

Hirano Tecseed (6245 JP)

A Fabless Maker Specialised in Coating Technologies



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CONTENTS

HT's technology core competences and business model strengths and risks	2
Technology core competences	2
Strengths and Risks of HT's business model	2
Strengths	2
Risks.....	3
Understanding HT's cash flow	3
Recent earnings	3
FY22 results	3
Orders and Order Backlog.....	4
Performance by Segment	5
Sales by Application	5
FY23 Outlook.....	6
long-term vision 2030.....	8
Vision and Target	8
Capital Allocation Policy.....	8
TSE's PBR1x Argument	8
Financial Summary.....	9
General disclaimer and copyright.....	11

HT'S TECHNOLOGY CORE COMPETENCES AND BUSINESS MODEL STRENGTHS AND RISKS

Technology core competences

Hirano Tecseed [HT] is a machinery maker specialised in coating, laminating, drying, heat treatment and line control technologies. A coating machine is used to place thin liquid coating on materials such as films, metal foil, paper, and fabric. Once the liquid is dry, the machine then rolls up the coated materials for easy transport. Currently, HT's machinery is mainly used in electrode coating for secondary lithium-ion batteries [LiB], often called rechargeable batteries, used in electric vehicles [EVs], and electronics materials such as multilayered ceramic capacitors [MLCCs] used in various devices such as smartphones.

A primary battery is a portable voltaic cell that is not rechargeable, whereas a secondary battery is a portable voltaic cell that is repeatedly rechargeable. According to the International Energy Agency [IEA], the +65% YoY growth in automotive-use LiB demand – from 330GWh in 2021 to 550GWh in 2022 – was primarily due to growth in electric passenger car sales, with new registrations increasing by +55% YoY in 2022.

The auto industry is shifting away from the use of nickel-metal hydride batteries and lead-acid batteries to LiBs as (1) they have the highest energy density among secondary (rechargeable) batteries and (2) LiBs can be smaller in size but still produce high output. According to Fuji Keizai, demand for xEVs applications is growing due to increased demand for EVs. In 2025, the market is forecast to be worth approx. ¥12.3trillion. xEV applications are expected to continue to drive the market, as automakers continue raise their EV sales targets, bolstered by the launch new EV models.

HT's technological core competences lie in 1) coating and line control, and 2) heat and circulation technology. The firm has mainly two segments, categorised based on base materials that are processed by its machine. Those are:

1. **Coating and Laminating Machinery Segment:** Here, the coating machinery process is for coating basic materials such as film, sheet, paper, metal foil. The largest proportion of sales are generated from electrode coating machines for secondary LiB batteries for EVs.

The coating machine market was a niche market, however, due to the growing use of LiBs in EVs, demand for electrode coating equipment – that offers faster speed and functionality – is on the rise. HT estimates that the current size of the LiB electrode coating equipment market is around ¥200~300bil. In the past, HT had approx. 20~30% market share in this market with sales of ¥20~25bil, however, due to the market growth, the firm's market share has likely contracted.

2. **Industrial Machinery Segment:** This segment includes polymer chemical machinery to coat materials such as non-woven fabric (e.g., diapers), glass fibre, carbon fibre, composite materials, glass substrate, and other new materials.

Strengths and Risks of HT's business model

Strengths

- **Customised products**

HT develops coating machines that are tailored to each customer's unique needs. Therefore, having close and trusted ties with its customers' R&D departments is key to the firm's ability to design and create machinery to meet those needs. HT established a technology demonstration centre, Technicum, which operates R&D to support its customers' product development. At the site, HT runs testing facilities of a similar scale to its customers' own production facility.

- **Fabless maker**

HT is practically a fabless maker; hence its main function is to capture customers' unique coating requirements, in its designs. Once agreed, the firm's subcontractors are engaged to manufacturing the custom-designed product. Many of HT's subcontractors are based overseas and handle the bulk of the manufacturing processes. If the order to delivery progresses smoothly, the fabless business model will likely produce favourable profitability.

