

## FREUND CORPORATION (6312)

Consolidated FY (Million Yen)		Sales	OP	RP	Profit Attributable to Owners of Parent	EPS (Yen)	DPS (Yen)	BPS (Yen)
FY02/2016		19,027	1,346	1,394	961	55.7	12.5	668.6
FY02/2017		21,164	2,041	2,097	1,064	61.7	20.0	706.6
FY02/2018CoE		21,000	2,100	2,100	1,400	81.2	20.0	-
FY02/2017	YoY	11.2%	51.6%	50.4%	10.7%	-	-	-
FY02/2018CoE	YoY	(0.8%)	2.9%	0.1%	31.5%	-	-	-
Consolidated Half Year (Million Yen)		Sales	OP	RP	Profit Attributable to Owners of Parent	EPS (Yen)	DPS (Yen)	BPS (Yen)
Q1 to Q2 FY02/2017		8,762	687	708	306	-	-	-
Q3 to Q4 FY02/2017		12,401	1,354	1,388	757	-	-	-
Q1 to Q2 FY02/2018CoE		9,000	600	600	400	-	-	-
Q3 to Q4 FY02/2018CoE		12,000	1,500	1,500	1,000	-	-	-
Q1 to Q2 FY02/2018CoE	YoY	2.7%	(12.7%)	(15.4%)	30.6%	-	-	-
Q3 to Q4 FY02/2018CoE	YoY	(3.2%)	10.8%	8.0%	31.9%	-	-	-

Source: Company Data, WRJ Calculation

### 1.0 Executive Summary (5 May 2017)

#### Persistent Growth

FREUND CORPORATION, developing, manufacturing and selling equipment incorporating proprietary formulation technology for pharmaceutical industry as the key earnings pillar, is planning to see persistent growth in the future. New midterm management plan (FY02/2018 to FY02/2022) to have been released recently is calling for prospective sales to increase by 7.2% and earnings by 8.0% in terms of CAGR over the next five years. This suggests that the Company is to maintain growth rate going forward basically in line with results over the past five years, i.e., 6.8% and 13.9%, respectively. The Company implies that it will be a harvest time in FY02/2018 and FY02/2019 for the Company to benefit from move to the era of 80% penetration rate for generic drugs in Japan, but FY02/2018 Company forecasts conservatively assume some negative impacts to capital expenditures by pharmaceutical industry stemming from NHI price revision. Due partly to this, the Company is to suffer from short-term corrections of earnings growth rate. Meanwhile, in regards to long-term prospects of equipment for pharmaceutical industry, the Company is likely to benefit from the entrance into new domain and market development overseas. On top of existing granulation/coating equipment, the Company has launched tablet-printing equipment (TABREX Rev.), which was followed by the first order intake in Q4 FY02/2017. The Company is likely to see startup for this on a full-fledged basis in FY02/2018. At the same time, while the Company has been focusing own resources to sales to generic drug industry in Japan in order to avoid any opportunity loss so far, it appears that own resources are to be increasingly more allocated to market development overseas going forward.


In FY02/2017, sales came in at ¥21,164m (up 11.2% YoY), operating profit ¥2,041m (up 51.6%), and operating profit margin 9.6% (up 2.6% points). By business segment, Equipment saw sales of ¥14,914m (up 14.4%), segment profit of ¥1,750m (up 47.1%) and segment profit margin of 11.7% (up 2.6% points), while Chemicals saw sales of ¥6,249m (up 4.3%), segment profit of ¥748m (up 44.0%) and segment profit margin of 12.0% (up 3.3% points). On the Equipment side, sales and earnings were driven by firm order intake in line with aggressive capital expenditures by generic drug industry in Japan. Sales overseas were also favorable, driven by strengths of sales in North America through FREUND-VECTOR CORPORATION, i.e., the Company's consolidated subsidiary based in the United States. Meanwhile, earnings were rather boosted, given non-reappearance of development expenses associated with tablet-printing equipment (TABREX Rev.) to have had appeared in FY02/2016. On the Chemicals side, sales and earnings favorably increased in regards to pharmaceutical excipients due mainly to firm demand from the generic drugs side, but sales and earnings came down in regards to food preservatives, given intensifying competition. In regards to dietary supplements, sales increased but earnings remained flat due to worsening sales mix. At the end of the day, it appears that earnings growth was so substantial for pharmaceutical excipients.

FY02/2018 Company forecasts are going for prospective sales of ¥21,000m (down 0.8% YoY), operating profit of ¥2,100m (up 2.9%) and operating profit margin of 10.0% (up 0.4% points), while prospective annual dividend of ¥20.0 per share, implying payout ratio of 24.6%. By business segment, Company forecasts are going for prospective sales of ¥15,410m (up 3.3%) for Equipment and ¥5,590m (down 10.5%) for Chemicals. On the Equipment side, Company forecasts assume some negative impacts to capital expenditures by pharmaceutical industry stemming from NHI price revision, while sales of tablet-printing equipment (TABREX Rev.) to be booked on a full-fledged basis in H2. In regards to tablet-printing equipment (TABREX Rev.), it takes four to six months for order intake to book sales, implying that the Company is to book sales by the end of the fiscal year for collective order backlog by the end of Q2. Meanwhile, it takes eight to ten months for existing granulation/coating equipment to do so due to its customization needs relatively larger. On the Chemicals side, sales of dietary supplements are to plummet, given a move that major customer increases own manufacturing with the Company's equipment. Still, this does not incur major negative impacts to earnings, as earnings on the Chemicals side hinge on pharmaceutical excipients to a large extent as far as we could gather.

