

22 Dec, 2023

## Pentamaster | 01665.HK

A semiconductor participant with unique edges

STOCK RATING

TARGET PRICE

BUY

HK\$ 1.23

Pentamaster (01665.HK) primarily provides automation technologies and solutions for multinational manufacturers, mainly in the automotive, semiconductor, telecommunications, consumer electronics and medical sectors. Pentamaster (01665.HK) achieved MYR 522.8mn total revenue for the first 9 months ended Sep 2023, of which 68.5% and 31.5% were contributed by the Automated Test Equipment (ATE) business segment and Factory Automation Solutions (FAS) business segment respectively.

Always on the right track: Pentamaster (01665.HK) is an asset-light company which puts its focus on R&D. The experienced management team and the technology-oriented & customized solution-based business model provide the Group with the flexibility to adapt to market change. In 2018, it developed solutions for 3D sensing which was one of the primary catalysts in the smartphone market, and the automotive segment became one of the primary contributors due to the increasing penetration of ADAS and NEV in 2020. It is not a coincidence or a matter of luck for Pentamaster (01665.HK) to consistently deliver convincing results, the decision of the management and the business model did play key roles in assisting the Group to ride on the right track.

Key drivers in coming years: The medical business segment provides growth potential for Pentamaster (01665.HK) because the Group established three income sources from this business, including i) the distribution of equipment through approved distributors, ii) the provision the FAS solutions to the customers, iii) the participation in the manufacturing of single-use medical devices. Besides, Pentamaster (01665.HK) penetrates the supply chain of auto-related semiconductor participants, allowing the Group to directly benefit from the growing penetration rate and the technological advancement of electric vehicles.

Forecast & Valuation: We estimate that the revenue of Pentamaster (01665.HK) will grow by YoY 16.2% - YoY 23.4% in the coming three years, and the Group may achieve over MYR 1.0bn top-line in FY 2025. According to our estimation, Pentamaster (01665.HK) may realize MYR 142.4mn of net profit in FY 2023, representing a YoY 6.8% growth. We believe that the depreciation and the staff expenses may slash the profitability of the Group in the short term, but the net profit margin will recover to ~21% - ~22% after the completion of Plant 3. We initiate our first coverage on Pentamaster (01665.HK) with a "BUY" rating and a HKD 1.23/share TP, implying 12.0x/9.3x/7.7x fw P/E of FY 2023/FY 2024/FY 2025.

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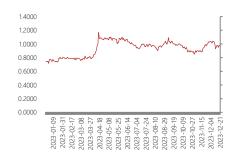
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Pentamaster (01665.HK)					
Stock Rating	BUY				
Target Price	HK\$ 1.23				
Current Price	HK\$ 0.98				
52-Week Range	HK\$ 0.70 - 1.17				
Market cap. (HKD, bn)	HK\$ 2.4				

MYR, mn	2022	2023	2024	2025	
_	(A)	(E)	(E)	(E)	
Revenue	600.6	698.2	861.7	1,009.8	
Gross Profit	185.5	209.4	267.4	319.3	
Gross Margin	4.9%	7.8%	8.5%	8.2%	
Net Profit	133.2	142.4	184.2	221.5	
ROE	19.4%	18.1%	20.2%	20.6%	

Performance	1 mth	3 mth	6 mth	1 year
Absolute	3.2%	-2.0%	-2.0%	31.3%
Relative to HSI	9.4%	3.9%	11.5%	44.6%





# | RESEARCH

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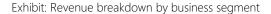
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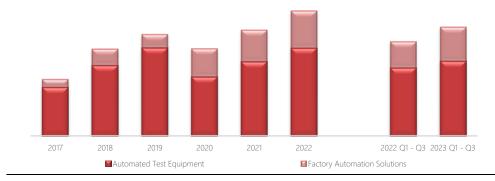


### **Business Overview**

Pentamaster (01665.HK) primarily provides automation technologies and solutions for multinational manufacturers, mainly in the automotive, semiconductor, telecommunications, consumer electronics and medical sectors. Established in Malaysia, the Group has expanded its global footprint to the United States, China, Japan, Singapore and Germany, and it plans to establish offices in Indonesia and the Middle East.

Pentamaster (01665.HK) achieved MYR 522.8mn total revenue for the first 9 months ended Sep 2023, of which 68.5% and 31.5% were contributed by the Automated Test Equipment (ATE) business segment and Factory Automation Solutions (FAS) business segment respectively.