Risks

- **Cash flow**

In FY18, HT generated an OPM of 14.8%. However, during the pandemic, the weakness in HT's fabless business model became evident. Lead times between submitting a quote to a customer, receiving an order, and final delivery was extended during the pandemic due to supply chain disruptions. Due to obligations under the Act on the Prevention of Delay in Payment to Subcontract, the firm pays subcontractors within 60 days post delivery. The supply chain disruptions, however, caused customers to change their delivery locations. Subsequently, this led to delays to the progress of the production process and affected earnings in FY21~22.

Understanding HT's cash flow

The aforementioned delay in the progress of production caused HT's FY22 free cash flow [FCF] to fall to -¥10,159mil from ¥2,300mil in FY21, and the order backlog surged to a historical record level of ¥79,906mil (+16.1% YoY). Whilst a high level of order backlogs suggests stable future cash from operations, frequent changes in customers' requirements will impact cash flow generation.

The problem with HT's business model is an imbalance between the turnover in sales receivable and accounts payable – where the firm pays its supplier and subcontractors within 60days, while HT receives revenue on percentage of progress basis over the course of 2~2.5 years. Hence, sales receivables in the current account on the balance sheet [BS] is not a current asset since nearly 90% of the sales receivable – the fee that HT agrees with a customer at the time of order placement – is a contract asset.

The order process is as follows:

1. Submit a quote to a customer,
2. Once agreed and an order is placed, the entire budget is fixed at a certain price. Here, HT books the total amount of the "order". Thereafter a proportion of the work-in-progress completed recognised as sales (contract asset) in each year until the project is completed,
3. HT allocates production to its subcontractors,
4. Final assembly, installation and inspection takes place. At this point, the remaining order backlog will be moved to the sales account on the P&L. On the balance sheet, contract assets equal to the order backlog will be moved to the sales receivables account.

RECENT EARNINGS

FY22 results

Hirano Tecseed reported FY22 OP of ¥3,093mil (-22.4% YoY) on sales of ¥42,423mil (+12.0% YoY). While sales improved, OP fell due to the continued shortage of materials, especially electronics parts, which led to delayed shipments and a surge in material prices. Declines in productivity, together with surging material costs, resulted in HT's gross profit margin [GPM] contracting from 18.6% in FY21 to 15.7% in FY22. SG&A rose +16.8% YoY, due to an increase in sales commission to distributors, leading to OPM declining -3.2ppt YoY to 7.3%.