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## 2.0 Company Profile

### A Leader of Formulation Technology and Equipment for Pharmaceutical Industry

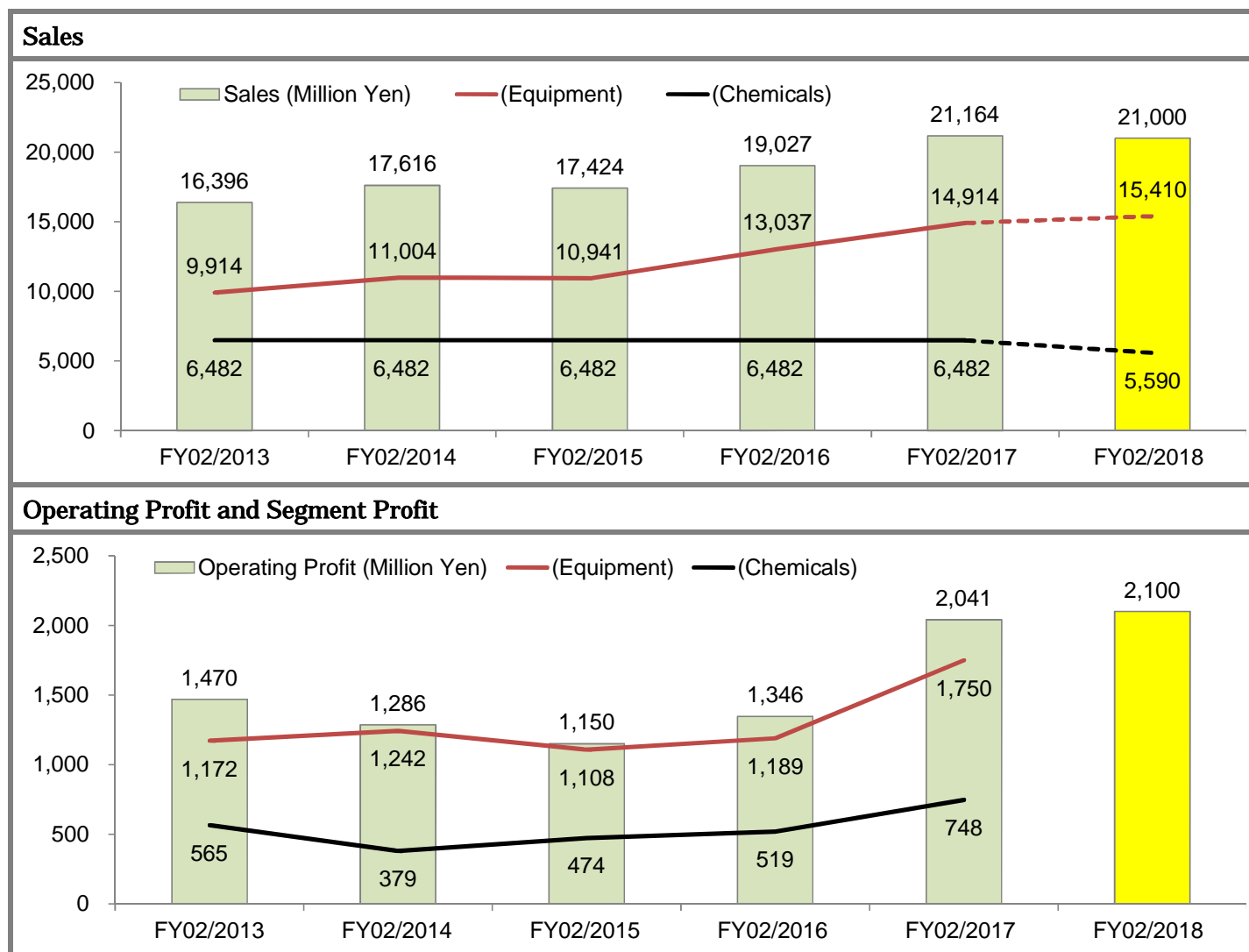
<b>Company Name</b>	FREUND CORPORATION <a href="#">Company Website</a> <a href="#">IR Information</a> <a href="#">Share Price</a>	
<b>Established</b>	22 April 1964	
<b>Listing</b>	24 July 1996: Tokyo Stock Exchange JASDAQ Standard (Ticker: 6312)	
<b>Capital</b>	¥1,035m (As of the end of February 2017)	
<b>No. of Shares</b>	18,400,000 shares, including 1,155,478 treasury shares (As of the end of Feb. 2017)	
<b>Main Features</b>	<ul style="list-style-type: none"> <li>● Leading the domestic market of Japan for granulation/coating equipment with market share of 60% to 70%</li> <li>● One of the three major players on a global basis</li> <li>● High expectations for tablet-printing equipment (TABREX Rev.)</li> </ul>	
<b>Businesses</b>	<ul style="list-style-type: none"> <li>. Equipment</li> <li>. Chemicals</li> </ul>	
<b>Top Management</b>	President & CEO: Iwao Fusejima	
<b>Shareholders</b>	Yasutoyo Fusejima 10.0%, FIL Corp. 8.9%, The Master Trust Bank of Japan (trust account) 7.4% (As of the end of February 2017)	
<b>Headquarters</b>	2F FREUND Bldg., 6-25-13 Nishishinjuku, Shinjuku-ku, Tokyo, JAPAN	
<b>No. of Employees</b>	Consolidated: 390, Parent: 228 (As of the end of February 2017)	

Source: Company Data

## 3.0 Recent Trading & Prospects

### FY02/2017 Results

In FY02/2017, sales came in at ¥21,164m (up 11.2% YoY), operating profit ¥2,041m (up 51.6%), recurring profit ¥2,097m (up 50.4%) and profit attributable to owners of parent ¥1,064m (up 10.7%), while operating profit margin 9.8% (up 2.6% points).



Source: Company Data, WRJ Calculation

When compared with initial Company forecasts, sales were better by 5.8% (¥1,164m), operating profit by 7.4% (¥141m) and recurring profit by 10.4% (¥197m), while profit attributable to owners of parent was worse by 9.8% (¥116m). Given net add-ons stemming from changes of fiscal yearend for consolidated subsidiaries, etc. not assumed in initial Company forecasts, sales were better, while profit attributable to owners of parent fell short due to unexpected booking of retirement bonus for director as much as ¥250m at the extraordinary level.

Meanwhile, earnings as a whole for the Company hinge on those of Equipment to a large extent. In FY02/2017 results, Equipment accounted for 70.0% of total segment profit of ¥2,498m, while operating profit of ¥2,041m comprised total segment profit and elimination (equating to company-wide SG&A expenses, etc. not allocated to each segment) of negative ¥456m.

Sales on the Equipment side comprised those of pharmaceutical-related (83.4% of total) and industrial-related (16.6%), while 63.4% in Japan and 36.6% overseas (26.0% in North America & Latin America) by region. Sales of pharmaceutical-related equated to those of granulation/coating equipment of which the Company holds the leading market share (60% to 70%) in Japan, while order intake in FY02/2017 surged driven by aggressive capital expenditures by generic drug industry, having resulted in increasing sales and segment profit and thus as a whole for the Company at the same time.

As mentioned above, order intake on the Equipment side has remained favorable towards the end of FY02/2017. Order intake on a 12-quarter moving average basis, being calculated by us to grasp midterm trend, came in at ¥3,490m (up 17.7% YoY) in Q4, having seen rather accelerating growth rate over the previous year. On top of this, the figures have kept on increasing on a quarter-on-quarter basis in absolute value.

Quarterly order intake has also remained firm in a respect of year-on-year changes. However, the figures in FY02/2017 have once peaked out in Q2 in absolute value. On top of this, this was also true of quarterly order backlog. It is taken for granted that the latter had a lot to do with steady booking of sales, but this may suggest a probability that demand associated with capital expenditures in existing granulation/coating equipment is suffering from a short-term correction.

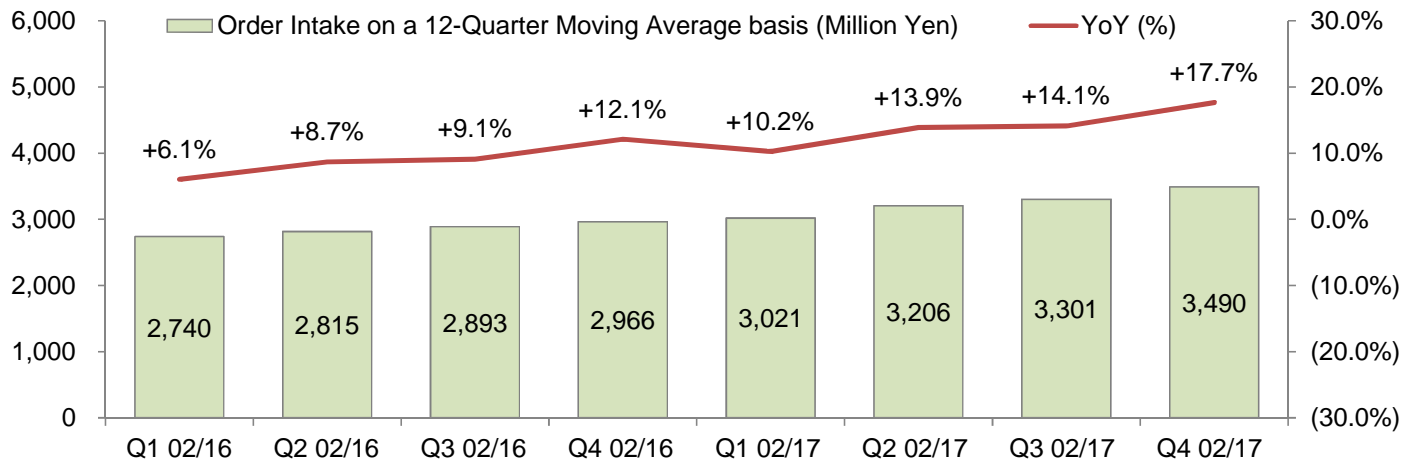
Meanwhile, this should be gradually compensated for by tablet-printing equipment (TABREX Rev.) to have been recently developed and launched. As far as FY02/2017 results were concerned, the Company only saw some limited order backlog for this, but looking to increasing demand over the long-term in the future.

In the first place, tablet-printing equipment (TABREX Rev.) represents one to offer functionality to do “printing” of identification information on the surface of tablets with objectives to avoid accidental ingestions and/or erroneous prescriptions. Prior to do “printing” on the surface of tablets, it has been the case that copying and “engraving” by means of laser have been adopted. However, both of them are inferior in terms of identifiability.

