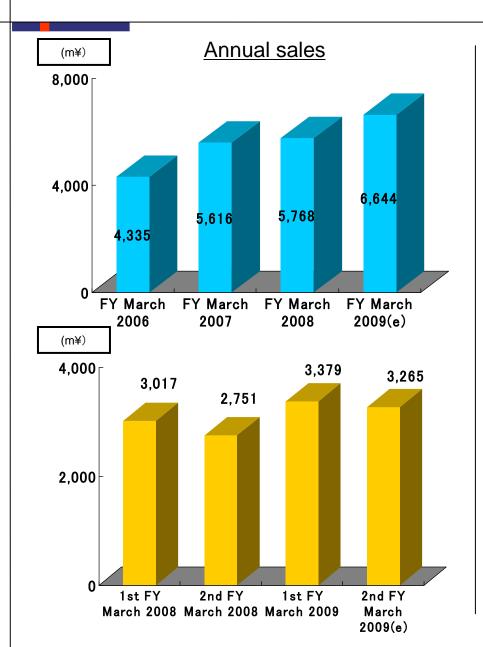


- Ceramic will be added from second half of FY 2009
- ☐ Silicon Product for PV Industry has been moved to PV Segment



Status and Outlook for Vacuum Feedthroughs





1. Status of 1st half of FY March 2009

- Capital expenditure in Semiconductor is in adjustment.
- Capital expenditure in FPD restarted.
- Growth in solar application.
- Strengthen sales activity for other industry in the US market.
- Solar application is going well in European market.

2. Outlook for 2nd half of FY March 2009

- No expectation in Semiconductor for both Japan and US market
- Slow down in FPD
- Little break in thin film solar application for Japan but sales will continue to be favorable in European market.

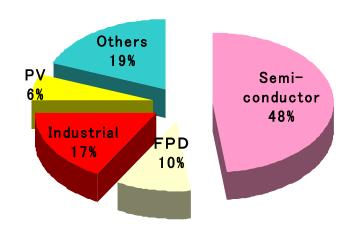
Strategies

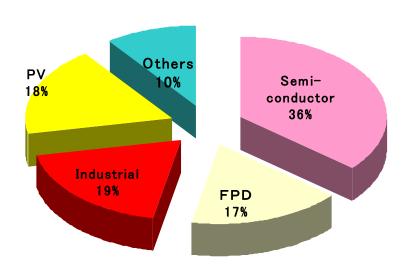
- Already built up the facilities to correspond to the increase for Ferrotec Single Crystal Si Growing System.
- Continue manufacturing vacuum parts including Chambers and Fringe.
- Sales reinforcement of FerroDrive for next fiscal year.
 Production of new product.
- Develop new market.



1st half of FY March 2008 Sales 3,017 million yen

1st half of FY March 2009 Sales 3,379 million yen

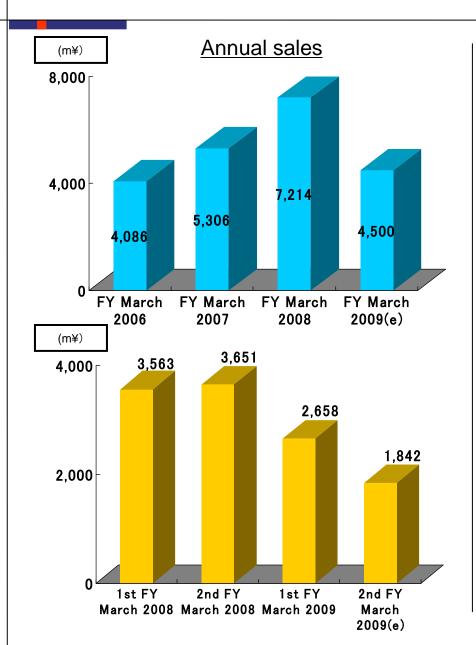




Industrial: Industrial Vacuum Equipment Others: Aero, Medical, Science etc

Status and Outlook for Quartz Products





1. Status of 1st half of FY March 2009

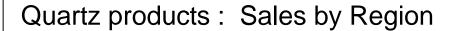
- Difficulty in orders for 300mm products
- Share is growing in OEM for US and China is flat.
- Share is growing for 300mm products in Asia especially in Taiwan.

2. Outlook for 2nd half of FY March 2009

- Price of the memory dropped and capital expenditure for 300mm is postponed. Rapid slow down of 300mm products due to the reduction of the production.
- Expecting decrease in orders from Japanese major company for thermal treatment equipment (Diffusion, CVD) and cleaning equipment.
- Recovery is expected after the 2nd half of next fiscal year, and changed the sales forecast significantly.

Strategies

- Increase the Chinese production of OEM products for US major company.
- Proactive sales to Taiwan foundry market.
- Expansion of sales network for solar application in Japan, Taiwan, and China.
- Sales collaboration with Ferrotec Ceramics.





1st half of FY March 2008 Sales 3,563 million yen

Europe

O%

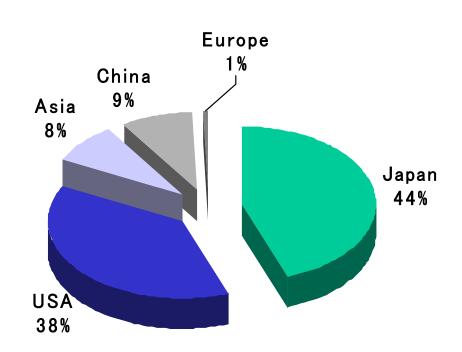
Asia China

5%

Japan

69%

1st half of FY March 2009 Sales 2,658 million yen



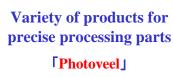
Ferrotec Ceramics Corporation Ceramics Products



Machinable Ceramics

Photoveel^R







High white Machinable Ceramics 「Photoveel L」



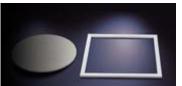
Super Machinable
Ceramics

[Photoveel II. II-S]











Parts for Semiconductor Manufacturing Equipment

Parts for FPD Manufacturing Equipment

For General Industries

Ceramics Material



(Alumina) 99.7%~99.99%

(Silicon Nitride)