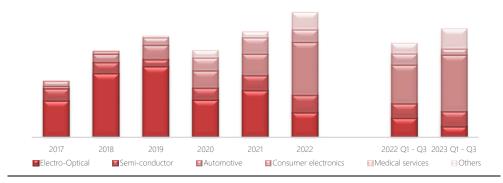




Source: Company data, West Bull Securities

The revenue generated from the automotive sector surged by YoY 46.5% to MYR 271.7mn, accounting for 52.0% of total revenue in 2023 Q1 – Q3. Contribution from the electro-optical customers and consumer electronics customers were the primary draggers, retreating by YoY 44.2% and YoY 46.5% respectively when compared to the first 9 months ended Sep 2022.

Exhibit: Revenue breakdown by industry



### Automated Test Equipment (ATE) business segment

The ATE business segment includes the services of designing, development and manufacturing of standard and non-standard automated equipment which are primarily used for i) semiconductor electronic components testing for smart sensors, power modules and ICs, (ii) burn-in testing for wafer-level devices and modules, and iii) end-products testing. The testing solutions are mainly provided to automotive, semiconductor, and telecommunications customers.

#### ■ Testing equipment for semiconductor and MEMS sensors

Equipment	Major Capabilities				
Test Solutions					
Discrete & ICs	Electrical Test, Functional Test, Open Short Test, Ambient Hot				
	Test and Vision Test, CMOS Image Sensor Test, Electrical				
	Functional Test, Stimulus Test, Vision Inspection, Active Die				
	Inspection, 2D Pad Measurement, 3D Measurement				
DBC Substrate	High Voltage / Power Test, Ambient Hot Temperature Test				
Power Device	Electrical Test, Functional Test, Open Short Test, Ambient Hot				
	Test & Vision Test				
Power Module	Lead, Mark and Package Inspection, Stress Test				
Motion Sensor	Axis Test				

### **Automated Vision Inspection Solutions**

Vision Inspection, Laser Marking, Sorting, Cosmetic Inspection, Dimension Inspection, Die Inspection, Package Inspection, Pre-wafer Alignment, Wafer Saw Line Inspection

#### Assembly and Process Solutions

Mark Inspection, Laser Alignment, Wafer Alignment, Package			
Inspection			
Dimension Inspection, Vision Alignment			
Active Alignment, Far Field Test, Light Current-Voltage Sweep			
Test, Cosmetic Inspection			
Active Alignment, Cosmetic Inspection, Mark Inspection			



■ Testing equipment for optics and photonics sensors

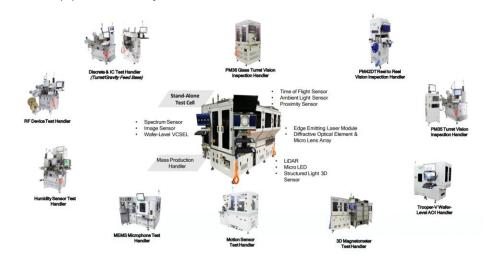
Equipment	Major Capabilities
Test Solutions	
Structure Light Sensor	Far Field Test, Light Current-Voltage Sweep Test, 2D Matrix
	Inspection, 6-sided AOI
Proximity Sensor	Light Current-Voltage Sweep Test, Angular & Module
	Reflectance Test, PD Test
ToF Sensor	Far Field Test, Light Current-Voltage Sweep Test, 2D Matrix
	Inspection
Ambient Light Sensor	Electrical Functional Test, Optical Alignment Test, Light
	Leakage Test, Senor Calibration
Image Sensor	Electrical Test, Functional Test
Spectrum Sensor	Electrical Test, Functional Test
Micro LED	DUT Alignment, 2DBC Scanning, Colrimeter Image Test,
	Electrical Functional Test
LiDAR Sensor	Tests for the emitter, optical lenses and receivers
Wafer-Level VCSEL	Light Current-Voltage Sweep Test, Near Field Test, Far Field
	Test, Burn-in Test
DOE	Far Field Test, Image Test, Vision Alignment, 2D Matrix
	Inspection, Laser Beam Transmission

### LED Test & Burn-in Test

Bun-in Test of LED products in tile form or wafer form

Source: Company data, West Bull Securities

Exhibit: Equipment offered by Pentamaster (01665.HK)



Source: Company data



Despite a temporary setback in the ATE segment in 2023 Q3, the performance of Pentamaster (01665.HK) remained resilient for the first 9 months ended 30 Sep 2023. The Group achieved MYR 358.3mn revenue in the ATE business segment for the first 9 months ended 30 Sep 2023, and the automotive segment was the primary contributor.

148.5

111.2

98.6

98.6

Q1

Q2

Q3

Q4

12017

12018

12019

12020

12022

12022

Exhibit: Quarterly revenue breakdown of ATE business segment (MYR, mn)

Source: Company data, West Bull Securities

### Factory Automation Solutions (FAS) business segment

The FAS business segment includes the services of designing, developing and installing integrated factory automation solutions. Pentamaster (01665.HK) customizes and automates manufacturing processes by integrating automated assembly and test modules, material handling equipment, robotics technology, auto inspection and manufacturing executive systems.