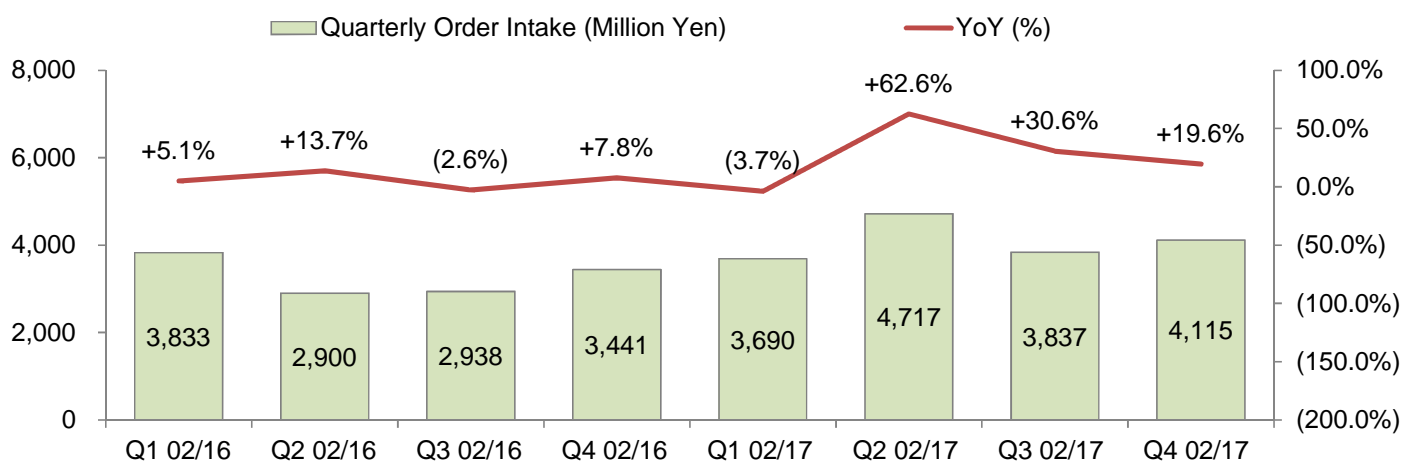
Driven by increasing accidental ingestions in line with progressing population ageing and home health care, there are potential needs for pharmaceutical companies to improve identifiability and/or avoid erroneous prescriptions at pharmacies where they prescribe tablets after subdividing and at medical care sites where they give tablets to patients. Given this, it looks that generic drug industry as well as major new drug players are to make a changeover to “printing” with high identifiability from “engraving” in their capital expenditures.

Now comes the time for the Company’s table-printing equipment (TABREX Rev.) and peers’ equivalents to cope with this. Given high growth potential in the future, the market of this domain has been far more congested than existing granulation/coating equipment with many peers. However, the Company spots that the launch of competitive second-generation model (i.e., TABREX Rev.) has given the key strengths, improving probability to benefit from increasing needs here, according to the Company.

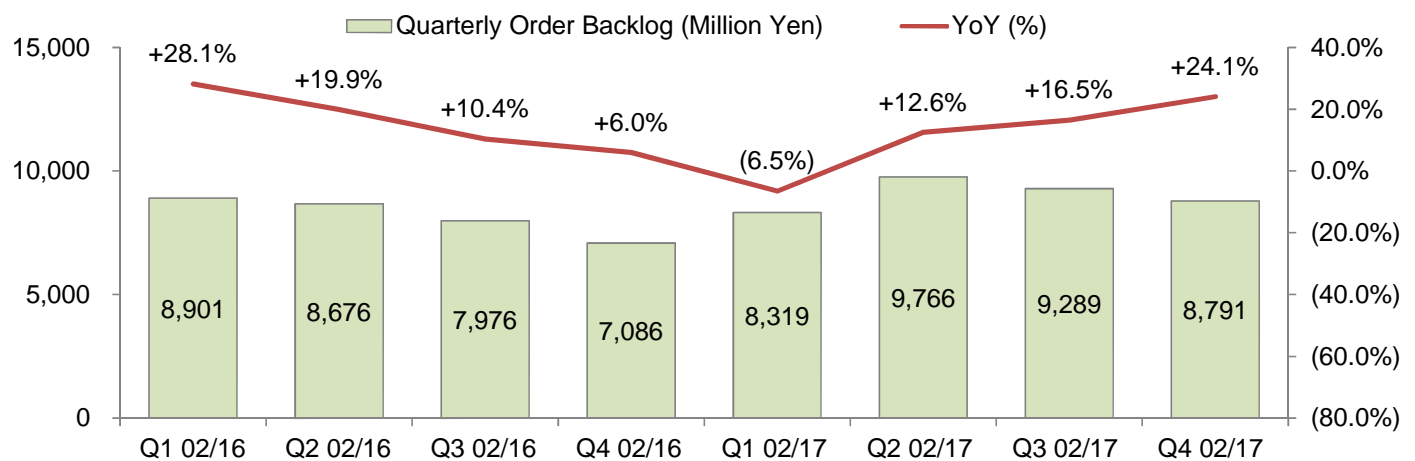
### Equipment: Order Intake on a 12-Quarter Moving Average basis



### Equipment: Quarterly Order Intake



### Equipment: Quarterly Order Backlog



Source: Company Data, WRJ Calculation

## Income Statement (Cumulative, Quarterly)

Income Statement (Million Yen)	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
	Q1	Q1 to Q2	Q1 to Q3	Q1 to Q4	Q1	Q1 to Q2	Q1 to Q3	Q1 to Q4		
	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017		
<b>Sales</b>	<b>3,002</b>	<b>7,697</b>	<b>13,081</b>	<b>19,027</b>	<b>3,912</b>	<b>8,762</b>	<b>14,767</b>	<b>21,164</b>	<b>+2,136</b>	
Cost of Sales	1,976	5,266	8,931	12,921	2,559	5,900	10,069	14,343	+1,421	
Gross Profit	1,026	2,431	4,150	6,106	1,352	2,862	4,697	6,821	+715	
SG&A	1,050	2,232	3,423	4,759	1,057	2,175	3,256	4,779	+20	
<b>Operating Profit</b>	<b>(24)</b>	<b>198</b>	<b>727</b>	<b>1,346</b>	<b>295</b>	<b>687</b>	<b>1,441</b>	<b>2,041</b>	<b>+694</b>	
Non Operating Balance	24	53	57	47	18	21	45	56	+8	
<b>Recurring Profit</b>	<b>(0)</b>	<b>252</b>	<b>784</b>	<b>1,394</b>	<b>314</b>	<b>708</b>	<b>1,486</b>	<b>2,097</b>	<b>+703</b>	
Extraordinary Balance	(3)	(2)	(24)	(253)	(227)	(230)	(230)	(313)	(60)	
Profit before Income Taxes	(3)	249	759	1,141	86	478	1,256	1,783	+642	
Total Income Taxes	28	132	344	187	37	172	441	719	+532	
NP Belonging to Non-Controlling SHs	(3)	(6)	(6)	(6)	-	-	-	-	+6	
<b>Profit Attributable to Owners of Parent</b>	<b>(29)</b>	<b>123</b>	<b>422</b>	<b>961</b>	<b>48</b>	<b>306</b>	<b>815</b>	<b>1,064</b>	<b>+103</b>	
Sales YoY	(14.4%)	+4.4%	+8.9%	+9.2%	+30.3%	+13.8%	+12.9%	+11.2%	-	
Operating Profit YoY	-	+96.8%	+24.3%	+17.1%	-	+245.6%	+98.2%	+51.6%	-	
Recurring Profit YoY	-	+78.8%	+17.6%	+11.6%	-	+181.1%	+89.6%	+50.4%	-	
Profit Attributable to Owners of Parent YoY	-	+242.4%	+25.5%	+38.1%	-	+147.8%	+93.1%	+10.7%	-	
Gross Profit Margin	34.2%	31.6%	31.7%	32.1%	34.6%	32.7%	31.8%	32.2%	+0.1%	
SG&A / Sales	35.0%	29.0%	26.2%	25.0%	27.0%	24.8%	22.1%	22.6%	(2.4%)	
Operating Profit Margin	(0.8%)	2.6%	5.6%	7.1%	7.5%	7.8%	9.8%	9.6%	+2.6%	
Recurring Profit Margin	(0.0%)	3.3%	6.0%	7.3%	8.0%	8.1%	10.1%	9.9%	+2.6%	
Profit Attributable to Owners of Parent Margin	(1.0%)	1.6%	3.2%	5.1%	1.2%	3.5%	5.5%	5.0%	(0.0%)	
Total Income Taxes / Profit before Income Taxes	-	53.2%	45.3%	16.4%	43.8%	36.0%	35.1%	40.3%	+23.9%	