(SIAION)

(Aluminum Nitride)

(Silicon Carbide)

(Yttria)

(Zirconia)

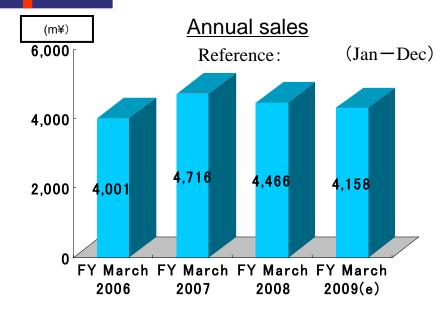
(Machinable Ceramics)

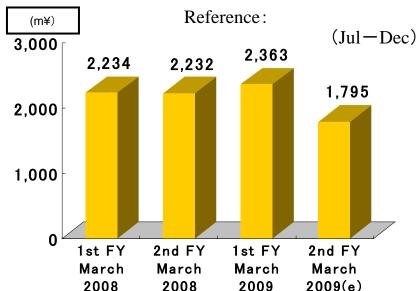


Wide Range of Ceramics Material

Status and Outlook for Ceramics Products







1. Status of 1st half of FY March 2009

- Favorable orders for Machinable Ceramics (Photoveel)
 - ⇒ For semiconductor testing equipment
- Order for Fine Ceramics remained flat.
 - ⇒ Semiconductor manufacturers reduced new investment.

2. Outlook for 2nd half of FY March 2009

- Huge adjustment in Memory.
 - ⇒Sudden drop and order decreased drastically from Summer
- Semiconductor manufacturers started to cancel or postpone new investment.
- Memory market starting to recover. Restart new investment.
- ⇒ After 2nd half of FY March 2010

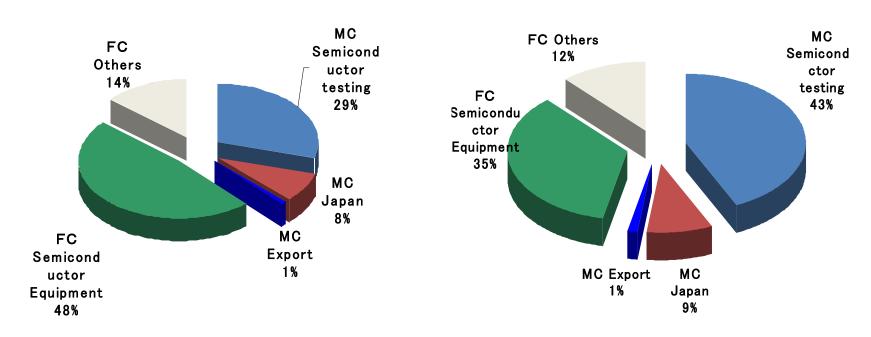
Strategies

- Corporation with Ferrotec USA.
 - ⇒ Sales activity of finding new customers in USA.
- Utilize Chinese factory to reduce the cost and be more competitive.
- Collaborate in sales with Quartz division.



1st half of FY March 2008 Sales 2,234 million yen

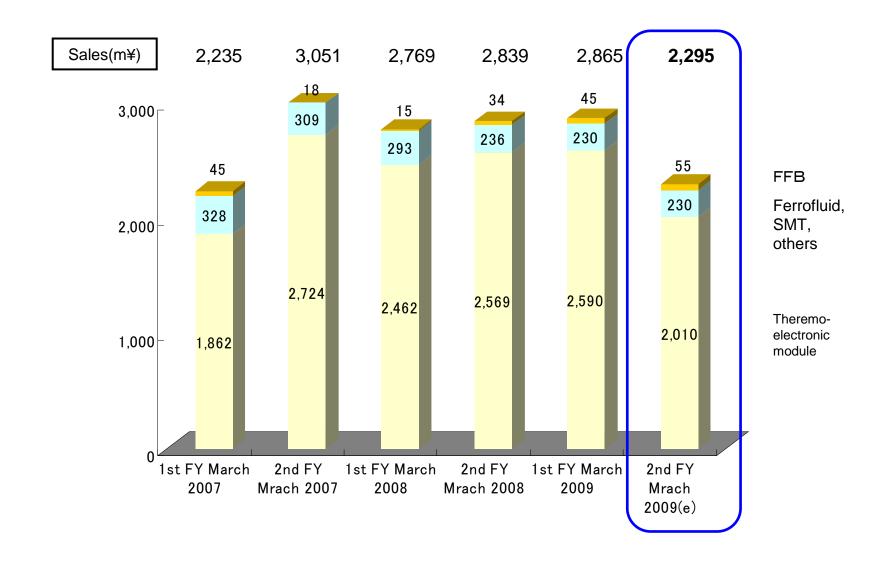
1st half of FY March 2009 Sales 2,363 million yen



FC(Fine Ceramics), MC(Machinable Ceramics)

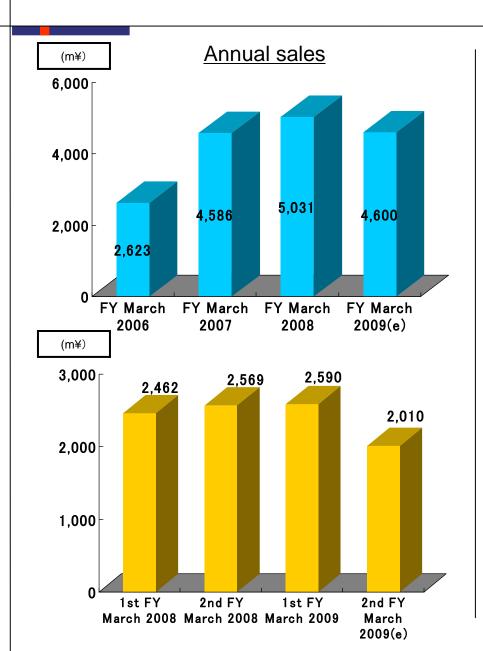
Electronic device business: Sales by product





Status and Outlook for Thermoelectric Module Products





1. Status of 1st half of FY March 2009

Automobile Seat Application

 Unable to achieve expected growth due to prolonged strike of GM parts supplier.

