

Frencken Group Ltd

Growing with a giant

SINGAPORE | TECHNOLOGY (MANUFACTURING) | INITIATION

- We believe Frencken is the key supplier for components in the most advanced lithography machine used to produce 2nm chips by their Netherlands-based customer. Frencken will ride on the organic growth of lithography, new products turning into mass production and customer shifting production into Asia. The investments into new capacity have been made as the ramp begins for multiple years.
- Frencken's front end suite of products is expanding into components for deposition, etch and strip processes. Medical and Analytical Life Sciences segment revenue are expected to remain stable HoH in 1H25e due to strong orders, while its Automotive revenue is likely to decline in 1H25e in-line with weaker EV sales in the UK and Germany.
- We initiate coverage with a BUY recommendation and target price S\$1.76. Frencken's current valuations are attractive at ~13x FY25e PE, a 35% discount to its local peers' average of ~20x FY25e PE. Our target price is based on 18x FY25e PE, more in-line with its peers' valuations. Singapore semiconductor manufacturer Grand Venture recently received a privatisation offer at 29x historical PE. Frencken has consistently paid out at least 30% of its earnings as dividends since its SGX listing in 2005.

Company Background

Frencken Group Limited (Frencken) is a technology solutions provider listed on the SGX Mainboard since 2005. It partners with multinational companies to develop customized solutions and manufacturing capabilities in different industries. Frencken operates in two business segments, Mechatronics (89% of revenue) and Integrated Manufacturing Services (IMS) (11% of revenue). Its Mechatronics division segments include Semiconductor (46% of total revenue), Analytical Life Sciences (23%), Medical (15%), and Industrial Automation (4%). Its IMS division segments include Automotive (8% of total revenue), Consumer & Industrial Electronics (2%), and Tooling (1%). Frencken operates in 18 facilities across Asia, Europe and the US. Its largest revenue contribution comes from The Netherlands (37% of revenue), its key semiconductor equipment customer.

Investment Highlights

- **Key semiconductor customers are expanding production in Asia.** Frencken's semiconductor segment revenue increased 34% YoY in 1Q25 because of a strong rebound in sales from its Asia operations. A key Netherlands-based customer is broadening its product portfolio by conducting tests in Asia for the most advanced lithography machine used to produce 2nm chips. In Asia, Frencken has manufacturing plants across Singapore, Malaysia and China. With an additional S\$63mn Capex spend on a five-storey manufacturing facility in Singapore (expected completion 1Q27e), we believe Frencken is well positioned to take on more products and processes from its customers' Asia expansion plans.
- **Rapid organic growth from key customers.** Frencken's key semiconductor customers experienced high revenue growth (average 27% YoY) in 1Q25 due to high demand for AI chips and leading-edge foundries' investments. TSMC maintained its Capex guidance for 2025e, with most of the Capex budgeted for advanced process equipment. We expect Frencken to benefit from new products and processes used by its key semiconductor equipment customers for R&D, to advance both front-end and back-end semiconductor equipment.
- **Attractive valuations compared to its peers.** Frencken is trading at ~13x FY25e PE, a 35% discount compared to its local peers' average valuations of ~20x FY25e PE. We believe Frencken is undervalued because of 1) strong manufacturing capabilities for its key customers in Asia, 2) high customer demand for testing new products, and 3) low exposure to direct impact from tariffs (shipments to USA make up ~9% of FY24 revenue).

11 July 2025

BUY (Initiation)

CLOSING PRICE	SGD 1.28
FORECAST DIV	SGD 0.03
TARGET PRICE	SGD 1.76
TOTAL RETURN	39.8%

COMPANY DATA

Bloomberg CODE:	FRKN SP EQUITY
O/S SHARES (MN):	427
MARKET CAP (USD mn / SGD mn):	424 / 542
52 - WK HI/LO (SGD):	1.68 / 0.83
3M Average Daily T/O (mn):	3.02

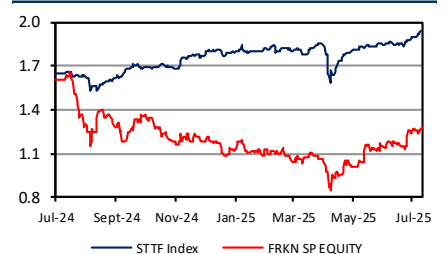
MAJOR SHAREHOLDERS

Precico Singapore Pte Ltd	9.8%
Sinn Hin Co Sdn Bhd	4.9%

TOTAL RETURN (%)

	1MTH	3MTH	YTD
COMPANY	7.7	52.1	14.4
STTF Index	2.9	21.3	10.1

PRICE VS. STTF



Source: Bloomberg, PSR

KEY FINANCIALS

Y/E Dec, SGD (mn)	FY23	FY24	FY25e	FY26e
Revenue	742.9	794.3	876.2	962.6
EBITDA	76.1	82.1	87.2	93.5
Net Profit	32.0	36.6	41.5	46.5
EPS (SGD cents)	7.6	8.7	9.8	11.0
P/E (X)	16.7	14.6	12.9	11.3
Dividend Yield	1.8%	2.1%	2.3%	2.7%
ROE	7.9%	8.4%	8.9%	9.3%
ROA	4.4%	5.0%	5.2%	5.5%

