



# VICPLAS INTERNATIONAL LTD

**Corporate Presentation  
1H2024 Results**



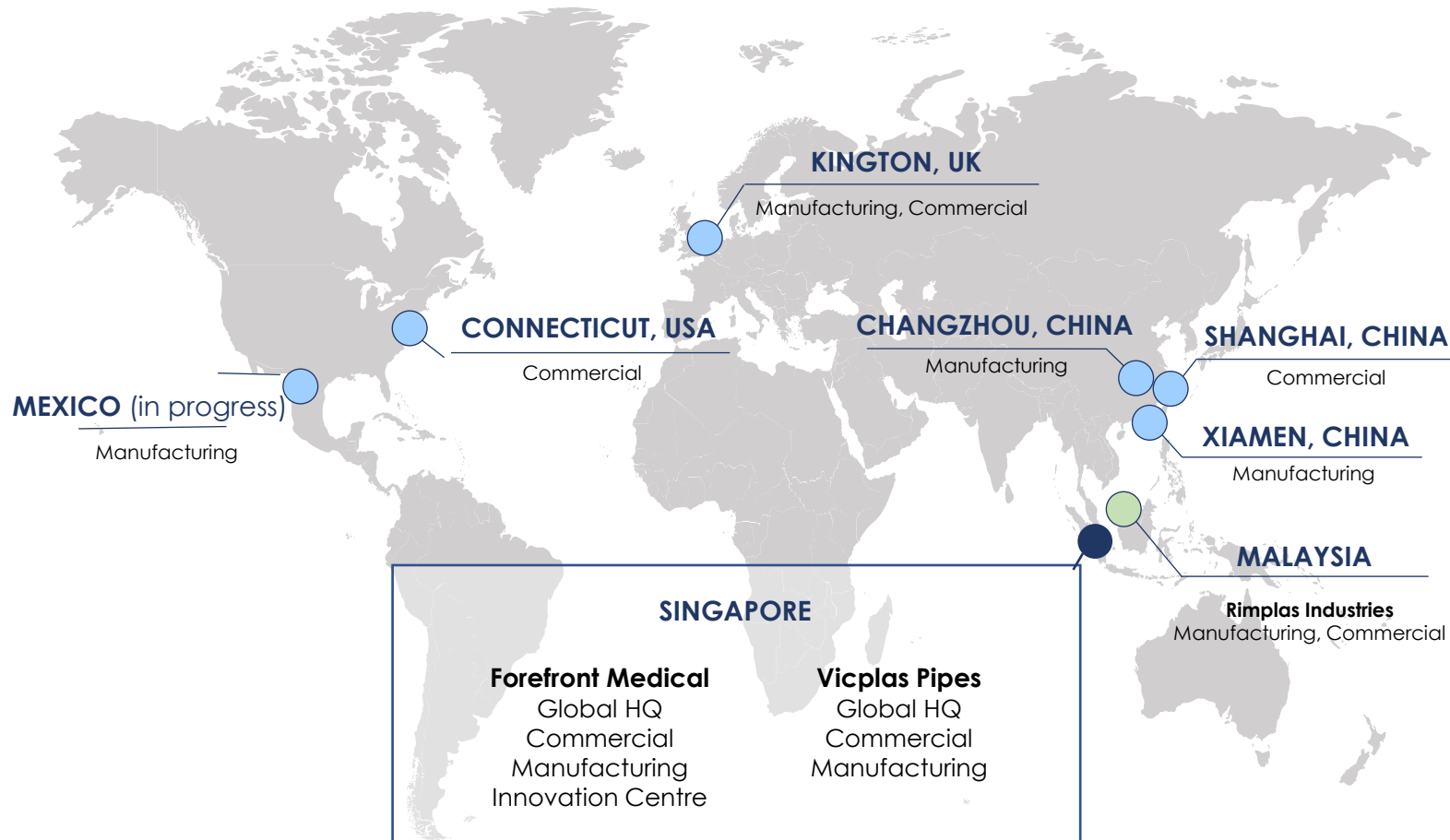
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# Company Overview