### ■ Factory Automation Solutions

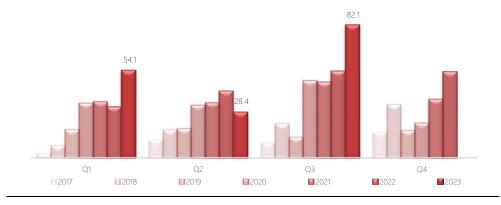
Solutions		Details				
i-ARMS		A combination of FAS modules into one automated				
		solution, including Vision Inspection, Manufacturing				
		Executive System, Robotic System, Intelligent				
		Conveyor System and RFID.				
F&B Automation Line		Automation of Bottle Filling & Packaging, Automation				
		of Can Filling & Packaging				
Automated Guided Ve	ehicle					
Material Handling Cor	nveyor System	Conveyor, Lifter				
i-Work Bench						
Automated Reel Packe	er	Automation of the packing process of semiconductor				
		reels				
Medical Device	Automated	Assembly Automation, Automation of Production				
Assembly Solution		Process				

### | RESEARCH



Pentamaster (01665.HK) recorded MYR 164.5mn revenue in the FAS business segment for the first 9 months ended 30 Sep 2023, accounting for approximately 31.5% of total revenue. Thanks to the significant contribution from the medical segment, the Group achieved MYR 82.1mn revenue in 2023 Q3, realizing the highest revenue from a single quarter.

Exhibit: Quarterly revenue breakdown of FAS business segment (MYR, mn)

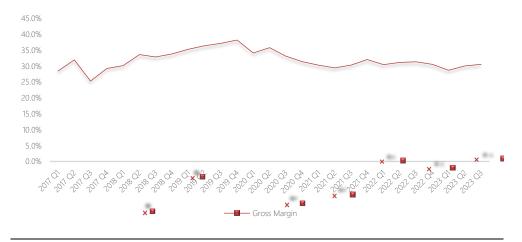


Source: Company data, West Bull Securities

#### Gross Margin

Pentamaster (01665.HK) achieved a 30.5% gross margin in 2023 Q3, the slight retreat in the gross margin of the ATE business was offset by the growing contribution from the FAS business with a better profit margin. Besides, the gross margin of the Group plunged to 28.7% in the first quarter of 2023 due to the upward adjustment of salary packages, the rebounding gross margin reflects that the increasing staff expense was partly absorbed by business expansion.

Exhibit: Quarterly gross margin of Pentamaster (01665.HK)



#### Production facilities

The headquarter and the plant of Pentamaster (01665.HK) are located in Penang, and the Group is actively working on a new plant with approximately 720,000 sq. ft. The new plant primarily supports the FAS business and medical segment business, phase 1 will be completed in 2023 and phase 2 will be completed in 2024 1H.

Exhibit: Production facilities of Pentamaster (01665.HK)

	Headquarter	Plant 2	Plant 3 (E)		
Space	140,310 sq. ft.	97,033 sq. ft.	720,000 sq. ft.		
Location	Bayan Lepas, Penang	Batu Kawan, Penang	Batu Kawan, Penang		
Use	Designing & prototyping,	High-volume machine	Support the FAS business		
	small-to-large volume	building and equipment	segment and orders from		
	machine building	contract manufacturing	the medical segment		

Source: Company data, West Bull Securities

Exhibit: Headquarter located at Bayan Lepas, Penang, Malaysia



Source: Company data

Exhibit: Plant 2 located at Batu Kawan, Penang, Malaysia



Source: Company data



Exhibit: (Proposed) Plant 3 located at Batu Kawan, Penang, Malaysia





Source: Company data



### Company Background

Mr. Chuah Choon Bin found Pentamaster Technology with Mr. Tan Boon Teik together in 1995, and Pentamaster Corporation Berhad (PCB) (PENT.MK), the controlling shareholder of Pentamaster (01665.HK), listed on the Main Market of Bursa Malaysia since 2004. As an extension of the core business, automated equipment, the Company expanded to automated testing equipment and high precision manufacturing equipment business via the establishment of Pentamaster Instrumentation and Pentamaster Equipment in 2003 and 2006 respectively.

In consideration of i) clearer segregation of business responsibilities and operations, ii) corporate reputation enhancement, and iii) access to a global fundraising platform, PCB decided to carve Pentamaster out after decades of development. Pentamaster was listed on the Hong Kong Stock Exchange in early 2018 at a price of HKD 1.0 per share, which was equivalent to approximately HKD 1.6bn market capitalization. When compared to the Malaysian stock market, the Hong Kong stock market is chosen because of i) the market depth, ii) access to international investors, and iii) the gateway to the PRC.