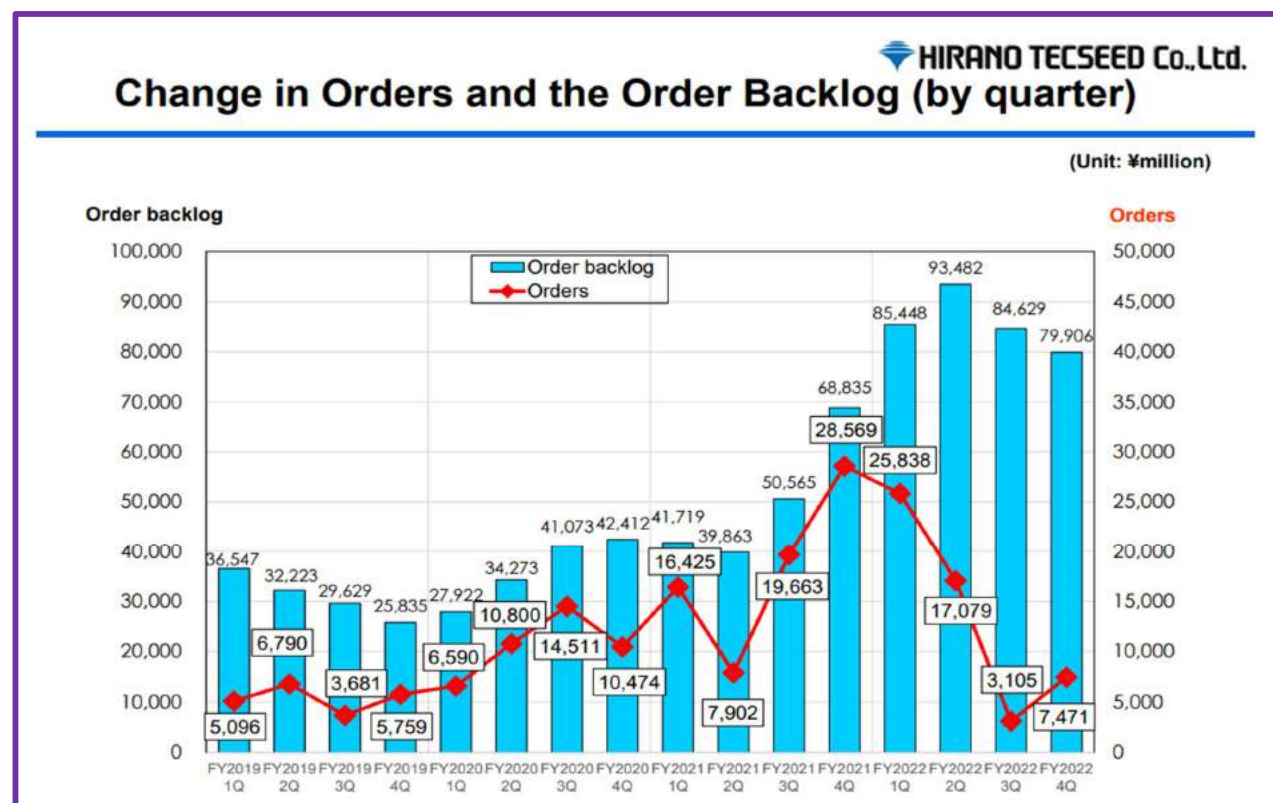
Hirano Tecseed (6245 JP): Earnings Summary and Guidance								
(¥mil)	FY21		FY22			FY23 CE		
	1H	FY	1H	FY	YoY (%)	1H CE	FY CE	YoY (%)
Sales	18,605	37,866	18,270	42,423	12.0	19,000	41,000	-3.4
GP	4,155	7,056	3,012	6,679	-5.3	N/A	N/A	N/A
GPM (%)	22.3	18.6	16.5	15.7	-2.9ppt	N/A	N/A	N/A
SG&A	1,434	3,070	1,515	3,585	16.8	N/A	N/A	N/A
SG&A/Sales (%)	7.7	8.1	8.3	8.5	+0.4ppt	N/A	N/A	N/A
OP	2,720	3,986	1,496	3,093	-22.4	1,040	2,920	-5.6
OPM (%)	14.6	10.5	8.2	7.3	-3.2ppt	5.5	7.1	-0.2ppt
RP	2,789	4,122	1,557	3,219	-21.9	1,100	3,000	-6.8
RPM (%)	15.0	10.9	8.5	7.6	-3.3ppt	5.8	7.3	-0.3ppt
NP*	1,988	3,103	1,078	2,243	-27.7	750	2,100	-6.4
EPS (¥)	132.0	206.1	71.6	148.9	-27.8	49.8	139.3	-6.4

Source: Nippon-IBR based on Hirano Tecseed's results presentation material
* NP attributed to the parent's shareholders

Orders and Order Backlog

While the overall order trend remained strong, thanks to rising CAPEX in the EV and electronic parts sectors, the fall in productivity led higher order backlogs. This restricted the firm taking more orders, and led to FY22 orders declining -26.3% YoY to ¥53,494mil.

Productivity was also affected by customers changing the shipment location, delivery times, the specification of parts and components. Consequently, HT had to readjust its production schedule and put production lines on hold. As a result, the FY22 order backlog rose +16.1% YoY to ¥79,906mil – during which the order backlog reached a historical record of ¥93,482mil in the Q2.



Performance by Segment

HT has three business segments, of which two – the Coating and Laminating Machinery segment and the Industrial Machinery segment – together generate 96.5% of consolidated sales and 98.0% of consolidated OP. Consolidated sales can also be divided by applications.

- **Coating and Laminating Machinery Segment:**

FY22 segment OP fell -29.0% YoY to ¥1,985mil on sales of ¥31,179mil (+17.5% YoY). While domestic sales declined -5.6% YoY to ¥2,327mil, exports increased +19.9% YoY to ¥28,851mil. The largest component of this segment is electrode coating equipment for secondary LiBs. (We discuss this further below.)