Other Application

 Sales for semiconductor and for Bio and medical markets are strong.

2. Outlook for 2nd half of FY March 2009

Automobile Seat Application

 Global economic downturn will affect the sales of automobile. Decline in order is expected.

Other Application

 Carry out two strategies which are high end products and low priced products for home appliances from medical, bio and optical sectors.

Strategies

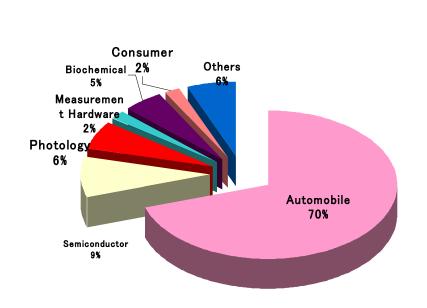
- Take shares by reducing the cost.
- Focus on sales activity for other applications to reduce dependence on automobile application.

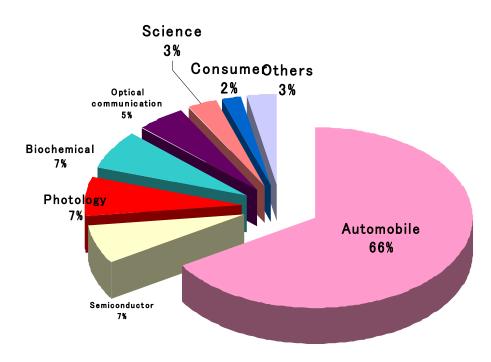
Thermo-electric Modules: Sales by category



1st half of FY March 2008 Sales 2,462 million yen

1st half of FY March 2009 Sales 2,590 million yen





Car Model adopting Climate Control Seat TM (CCSTM)

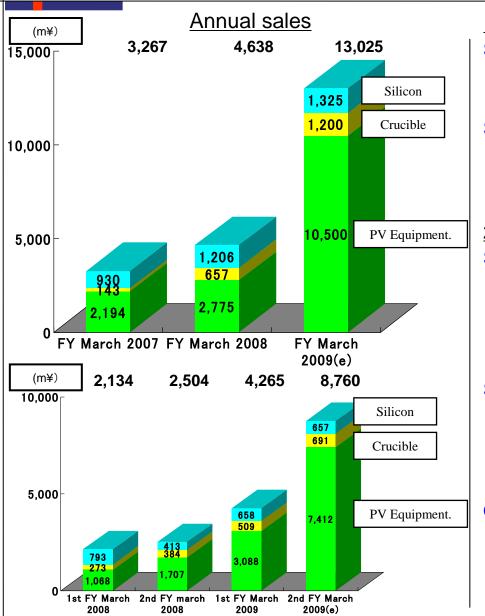
□ CCSTM are adopted by American, Japanese and the European manufacturers.

Car model adopting CCSTM(Source :AMERIGON HP, September 2008)

モデル名	モデル名
1 Lincoln Navigator SUV	30 Nissan Infiniti FX35, FX50
2 Ford Expedition SUV	31 Nissan Maxima
3 Lincoln Aviator SUV	
4 Lincoln LS luxury sedan	
5 Mercury Monterey minivan	
6 Lincoln Zephyr luxury sedan	
7 Cadillac XLR roadster	
8 Cadillac Escalad	
9 Cadillac Escalade EXT	
10 Cadillac Escalade ESV	INC COMPANIES AND ADMINISTRATION OF THE SAME ADMINISTRATION OF THE SAME AND ADMINISTRATION OF THE SAME AND ADMINISTRATION OF THE SAME AND ADMINISTRATION OF THE SAME ADMINISTRATION OF THE SAME AND ADMINISTRATION OF THE SAME AND ADMINISTRATION OF THE SAME ADMINIS
11 Cadilac DTS luxury sedan	
12 Buick Lucerne luxury sedan	
13 Hyndai Equus luxury sedan	
14 Infinity M45 luxury sports sedan	
15 Infinity Q45 luxury sedan	
16 Nissan Cima luxury sedan	
17 Nissan Fuga mid-sized sedan	
18 Lexus LS 430 luxury sedan	© eVox
19 Toyota Celsior luxury sedan	
20 Toyota Century luxury limousine	
21 Lexus LS 460 luxury sedan	
22 Lexus LS 460L luxury sedan	
23 Range Rover SUV	
24 Jaguar XJ Luxury sedan	
25 Lexus LS 600h L luxury hybrid sedan	
26 Jaguar XF Mid-size sports sedan	
27 Lincoln MKS	
28 Hyndai Genesis	
29 Lexus LX 570	

Status and Outlook for PV Related Products FCCOTCC





1. Status of 1st half of FY March 2009

Silicon Ingot Manufacturing Equipment

 Received large orders from Chinese Solar cell manufactures. Starting shipment from 2nd quarter steadily.

Single Crystal Si Ingot for Solar Application

 Supply of the Poly-silicon was delayed and sales was also delayed compared with the plan.

2. Outlook for 2nd half of FY March 2009 Silicon Ingot Manufacturing Equipment

- Started the shipment of Multi Crystal Si Ingot Growing System.
- Expecting the shipment of Single Crystal Si Ingot Growing System to increase.

Single Crystal Si Ingot for Solar Application

- Increase of production and sales of Silicon Ingot manufactured by Shanghai plant.
- Production delay due to the customer supplied raw material is expected to gradually resolve.

Quartz Crucible

 Expansion of Chinese customer and increase of shipment to Korean and Japanese customers.

Crystal Silicon Ingot Growing System



Multi

















Single Crystal Si Ingot

Single Crystal Si Ingot Growing System

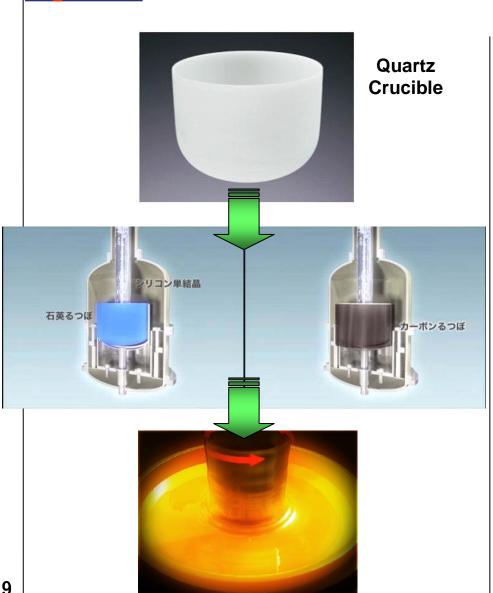
- Ramp up the production capacity to 40 units a month.
- Increase the customized equipment.
- Increase the staffs for maintenance service and process support.