Income Statement (Million Yen)	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017		
<b>Sales</b>	<b>3,002</b>	<b>4,694</b>	<b>5,384</b>	<b>5,945</b>	<b>3,912</b>	<b>4,850</b>	<b>6,004</b>	<b>6,397</b>	<b>+451</b>	
Cost of Sales	1,976	3,289	3,665	3,990	2,559	3,341	4,169	4,273	+283	
Gross Profit	1,026	1,404	1,719	1,955	1,352	1,509	1,835	2,123	+167	
SG&A	1,050	1,181	1,190	1,336	1,057	1,117	1,081	1,523	+187	
<b>Operating Profit</b>	<b>(24)</b>	<b>223</b>	<b>528</b>	<b>619</b>	<b>295</b>	<b>392</b>	<b>753</b>	<b>600</b>	<b>(19)</b>	
Non Operating Balance	24	29	3	(9)	18	2	24	10	+19	
<b>Recurring Profit</b>	<b>(0)</b>	<b>252</b>	<b>532</b>	<b>610</b>	<b>314</b>	<b>394</b>	<b>778</b>	<b>610</b>	<b>0</b>	
Extraordinary Balance	(3)	0	(22)	(228)	(227)	(2)	0	(83)	+144	
Profit before Income Taxes	(3)	253	509	381	86	392	777	527	+145	
Total Income Taxes	28	104	211	(156)	37	134	268	278	+435	
NP Belonging to Non-Controlling SHs	(3)	(3)	0	0	-	-	-	-	0	
<b>Profit Attributable to Owners of Parent</b>	<b>(29)</b>	<b>152</b>	<b>298</b>	<b>538</b>	<b>48</b>	<b>257</b>	<b>509</b>	<b>248</b>	<b>(290)</b>	
Sales YoY	(14.4%)	+21.5%	+16.1%	+9.8%	+30.3%	+3.3%	+11.5%	+7.6%	-	
Operating Profit YoY	-	+83.2%	+9.1%	+9.6%	-	+75.6%	+42.7%	(3.1%)	-	
Recurring Profit YoY	-	+78.2%	+1.1%	+4.8%	-	+56.3%	+46.2%	+0.1%	-	
Profit Attributable to Owners of Parent YoY	-	+131.2%	(0.6%)	+49.9%	-	+68.8%	+70.5%	(53.9%)	-	
Gross Profit Margin	34.2%	29.9%	31.9%	32.9%	34.6%	31.1%	30.6%	33.2%	+0.3%	
SG&A / Sales	35.0%	25.2%	22.1%	22.5%	27.0%	23.0%	18.0%	23.8%	+1.3%	
Operating Profit Margin	(0.8%)	4.8%	9.8%	10.4%	7.5%	8.1%	12.6%	9.4%	(1.0%)	
Recurring Profit Margin	(0.0%)	5.4%	9.9%	10.3%	8.0%	8.1%	13.0%	9.5%	(0.7%)	
Profit Attributable to Owners of Parent Margin	(1.0%)	3.3%	5.5%	9.1%	1.2%	5.3%	8.5%	3.9%	(5.2%)	
Total Income Taxes / Profit before Income Taxes	-	41.2%	41.4%	-	43.8%	34.3%	34.5%	52.8%	-	

Source: Company Data, WRJ Calculation

## Segmented Information (Cumulative, Quarterly)

Segmented Information	Cons.Act Q1	Cons.Act Q1 to Q2	Cons.Act Q1 to Q3	Cons.Act Q1 to Q4	Cons.Act Q1	Cons.Act Q1 to Q2	Cons.Act Q1 to Q3	Cons.Act Q1 to Q4	YoY Net Chg.
(Million Yen)	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017	
Equipment	1,826	4,992	8,663	13,037	2,413	5,697	10,003	14,914	+1,877
Chemicals	1,176	2,704	4,417	5,990	1,498	3,065	4,763	6,249	+259
<b>Sales</b>	<b>3,002</b>	<b>7,697</b>	<b>13,081</b>	<b>19,027</b>	<b>3,912</b>	<b>8,762</b>	<b>14,767</b>	<b>21,164</b>	<b>+2,136</b>
Machinery	+1.7%	+23.5%	+21.2%	+19.2%	+32.2%	+14.1%	+15.5%	+14.4%	-
Chemicals	(31.3%)	(18.7%)	(9.1%)	(7.6%)	+27.4%	+13.3%	+7.8%	+4.3%	-
<b>Sales (YoY)</b>	<b>(14.4%)</b>	<b>+4.4%</b>	<b>+8.9%</b>	<b>+9.2%</b>	<b>+30.3%</b>	<b>+13.8%</b>	<b>+12.9%</b>	<b>+11.2%</b>	<b>-</b>
Equipment	60.8%	64.9%	66.2%	68.5%	61.7%	65.0%	67.7%	70.5%	-
Chemicals	39.2%	35.1%	33.8%	31.5%	38.3%	35.0%	32.3%	29.5%	-
<b>Sales (Composition Ratio)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>
Equipment	(9)	152	578	1,189	220	567	1,154	1,750	+560
Chemicals	81	219	404	519	178	357	602	748	+228
<b>Segment Profit</b>	<b>72</b>	<b>371</b>	<b>983</b>	<b>1,709</b>	<b>398</b>	<b>924</b>	<b>1,756</b>	<b>2,498</b>	<b>+789</b>
Elimination	(97)	(173)	(255)	(362)	(103)	(237)	(315)	(456)	(94)
<b>Operating Profit</b>	<b>(24)</b>	<b>198</b>	<b>727</b>	<b>1,346</b>	<b>295</b>	<b>687</b>	<b>1,441</b>	<b>2,041</b>	<b>+694</b>
Equipment	-	+21.6%	(5.5%)	+7.3%	-	+272.6%	+99.6%	+47.1%	-
Chemicals	+1.1%	+13.6%	+25.7%	+9.6%	+117.5%	+62.6%	+48.7%	+44.0%	-
<b>Segment Profit (YoY)</b>	<b>(43.6%)</b>	<b>+16.8%</b>	<b>+5.2%</b>	<b>+8.0%</b>	<b>+449.5%</b>	<b>+148.6%</b>	<b>+78.6%</b>	<b>+46.2%</b>	<b>-</b>
Equipment	(12.9%)	41.0%	58.8%	69.6%	55.3%	61.4%	65.7%	70.0%	-
Chemicals	112.9%	59.0%	41.2%	30.4%	44.7%	38.6%	34.3%	30.0%	-
<b>Segment Profit (Composition Ratio)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>
Equipment	(0.5%)	3.1%	6.7%	9.1%	9.1%	10.0%	11.5%	11.7%	+2.6%
Chemicals	7.0%	8.1%	9.2%	8.7%	11.9%	11.6%	12.6%	12.0%	+3.3%
Elimination	(3.2%)	(2.2%)	(2.0%)	(1.9%)	(2.6%)	(2.7%)	(2.1%)	(2.2%)	(0.3%)
<b>Operating Profit Margin</b>	<b>(0.8%)</b>	<b>2.6%</b>	<b>5.6%</b>	<b>7.1%</b>	<b>7.5%</b>	<b>7.8%</b>	<b>9.8%</b>	<b>9.6%</b>	<b>+2.6%</b>