The main reason for the deterioration in the OPM, from 10.5% in FY21 to 6.4% in FY22, was a change in the sales mix due to an increase in LiB electrode coating equipment sales. Due to delays in production progress on the back of supply shortages and changes to specifications by customers, final project completion times were delayed. In addition, higher costs (subcontractors / materials) were incurred.

Given HT pays its suppliers and subcontractors within a month or receiving an order, delays in revenue recognition were extended to as much as 12 months. As a result, the Coating and Laminating Machinery segment order backlog surged +28.6% YoY to ¥68,912mil – the equivalent of almost two years of segment sales. Sales are recognised based on the percentage of completion method. As a result, any delays to the production process will be reflected in order backlog and contract assets on the BS.

- **Industrial Machinery Segment:**

FY22 segment OP rose +6.3% YoY to ¥2,069mil on sales of ¥9,774mil (-2.2% YoY). Sales are further split into domestic sales of ¥3,363mil (+24.6% YoY) and exports of ¥6,410mil (-12.2% YoY). Segment growth was led by rising demand for deposition equipment that is mainly used in electronic materials applications such as MLCCs and forming polyimide film. FY22 segment orders slumped -62.7% YoY to ¥4,757mil and the order backlog declined -34.0% YoY to ¥9,750mil. Orders for MLCC-related polyimide film deposition equipment were halved, due to strong orders during FY20 and FY21. Order trend for polyimide film deposition equipment is volatile year by year, hence YoY decline in FY22 order was not a surprise.

Sales by Application

HT's sales can be further divided by applications for which the firm's machinery is used in the manufacturing process. There are four categories of applications: energy related, electronic materials related, display related, and household-related products. The two largest applications for which HT's machinery is deployed are as follows:

- **Energy-related Applications:**

Energy-related application earns 80.3% of Coating and Laminating Machinery Segment / 59.0% of FY22 consolidated sales. Sales are solely generated from electrode coating equipment for LiBs in EVs.

In FY22, sales of the LiB electrode coating equipment rose +18.4% YoY to ¥25,048mil. However, profitability of the equipment is lower than other applications, due to the aforementioned issues – components shortage and customers' modifying their orders, which led to fall in product efficiency.

Furthermore, price negotiations with battery makers that supply to the auto sector are tough. As a result, the sales mix of the Coating and Laminating Machinery segment deteriorated in the OPM from 10.5% in FY21 to 6.4% in FY22, as sales from electrode coating machine increased. Also, order backlog of the Coating and Laminating Machinery segment surged +28.6% to ¥68,912mil, most of which is order backlog of LiB electrode coating equipment, and represents the equivalent of almost two years' worth of segment sales.

- **Electronic materials-related Applications:**

Electronic materials related applications are for 1) high-precision coating for electronic components included in the Coating and Laminating Machinery Segment, and 2) film making systems, such as high-precision thick films, drying control technology and cleaner film processes for the ceramic sheet forming lines that can output

various thickness of coating for MLCCs included in the Industrial Machinery Segment. Electronic materials-related applications earned FY22 sales of ¥8,203mil (+5.6% YoY), accounting for 19.3% of the consolidated sales.

Hirano Tecseed (6245 JP): Segment by Application (Quarterly)											
(¥mil)	FY21					FY22					
	Q1	Q2	Q3	Q4	FY Total	Q1	Q2	Q3	Q4	FY Total	YoY (%)
Display - related	1,636	1,321	596	150	3,704	662	1,144	1,223	783	3,815	3.0
Electronic materials-related	2,579	1,413	1,622	2,155	7,770	2,123	2,005	2,495	1,579	8,203	5.6
Household product-related	296	195	250	313	1,056	256	108	168	157	690	-34.7
Energy- related	3,464	5,687	5,383	6,613	21,150	5,036	4,517	6,861	8,633	25,048	18.4
Other	870	1,139	1,107	1,066	4,184	1,147	1,268	1,208	1,041	4,666	11.5
Total	8,847	9,757	8,961	10,299	37,866	9,226	9,044	11,958	12,194	42,423	12.0