Pentamaster (01665.HK) made great progress after listing in Hong Kong, it acquired TP Concept which engaged in the design and manufacturing of automation equipment for the assembly and test of single-used medical devices in 2019, allowing the Group to diversify to the medical segment. In addition, the Group set up MediQ in 2020 to venture into the manufacturing of single-use medical devices, including Intravenous Caterers and Dual-Safety Pen Needles.

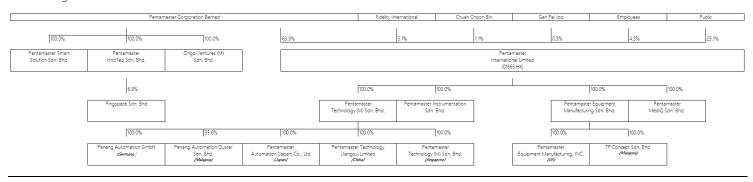
The Group also established branches in both China and Japan to expand its footprint in Asia-Pacific in 2021, and it commenced to engage actively in the automotive segment, including i) front-end tester covering Silicon Carbide (SiC) and GaN, ii) back-end solutions for integrated power management circuits such as IGBT, AC/DC converters etc. The wafer-level burn-in tester for SiC and its back-end assembly & test solutions for the hybrid pack power modules were the primary drivers in the automotive segment business of the Group in 2023.

Exhibit: Changes in contribution by customers



As at the end of Sep 2023, Pentamaster (01665.HK) has a stable shareholding structure that PCB hold approximately 63.9% of shares of Pentamaster (01665.HK). The Fidelity fund acquired the shares of Pentamaster in Mar 2023, becoming the second largest shareholder of the Group, leaving about 25.1% to the public and ~6% to the management and employees.

### Exhibit: Organization Structure





### **Industry Overview**

#### Automated Test Equipment Market

Automated Test Equipment refers to the computerized machinery assessing the functionality, performance, quality and stress etc. of electronic parts, devices and systems, i) adoption of thirdparty solutions to reduce time and cost, ii) adoption of Automated Test Equipment to amplify performance capacity, iii) booming use of electronic devices, and iv) increasing design complexity are the key factors driving the market to grow. The Automated Test Equipment market size was approximately USD 7bn - USD 8bn in 2022, it is expected that the market will grow at a CAGR of ~5% - ~6% in coming years, according to the research reports, and the demand from automotive & transportation segment and the medical segment is expected to grow faster than other segments.

The Automated Test Equipment market can be segmented into 4 categories, including memory ATE, non-memory ATE, discrete ATE and test handlers, of which the non-memory automated test equipment dominates the market, and Pentamaster (01665.HK) primarily focuses on the nonmemory ATE and test handlers markets. Besides, the Automated Test Equipment market is fragmented, Chroma (2360.TW), Aeroflex, Astronics, Advantest (6857.JP), Teradyne (TER.US), Cohu (COHU.US), STAr Technologies and Tesec (6337.JP) are also the leading market players in the Automated Test Equipment market. The high cost and investment for i) R&D, ii) purchasing advanced testing equipment, iii) surging salary expenses are the primary restraints for market development.

#### Factory Automation System Market

Industrial automation can be categorized into process automation and factory automation. The former concerns the conversion of raw materials into finished products, the factories are typically monitored and managed through the adoption of sensors; the latter focuses on the computerization and automation of the manufacturing process.

Factory automation can further be divided into fixed automation, programmable automation and flexible automation, and all of them are designed to reduce the human input in the manufacturing process and the control over machines, improving cost-effectiveness, efficiency as well as precision. Fixed automation refers to the adoption of equipment that cannot be reconfigured to perform other tasks, it is more suitable for high-volume production. Changes can be made in programmable automation and flexible automation, but the former requires a reconfiguration of hardware equipment.



The Industrial Automation Market, according to the research reports, is projected to expand at a CAGR of ~8% - ~9% in coming years, i) hiking labour costs, ii) embracement of Industry 4.0, iii) growing adoption of robots, and iv) supports from local governments are the primary growth drivers.

Based on components, the market can be categorized into sensors, controllers, switches & relays, industrial robots etc., of which the industrial robots segment is expected to grow faster than the other segments due to the extensive use of industrial robots for operation optimization. Besides, the demand from the automotive segment is expected to remain robust, and it is a result of i) increasing implementation of machine vision systems and sensor technologies, and ii) surging utilization of robotics for automotive body assembly automation. However, i) the CAPEX for industrial automation solution installation and maintenance and ii) scarcity of skilled practitioners are the challenges limiting the growth of the market.

The Industrial Automation Market is fragmented with few major players, including Siemens (SIE.GR), ABB (ABBN.SW), Schneider (SCHN.FR), Rockwell Automation (ROK.US), Fanuc (6954.JP), Mitsubishi Electric (6503.JP) etc.