Source: Company, PSR

VALUATION METHOD

18x PE Multiple FY25e

Yik Ban Chong (Ben) (+65 6212 1851)

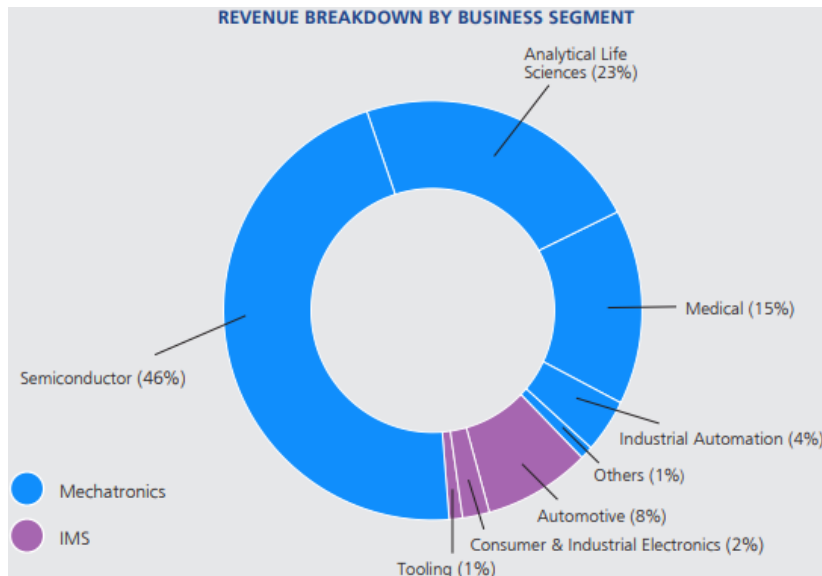
Research Analyst

chongyb@phillip.com.sg

Business Segments

Mechatronics division forms the bulk of Frencken's FY24 revenue, with key business segments such as Semiconductor, Analytical Life Sciences, Medical and Industrial Automation. Integrated Manufacturing Services (IMS) division makes up a smaller portion of Frencken's FY24 revenue, with Automotive segment contributing the most to IMS division.

Fig 1: Semiconductor is the largest revenue segment of Frencken, at 46% of FY24 revenue



Source: Company

Mechatronics

Frencken's Mechatronics division manufactures high precision industrial machinery and capital equipment for original equipment manufacturers (OEMs) globally. They hold sole manufacturer status for the major parts and modules that they develop, such as wafer fabrication equipment for lithography, deposition and etch processes in the semiconductor sector.

Within the semiconductor segment, Frencken has close partnerships with two key semiconductor equipment customers, one based in the US and another front-end customer based in the Netherlands. Due to increased customer orders and an expanded product range in Asia from above-mentioned customers, Frencken's semiconductor segment revenue increased 33.7% YoY in 1Q25.

Fig 2: Frencken's Mechatronics division serves the key US and Netherlands-based semiconductor customers locally, as well as in their Asia operations



Source: Company

Fig 3: Frencken's Mechatronics division have ~10,000 sqm floor space across Europe, Asia and the US.



Frencken Mechatronics Singapore



Frencken Mechatronics Malaysia



Frencken Mechatronics China, Wuxi



Frencken Mechatronics Europe



Frencken Mechatronics



Frencken Mechatronics Machinefabriek Gebrs

Source: Company

Some examples of key components manufactured in each segment include:

Semiconductor: 1) Wafer fab tools for lithography, chemical vapor deposition (CVD), 2) Die bonders, 3) Integrated circuit testers and manipulators

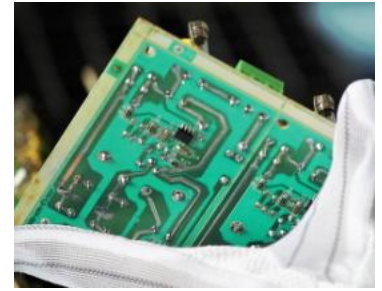
Analytical Life Sciences: Components and sub-assemblies for 1) Scanning electron microscopes, 2) vacuum system

Medical: Components and sub-assemblies for 1) Cardiovascular (CV) patient tables. 2) CT scanner

Integrated Manufacturing Services (IMS)

Frencken's IMS division (12% of FY24 revenue) offers integrated contract design and manufacturing services to the automotive and office automation industries. Automotive makes up 72% of IMS' revenue. IMS products supplied in the automotive segment include interior plastic decorative parts, dashboard pointers and clocks, radar antennas and filters.