VICPLAS INTERNATIONAL LTD



# Company Presence



## Business Segments

### Medical devices segment

**Forefront Medical** designs, develops and manufactures sterile and non-sterile medical devices

### Pipes & pipe fittings segment

**Vicplas Holdings ("Vicplas Pipes")** manufactures and distributes piping systems for diverse industries

Total employees : 950 + worldwide

## Accreditations

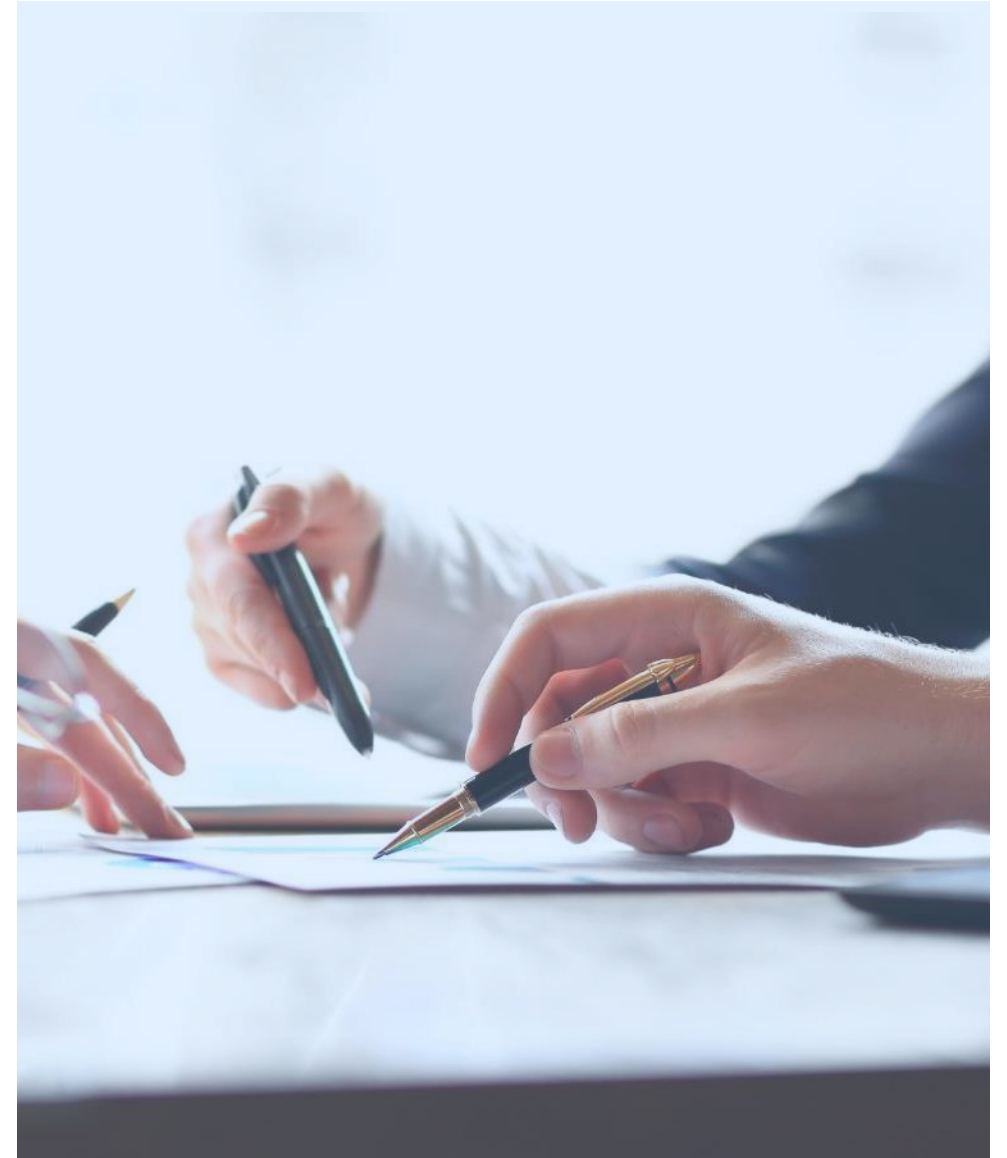
The subsidiaries in the pipes and pipe fittings segment have ISO9001:2015 quality certifications. Vicplas Holdings Pte. Ltd. additionally is ISO14001:2015, ISO14067:2018, ISO45001:2018 and ISO50001:2018 certified.