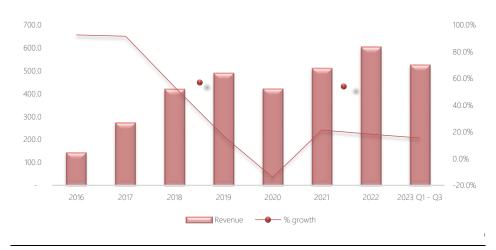
### **Investment Thesis**

### Always on the right track

■ Strong historical performance with a solid growth rate

Pentamaster (01665.HK) achieved MYR 600.6mn of total revenue in 2022, representing a CAGR of 27.2% from FY 2016 – FY 2022, the Group further recorded a YoY 15.4% increase in the total revenue to MYR 522.8mn in 2023 Q1 – Q3.

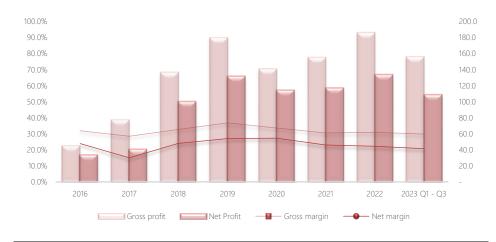
Exhibit: Revenue (MYR, mn) and YoY growth rate of Pentamaster (01665.HK)



Source: Company data, West Bull Securities

Thanks to the customized solutions with a higher entry barrier, Pentamaster (01665.HK) maintained a fairly stable profit margin across the semiconductor cycles, and 2023 Q3 is the 11<sup>th</sup> consecutive quarter for the Group to achieve ~30% gross margin.

Exhibit: Profit (MYR, mn) and profit margin of Pentamaster (01665.HK)





A right direction is the key to steady growth

Pentamaster (01665.HK) is an asset-light company which puts its focus on R&D, and approximately 70% of staff is devoted to R&D. The experienced management team and the technology-oriented & customized solution-based business model provide the Group with the flexibility to adapt to market change.

Electro-Optical segment was the primary contributor to Pentamaster (01665.HK) in 2018, Pentamaster (01665.HK) offered a wide range of solutions to the smartphone manufacturing participants and developed solutions for 3D sensing which was one of the primary catalysts in the smartphone market. However, COVID-19 and the turnaround of the smartphone market brought the Group a temporary setback in 2020.

As mentioned, the flexible business model provides a foundation for the Group to react instantly to the market change, alleviating the damage brought by the decelerating electro-optical segment. The contribution from the automotive segment recorded robust growth since 2018, and its contribution became significant in 2020 when Pentamaster (01665.HK) encountered a headwind in the electro-optical segment business. Thanks to the increasing penetration of ADAS and new energy vehicles, the automotive segment became one of the primary contributors supporting the semiconductor industry.

It is not a coincidence or a matter of luck for Pentamaster (01665.HK) to consistently deliver convincing results, the decision of the management and the business model did play key roles in assisting the Group to ride on the right track.

### Wider and deeper

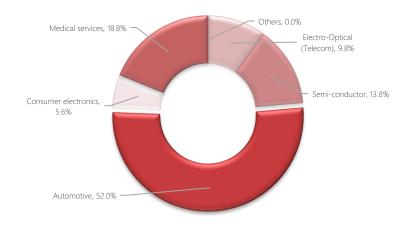
■ Expanding business horizon

Pentamaster (01665.HK) relied heavily on smartphone customers when it listed on the HKEx, about 64.2%, 73.0% and 69.3% of total revenue was generated by the electro-optical segment in 2017, 2018 and 2019 respectively. "Thanks to" the setback encountered in the smartphone market, Pentamaster (01665.HK) successfully diversified its business and extended its footprint to other segments, especially the automotive and medical segments.

The current business portfolio is more diverse with approximately 50% of revenue contributed by the automotive segment, making it less sensitive to the headwind faced in each segment.



Exhibit: Revenue contribution by each segment in 2023 Q1 – Q3



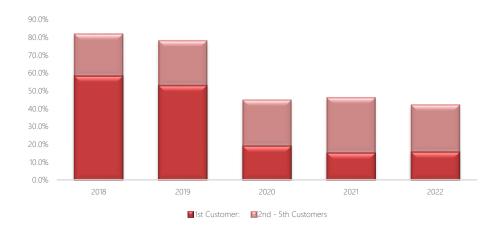
Source: Company data, West Bull Securities

#### ■ Expanding customer base

The concentration risk for Pentamaster (01665. HK) was comparatively high before 2020 due to the material contribution from smartphone and peripheral segments, especially a company listed on the SIX Swiss Exchange that provides sensor solutions and a leading US technology company offering smartphone and earbuds products.