Fig 4: Semiconductor chip



Source: Company

Fig 5: Automotive dashboard



Source: Company

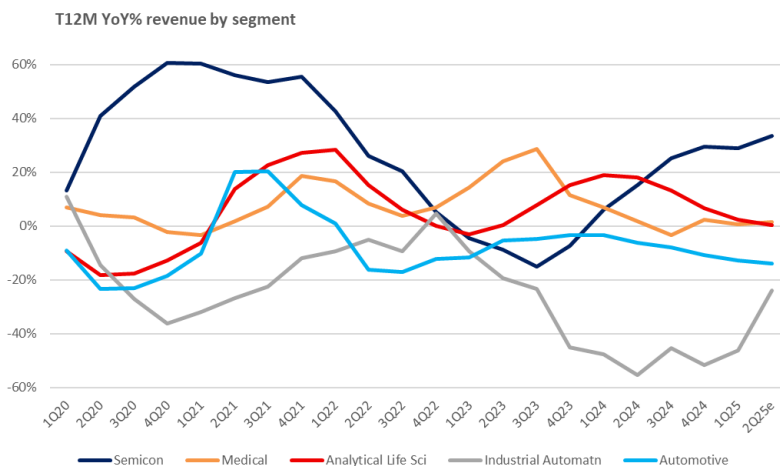
Revenue

Frencken's revenue is mainly driven by five key segments: Semiconductor, Medical, Analytical Life Sciences, Industrial Automation and Automotive. The revenue growth of the five segments has a low correlation as they operate in different industries and are influenced by changes in demand from their respective customers. For example, the Semiconductor T12M revenue decreased 15% YoY in 3Q23 because of semiconductor industry slowdown. However, the Medical and Analytical Life Sciences T12M revenue increased 29% and 8% YoY respectively in 3Q23, offsetting Semiconductor's decline for total revenue to decrease only 5% YoY in 3Q23.

Frencken's trailing 12-month (T12M) revenue increased 8% YoY in 1Q25, driven by the Semiconductor segment. Semiconductor segment's T12M revenue increased 29% YoY in 1Q25 because of steady sales from Frencken's key Netherlands-based front-end customer and a rebound in sales from its Asia operations. The customer is working on advanced AI chip equipment used to produce the next generation 2nm chip, and Frencken is working together with the customer to transfer some modules from Netherlands to Asia. Although the timeline is uncertain, we should expect a ramp in modules supplied by Frencken once the equipment goes into volume production.

Medical / Analytical Life Sciences' T12M revenue increased slightly by 1% / 2% YoY respectively in 1Q25 due to increased customer orders. Industrial Automation segment's T12M revenue declined 46% YoY in 1Q25 due to slower orders from a key customer in data storage solutions. Management guides Industrial Automation revenue to be stable HoH in 1H25e, equivalent to a ~24% decline in T12M YoY revenue in 2Q25e. Automotive's T12M revenue declined 13% YoY in 1Q25 due to soft demand in the automotive sector, and management guides Automotive to experience lower HoH revenue in 1H25e.

Fig 6: Frencken's Semicon segment revenue experiences tailwind from the demand for AI chips



Source: Company, PSR

Fig 7: Management believes USA tariffs does not have a significant direct impact as most of the tariffs will be borne by customers. USA shipments makes up ~9% of Frencken's FY24 revenue.

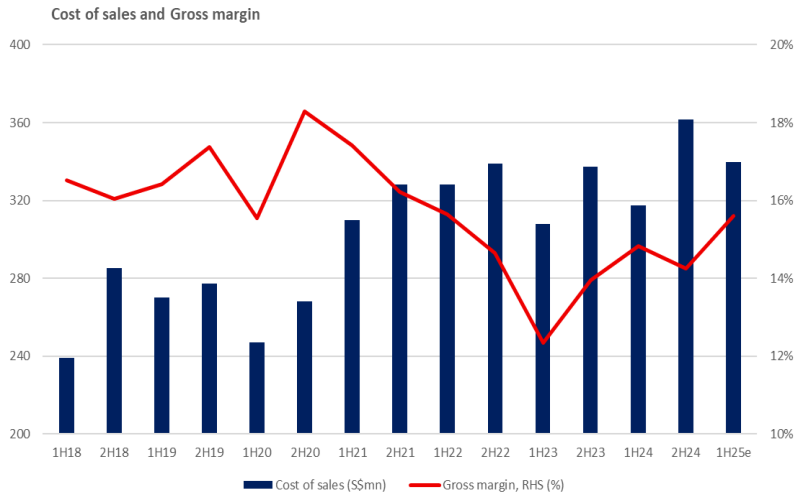
Anticipated revenue performances of key business segments	1H25 versus 2H24
Semiconductor	Higher
Medical	Higher
Analytical life sciences	Stable
Industrial Automation	Stable
Automotive	Lower

Source: Company

Expenses

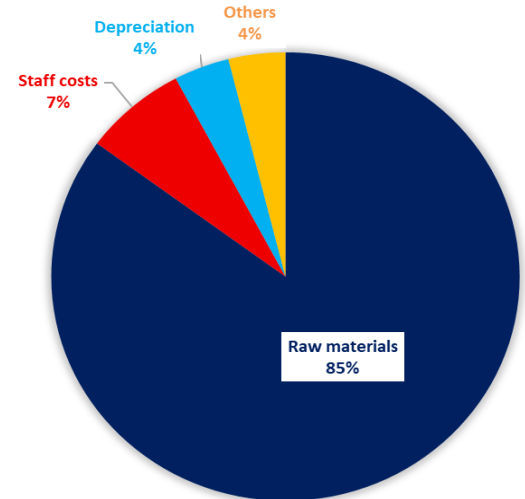
Frencken's expenses are largely raw material (85% of expenses), staff costs (7%) and depreciation (4%) – Fig 9. Raw materials, which make up the cost of sales, have been increasing at a CAGR of 4% since 2018 – Fig 8. Gross margins have been between 12-18% for the past six years. The latest 1Q25 gross margins were at 14.8%, +1.1ppt YoY due to improved operating leverage.