Segmented Information	Cons.Act Q1	Cons.Act Q2	Cons.Act Q3	Cons.Act Q4	Cons.Act Q1	Cons.Act Q2	Cons.Act Q3	Cons.Act Q4	YoY Net Chg.
(Million Yen)	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017	
Equipment	1,826	3,166	3,671	4,373	2,413	3,284	4,305	4,911	+537
Chemicals	1,176	1,528	1,713	1,572	1,498	1,566	1,698	1,486	(85)
<b>Sales</b>	<b>3,002</b>	<b>4,694</b>	<b>5,384</b>	<b>5,945</b>	<b>3,912</b>	<b>4,850</b>	<b>6,004</b>	<b>6,397</b>	<b>+451</b>
Machinery	+1.7%	+40.8%	+18.2%	+15.3%	+32.2%	+3.7%	+17.3%	+12.3%	-
Chemicals	(31.3%)	(5.5%)	+11.7%	(3.0%)	+27.4%	+2.5%	(0.9%)	(5.5%)	-
<b>Sales (YoY)</b>	<b>(14.4%)</b>	<b>+21.5%</b>	<b>+16.1%</b>	<b>+9.8%</b>	<b>+30.3%</b>	<b>+3.3%</b>	<b>+11.5%</b>	<b>+7.6%</b>	<b>-</b>
Equipment	60.8%	67.4%	68.2%	73.6%	61.7%	67.7%	71.7%	76.8%	-
Chemicals	39.2%	32.6%	31.8%	26.4%	38.3%	32.3%	28.3%	23.2%	-
<b>Sales (Composition Ratio)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>
Equipment	(9)	161	425	611	220	347	586	595	(15)
Chemicals	81	137	185	114	178	178	245	146	+31
<b>Segment Profit</b>	<b>72</b>	<b>299</b>	<b>611</b>	<b>726</b>	<b>398</b>	<b>526</b>	<b>831</b>	<b>742</b>	<b>+15</b>
Elimination	(97)	(75)	(82)	(106)	(103)	(133)	(78)	(141)	(35)
<b>Operating Profit</b>	<b>(24)</b>	<b>223</b>	<b>528</b>	<b>619</b>	<b>295</b>	<b>392</b>	<b>753</b>	<b>600</b>	<b>(19)</b>
Equipment	-	+108.3%	(12.5%)	+23.1%	-	+114.7%	+37.7%	(2.5%)	-
Chemicals	+1.1%	+22.7%	+43.7%	(24.4%)	+117.5%	+29.9%	+32.3%	+27.3%	-
<b>Segment Profit (YoY)</b>	<b>(43.6%)</b>	<b>+57.7%</b>	<b>(0.7%)</b>	<b>+12.0%</b>	<b>+449.5%</b>	<b>+75.7%</b>	<b>+36.1%</b>	<b>+2.2%</b>	<b>-</b>
Equipment	(12.9%)	54.0%	69.7%	84.2%	55.3%	66.0%	70.5%	80.3%	-
Chemicals	112.9%	46.0%	30.3%	15.8%	44.7%	34.0%	29.5%	19.7%	-
<b>Segment Profit (Composition Ratio)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>
Equipment	-0.5%	5.1%	11.6%	14.0%	9.1%	10.6%	13.6%	12.1%	(1.8%)
Chemicals	7.0%	9.0%	10.8%	7.3%	11.9%	11.4%	14.4%	9.8%	+2.5%
Elimination	(3.2%)	(1.6%)	(1.5%)	(1.8%)	(2.6%)	(2.8%)	(1.3%)	(2.2%)	(0.4%)
<b>Operating Profit Margin</b>	<b>(0.8%)</b>	<b>4.8%</b>	<b>9.8%</b>	<b>10.4%</b>	<b>7.5%</b>	<b>8.1%</b>	<b>12.6%</b>	<b>9.4%</b>	<b>(1.0%)</b>

Source: Company Data, WRJ Calculation



## Sales by Region: Equipment (Cumulative, Quarterly)

Sales by Region: Equipment (Million Yen)		Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
		Q1 02/2016	Q1 to Q2 02/2016	Q1 to Q3 02/2016	Q1 to Q4 02/2016	Q1 02/2017	Q1 to Q2 02/2017	Q1 to Q3 02/2017	Q1 to Q4 02/2017	
Japan		1,213	3,391	5,304	7,668	1,819	4,195	7,040	9,459	+1,791
North America & Latin America		300	807	1,993	3,491	437	1,104	1,906	3,884	+392
Europe & Africa		235	328	730	982	92	263	424	867	(114)
Middle East, Asia & Oceania		77	465	635	894	63	134	632	702	(192)
Overseas		612	1,600	3,359	5,368	594	1,502	2,963	5,454	+86
<b>Sales</b>		<b>1,826</b>	<b>4,992</b>	<b>8,663</b>	<b>13,037</b>	<b>2,413</b>	<b>5,697</b>	<b>10,003</b>	<b>14,914</b>	<b>+1,877</b>
Japan		(13.5%)	+31.3%	+18.6%	+15.5%	+49.9%	+23.7%	+32.7%	+23.4%	-
North America & Latin America		+13.7%	(22.1%)	+11.6%	+31.1%	+45.8%	+36.8%	(4.4%)	+11.2%	-
Europe & Africa		+335.9%	+228.9%	+185.0%	+123.0%	(60.5%)	(19.8%)	(41.9%)	(11.6%)	-
Middle East, Asia & Oceania		+3.8%	+43.7%	+0.4%	(25.3%)	(17.6%)	(71.2%)	(0.5%)	(21.5%)	-
Overseas		+56.1%	+9.6%	+25.5%	+24.8%	(3.0%)	(6.1%)	(11.8%)	+1.6%	-
<b>Sales (YoY)</b>		<b>+1.7%</b>	<b>+23.5%</b>	<b>+21.2%</b>	<b>+19.2%</b>	<b>+32.2%</b>	<b>+14.1%</b>	<b>+15.5%</b>	<b>+14.4%</b>	<b>-</b>
Japan		66.5%	67.9%	61.2%	58.8%	75.4%	73.6%	70.4%	63.4%	-
North America & Latin America		16.4%	16.2%	23.0%	26.8%	18.1%	19.4%	19.1%	26.0%	-
Europe & Africa		12.9%	6.6%	8.4%	7.5%	3.9%	4.6%	4.2%	5.8%	-
Middle East, Asia & Oceania		4.2%	9.3%	7.3%	6.9%	2.6%	2.4%	6.3%	4.7%	-
Overseas		33.5%	32.1%	38.8%	41.2%	24.6%	26.4%	29.6%	36.6%	-
<b>Sales (Composition)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>
Sales by Region: Equipment (Million Yen)		Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
		Q1 02/2016	Q2 02/2016	Q3 02/2016	Q4 02/2016	Q1 02/2017	Q2 02/2017	Q3 02/2017	Q4 02/2017	
Japan		1,213	2,178	1,912	2,364	1,819	2,375	2,845	2,419	+54
North America & Latin America		300	507	1,186	1,498	437	666	802	1,977	+479
Europe & Africa		235	93	401	251	92	170	160	443	+191
Middle East, Asia & Oceania		77	387	170	259	63	71	497	70	(188)
Overseas		612	988	1,758	2,009	594	908	1,460	2,491	+482
<b>Sales</b>		<b>1,826</b>	<b>3,166</b>	<b>3,671</b>	<b>4,373</b>	<b>2,413</b>	<b>3,284</b>	<b>4,305</b>	<b>4,911</b>	<b>+537</b>
Japan		(13.5%)	+84.4%	+1.2%	+9.2%	+49.9%	+9.1%	+48.8%	+2.3%	-
North America & Latin America		+13.7%	(34.4%)	+58.1%	+70.7%	+45.8%	+31.5%	(32.4%)	+32.0%	-
Europe & Africa		+335.9%	+103.3%	+157.0%	+36.5%	(60.5%)	+82.6%	(60.0%)	+76.2%	-
Middle East, Asia & Oceania		+3.8%	+55.7%	(44.9%)	(54.1%)	(17.6%)	(81.7%)	+191.9%	(72.8%)	-
Overseas		+56.1%	(7.4%)	+44.6%	+23.5%	(3.0%)	(8.1%)	(17.0%)	+24.0%	-
<b>Sales (YoY)</b>		<b>+1.7%</b>	<b>+40.8%</b>	<b>+18.2%</b>	<b>+15.3%</b>	<b>+32.2%</b>	<b>+3.7%</b>	<b>+17.3%</b>	<b>+12.3%</b>	<b>-</b>
Japan		66.5%	68.8%	52.1%	54.1%	75.4%	72.3%	66.1%	49.3%	-
North America & Latin America		16.4%	16.0%	32.3%	34.3%	18.1%	20.3%	18.6%	40.3%	-
Europe & Africa		12.9%	3.0%	10.9%	5.8%	3.9%	5.2%	3.7%	9.0%	-
Middle East, Asia & Oceania		4.2%	12.3%	4.6%	5.9%	2.6%	2.2%	11.6%	1.4%	-
Overseas		33.5%	31.2%	47.9%	45.9%	24.6%	27.7%	33.9%	50.7%	-
<b>Sales (Composition)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>