The subsidiaries in the medical devices segment have EN ISO13485:2016 quality certifications and, with the exception of Forefront Medical Americas Pte. Ltd. and XentiQ (Pte.) Ltd., are registered under the United States Food and Drug Administration (FDA) as a "contract manufacturer for medical devices". Forefront Medical Technology (Pte) Ltd, Forefront Medical Investment Pte. Ltd., Forefront (Xiamen) Medical Devices Co., Ltd and Forefront Medical Technology (Jiangsu) Co., Ltd have accreditation certificate of foreign medical device manufacturer from Japan Ministry of Health, Labour and Welfare and Korea Ministry of Food and Drug Safety. Forefront Medical Investment Pte. Ltd. and Forefront Medical Technology (Jiangsu) Co., Ltd are ISO14001:2015, ISO45001:2018 and ISO50001:2018 certified. Forefront Medical Investment Pte. Ltd. additionally has a Class A, B, C, D Medical Device manufacturer license registered under Health Science Authority (HSA) Singapore. Forefront Medical Technology (Jiangsu) Co., Ltd additionally has a Class II Medical Device Manufacturing License in China. Arrow Medical Limited additionally is EN 13795-1 certified.

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# Financial Information

VICPLAS INTERNATIONAL LTD



# Financial Overview

- 1H2024 revenue decreased by 23.1% and net profit after tax decreased by 91.1% as compared to 1H2023, while Adjusted EBITDA decreased by 45.9% to S\$4.0 million compared to 1H2023
- Net profit margin decreased by 3.4 percentage points to 0.4%
- Medical devices segment's revenue decreased by 33.1% in 1H2024 and segmental results decreased by 163.2% to a loss of S\$1.6 million
- Pipes and pipe fitting segment's 1H2024 revenue grew by 1.7% and segmental results increased by 30.7% to S\$4.1 million

## Group

S\$'000	1H2024	1H2023	% Change
<b>Revenue</b>	<b>51,057</b>	66,413	-23.1
<b>Net Profit before Tax</b>	<b>277</b>	3,294	-91.6
<b>Net Profit after Tax</b>	<b>224</b>	2,503	-91.1
<b>Net Profit Margin</b>	<b>0.4%</b>	3.8%	-3.4 pts
<b>Adjusted EBITDA<sup>1</sup></b>	<b>3,989</b>	7,380	-45.9

## Segment

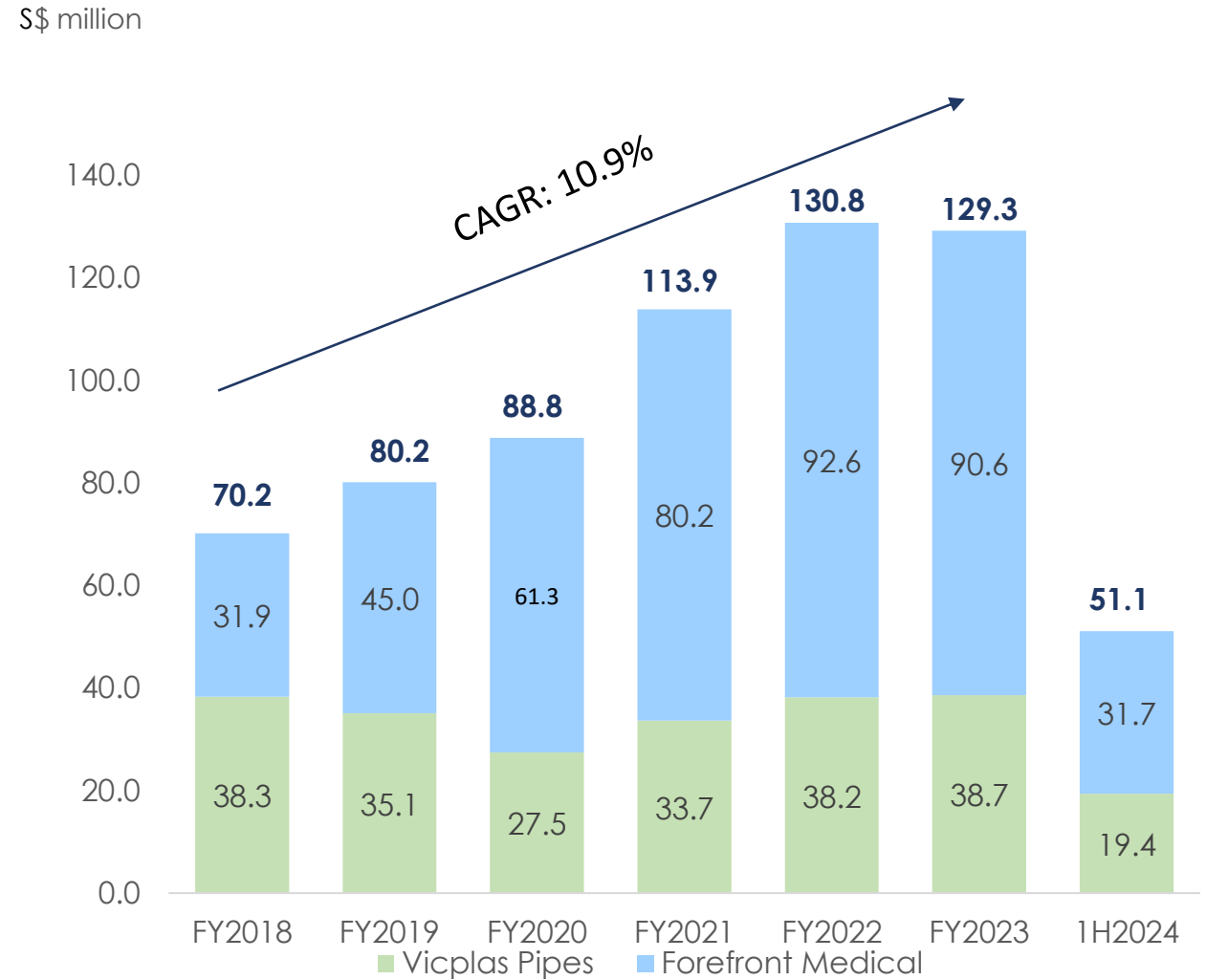
S\$'000		1H2024	1H2023	% Change
<b>Medical Devices</b>	<b>Revenue</b>	<b>31,690</b>	47,368	-33.1
	<b>Segmental Result<sup>2</sup></b>	<b>(1,617)</b>	2,557	-163.2
<b>Pipes &amp; Pipe Fittings</b>	<b>Revenue</b>	<b>19,367</b>	19,045	1.7
	<b>Segmental Result<sup>2</sup></b>	<b>4,097</b>	3,135	30.7