Multi Crystal Si Ingot Growing System Expecting to become the growth driver for 2009.

- Ramp up the production capacity to 10 units a month.
- 450Kg charge will become the main stream.
- Single Crystal Si Cell manufacturers adopting the Multi System for the reuse of the raw material.

Quartz Crucible, Carbon Parts





Expansion in consumable and support business for Single Crystal Si Ingot Growing System.

Quartz Crucible

- Sales increase by receiving the certification from the customers. Increase production capacity.
- Production capacity 5,000 units per month
- Increased large orders from China, Japan, and Korea.

Market Potential

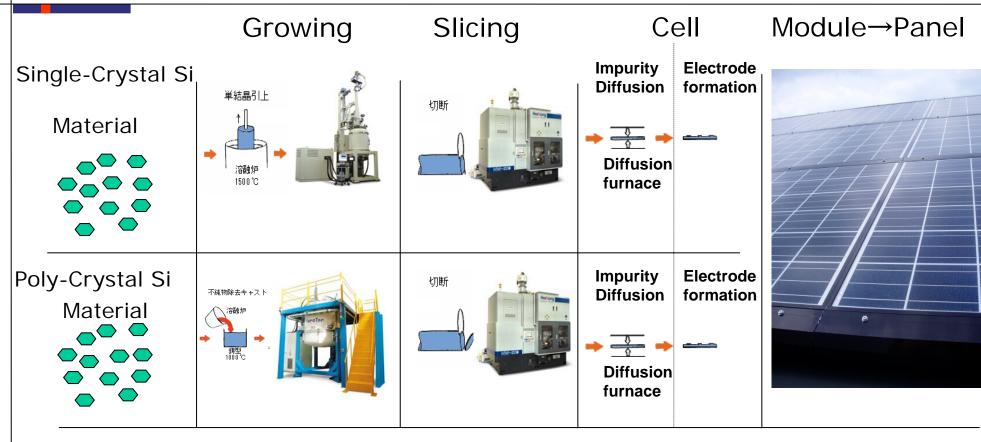
- Consume one Quartz Crucible for each Single Crystal Si Ingot growing process.
- Approximately 200 units will be consumed annually
- More than 400 Ferrotec Single Crystal Si Ingot Growing system has been delivered. The market size will be 80,000 units per year.

Single Crystal Si Ingot Growing System Support Business

- 1.Educational support for customer operators.
 - 2. Process guidance
 - 3. After-sales service (Introduction of onerous contract)
- Manufacture and Sales of Crucible for the equipment (Consumable)
- Manufacture and Sales of Carbon Parts for the equipment (Exchange Regularly)

Sales Strategy in PV sector





Thin-film

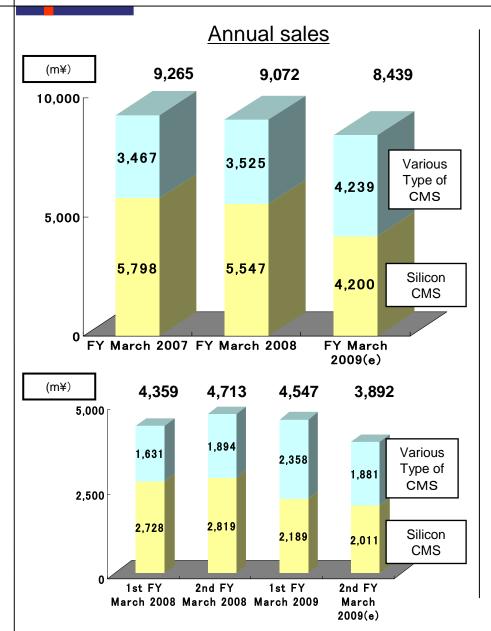
Supplying Crystal Ingot Growing System and Wire Saw for Crystal Silicon type Cell and Supplying Vacuum Feedthrough for both Crystal Silicon type Cell and Think Film type Cell.

Wire-Saw business started in 3rd quarter. Currently, customer approval is underway.



Status and Outlook for CMS Business





CMS Business Content

Contract Manufacturing, Wafer Processing

1. Status of 1st half of FY March 2009

Silicon CMS (Wafer Processing)

 Orders declined due to the depression in Semiconductor Industry

Cleaning of Equipment Parts

Semiconductor and liquid crystal foundries remained flat.

Machine Tool Production

 Orders declined from Japanese machine tool equipment manufacturers.

2. Outlook for 2nd half of FY March 2009

Silicon CMS (Wafer Processing)

Expecting a decline due to a Semiconductor market downturn

Cleaning Equipment Parts

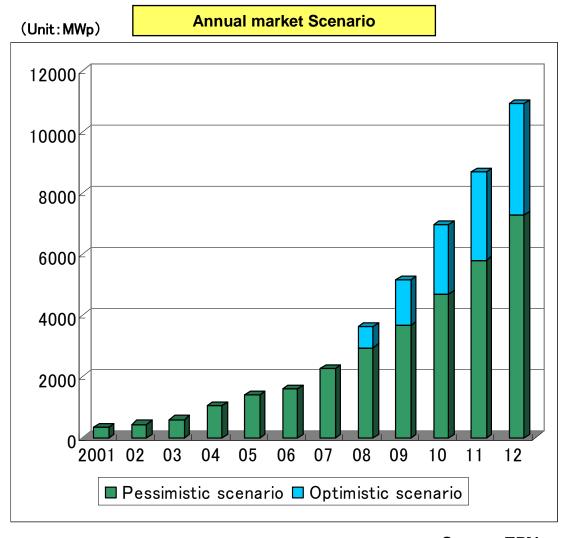
 Expecting to remain flat for Semiconductor and liquid crystal

Machine Tool Production

 Reduce the orders and transfer the staffs to the production of Crystal Ingot Growing System.