Fig 8: Gross margins recovered from 12.3% in 1H23 to 14.8% in 2H24



Source: Company, PSR

Fig 9: The largest expense comprises raw material



Source: Company

Balance sheet and cash flow

Frencken's net asset value (NAV) per share rose 8% YoY to S\$1.03 in 1Q25. Net cash rose 43% YoY to S\$73mn in FY24 due to lower cash used in investing and financing activities. 52% lower Capex YoY in FY24 also increased free cash flow by 59% YoY in FY24.

Fig 10: Net cash increased 43% YoY in FY24

S\$mn	FY19	FY20	FY21	FY22	FY23	FY24	FY25e
Cash and cash equivalents	122	174	193	167	143	159	178
Total borrowings	-53	-67	-97	-109	-92	-87	-90
Net cash	69	107	95	58	51	73	88

Source: Company, PSR

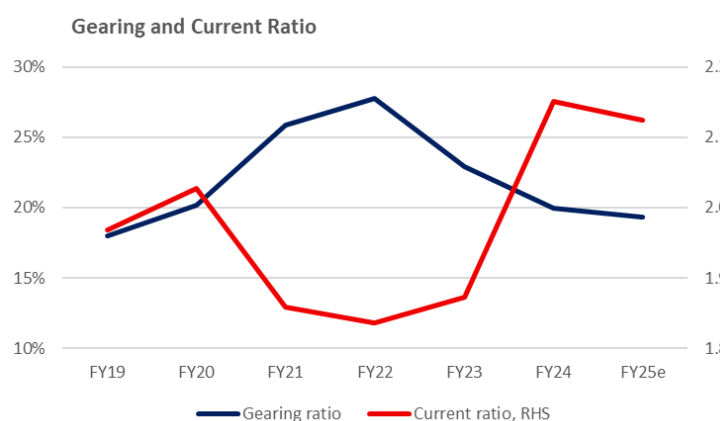
Fig 11: Free cash flow increased 52% YoY in FY24

S\$mn	FY19	FY20	FY21	FY22	FY23	FY24	FY25e
Operating cash flow	95	80	40	38	49	48	63
Capex	-15	-24	-17	-43	-27	-13	-26
Free cash flow	80	56	23	-5	22	35	37

Source: Company, PSR

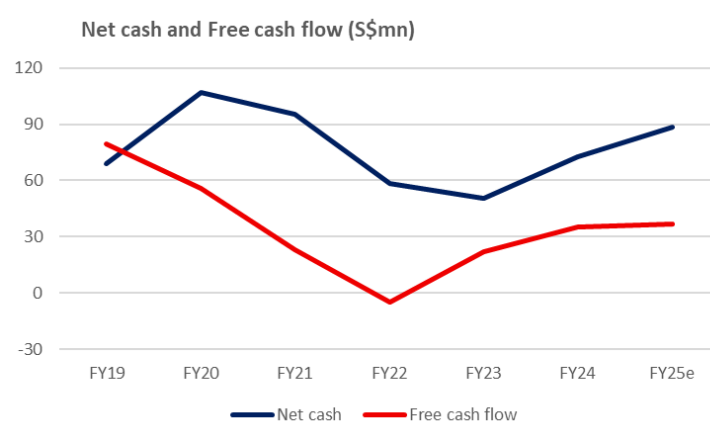
Gearing ratio (debt / equity) remains at healthy levels, declining to 20% in FY24 from 28% in FY22. Current ratio (current assets / current liabilities) is at its highest level in five years, providing Frencken with better short-term liquidity to fund its upcoming S\$63mn Capex investments to expand its front-end capabilities. The five-storey manufacturing facility in Singapore is expected to complete by 1Q27e. We expect FY25e Capex to double YoY as a result. The new facility has clean rooms with higher floor-to-ceiling heights, enabling Frencken to take on new programmes with key wafer fabrication equipment customers in the following years.

Fig 12: Gearing ratio decreased by 3 ppt YoY in FY24, while its current ratio increased by 15% YoY in FY24



Source: Company, PSR

Fig 13: Net cash and free cash flow are positive and have increased since FY22

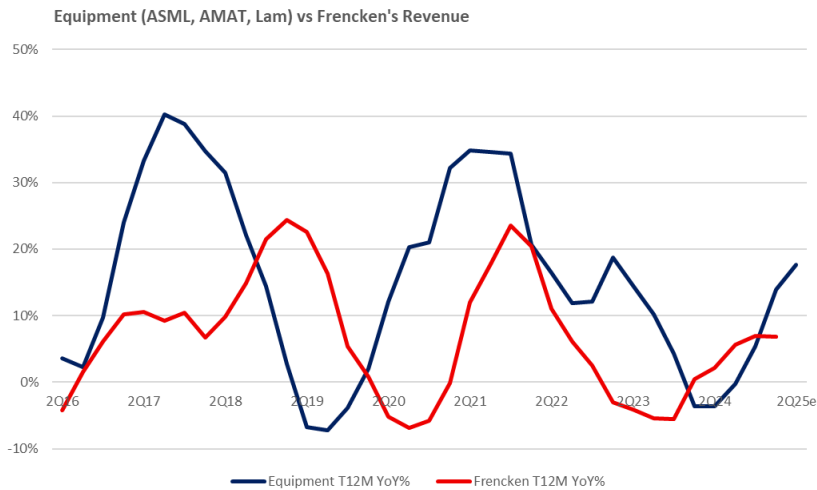


Source: Company, PSR

Industry

Frencken's revenue is closely related to the revenue of major semiconductor equipment makers, with a lag time of 3 to 4 quarters in some periods – Fig 14. All three equipment makers (ASML, Applied Materials, and Lam Research) provided positive revenue guidance of an average 18% YoY increase for 2Q25e, driven by increased leading-edge foundry investments. In their 1Q25 earnings, TSMC reiterated their 2025e CAPEX budget of US\$40bn midpoint, where 70% will go towards advanced process technologies. We believe that the strong demand for AI chip equipment in 2025e will continue to drive revenue growth for Frencken this year.