<sup>1</sup> Adjusted EBITDA refers to earnings before interest, tax, depreciation and amortisation; and excludes unrealised foreign exchange by adding back unrealised foreign exchange loss and deducting unrealised foreign exchange gain.

<sup>2</sup> The segmental result of the medical devices segment and pipes and pipe fittings segment are before corporate, interest and tax expenses as set out in Note 4 of the Condensed Interim Financial Statements.

# Revenue

- Over the past six financial years, the Group achieved revenue growth with a CAGR of 10.9%
- Forefront Medical still contributes more than 60% of Group revenue and the Group remains medical device-focused
- Forefront Medical's revenue was affected in 1H2024 as certain customers continued to adjust their inventory levels post pandemic leading to lower orders
- Vicplas Pipes, an industry leader in the supply of pipes and pipe fittings, recorded an improved performance in 1H2024 as the construction activities in Singapore improved
- Vicplas Pipes will help support the Group's performance as Forefront Medical further develops its capabilities and expands its production capacity to grow its market share in the growing MedTech contract development and manufacturing industry

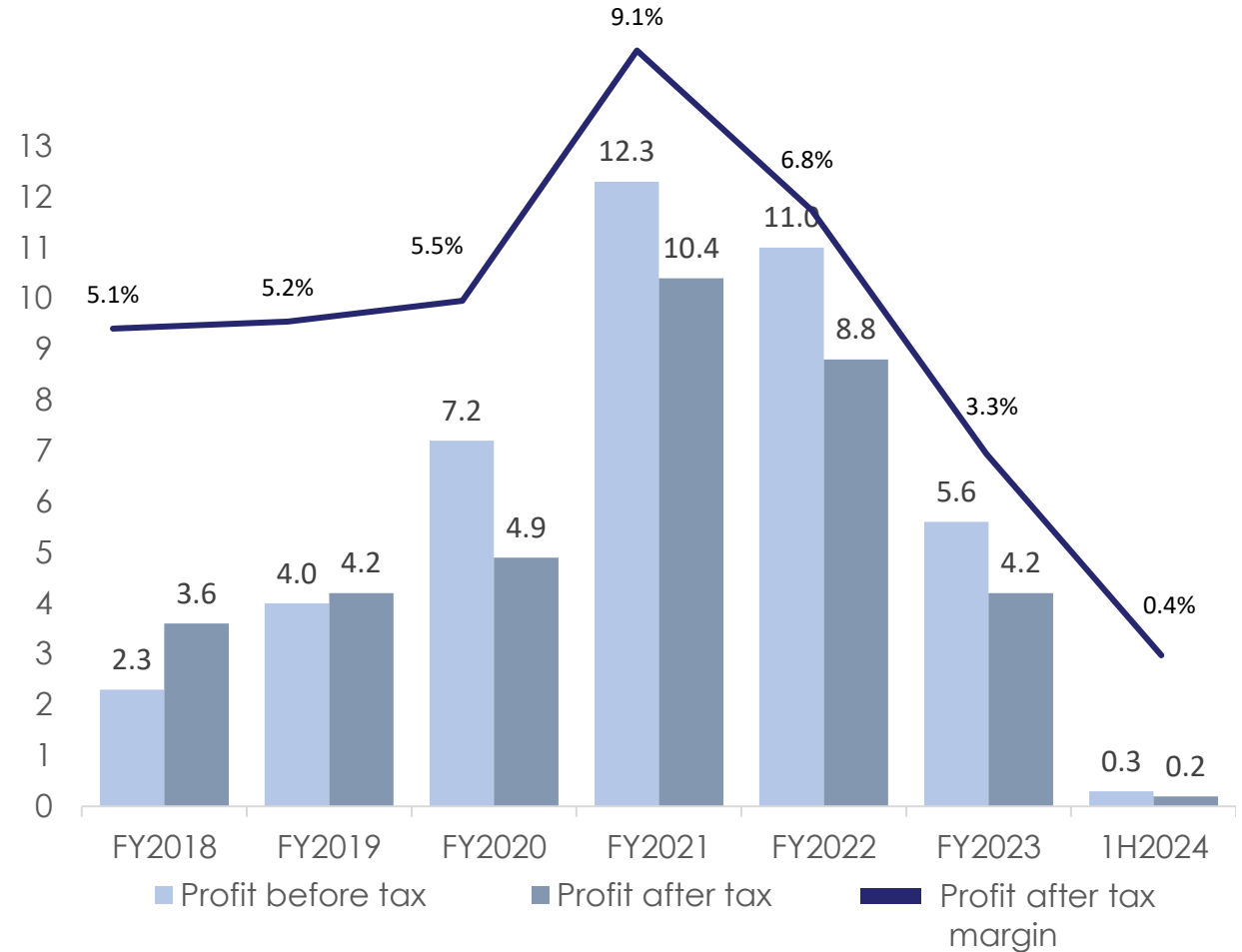


# Profit

1H2024 profit performance compared to 1H2023 was impacted by:

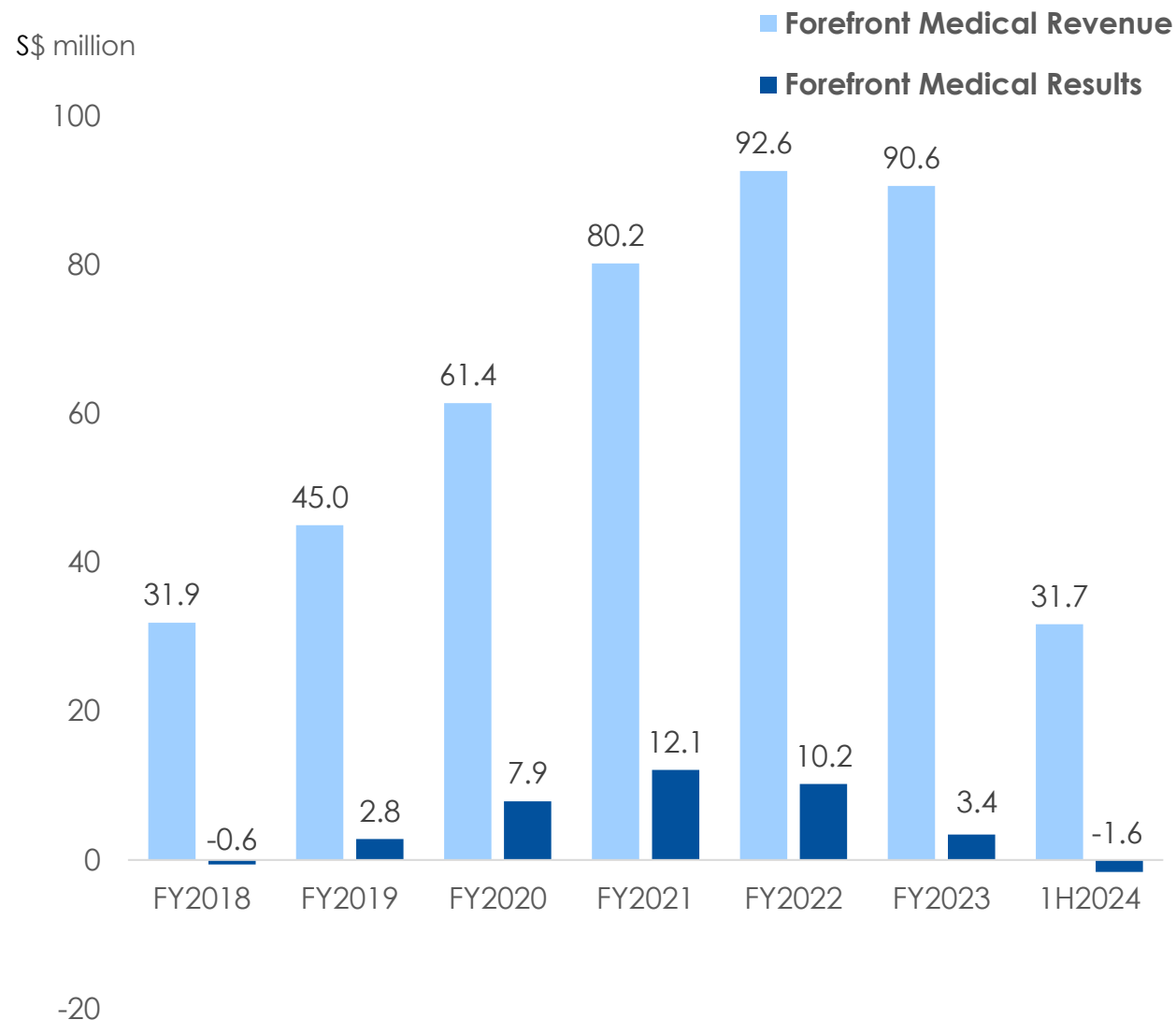
- 25.4% increase in other income mainly due to an increase in income from tooling, mould and maintenance services
- 21.5% decrease in raw material and consumables used due to the decrease in production activities
- 14.1% decrease in employee salary and benefits expense due to decreased headcount and overtime
- 26.3% decrease in other operating expenses mainly due to foreign exchange gain of S\$1.0 million as compared to foreign exchange loss of S\$1.0 million in 1H2023 and partly due to lower production activities that resulted in lower laboratory and testing costs, factory consumables and selling and marketing expenses

S\$ million



# Segmental Result – Forefront Medical

- In 1H2024, Forefront Medical's revenue fell by 33.1% to S\$31.7 million as certain customers continued to adjust their inventory levels post pandemic, leading to a reduced ordering situation
- The segment's results were affected by higher operating costs due to:
  - Costs associated with the Changzhou plant extension
  - Higher business development and marketing costs
  - Startup costs associated with the new Mexico plant
- All of which led to a segmental results loss of S\$1.6 million for 1H2024