Reference Material for PV industry

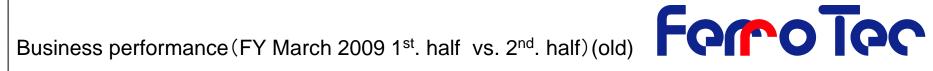




Business performance (FY March 2009 1st. half plan vs. results) (old FCTC)



		Plan of 1st	half of FY				
		March	2009	Results of	1st half of	FY March 2	009
	(m¥)	Amount	(%)	Amount	(%)	Change	(%)
Sales		18,600	100.0	19,551	100.0	951	5.1
	Vacuum feedthrough	2,757	14.8	3,379	17.3	622	22.6
	Quartz	2,727	14.7	2,658	13.6	△ 69	△ 2.5
	EB-gun•Crucible·others	1,956	10.5	1,657	8.5	△ 299	△ 15.3
	Silicon crystal ingot	1,340	7.2	1,358	6.9	18	1.3
	Equipment related	8,780	47.2	9,052	46.3	272	3.1
	Theremo module	2,148	11.5	2,590	13.2	442	20.6
	Ferrofluid,SMT, others	302	1.6	275	1.4	△ 27	△ 8.9
	Electronic device	2,450	13.2	2,865	14.7	415	16.9
	CMS	7,370	39.6	7,634	39.0	264	3.6
	(Silicon CMS)	2,358	12.7	2,189	11.2	△ 169	△ 7.2
	(PV Equipment)	2,930	15.8	3,088	15.8	158	5.4
Gross Profits		5,900	31.7	6,343	32.4	443	7.5
SG&A		4,100	22.0	4,288	21.9	188	4.6
Operating Profits		1,800	9.7	2,054	10.5	254	14.1
Ordinary Profits		1,400	7.5	1,819	9.3	419	29.9
Net income		950	5.1	877	4.5	△ 73	△ 7.7





		FY March 2009 1st. FY March 2009 2nd. Half					
	(m¥)	Amount	(%)	Amount	(%)	Change	(%)
Sales		19,551	100.0	23,449	100.0	3,898	19.9
	Vacuum feedthrough	3,379	17.3	3,265	13.9	△ 114	△ 3.4
	Quartz	2,658	13.6	1,842	7.9	△ 816	△ 30.7
	Ceramics	105	0.5	1,795	7.7	1,690	1609.5
	Silicon crystal ingot	2,910	14.9	2,947	12.6	37	1.3
	Equipment related	9,052	46.3	9,849	42.0	797	8.8
	Theremo module	2,590	13.2	2,010	8.6	△ 580	△ 22.4
	Ferrofluid,SMT, others	275	1.4	285	1.2	10	3.6
	Electronic device	2,865	14.7	2,296	9.8	△ 569	△ 19.9
	CMS	7,634	39.0	11,304	48.2	3,670	48.1
	(Silicon CMS)	2,189	11.2	2,011	8.6	△ 178	△ 8.1
	(PV Equipment)	3,088	15.8	7,412	31.6	4,324	140.0
Gross Profits		6,343	32.4	6,656	28.4	313	4.9
SG&A		4,288	21.9	5,011	21.4	723	16.9
Operating Profits		2,054	10.5	1,645	7.0	△ 409	△ 19.9
Ordinary Profits		1,819	9.3	1,280	5.5	△ 539	△ 29.6
Net income		877	4.5	722	3.1	△ 155	△ 17.7



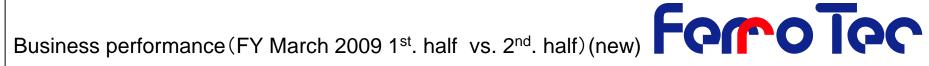
Business performance (FY March 2008 vs. 2009) (old)



		FY Marc	h 2008	FY March 2	2009(e)		
	(m¥)	Amount	(%)	Amount	(%)	Change	(%)
Sales		36,625	100.0	43,000	100.0	6,375	17.4
	Vacuum feedthrough	5,768	15.7	6,644	15.5	876	15.2
	Quartz	7,214	19.7	4,500	10.5	△ 2,714	△ 37.6
	Ceramics	0	0.0	1,900	4.4	1,900	#DIV/0!
	Silicon crystal ingot	6,186	16.9	5,857	13.6	△ 329	△ 5.3
	Equipment related	19,168	52.3	18,901	44.0	△ 267	△ 1.4
	Theremo module	5,031	13.7	4,600	10.7	△ 431	Δ 8.6
	Ferrofluid,SMT, others	578	1.6	560	1.3	Δ 18	△ 3.1
	Electronic device	5,609	15.3	5,160	12.0	△ 449	△ 8.0
	CMS	11,848	32.3	18,939	44.0	7,091	59.8
	(Silicon CMS)	5,547	15.1	4,200	9.8	△ 1,347	△ 24.3
	(PV Equipment)	2,775	7.6	10,500	24.4	7,725	278.4
Gross Profits		10,640	29.1	13,000	30.2	2,360	22.2
SG&A		7,583	20.7	9,300	21.6	1,717	22.6
Operating Profits		3,057	8.3	3,700	8.6	643	21.0
Ordinary Profits		2,415	6.6	3,100	7.2	685	28.4
Net income		1,903	5.2	1,600	3.7	△ 303	△ 15.9
Capital investment		2,449	6.7	2,500	5.8	51	2.1
Depreciation		2,144	5.9	2,200	5.1	56	2.6

Business performance (FY March 2009 1st. half plan vs. results) (new)