Benefiting from the business diversification, the Group successfully expanded its customer base. The aggregate contribution from the five largest customers dropped to 41.9% in FY 2022. According to our conversation with the management, most of the primary module and wafer participants are the customers of the Group in the automotive segment.

Exhibit: Contribution from the largest customer and the  $2^{nd} - 5^{th}$  customers



## 西牛证券 WESTBULL SECURITIES

#### RESEARCH

■ Enrichment of product portfolio

Pentamaster (01665.HK) penetrates the market through the enrichment of its product portfolio after horizontal expansion.

Pentamaster (01665.HK) primarily offered the test handler solutions for light sensors, proximity sensors, microphones, gyroscopes and accelerometers in the electro-optical segment and consumer electronics segment before listing on the HKEx. Thanks to the provision of the 3D facial recognition function of the iPhone, 3D sensing was one of the primary upgrades for the smartphones, giving a chance for the Group to expand its product portfolio and deliver the test solutions related to VCSEL, 3D structured light sensors and 3D ToF sensors, including ZETA and TROOPER.

In the automotive segment, the Group delivered test-handling equipment for MLCC, IGBT, automotive power management and power devices in 2019. End-to-end solutions ranging from assembly to final inspection and test for IGBT were provided in 2020, and the Group further penetrated the market through the technology capabilities covering SiC and Gan based compound power modules. Pentamaster (01665.HK) further broadened its product portfolio via the development and delivery of the SiC wafer burn-in system in 2021, and the wafer level burn-in tester for SiC as well as the back-end assembly and test solutions for the hybrid pack power modules brought the Group a substantial growth in the automotive segment in 2023 1H.

In the medical segment, Pentamaster (01665.HK) acquired TP Concept which engaged in the design and manufacturing of automation equipment for the assembly and test of single-used medical devices in 2019, marking a turning point for the Group to explore the medical segment. The Group further set up MediQ to venture into the manufacturing of single-use medical devices like intravenous catheters, dual safety pen needles and sutures and invested in the production lines, aiming at the manufacturing of the single-use medical devices on an OEM and ODM basis.



#### Key drivers in coming years

#### Booming contribution from the medical segment

The medical business segment accounted for 35.4% and 18.8% of the total revenue of Pentamaster (01665.HK) in 2023 Q3 and the first three quarters of 2023 respectively, and, according to the latest result conference, the order book from this segment remains one of the most significant contributors. It provides growth potential for Pentamaster (01665.HK) because the Group successfully established three income sources from this business, including i) the distribution of equipment to the health authorities and hospitals through appointed and approved distributors after the acquisition of TP Concept in 2019, ii) the provision the FAS solutions to the customers, and one of the major customers which contributed significantly in 2023 Q3 may expand further and place more orders to the Group, iii) the participation in the manufacturing of single-use medical devices which contribution remains small in the initial stage.

#### ■ Growing potential of the automotive segment

The automotive business segment accounted for 52.0% of total revenue for the first three quarters ended Sep 2023. It is the primary driver for Pentamaster (01665.HK) in coming years, the order book from the automotive and medical segments accounted for nearly 70% of the total order book in 2023 Q3.

Being a testing equipment supplier for electric vehicle components, Pentamaster (01665.HK) penetrates the supply chain of auto-related semiconductor participants, allowing the Group to directly benefit from the growing penetration rate and the technological advancement of electric vehicles. More importantly, the Group broadened its portfolio to SiC, making it one of the major equipment suppliers for SiC wafer burn-in systems in the world. As of 2023 Q3, about 40% of the revenue generated from the automotive segment was contributed by the front-end wafer equipment, and the remaining was generated from the assembly, module and final inspection.

### Consecutive purchasing actions taken by the controlling shareholder

Pentamaster Corporation Berhad (PCB) (PENT.MK), the controlling shareholder of Pentamaster (01665.HK), has shown its confidence in Pentamaster (01665.HK) and commenced to buy the shares of Pentamaster (01665.HK) since early Nov 2023 in the secondary market. As of 19 Dec 2023, PCB had (net) purchased 6.2mn shares, amounting to 0.3% of total outstanding shares and bringing its holding interest to 64.2%.



### Forecast & Valuation

#### Forecast

#### ■ Revenue

We estimate that the total revenue of Pentamaster (01665.HK) will grow by YoY 16.2% - YoY 23.4% in the coming three years, and the Group may achieve over MYR 1.0bn top-line in FY 2025. The growing performance is primarily driven by i) the strong demand for testing equipment due to the growing penetration and technological advancement of electric vehicles in the global market, ii) the exploration in the medical business segment. We believe that the smartphone market is experiencing a small rebound but not a recovery, its contribution will continue to drag the growth of the Group.