Source: Hirano Tecseed

FY23 Outlook

HT is guiding for FY23 1H OP of ¥1,040mil (-30.5% YoY) on sales of ¥19,000mil (+4.0% YoY) and FY23 OP of ¥2,920mil (-5.6% YoY) on sales of ¥41,000mil (-3.4% YoY). The firm's order backlog is at an historical high level, supported by an active order environment, particularly in energy-related applications. As well as aiming to promote further delivery management and productivity improvements, while also keeping a close eye on customers' CAPEX trends, HT is looking to capture new market demand to ensure growth over the medium to long term.

However, HT expects FY23 OP, especially in the 1H, to be negatively affected by high raw materials and energy costs, and that full-year sales will likely see weaker YoY growth due to a rising number of equipment specifications adjustments – such as changes in delivery location which results in different requirements – which will lead to delays in delivery.

With the order backlog at record levels, the average lead time from the customer exchanges the order contract to the equipment delivery (installation) currently takes between 2~2.5 years. Some 80% of the current order backlog is made of orders received in FY21. Currently, HT is in a position not to drastically increase orders without risking longer delivery cycle.

Since orders for LiB electrode coating equipment rapidly surged in FY21, the firm's requirement for working capital reached approx. ¥10,100mil to satisfy the level of production. Because of this, HT is trying to receive advance payments for new orders. For example, in FY22, the firm's advance payments account on the BS surged +4.5x YoY. However, due to changes in specifications of LiB electrode coating equipment, some orders in the current order backlog have become less profitable, though not unprofitable. Consequently, HT is considering renegotiating prices in some cases. In case of cancellations, the firm has already realised revenue based on the percentage of completion basis, hence will unlikely report impairment loss in the future.

Segment Data



	Application	Segment
Display - related	Optical films	Coating and Laminating Machinery
	Vacuum equipment	Industrial Machinery
Electronic materials - related	Film making systems	Industrial Machinery
	Electrics & Electronics	Coating and Laminating Machinery
Household product - related	Adhesive materials	Coating and Laminating Machinery
	New materials/Composites	Industrial Machinery
	Dyeing Machinery/Other parts	Others
Energy - related	Lithium-ion batteries and others	Coating and Laminating Machinery

Source: Hirano Tecseed FY22 earnings results presentation

Hirano Tecseed (6245 JP): Segment Financial Summary				
¥mil		FY21	FY22	
		FY	FY	YoY (%)
Coating and Laminating Machinery	Sales	26,533	31,179	17.5
	Segment Profit	2,796	1,985	-29.0
	Segment Profit Margin (%)	10.5	6.4	-4.1ppt
	Assets	20,647	30,388	47.2
	Liabilities	6,857	7,039	2.7
	Production	22,323	27,352	22.5
	Order Received	58,466	46,503	-20.5
	Order Backlog	53,588	68,912	28.6
Industrial Machinery	Sales	9,998	9,774	-2.2
	Segment Profit	1,946	2,069	6.3
	Segment Profit Margin (%)	19.5	21.2	+1.7ppt
	Assets	8,369	8,619	3.0
	Liabilities	4,418	2,936	-33.5
	Production	7,484	7,196	-3.8
	Order Received	12,757	4,757	-62.7
	Order Backlog	14,768	9,750	-34.0
Others	Sales	1,334	1,470	10.2
	Segment Profit	204	82	-59.8
	Segment Profit Margin (%)	15.3	5.6	-9.7ppt
	Assets	530	883	66.6
	Liabilities	394	715	81.5
	Production	1,002	1,195	19.3
	Order Received	1,336	2,233	67.1
	Order Backlog	479	1,242	159.3

Source: Nippon-IBR based on Hirano Tecseed's FY21 & FY22 Tanshin

LONG-TERM VISION 2030

Vision and Target

Hirano Tecseed announced its Long-Term Vision 2030 plan, during which the firm's aim is to become a global leader in coating machines. HT is looking to enhance corporate value by establishing a stable revenue base based on the following three goals:

1. Capturing the top market share in coating equipment in energy-related and electronic materials.
2. Expanding its coverage globally from manufacturing to maintenance through enhancing overseas network.
3. Contributing to industrial development and the global environment through coating technology

The two areas of growth focus will remain 1) energy-related application, including LiB electrode coating equipment but also next generation batteries such as solid-state batteries [SSB] and fuel cells, and 2) electronic materials applications, including coating equipment for capacitors loaded in EVs, and for electronic materials used in 5G high-frequency wave.