		Plan of 1st half of FY March 2009		Results of 1st half of FY March 2009			109
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Sales		18,600	100.0	19,551	100.0	951	5.1
	Vacuum feedthroughs	2,757	14.8	3,379	17.3	622	22.6
	Quartz	2,727	14.7	2,658	13.6	△ 69	△ 2.5
	Ceramics	0	0.0	105	0.5	105	#DIV/0!
	Silicon products	2,041	11.0	1,731	8.9	△ 310	△ 15.2
	Production device Related	7,525	40.5	7,873	40.3	348	4.6
	Thermo-electric Modules	2,148	11.5	2,590	13.2	442	20.6
	Ferro fluid,FFB&Others	302	1.6	275	1.4	△ 27	△ 8.9
	Electronic devices	2,450	13.2	2,865	14.7	415	16.9
	Quartz crucibles	715	3.8	509	2.6	△ 206	△ 28.8
	Solar silicon	540	2.9	668	3.4	128	23.7
	Si Growing Equip.	2,930	15.8	3,088	15.8	158	5.4
	PV	4,185	22.5	4,265	21.8	80	1.9
	CMS	4,440	23.9	4,547	23.3	107	2.4
Gross Profits		5,900	31.7	6,343	32.4	443	7.5
SG&A		4,100	22.0	4,288	21.9	188	4.6
Operating Profits		1,800	9.7	2,054	10.5	254	14.1
Ordinary Profits		1,400	7.5	1,819	9.3	419	29.9
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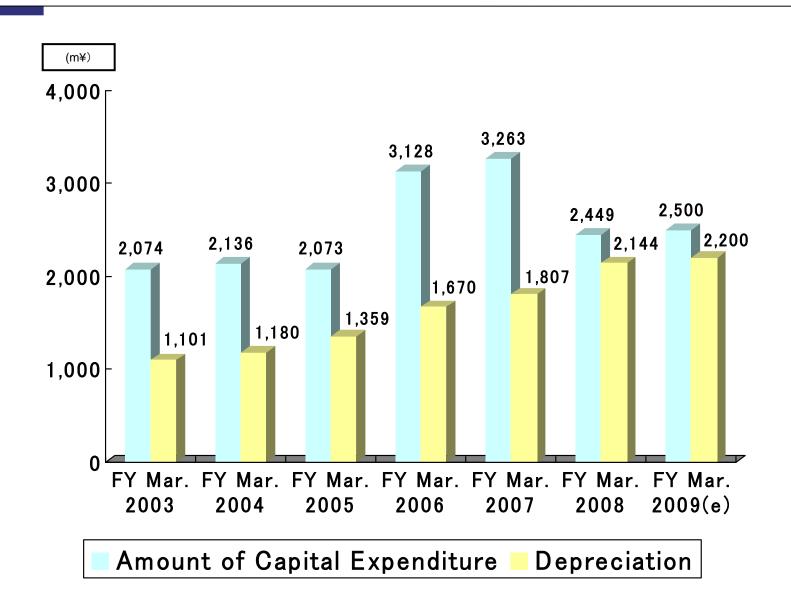
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	Quartz	2,658	13.6	1,842	7.9	△ 816	△ 30.7
	Ceramics	105	0.5	1,795	7.7	1,690	1609.5
	Silicon products	1,731	8.9	1,598	6.8	△ 133	△ 7.7
	Production device Related	7,873	40.3	8,501	36.3	628	8.0
	Thermo-electric Modules	2,590	13.2	2,010	8.6	△ 580	△ 22.4
	Ferro Fluid,FBB&Others	275	1.4	285	1.2	10	3.6
	Electronic devices	2,865	14.7	2,295	9.8	△ 570	△ 19.9
	Quartz crucibles	509	2.6	691	2.9	182	35.8
	Solar sikicon	668	3.4	657	2.8	Δ 11	△ 1.6
	Si Growing Equip.	3,088	15.8	7,412	31.6	4,324	140.0
	PV	4,265	21.8	8,760	37.4	4,495	105.4
	CMS	4,547	23.3	3,892	16.6	△ 655	△ 14.4
Gross Profits		6,343	32.4	6,656	28.4	313	4.9
SG&A		4,288	21.9	5,011	21.4	723	16.9
Operating Profits		2,054	10.5	1,645	7.0	△ 409	△ 19.9
Ordinary Profits		1,819	9.3	1,280	5.5	△ 539	△ 29.6
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Business performance (FY March 2008 vs. 2009) (new)

	<u> </u>	FY March 2008		FY March 2009(e)			
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	Quartz	7,214	19.7	4,500	10.5	△ 2,714	△ 37.6
	Ceramics	0	0.0	1,900	4.4	1,900	#DIV/0!
	Silicon products	6,186	16.9	3,331	7.7	△ 2,855	△ 46.2
	Production device Related	19,168	52.3	16,375	38.1	△ 2,793	△ 14.6
	Thermo-electric Modules	5,031	13.7	4,600	10.7	△ 431	△ 8.6
	Ferro fluid,FBB&Others	578	1.6	560	1.3	△ 18	△ 3.1
	Electronic devices	5,609	15.3	5,160	12.0	△ 449	△ 8.0
	Quartz crucible	657	1.8	1,200	2.8	543	82.6
	Solar silicon	1,206	3.3	1,325	3.1	119	9.9
	Si Growing Equip.	2,775	7.6	10,500	24.4	7,725	278.4
	PV	4,638	12.7	13,025	30.3	8,387	180.8
	CMS	9,702	26.5	8,439	19.6	△ 1,263	Δ 13.0
Gross Profits		10,640	29.1	13,000	30.2	2,360	22.2
SG&A		7,583	20.7	9,300	21.6	1,717	22.6
Operating Profits		3,057	8.3	3,700	8.6	643	21.0
Ordinary Profits		2,414	6.6	3,100	7.2	686	28.4
Net income		1,903	5.2	1,600	3.7	△ 303	△ 15.9
Capital investment		2,449	_	2,500	5.8	51	2.1
Depreciation		2,144	_	2,200	5.1	56	2.6