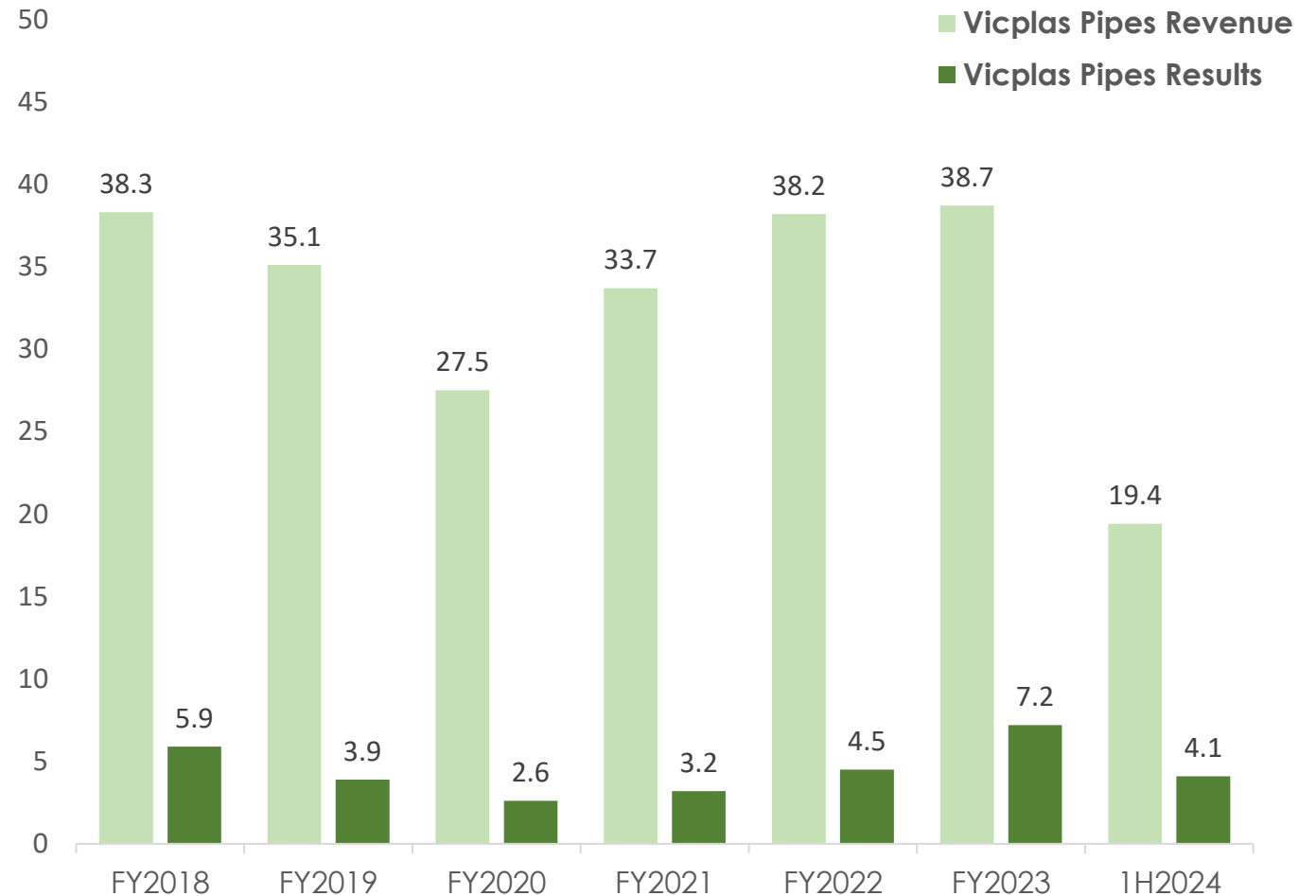
\*The segmental result of the medical devices segment and pipes and pipe fittings segment are before corporate, interest and tax expenses as set out in Note 4 of the Condensed Interim Financial Statements.



# Segmental Result - Vicplas Pipes

- Vicplas Pipes' 1H2024 revenue increased to S\$19.4 million as construction activities in Singapore improved
- Segmental results saw a 30.7% increase to S\$4.1m due to cost and efficiency improvements in its manufacturing plants

S\$ million



\*The segmental result of the medical devices segment and pipes and pipe fittings segment are before corporate, interest and tax expenses as set out in Note 4 of the Condensed Interim Financial Statements.