By expanding its existing business, as well as development of the cutting-edge technologies, HT is targeting an OPM of 12.0% in FY30 vs 7.3% in FY22, on sales of ¥60,000mil (8-yr CAGR +4.4%), and ROE of more than 10.0% (vs 6.4% in FY22).

Capital Allocation Policy

With cash & equivalents at ¥13,161mil as of FY22 end, just shy of 50% of market cap, Hirano Tecseed is considered as a cash rich company. However, the ¥27,309mil in current assets categorised as sales receivable— of which approx. ¥25,000mil are categorised as contract assets – will likely take around two years to be recognised as sales.

Given the receivables turnover has slowed due to the rise in LiB electrode coating equipment orders which suffered from customers' requirements changing, as discussed above, the firm needs working capital of some ¥10,000mil. Hence the real surplus cash appears fairly limited.

HT plans to allocate available funds between investment for growth, CAPEX and R&D, and shareholder returns within cash flow. As for shareholder returns, management aim to maintain a minimum annual dividend of ¥56.00/share and pay out more than 35% of EPS. HT will also consider buying back shares depending on the stock price.

TSE's PBR1x Argument

Tokyo Stock Exchange [TSE] demands all prime and standard listed companies to proactively find solutions to improve capital efficiency so that those companies currently valued below PBR 1x can improve their stock valuation. HT acknowledges that its shareholders and investors' opinion that the firm's shareholder equity is too big for the size of its business. In the Long-term Vision 2030, HT has not yet mentioned details of its capital policy, its view on capital cost and separate working capital and surplus cash. HT aims to improve disclosure on its capital policy in due course.

FINANCIAL SUMMARY

P&L Summary											
(¥mil / March yr-end)	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23 CE
Sales	28,504	14,514	18,335	19,651	20,738	32,659	31,682	25,800	37,866	42,423	41,000
YoY (%)	81.1	-49.1	26.3	7.1	5.5	57.4	-3.0	-18.6	46.7	12.0	-3.4
COGS	23,271	12,426	14,429	14,906	16,031	25,714	25,371	20,815	30,809	35,744	-
Gross Profit (GP)	5,233	2,087	3,905	4,745	4,706	6,944	6,310	4,985	7,056	6,679	-
GPM (%)	18.4	14.4	21.3	24.1	22.7	21.3	19.9	19.3	18.6	-5.3	-
SG&A	1,665	1,533	1,955	1,723	1,782	2,105	2,625	2,425	3,070	3,585	-
Operating Profit (OP)	3,568	553	1,950	3,021	2,924	4,839	3,684	2,560	3,986	3,093	2,920
YoY (%)	205.2	-84.6	252.6	54.9	-3.3	65.4	-23.9	-30.6	55.7	-22.4	-5.6
OPM (%)	12.5	3.8	10.6	15.3	14.0	14.8	11.6	9.9	10.5	7.3	7.1
Interest & dividend received	47	56	52	53	53	55	65	78	80	90	-
Interest payment	11	9	10	8	7	9	8	6	8	27	-
Investment gains & losses	-	-	-	-	-	-	-	-	-	-	-
Recurring Profit (RP)	3,647	645	2,034	3,075	2,982	4,895	3,773	2,661	4,122	3,219	3,000
YoY (%)	193.6	-82.4	215.3	51.1	-3.1	64.1	-23.0	-29.5	54.9	-21.9	-6.8
RPM (%)	12.8	4.4	11.1	15.6	14.4	15.0	11.9	10.3	10.9	7.6	7.3
Pre-tax Profit	3,697	758	2,034	3,083	2,972	4,896	3,765	2,586	4,205	3,219	-
Tax costs	1,579	313	703	801	884	1,470	1,413	800	1,102	976	-
Minority shareholder interest	-	-	-	-	-	-	-	-	-	-	-
Net Profit (NP)	2,117	445	1,330	2,281	2,088	3,425	2,351	1,785	3,103	2,243	2,100
YoY (%)	174.5	-79.0	198.8	71.5	-8.5	64.0	-31.4	-24.1	73.8	-27.7	-6.4
Comprehensive Profit	2,145	593	1,043	2,532	2,219	3,278	2,317	2,365	3,229	2,361	-