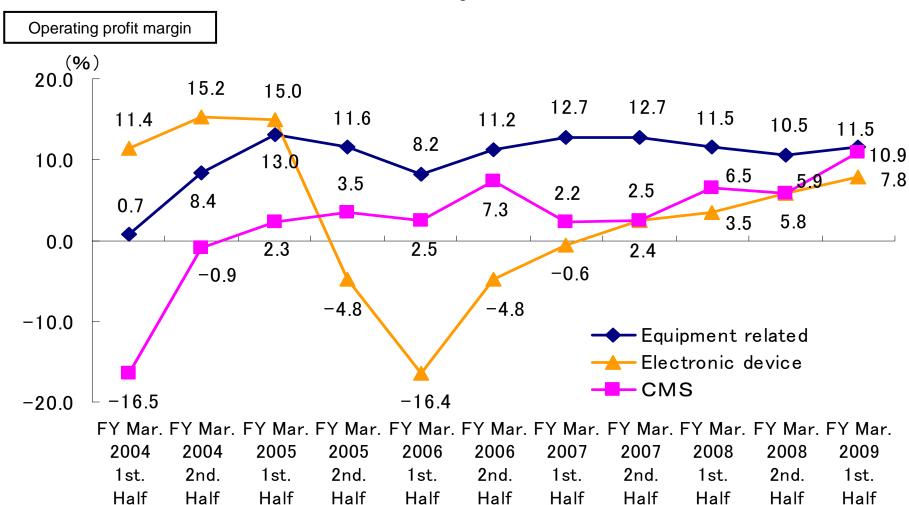




Operating Margin by Business Segment (old)



- ☐ Equipment-related segment continues to perform well
- Both the electronic devices & CMS are recovering

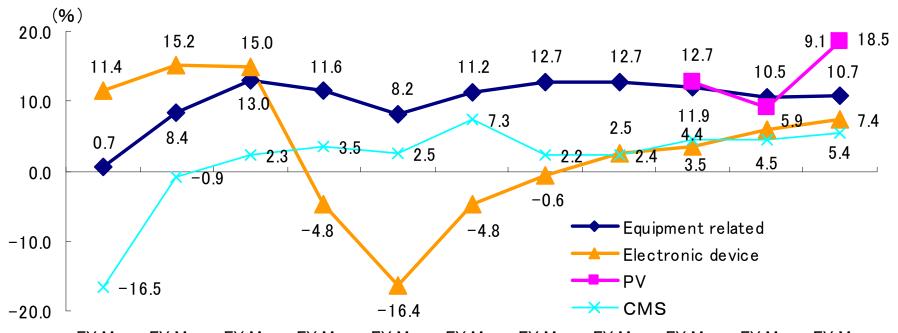


Operating Margin by Business Segment (new)



- PV and Equipment-related segment continues to perform well
- Both the electronic devices & CMS are recovering

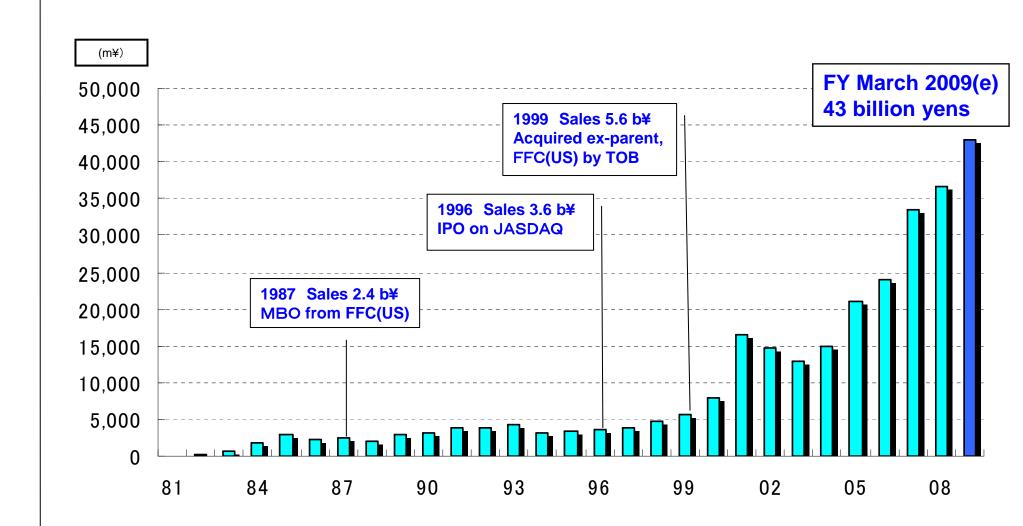
Operating profit margin



FY Mar. 2004 2004 2005 2005 2006 2006 2007 2007 2008 2008 2009 1st. Half 2nd. Half 1st. Half