#### ■ Gross profit

We forecast that the overall gross margin will be flat with small fluctuations due to the pricing strategies. Solution mix should be the major factor affecting the gross margin recognized, we do not see any factors damaging the profit margin of the Group in the near term.

#### ■ Net profit

According to our estimation, Pentamaster (01665.HK) may achieve MYR 142.4mn of net profit in FY 2023, representing a YoY 6.8% growth when compared to last year. We believe that the depreciation and the staff expenses may slash the profitability of the Group in the short term, but the net profit margin, according to our forecast, will recover to ~21% - ~22% after the completion of Plant 3.

## l research



#### Valuation

We use the DCF valuation methodology and the P/E valuation methodology for valuation. We initiate our first coverage on Pentamaster (01665.HK) with a "BUY" rating and a HKD 1.23/share target price, implying 12.0x/9.3x/7.7x forward P/E of FY 2023/FY 2024/FY 2025.

#### ■ DCF valuation

We are positive about the outlook of the Pentamaster (01665.HK) as well as the ability of the management team, we, therefore, forecast that the top-line will have a double-digit growth and the bottom-line will rebound very soon after the absorption of fixed expenses. However, we assume a conservative risk premium to justify the i) higher risk-free rate, ii) low trading volume of both the stock and the Hong Kong stock market, iii) gloomy atmosphere in the Hong Kong stock market. The valuation given to the Hong Kong stock market and the regional risk are the primary risks limiting the stock price to reflect the value of the Group. Besides, the uncertain macro economy and the negative signals released by the automotive participants are also part of our concerns. Derived from the DCF model with the assumptions below, we assign a fair value of HKD 1.17/share to Pentamaster (01665.HK).

#### Exhibit: Assumption of valuation

Discounted Cash Flow	2,342.1mn	LT Debt-to-Equity Ratio	0.0%
Terminal Value	2,083.6mn	BETA	0.5
Discounted Terminal Value	1,378.5mn	LT Risk-free Rate	4.0%
		Risk Premium	10.8%
		LT Equity Cost	14.8%
		LT Debt Cost	0.0%
		LT Debt Cost (After Tax)	0.0%
		WACC	14.8%
		LT Growth Rate	5.0%

Source: West Bull Securities

#### ■ P/E valuation

We assign a  $\sim$ 10x PE ratio to Pentamaster (01665.HK) to derive a valuation of HKD 1.28/share to the Group. The multiple given is a bit lower than the peers is primarily the result of i) thin trading volume, ii) the low valuation given to the Hong Kong stock market, iii) smaller scale than the peers, iv) historical record.

## Peers comparison

		Mkt. Cap.	P/E	Fw. P/E	P/B	P/S	Revenue	GM	ROE
		(HKD, mn)	(x)	(x)	(x)	(x)	(HKD, mn)	(%)	(%)
00522.HK	ASMPT	31,274.4	20.6	23.7	2.0	1.9	19,363.5	41.1	9.7
COHU.US	Cohu	12,780.5	29.7	29.0	3.2	2.4	6,364.5	47.2	5.7
ROK.US	Rockwell	272,927.2	22.6	23.8	9.8	3.9	70,931.9	41.0	44.0
TER.US	Teradyne	125,474.0	34.2	31.6	6.6	6.0	24,706.0	59.2	21.5
2360.TW	Croma	21,886.4	21.6	16.2	4.1	4.4	5,799.9	51.5	19.2
6337.JP	Tesec	748.0	7.9	-	1.0	1.5	506.9	46.8	13.1
6503.JP	Mitsubishi	232,510.9	16.2	15.4	1.2	0.8	290,122.0	28.1	8.0
6857.JP	Advantest	205,522.9	42.8	47.8	9.1	7.2	32,480.7	57.0	22.9
6954.JP	Fanuc	222,916.1	26.0	30.6	2.3	4.7	49,397.7	38.2	9.1
300604.CH	Chang Chuan								
300004.CH	Technology	28,298.2	184.8	37.2	9.1	12.4	3,000.2	56.7	5.5
688001.CH	HYC Technology	16,142.7	68.0	-	3.8	7.4	2,701.5	52.1	5.7
SCHN.FR	Schneider	193,717.6	27.4	24.9	4.9	1.8	93,090.9	69.9	18.3
ABBN.SW	ABB	634,109.4	20.2	19.5	6.1	2.5	230,580.9	33.0	31.6
SIE.GR	Siemens	1,113,800.0	16.2	15.1	2.7	1.6	650,354.2	38.1	16.4
GTB.MK	Globetronics	1,848.6	34.6	43.4	3.6	7.8	320.8	42.1	10.6
VITRO.MK	VitroX	11,368.9	44.7	31.7	7.5	11.0	1,336.8	=	20.1
	Average	195,332.9	38.6	27.8	4.8	4.8	92,566.2	46.8	16.3
01665.HK	Pentamaster	2,280.0	9.3	9.1	1.7	2.0	1,070.1	30.9	19.1