Source: Nippon-IBR based on Hirano Tecseed's presentation materials, YUHOs and Toyo Keizai estimate

Cash Flow Summary										
(¥mil / March yr-end)	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Accounting Standard (Japan)	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol
Operating Cash Flow	3,716	-2,356	3,985	-344	-601	11,001	-3,090	1,971	2,300	-10,249
Depreciation	418	377	338	318	339	341	458	598	583	658
Goodwill Amortisation	-	-	-	-	-	-	-	-	-	-
Change in Sales Receivables	-427	-411	305	-1,122	-510	4,292	-1,516	620	-5,884	-6,603
Change in inventories	4,456	655	-578	-2,262	-3,847	1,375	359	-268	-200	-306
Change in Accounts Payable	-4,731	-1,359	1,579	847	1,260	92	-677	-112	2,169	410
Investment Cash Flow	-343	-1,292	-869	-893	-1,675	-3,353	155	668	-1,119	90
Free Cash Flow	3,373	-3,648	3,116	-1,237	-2,276	7,648	-2,935	2,639	1,181	-10,159
Finance Cash Flow	-54	-375	-418	165	-530	-847	-598	-723	-934	9,518
Cash and Cash Equivalent	13,533	9,521	12,220	11,147	8,341	15,140	11,605	13,548	13,801	13,161

Source: Nippon-IBR based on Hirano Tecseed's presentation materials, YUHOs and Toyo Keizai estimate

Balance Sheet Summary										
(¥mil / March yr-end)	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Accounting Standard (Japan)	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol	Consol
Current Asset	23,051	19,353	23,359	26,398	29,126	34,868	31,759	32,186	38,953	48,159
Fixed Asset	6,261	6,481	6,399	7,316	8,431	8,866	10,448	10,512	11,508	12,364
Tangible	3,687	3,454	3,310	3,952	3,959	4,653	6,924	6,687	6,756	7,409
Intangible	151	110	99	111	90	78	186	373	596	672
Investment and others	2,422	2,916	2,989	3,252	4,381	4,135	3,337	3,452	4,155	4,283
Total Asset	29,313	25,834	29,759	33,714	37,557	43,734	42,208	42,699	50,461	60,522
Current Liability	8,206	4,427	7,645	9,119	11,212	15,094	11,797	10,637	15,104	23,429
Fixed Liability	1,412	1,286	1,144	1,454	1,422	964	1,085	1,007	894	1,097
Net Asset	19,694	20,121	20,969	23,140	24,923	27,675	29,325	31,054	34,463	34,930
Capital	1,847	1,847	1,847	1,847	1,847	1,847	1,847	1,847	1,847	1,847
Capital Surplus	1,339	1,339	1,339	1,339	1,339	1,339	1,342	1,343	1,353	1,360
Retained Earnings	16,733	17,012	18,147	20,068	21,719	24,618	26,293	27,431	30,699	32,099
Treasury Shares	-407	-407	-407	-407	-408	-408	-401	-392	-386	-377
Minority Interest	-	-	-	-	-	-	-	-	-	-
Shareholders' Equity	19,694	20,121	20,969	23,140	24,923	27,675	29,325	31,054	34,463	34,930
Shareholders' Equity Ratio (%)	67.1	77.8	70.4	68.6	66.3	63.2	69.4	72.7	68.2	57.7
Interest-bearing Debt	1,056	1,014	794	1,326	1,233	915	995	922	737	10,503

Source: Nippon-IBR based on Hirano Tecseed's presentation materials, YUHOs and Toyo Keizai estimate

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