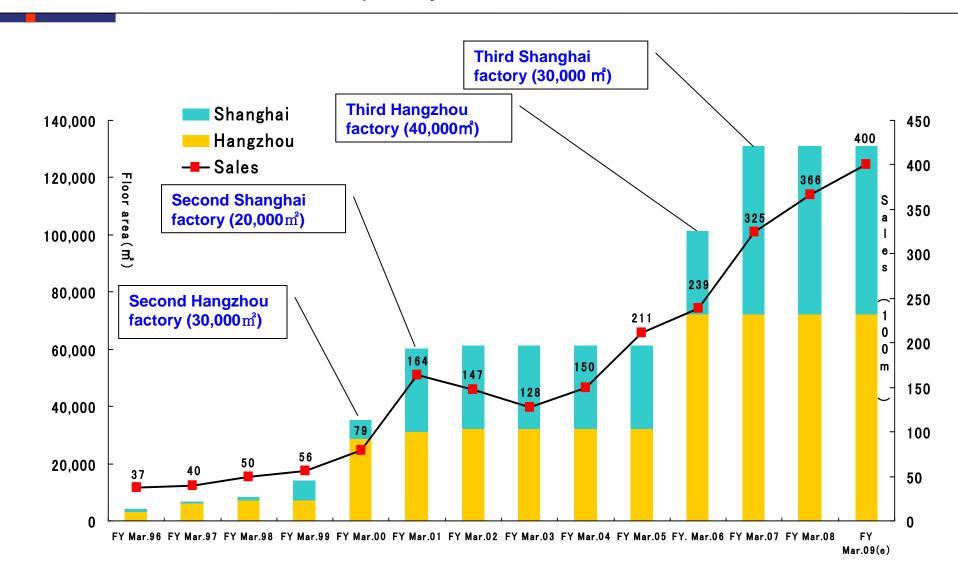






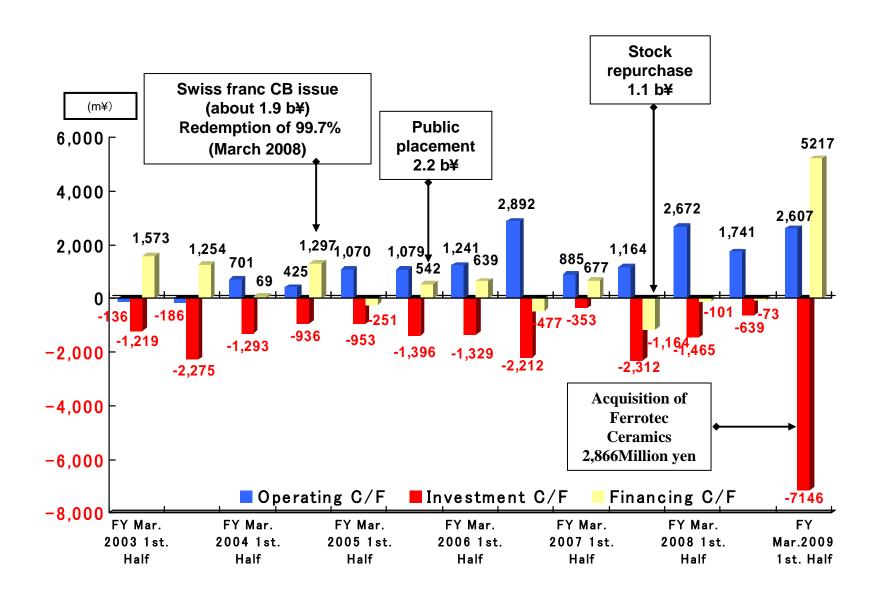






Cash Flow trend

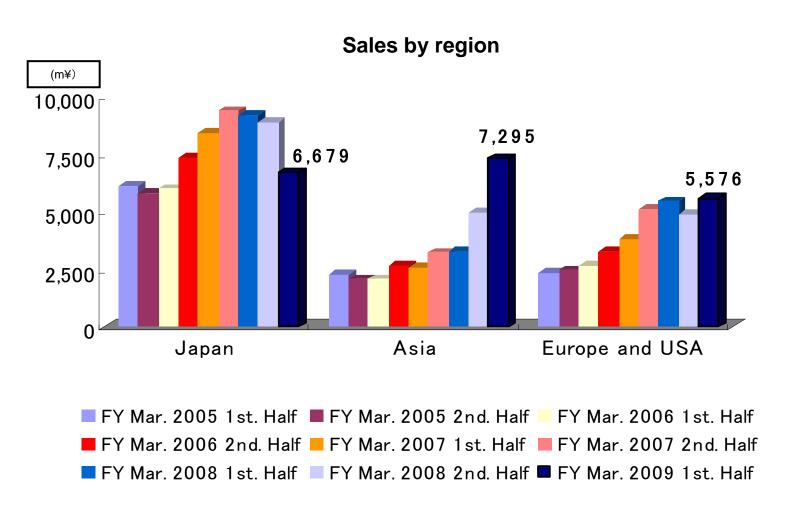




Sales by region



■ Sales in Asia is growing



Strategies for M&A and Alliances



Past M&A and alliances ---- Acquisition of companies with manufacturing technologies and alliances to enlarge business operations

Time	Company acquired/Alliance partner	Description
July. 2008	Acquired of Sumikin Ceramics. Changed the name of the company.	Acquired 90% of Sumikin Ceramics and Quartz Corporation 's(SCQ) stock after SCQ divests all business excluding the Ceramic business. New company's name is Ferrotec Ceramics.
May. 2008	Business cooperation of Wire-Saw and establishment of joint venture for trading Wire-Saw outside Japan with Tokyo Rope Manufacturing Co., Ltd	Tokyo Rope Group and Ferrotec Group agreed to form an alliance to manufacture and establish a joint venture to distribute wire saws in countries other than Japan.
Dec. 2007	Jointly established an assembly sales company in Korea.	Established "CMC Ferrotec" with the local company for the manufacture of solar cell manufacturing equipment.
April, 2007	Established a joint venture Manufacturing Corporation in Korea	Established joint venture corporation Ferrotec Korea Co.Ltd with Korean Company(KSMC Corp) for manufacturing Vacuum Feedthrough.
Nov. 2006	Merger and liquidation	Merged with Ferrotec Precision, which produces Vacuum feedthrough. Liquidated two subsidiaries(Dec.).
Sep. 2006	Established a joint venture in Taiwan	Established Ferrotec Taiwan jointly with a local partner to sell vacuum feedthroughs and offer maintenance services
Dec. 2005	Established a joint venture with D Ceramics Inc. (USA)	Established joint venture in China to manufacture ceramics
July 2005	Acquired NORD Co., Ltd.(Russia)	Acquired company that manufactures and sells Peltier (thermoelectric) devices in order to increase share of global market
May 2005	Business alliance with KSM Inc.(Korea)	Alliance for mutual sales of vacuum feedthroughs and products associated with semiconductor manufacturing equipment
Oct. 2004	Acquired trade right from Advanced Fluid Systems(U.K.)	Purchased rights from this company for the European vacuum feedthrough business
July 2004	Exclusive contract with Applied Films(Germany)	Gave this company exclusive rights to purchase Ferrotec vacuum feedthroughs
Oct. 2003	Business and financial alliance with Aliontek	Technology alliance with ALIONTEK CORPORATION, which has technology for the grinding of quartz products, strengthened manufacturing technology for quartz products in China
July 2002	Established a joint venture Diacelltec Corporation with Mitsubishi Cable Industries, Ltd	Established jointly owned company to manufacture and sell lithium-ion batteries and take over the lithium-ion battery business of Mitsubishi Cable
Feb. 2002	Business alliance with Toshiba Ceramics and Mitsui Co. for wafer production by commissioning	Ferrotec silicon wafer production equipment moved to China factory to conduct a CMS business, and manufacturing is outsourced to this factory
Feb. 2002	Acquired control of Ferrotec Silicon through exchange of shares	Group acquires manufacturing technology and operating rights for silicon crystal ingots