Source: Bloomberg, West Bull Securities

## Risk factors

- A low valuation is given to the Hong Kong stock market, especially small-cap stocks
- A decrease in the demand for electric vehicles
- Loss of orders from the key customers from the medical segment
- Kenn competition for R&D staff
- Worse-than-expected demand for smartphone and consumer electronics products



## Financial Statement

PnL					Balance Sheet				
(MYR, mn)	2022 (A)	2023 (E)	2024 (E)	2025 (E)	(MYR, mn)	2022 (A)	2023 (E)	2024 (E)	2025 (E)
Revenue	600.6	698.2	861.7	1,009.8	PPE	134.6	247.8	365.7	418.8
YoY growth	18.2%	16.2%	23.4%	17.2%	Others	95.5	104.1	106.1	106.2
COGS	(415.1)	(488.7)	(594.3)	(690.4)	Non-current assets	230.2	351.9	471.9	525.0
Gross profit	185.5	209.4	267.4	319.3					
Other income	11.4	5.1	5.9	6.9	Inventories	170.9	177.2	182.9	190.3
Operating expenses	(60.4)	(68.9)	(83.4)	(95.9)	Trade receivables	237.9	206.6	233.6	273.2
Operating profit	136.5	145.7	189.9	230.3	Cash & cash equivalents	328.6	394.6	462.5	603.5
Finance expenses	(0.1)	-	-	-	Others	34.0	37.3	35.9	36.2
JV & Ass.	(1.6)	0.1	-	-	Current assets	771.5	815.6	914.8	1,103.1
Profit before tax	134.8	145.8	189.9	230.3					
Tax	(1.5)	(3.4)	(5.7)	(8.9)	Total assets	1,001.7	1,167.5	1,386.7	1,628.2
Net profit	133.3	142.4	184.2	221.5					
YoY growth	14.2%	6.8%	29.4%	20.2%	LT borrowings	=	-	-	-
					Others	3.8	4.6	4.6	4.6
					Non-current liabilities	3.8	4.6	4.6	4.6
					Trade payables	121.5	129.4	147.5	154.6
					ST borrowings	-	-	-	-
					Others	139.7	195.9	250.9	303.2
					Current liabilities	261.2	325.3	398.4	457.8
					Total liabilities	264.9	329.9	403.0	462.4
					Non-controlling interests	-	=	=	=
					Controlling interests	736.7	837.6	983.7	1,165.8
					Total equities	736.7	837.6	983.7	1,165.8



#### Cash Flow

					Figure stal Basta				
(MYR, mn)	2022 (A)	2023 (E)	2024 (E)	2025 (E)	Financial Ratio	2022 (A)	2023 (E)	2024 (E)	2025 (E)
Profit before tax	134.8	145.8	189.9	230.3	Gorss margin	30.9%	30.0%	31.0%	31.6%
Finance expenses	0.1	-	-	-	Operating margin	22.7%	20.9%	22.0%	22.8%
Finance income	(5.2)	(4.9)	(5.9)	(6.9)	Net profit margin	22.2%	20.4%	21.4%	21.9%
D&A	8.4	17.9	37.5	51.8	Return on Equity	19.4%	18.1%	20.2%	20.6%
Others	4.3	5.6	6.0	4.4	Return on Asset	14.6%	13.1%	14.4%	14.7%
Change in working capital	(82.4)	65.6	20.6	(11.9)	Current ratio	295.4%	250.7%	229.6%	241.0%
CFO	59.9	230.0	248.1	267.7	Quick ratio	218.4%	196.2%	183.7%	199.4%
					Cash ratio	125.8%	121.3%	116.1%	131.8%
CAPEX	(44.6)	(136.1)	(157.6)	(105.1)	Debt-to-Equity ratio	0.0%	0.0%	0.0%	0.0%
Others	5.4	4.8	5.9	6.9	Net Debt-to-Equity ratio	-44.6%	-47.1%	-47.0%	-51.8%
CFI	(39.2)	(131.3)	(151.7)	(98.2)	Inventory turnover days	106.8	130.0	110.6	98.6
					Receivable turnover days	122.1	116.2	93.2	91.6
Shares issuance	-	-	-	-	Payable turnover days	87.5	93.7	85.0	79.9
Net borrowings	(2.6)	-	-	-					
Interest expenses	-	-	-	-					
Dividend paid	(26.9)	(27.1)	(28.5)	(28.5)					
Others	(13.9)	(5.7)	-	-					
CFF	(43.3)	(32.8)	(28.5)	(28.5)					
FCFE	12.8	93.9	90.5	162.6					
FCFF	15.4	93.9	90.5	162.6					

Source: Company data, West Bull Securities

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