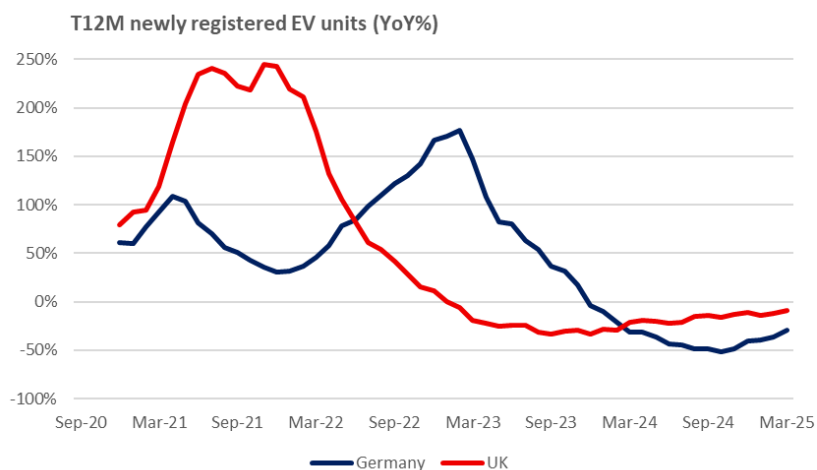
Figure 14: Semicon equipment makers guided an average 18% YoY increase in 2Q25e revenue



Source: Company, PSR

We expect Automotive segment's revenue to be lower HoH in 1H25e. This is in tandem with a slowdown in demand for electric vehicles (EVs) in UK and Germany. UK pushed back a ban on new petrol and diesel cars/vans from 2030 to 2035, easing the transition to EVs. Germany ended its EV subsidy programme in 2023 as part of budget cuts, decreasing demand for EVs.

Figure 15: UK/Germany recorded a 9%/30% decline respectively in their T12M newly registered EV units in March 2025.



Source: CEIC, PSR

Valuation

Frencken is trading at FY25e PE valuation of ~13x, a 35% discount compared to its local peers' average PE of ~20x (Fig 16). We initiate coverage with a BUY rating and a target price of S\$1.76. Our target price is based on 18x FY25e PE, more in-line with its peers' valuations.

Fig 16: Local/Regional peers are trading at an average 20x/27x one-year forward PE, respectively

Name	1 Mth Perf.	3 Mth Perf.	YTD Perf.	Last Price (\$)	Mkt. Cap. (\$mn)	Yr0	P/E Yr+1	Yr+2	P/B	P/S	LTM revenue growth (%)
Local Peers											
Frencken Group	10%	36%	15%	1.27	543	14.6	12.9	12.3	1.2	0.7	7%
UMS Integration Ltd	13%	39%	33%	1.33	945	23.0	19.6	16.2	2.3	3.9	-19%
AEM Holdings Ltd	15%	36%	1%	1.46	458	39.9	18.5	13.2	0.9	1.2	-21%
Grand Venture Technology Ltd	3%	57%	29%	0.96	324	29.2	25.8	17.4	2.4	2.0	43%
Nanofilm Technologies Intl	12%	28%	-16%	0.63	411	53.4	28.9	17.2	1.1	2.0	15%
Venture Corp Ltd	5%	13%	-6%	11.79	3,393	14.0	14.3	13.8	1.2	1.2	-10%
Average (excl. Frencken)	10%	35%	9%	n.m	1,012	29.0	20.0	15.0	1.5	1.8	3%
Global and Regional Peers											
Malaysian Pacific Industries	1%	42%	-17%	21.18	1,271	21.8	30.3	25.2	2.0	2.0	2%
Sam Engineering & Equipment	0%	16%	-8%	4.00	815	29.5	26.7	22.2	1.9	1.8	-1%
Unisem (M) Berhad	9%	11%	-25%	2.21	1,073	61.2	48.0	31.1	1.6	2.2	10%
Benchmark Electronics Inc	5%	16%	-11%	40.15	1,855	22.1	19.8	16.7	1.3	0.6	-6%
Flex Ltd	18%	76%	35%	51.68	24,721	22.3	17.6	15.7	3.9	0.8	-2%
Sanmina Corp	17%	39%	37%	103.46	7,080	22.6	17.6	15.1	2.5	0.7	-15%
Average	8%	33%	2%	n.m	6,136	29.9	26.6	21.0	2.2	1.3	-2%

Source: Bloomberg, PSR

Appendix 1 – Frencken’s segments and products



AUTOMOTIVE

- Filters
- Interior plastic decorative parts
- Dashboard clusters, pointers and clocks
- Radar antennas