Source: Company Data, WRJ Calculation

## Balance Sheet (Quarterly)

Balance Sheet (Million Yen)	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017		
Cash & Deposit	4,682	4,640	4,040	4,042	4,263	4,900	5,407	6,982		+2,940
Accounts Receivables	4,308	4,533	5,240	5,694	4,832	4,994	5,373	4,403		(1,290)
Inventory	2,458	2,880	2,884	2,432	2,968	3,578	2,717	2,765		+333
Other	874	855	733	884	980	848	854	786		(97)
<b>Current Assets</b>	<b>12,323</b>	<b>12,910</b>	<b>12,898</b>	<b>13,053</b>	<b>13,045</b>	<b>14,321</b>	<b>14,353</b>	<b>14,938</b>		<b>+1,885</b>
Tangible Assets	3,348	3,300	3,299	3,135	3,109	3,210	3,232	3,234		+99
Intangible Assets	140	216	197	182	93	80	68	55		(126)
Investments & Other Assets	948	935	917	835	807	756	757	872		+36
<b>Fixed Assets</b>	<b>4,437</b>	<b>4,452</b>	<b>4,414</b>	<b>4,153</b>	<b>4,010</b>	<b>4,047</b>	<b>4,058</b>	<b>4,162</b>		<b>+9</b>
<b>Total Assets</b>	<b>16,761</b>	<b>17,362</b>	<b>17,313</b>	<b>17,206</b>	<b>17,056</b>	<b>18,369</b>	<b>18,411</b>	<b>19,101</b>		<b>+1,894</b>
Accounts Payables	2,536	2,922	2,976	2,580	2,617	3,341	2,952	3,058		+478
Short Term Debt	-	-	-	-	-	-	-	-		-
Other	2,767	2,958	2,646	2,735	2,952	3,441	3,408	3,533		+798
<b>Current Liabilities</b>	<b>5,303</b>	<b>5,881</b>	<b>5,622</b>	<b>5,315</b>	<b>5,570</b>	<b>6,782</b>	<b>6,361</b>	<b>6,592</b>		<b>+1,276</b>
Long Term Debt	-	-	-	-	-	-	-	-		-
Other	654	630	602	361	326	339	328	323		(38)
<b>Fixed Liabilities</b>	<b>654</b>	<b>630</b>	<b>602</b>	<b>361</b>	<b>326</b>	<b>339</b>	<b>328</b>	<b>323</b>		<b>(38)</b>
<b>Total Liabilities</b>	<b>5,958</b>	<b>6,512</b>	<b>6,225</b>	<b>5,677</b>	<b>5,896</b>	<b>7,122</b>	<b>6,689</b>	<b>6,916</b>		<b>+1,238</b>
<b>Shareholders' Equity</b>	<b>10,640</b>	<b>10,792</b>	<b>11,091</b>	<b>11,630</b>	<b>11,394</b>	<b>11,652</b>	<b>12,161</b>	<b>12,410</b>		<b>+779</b>
Adjustments	162	57	(4)	(101)	(235)	(405)	(439)	(225)		(123)
<b>Total Assets</b>	<b>10,802</b>	<b>10,850</b>	<b>11,087</b>	<b>11,529</b>	<b>11,159</b>	<b>11,246</b>	<b>11,722</b>	<b>12,185</b>		<b>+656</b>
<b>Total Liabilities &amp; Net Assets</b>	<b>16,761</b>	<b>17,362</b>	<b>17,313</b>	<b>17,206</b>	<b>17,056</b>	<b>18,369</b>	<b>18,411</b>	<b>19,101</b>		<b>+1,894</b>
Equity Capital	10,625	10,850	11,087	11,529	11,159	11,246	11,722	12,185		+656
Interest Bearing Debt	-	-	-	-	-	-	-	-		-
Net Debt	(4,682)	(4,640)	(4,040)	(4,042)	(4,263)	(4,900)	(5,407)	(6,982)		(2,940)
Equity Capital Ratio	63.4%	62.5%	64.0%	67.0%	65.4%	61.2%	63.7%	63.8%		-
Net-Debt-Equity Ratio	(44.1%)	(42.8%)	(36.4%)	(35.1%)	(38.2%)	(43.6%)	(46.1%)	(57.3%)		-
ROE (12 months)	6.8%	7.5%	7.3%	8.5%	9.5%	10.4%	11.9%	9.0%		-
ROA (12 months)	7.8%	8.3%	8.2%	8.1%	10.1%	10.4%	11.7%	11.6%		-
Total Assets Turnover	72%	108%	124%	138%	92%	106%	130%	134%		-
Inventory Turnover	3.2	4.6	5.1	6.6	3.4	3.7	6.1	6.2		-
Days of Inventory	114	80	72	56	106	98	59	59		-
Quick Ratio	170%	156%	165%	183%	163%	146%	169%	173%		-
Current Ratio	232%	220%	229%	246%	234%	211%	226%	227%		-

Source: Company Data, WRJ Calculation

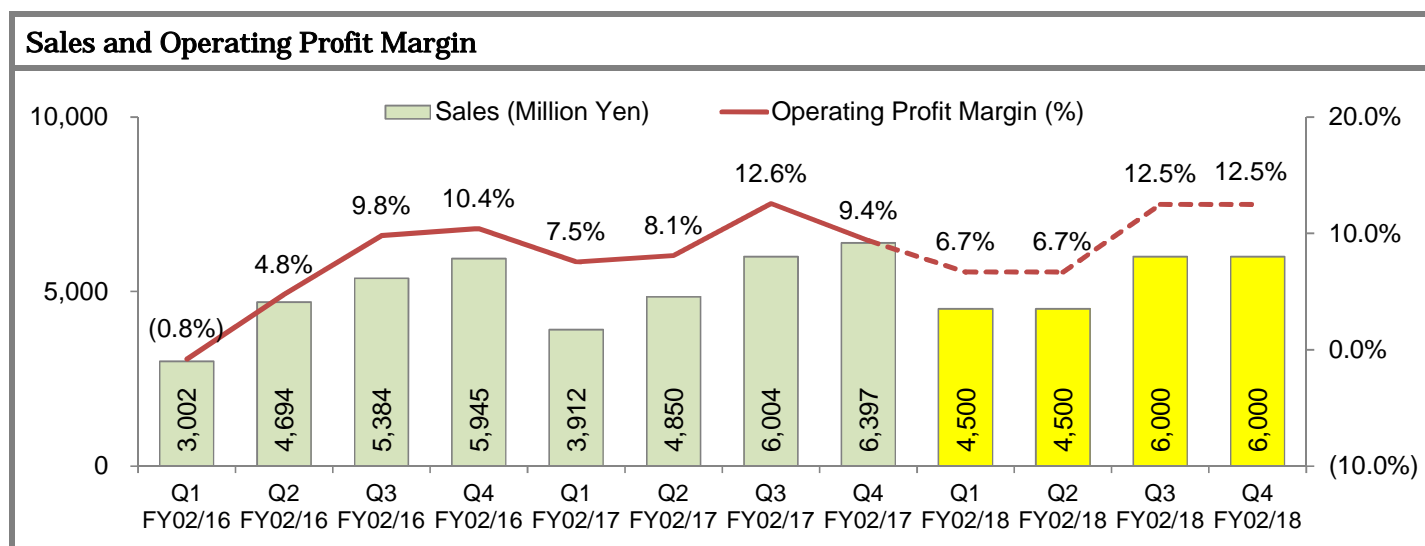
## Cash Flow Statement (Cumulative)

Cash Flow Statement (Million Yen)	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	Cons.Act	YoY Net Chg.
	Q1	Q1 to Q2	Q1 to Q3	Q1 to Q4	Q1	Q1 to Q2	Q1 to Q3	Q1 to Q4		
	02/2016	02/2016	02/2016	02/2016	02/2017	02/2017	02/2017	02/2017		
Operating Cash Flow	-	472	-	290	-	1,480	-	3,605		+3,315
Investment Cash Flow	-	(278)	-	(432)	-	(268)	-	(351)		+81
<b>Operating CF &amp; Investment CF</b>	<b>-</b>	<b>194</b>	<b>-</b>	<b>(142)</b>	<b>-</b>	<b>1,211</b>	<b>-</b>	<b>3,253</b>		<b>+3,396</b>
Financing Cash Flow	-	(299)	-	(331)	-	(247)	-	(277)		+53

Source: Company Data, WRJ Calculation

## FY02/2018 Company Forecasts

FY02/2018 Company forecasts are going for prospective sales of ¥21,000m (down 0.8% YoY), operating profit of ¥2,100m (up 2.9%), recurring profit of ¥2,100m (up 0.1%) and profit attributable to owners of parent of ¥1,400m (up 31.5%). The increases of profit attributable to owners of parent have a lot to do with non-reappearance of aforementioned extraordinary loss in FY02/2017. Meanwhile, Company forecasts are going for prospective operating profit margin of 10.0% (up 0.4% points) and annual dividend of ¥20.0 per share, implying payout ratio of 24.6%.