ANALYTICAL LIFE SCIENCES

- Components and sub-assemblies for
- Scanning electron microscopes
 - Mass spectrometers
 - Gas / Liquid chromatography systems
 - Spectroscopes
 - Vacuum systems



HEALTHCARE

- Components and sub-assemblies for
- CV (cardiovascular) tables
 - X-ray system
 - CT scanner
 - Histopathology digital scanner



SEMICONDUCTOR

- Components, sub-assemblies and complete equipment build-up for front-end and back-end semiconductor equipment such as:
- Wafer fabrication equipment for lithography, deposition, etch & strip processes
 - Die bonders
 - IC testers and manipulators
 - Metrology tools
 - Customised motors, consumables & repair solutions for wafer fabrication equipment



INDUSTRIAL

- Components and sub-assemblies for
- Industrial automation for disk drive assembly and testing
 - Electric motors for custom applications
 - Semiconductor wafer transfer robots
 - Electrical switch-gear for industrial and home applications

Source: Company

Financials

Income Statement

Y/E Dec, SGD '000	FY22	FY23	FY24	FY25e	FY26e
Revenue	786,107	742,859	794,333	876,182	962,602
Gross profit	118,980	98,004	115,338	127,046	139,577
EBITDA	94,453	76,125	82,128	87,213	93,485
Depreciation & amortisation	(27,810)	(29,787)	(30,609)	(30,261)	(30,916)
EBIT	66,643	46,338	51,519	56,952	62,569
Net finance costs	(3,598)	(4,804)	(5,473)	(5,042)	(4,480)
Share of results from assoc	2	4	(2)	-	-
Profit before tax	63,047	41,538	46,044	51,910	58,089
Income tax expense	(11,410)	(9,552)	(9,415)	(10,382)	(11,618)
PATMI	51,637	31,986	36,629	41,528	46,472

Per share data (SGD cents)

Y/E Dec	FY22	FY23	FY24	FY25e	FY26e
EPS	12.1	7.6	8.7	9.8	11.0
BVPS	0.9	0.9	1.0	1.1	1.2
DPS	3.6	2.3	2.6	2.9	3.3

Cash Flow

Y/E Dec, SGD '000	FY22	FY23	FY24	FY25e	FY26e
CFO					
Profit after tax	51,637	31,986	36,629	41,528	46,472
Adjustments	43,306	43,516	49,245	49,433	50,146
WC changes	(44,101)	(8,743)	(23,010)	(14,021)	(22,170)
Cash generated from ops	50,842	66,759	62,864	76,940	74,448
Tax paid	(8,839)	(11,752)	(8,125)	(7,886)	(8,663)
Finance costs paid	(4,177)	(6,043)	(6,691)	(6,133)	(6,738)
Cashflow from ops	37,826	48,964	48,048	62,921	59,047

CFI

CAPEX, net	(42,600)	(26,845)	(13,101)	(26,285)	(28,878)
Others	(1,878)	(452)	1,984	2,357	2,530
Cashflow from investments	(44,478)	(27,297)	(11,117)	(23,928)	(26,348)

CFF

Loans issuance, net of repayments	(2,271)	(10,071)	3,263	3,263	3,263
Dividends paid	(17,636)	(15,544)	(9,737)	(12,592)	(14,073)
Others	(10,518)	(10,235)	(9,093)	(9,011)	(9,222)
Cashflow from financing	(30,425)	(35,850)	(15,567)	(18,339)	(20,033)
Net change in cash	(42,342)	(19,073)	25,231	20,654	12,666
CCE, end	110,268	91,195	116,426	137,080	149,746

Source: Company, Phillip Securities Research (Singapore) Estimates

Balance Sheet

Y/E Dec, SGD '000	FY22	FY23	FY24	FY25e	FY26e
ASSETS					
Cash and cash equivalents	166,989	142,631	159,199	178,260	189,241
Trade receivables	123,207	171,193	137,774	168,035	184,609
Inventories	228,821	203,396	226,465	238,081	257,054
Others	13,386	11,257	16,389	13,390	14,514
Total current assets	532,403	528,477	539,827	597,767	645,418
PPE	127,541	129,816	119,997	124,083	130,006
Right-of-use assets	38,965	49,333	47,312	46,714	47,873
Goodwill	21,503	21,348	22,017	21,905	21,177
Other	4,796	6,312	5,991	5,665	5,838
Total non-current assets	192,805	206,809	195,317	198,367	204,894
Total Assets	725,208	735,286	735,144	796,134	850,312

LIABILITIES

Trade payable	108,312	124,802	94,503	121,093	133,037
Borrowings	107,721	91,569	86,458	89,721	92,984
Others	73,927	65,869	70,001	70,535	73,989
Total current liabilities	289,960	282,240	250,962	281,349	300,010
Lease liabilities	32,422	42,276	38,549	40,174	41,171
Others	6,407	5,492	8,125	8,906	9,701
Total non-current liabilities	38,829	47,768	46,674	49,080	50,872
Total Liabilities	328,789	330,008	297,636	330,429	350,882

Equity

Share capital	2,345	2,345	2,345	2,345	2,345
Shareholder Equity	396,419	405,278	437,508	465,705	499,430