Source: Company Data, WRJ Calculation (quarterly forecasts in FY02/2018: half-year Company forecasts pro rata)

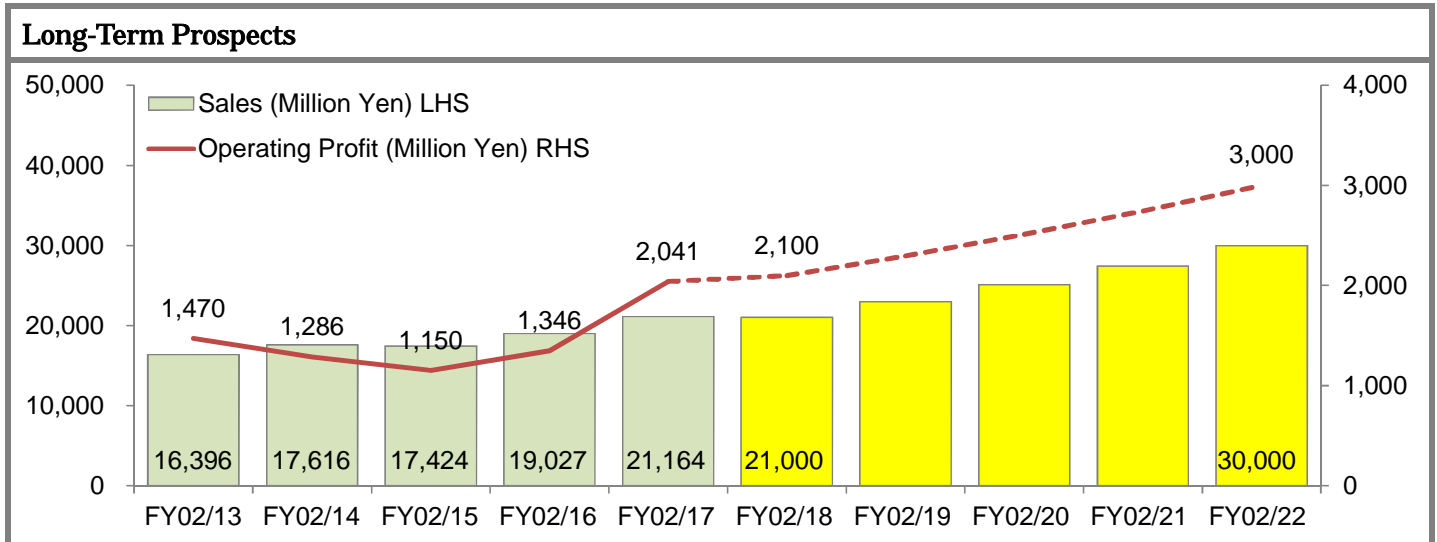
By business segment, Company forecasts are going for prospective sales of ¥15,410m (up 3.3%) for Equipment and ¥5,590m (down 10.5%) for Chemicals.

Sales growth rate on the Equipment side is to decelerate. This has a lot to do with that Company forecasts assume, in regards to the mainstay equipment for pharmaceutical industry, some negative impacts to capital expenditures by pharmaceutical industry stemming from NHI price revision. On top of this, another negative factor comes from change of fiscal yearend for two consolidated subsidiaries belonging to the Equipment side, i.e., FREUND-VECTOR CORPORATION and FREUND-TURBO CORPORATION. Fiscal yearend for both changed to February from December, having resulted in sales booked for 14 months in FY02/2017 for both in terms of the Company's consolidated accounts versus being booked for 12 months in FY02/2018. Collective sales of both in January and February in 2017 were ¥832m (and operating loss of ¥10m, collectively). Sales of industrial-related equipment are to accelerate, while sales of tablet-printing equipment (TABREX Rev.) being booked on a full-fledged basis in H2, but sales on the Equipment side as a whole are not to go up very much. On the Chemicals side, sales are to come down in line with plummeting sales of dietary supplements.

Meanwhile, Company forecasts are going for concentration of sales and earnings in H2 as in the past years. This is due mainly to concentration of sales in H2 due to seasonal factors in FREUND-VECTOR CORPORATION, which is the Company's consolidated subsidiary based in the United States, being in charge of operations overseas mainly in North America on the Equipment side. When compared with FY02/2017 results, operating profit is to concentrate even more in H2. The Company suggests that this has a lot to do with tablet-printing equipment (TABREX Rev.), having had already booked development expense, to see sales on a full-fledged basis in H2. That is to say, tablet-printing equipment (TABREX Rev.) is to take off with gross profit margin favorably high from the scratch.

## Long-Term Prospects

The Company released its new midterm management plan “ONE FREUND” on 11 April 2017, which was followed by disclosure of further details in results meeting to have held on 14 April. As prospective earnings target in FY02/2022, the plan is calling for sales of ¥30,000m, operating profit of ¥3,000m, operating profit margin of 10.0% and ROE of 8.0%.



Source: Company Data, WRJ Calculation

When based on FY02/2017 results, the plan goes for sales increasing 7.2% in terms of CAGR towards FY02/2022 and 8.0% for earnings. Meanwhile, as mentioned earlier, FY02/2018 Company forecasts are going for sales to come down by 0.8% over the previous year and earnings to increase by 2.9%, suggesting CAGR of 9.3% for sales and 9.3% for earnings in and after FY02/2019. Thus, the Company suggests that the increases of sales and earnings are to adjust rather temporarily in FY02/2018.

Meanwhile, the Company mentions three major tasks to be achieved in the near future in order to meet above-mentioned prospective earnings target, i.e., a) sales promotions for tablet-printing equipment (TABREX Rev.) to have been launched in H2 FY02/2017, b) establishment of supply chain on a global basis on the Chemicals side and c) enhancement of sales overseas.

While a) has been already discussed, b) represents the Company's efforts to beef up exports of pharmaceutical excipients, being the most competitive on the Chemicals side and carrying gross profit margin favorably high, to India, etc. In regards to c), the Company refers to the strategy on the Equipment side to allocate own resources more than before on market development overseas as in China and India where the Company finds huge room to beef up own presence going forward. Still, it is too early to anticipate for all those tasks to contribute to short-term earnings, as they are to gradually generate positive impacts to earnings as time goes in the period of new midterm management plan.

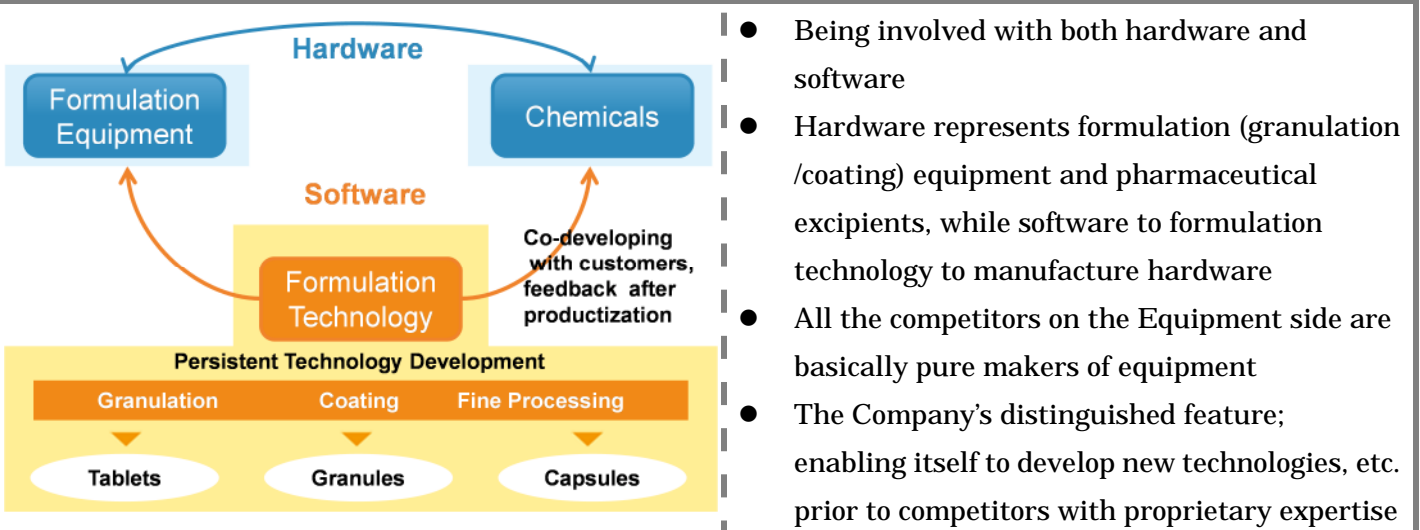
Meanwhile, new midterm management plan assumes sales on the Equipment side to increase 7.4% in terms of CAGR over the next five years and 6.7% on the Chemicals side. At the same time, based on data disclosed by the Company, we come up with earnings growth rate of 8.3% on the Equipment side and 2.7% on the Chemicals side. Thus, earnings on the Equipment side are expected to increase faster than on the Chemicals side, as far as we could see.

## 4.0 Business Model

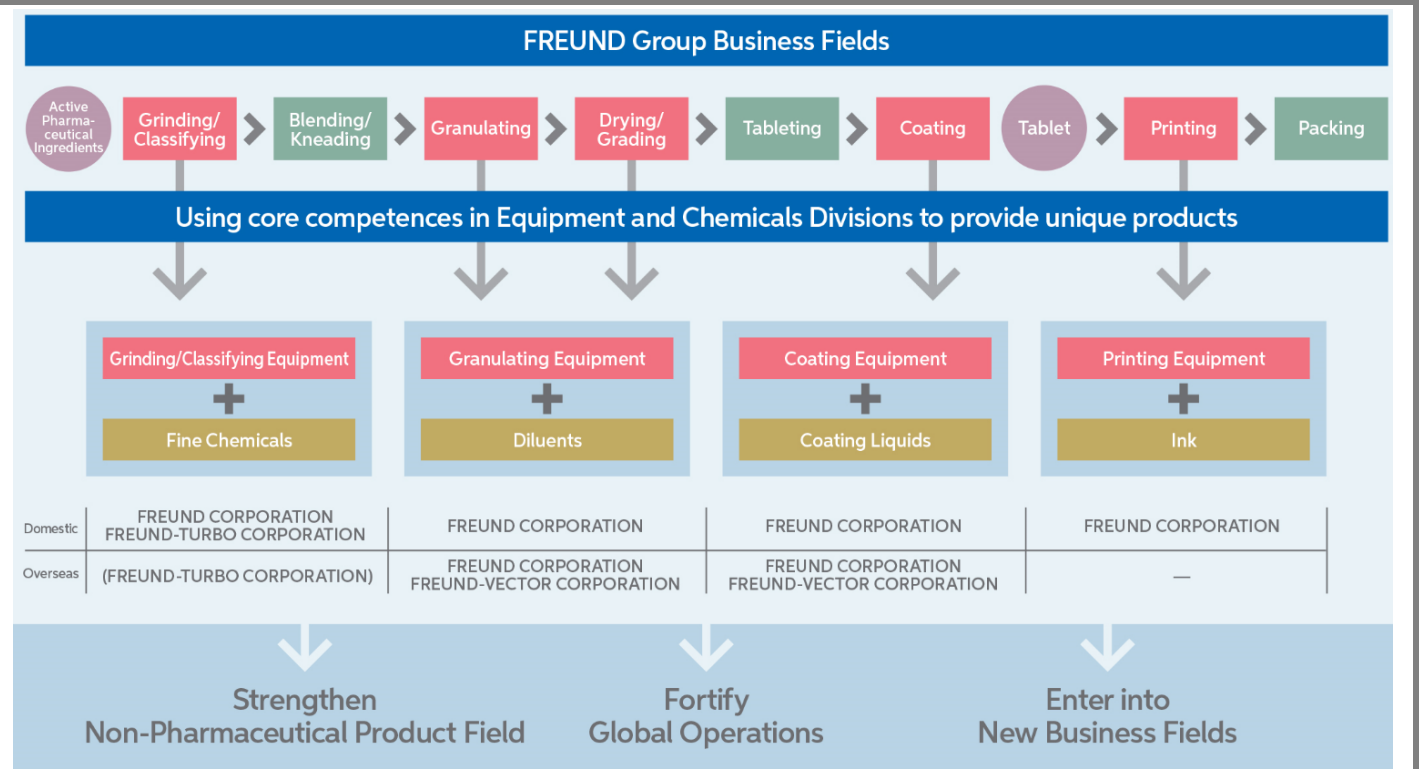
### Formulation, the Key Technology

The Company's mainstay business relates to development, manufacture and sales of granulation/coating equipment for pharmaceutical industry. Here, the Company is one of the three largest players on a global basis. It appears that Glatt GmbH (based in Germany) is the largest and GEA Group (based in Denmark) the second largest together with the Company. Meanwhile, in Japan, the Company is leading the market with share of 60% to 70%, while the only competitor in Japan is Powrex Corporation (unlisted) which sells equivalents based on the technology licensing by Glatt GmbH.

#### Business Model






#### FREUND Group's Business Fields based upon Pharmaceutical Products Manufacturing Processes



Source: Company Data

In FY02/2017, granulation/coating equipment accounted for 83.4% of sales on the Equipment side, literally applied in granulation and coating processes in the manufacture of pharmaceuticals. Granulation represents processing into fine particles through mixing drug compounds as an active ingredient of the medicament and additives to control various functions at a predetermined ratio. Meanwhile, coating represents formation of functionality films on the surface of tablets so that emission limits to control drug resolution in the tablet surface are achievable and so is masking to block the bitterness, etc.

Serial Granulation & Drying	Tablet-Printing Equipment	Pharmaceutical Excipients
 <p style="text-align: center;">Granuformer</p>	 <p style="text-align: center;">TABREX Rev.</p>	 <p style="text-align: center;">Granulot F (Fine)</p>
<p>Granulation, mixing and drying all on a serial basis</p>	<p>Printing identification information on the surface of tablets with objectives to avoid accidental ingestions and/or erroneous prescriptions</p>	<p>Miniaturized particles, diversifying applications</p>

Source: Company Data

Meanwhile, on the Chemicals side, the Company is involved with development, manufacture and sales of a) pharmaceutical excipients, b) food preservatives and c) dietary supplements. Sales here are almost all those of Japan, but as far as pharmaceutical excipients are concerned, the Company is exposed to exports to India, Korea and Taiwan, collectively accounting for 4% to 5% sales.

Pharmaceutical excipients are additives to formulate drug substances into tablets, coating agents, orally-fast-disintegrating tablets, capsules, granules, etc. in the manufacture of pharmaceuticals, making drug substances properly exert their functions. At the moment, the Company is seeing increasing exposure to those of generic drugs where the Company is competitive in particular and thus carrying gross profit margin high in particular.

In regards to food preservatives, adopted as those for baumkuchen and diverse other foods, the Company currently sees decreasing sales and earnings due to intensifying competition. Meanwhile, in regards to dietary supplements, the Company suggests that it is heavily involved with joint development of final products with own customers, implying sales are inclined to be determined by demand from specific customers and their measures for operations, etc.



**Disclaimer**

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Information here is a summary of “IR Information” of the Company, compiled by Walden Research Japan, from a neutral and professional standing point, in the form of a report. “IR Information” of the Company comprises a) contents of our interview with the Company, b) contents of presentations for institutional investors, c) contents of timely disclosed information and d) contents of the homepage etc.

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