Valuation Ratios

Y/E Dec	FY22	FY23	FY24	FY25e	FY26e
P/E (X)	10.5	16.7	14.6	12.9	11.3
P/B (X)	1.4	1.4	1.2	1.2	1.1
EV/EBITDA (X)	6.5	5.7	5.2	4.6	4.1

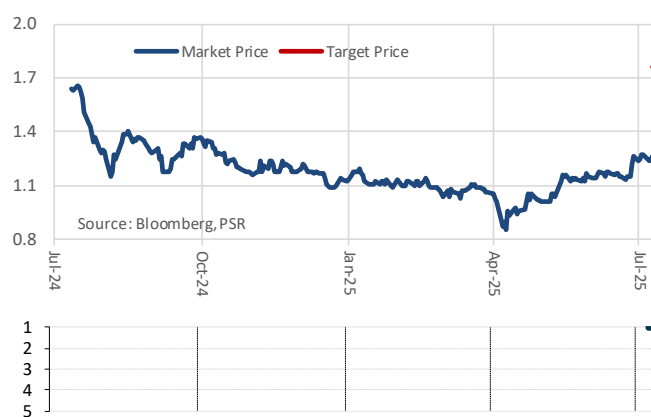
Growth & Margins

Growth					
Revenue	2.5%	-5.5%	6.9%	10.3%	9.9%
EBITDA	-0.5%	-19.4%	7.9%	6.2%	7.2%
EBIT	-7.3%	-30.5%	11.2%	10.5%	9.9%
Net profit	-12.6%	-38.1%	14.5%	13.4%	11.9%
Margins					
Gross margin	15.1%	13.2%	14.5%	14.5%	14.5%
EBITDA margin	12.0%	10.2%	10.3%	10.0%	9.7%
EBIT margin	8.5%	6.2%	6.5%	6.5%	6.5%
Net profit margin	6.6%	4.3%	4.6%	4.7%	4.8%

Key Ratios

ROE	13.0%	7.9%	8.4%	8.9%	9.3%
ROA	7.1%	4.4%	5.0%	5.2%	5.5%
Net Gearing	CASH	CASH	CASH	CASH	CASH

Ratings History



PSR Rating System

Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

Contact Information (Singapore Research Team)

Head of Research

Paul Chew – paulchewkl@phillip.com.sg

Research Admin

Qystina Azli - qystina@phillip.com.sg

Technical Analyst

Zane Aw – zaneawyx@phillip.com.sg

Property | REITs

Darren Chan – darrenchanrx@phillip.com.sg

Property | REITs

Liu Miaomiao – liumm@phillip.com.sg

Banking | Auto

Glenn Thum – glennthumjc@phillip.com.sg

US Tech Hardware | E-commerce | ETF

Helena Wang – helenawang@phillip.com.sg

Construction | Semiconductors

Yik Ban Chong (Ben) – chongyb@phillip.com.sg

Communications | CRM

Serena Lim – serenalimyq@phillip.com.sg

Software | Services

Alif Fahmi – aliffahmi.shakir@phillipcapital.com.my

Contact Information (Regional Member Companies)

SINGAPORE

Phillip Securities Pte Ltd

Raffles City Tower
250, North Bridge Road #06-00
Singapore 179101
Tel +65 6533 6001
Fax +65 6535 6631
Website: www.poems.com.sg

JAPAN

Phillip Securities Japan, Ltd.

4-2 Nihonbashi Kabuto-cho Chuo-ku,
Tokyo 103-0026
Tel +81-3 3666 2101
Fax +81-3 3666 6090
Website: www.phillip.co.jp

THAILAND

Phillip Securities (Thailand) Public Co. Ltd

15th Floor, Vorawat Building,
849 Silom Road, Silom, Bangrak,
Bangkok 10500 Thailand
Tel +66-2 6351700 / 22680999
Fax +66-2 22680921
Website www.phillip.co.th

UNITED STATES

Phillip Capital Inc

141 W Jackson Blvd Ste 3050
The Chicago Board of Trade Building
Chicago, IL 60604 USA
Tel +1-312 356 9000
Fax +1-312 356 9005
Website: www.phillipusa.com

INDIA

PhillipCapital (India) Private Limited

No.1, 18th Floor, Urmi Estate
95, Ganpatrao Kadam Marg
Lower Parel West, Mumbai 400-013
Maharashtra, India
Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969
Website: www.phillipcapital.in

MALAYSIA

Phillip Capital Management Sdn Bhd

B-3-6 Block B Level 3 Megan Avenue II,
No. 12, Jalan Yap Kwan Seng, 50450
Kuala Lumpur
Tel +603 2162 8841
Fax +603 2166 5099
Website: www.poems.com.my

INDONESIA

PT Phillip Securities Indonesia

ANZ Tower Level 23B,
Jl Jend Sudirman Kav 33A
Jakarta 10220 – Indonesia
Tel +62-21 5790 0800
Fax +62-21 5790 0809
Website: www.phillip.co.id

FRANCE

King & Shaxson Capital Limited

3rd Floor, 35 Rue de la Bienfaisance 75008
Paris France
Tel +33-1 45633100
Fax +33-1 45636017
Website: www.kingandshaxson.com

AUSTRALIA

Phillip Capital Limited

Level 10, 330 Collins Street
Melbourne, Victoria 3000, Australia
Tel +61-03 8633 9803
Fax +61-03 8633 9899
Website: www.phillipcapital.com.au

TURKEY

PhillipCapital Menkul Degerler

Esentepe Mah. Harman 1 Sk.
Nida Kule Kat 3-12 Levent-Şişli
34394, İstanbul Turkey
Tel: +90 (212) 239 10 00
Fax: 0212 233 69 29
Website: www.phillipcapital.com.tr

HONG KONG

Phillip Securities (HK) Ltd

11/F United Centre 95 Queensway
Hong Kong
Tel +852 2277 6600
Fax +852 2868 5307
Websites: www.phillip.com.hk

CHINA

Phillip Financial Advisory (Shanghai) Co Ltd

No 550 Yan An East Road,
Ocean Tower Unit 2318,
Postal code 200001
Tel +86-21 5169 9200
Fax +86-21 6351 2940
Website: www.phillip.com.cn

UNITED KINGDOM

King & Shaxson Capital Limited

6th Floor, Candlewick House,
120 Cannon Street,
London, EC4N 6AS
Tel +44-20 7426 5950
Fax +44-20 7626 1757
Website: www.kingandshaxson.com

CAMBODIA

Phillip Bank Plc

Ground Floor of B-Office Centre, #61-64,
Norodom Blvd Corner Street 306, Sangkat
Boeung Keng Kang 1, Khan Chamkamorn,
Phnom Penh, Cambodia
Tel: 855 (0) 7796 6151/855 (0) 1620 0769
Website: www.phillipbank.com.kh

DUBAI

Phillip Futures DMCC

Member of the Dubai Gold and
Commodities Exchange (DGCX)
Unit No 601, Plot No 58, White Crown Bldg,
Sheikh Zayed Road, P.O.Box 212291
Dubai-UAE
Tel: +971-4-3325052 / Fax: + 971-4-3328895

Important Information

This report is prepared and/or distributed by Phillip Securities Research Pte Ltd ("Phillip Securities Research"), which is a holder of a financial adviser's licence under the Financial Advisers Act, Chapter 110 in Singapore.

By receiving or reading this report, you agree to be bound by the terms and limitations set out below. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

The information and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this report has been obtained from public sources which Phillip Securities Research believes to be reliable. However, Phillip Securities Research does not make any representation or warranty, express or implied that such information or Research is accurate, complete or appropriate or should be relied upon as such. Any such information or Research contained in this report is subject to change, and Phillip Securities Research shall not have any responsibility to maintain or update the information or Research made available or to supply any corrections, updates or releases in connection therewith.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this report are as of the date indicated and are subject to change at any time without prior notice. Past performance of any product referred to in this report is not indicative of future results.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. This report should not be relied upon exclusively or as authoritative, without further being subject to the recipient's own independent verification and exercise of judgment. The fact that this report has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this report is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this report involve significant risks and may not be suitable for all investors, and that any decision to enter into transactions involving such products should not be made, unless all such risks are understood and an independent determination has been made that such transactions would be appropriate. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of such risks.

Nothing in this report shall be construed to be an offer or solicitation for the purchase or sale of any product. Any decision to purchase any product mentioned in this report should take into account existing public information, including any registered prospectus in respect of such product.

Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may provide an array of financial services to a large number of corporations in Singapore and worldwide, including but not limited to commercial / investment banking activities (including sponsorship, financial advisory or underwriting activities), brokerage or securities trading activities. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this report, and may have performed services for or solicited business from such issuers. Additionally, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have provided advice or investment services to such companies and investments or related investments, as may be mentioned in this report.

Phillip Securities Research or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report may, from time to time maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation in respect of the foregoing. Investments will be denominated in various currencies including US dollars and Euro and thus will be subject to any fluctuation in exchange rates between US dollars and Euro or foreign currencies and the currency of your own jurisdiction. Such fluctuations may have an adverse effect on the value, price or income return of the investment.

To the extent permitted by law, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold an interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this report. Accordingly, information may be available to Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, which is not reflected in this report, and Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may, to the extent permitted by law, have acted upon or used the information prior to or immediately following its publication. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this report.

The information, tools and material presented herein are not directed, intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution, publication, availability or use would be contrary to the applicable law or regulation or which would subject Phillip Securities Research to any registration or licensing or other requirement, or penalty for contravention of such requirements within such jurisdiction.

This report is intended for general circulation only and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. The products mentioned in this report may not be suitable for all investors and a person receiving or reading this report should seek advice from a professional and financial adviser regarding the legal, business, financial, tax and other aspects including the suitability of such products, taking into account the specific investment objectives, financial situation or particular needs of that person, before making a commitment to invest in any of such products.

This report is not intended for distribution, publication to or use by any person in any jurisdiction outside of Singapore or any other jurisdiction as Phillip Securities Research may determine in its absolute discretion.

IMPORTANT DISCLOSURES FOR INCLUDED RESEARCH ANALYSES OR REPORTS OF FOREIGN RESEARCH HOUSES

Where the report contains research analyses or reports from a foreign research house, please note:

- (i) recipients of the analyses or reports are to contact Phillip Securities Research (and not the relevant foreign research house) in Singapore at 250 North Bridge Road, #06-00 Raffles City Tower, Singapore 179101, telephone number +65 6533 6001, in respect of any matters arising from, or in connection with, the analyses or reports; and
- (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, Phillip Securities Research accepts legal responsibility for the contents of the analyses or reports.