# Forefront Medical Devices

Presented by

**Walter Tarca**

Group CEO





# POSITIONED FOR LONG TERM GROWTH



# Our Vision

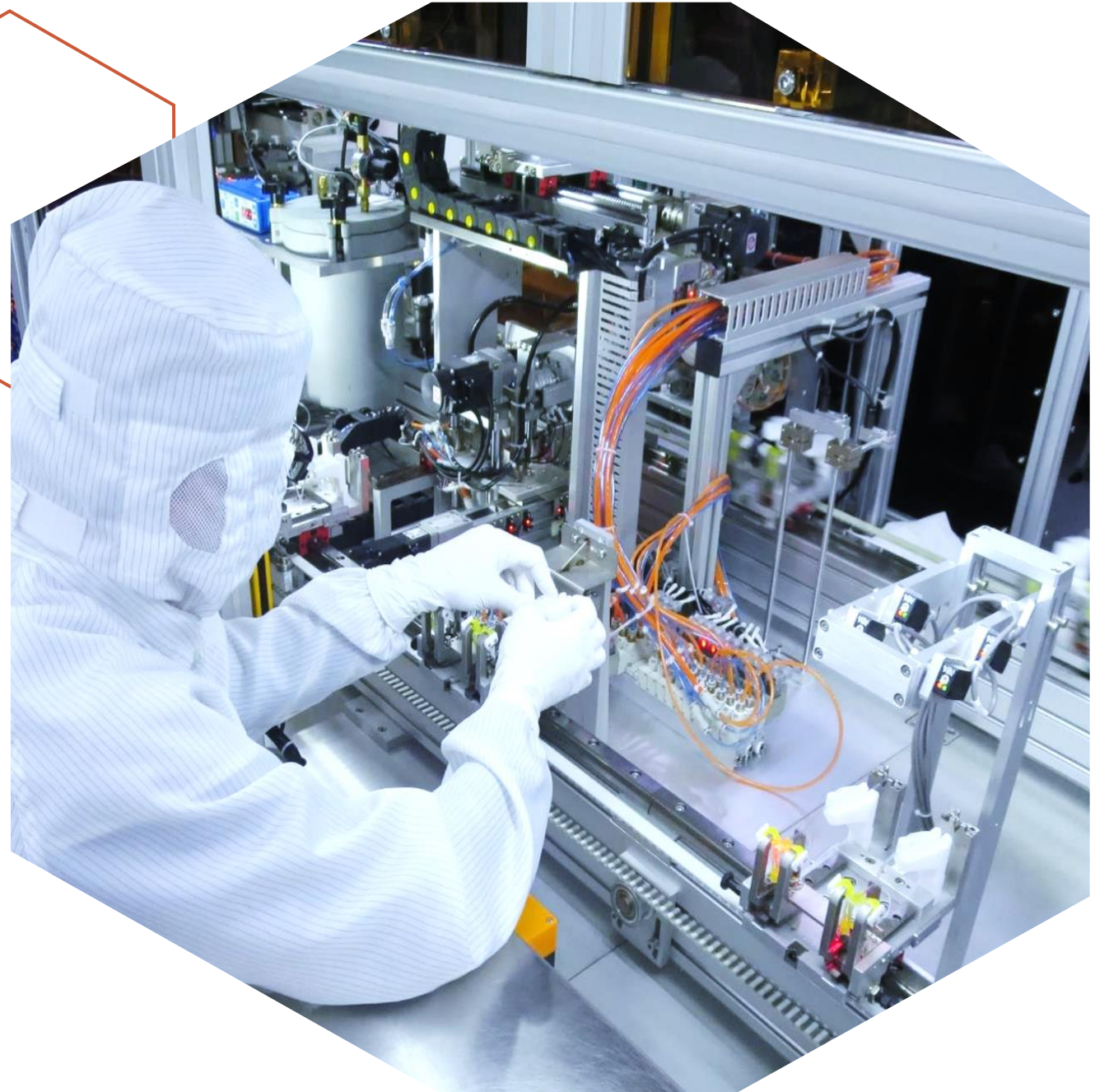
To be a leading global medical device manufacturing partner with solutions that are preferred by product owners

- 100% focused on manufacturing quality devices for the medical device industry
- Global customer base in five continents
- More than 800 employees
- Committed to providing our customers and their patients with :
  - innovative and cost-effective medical devices to enable continuous improvements in healthcare
  - Supply chain resilience



# About Us

Forefront Medical is a medical device specialist in the contract development and manufacturing industry (CDMO), offering industrial and product designs with strong specialisation in the electro-mechanical, injection and blow molding and extrusion fields together with an extended range of services and support to add value to our customers throughout the world and their patients.



# Global Presence



Singapore – Corporate HQ



Changzhou, China



Xiamen, China



Plant Extension in Changzhou, China



Juarez, Mexico

## Manufacturing Sites

- Singapore – Corporate HQ (7,410m<sup>2</sup>)
- Xiamen, China (7,000m<sup>2</sup>)
- Changzhou, China (7,024m<sup>2</sup> + 7,000m<sup>2</sup> extension)
- Kington, UK (2,600m<sup>2</sup>)
- Juarez, Mexico (7,000m<sup>2</sup>) from 2<sup>nd</sup> half of calendar year 2024

## Commercial Offices

- Singapore
- Shanghai, China
- Connecticut, USA
- Kington, UK

# Extensive In-House Capabilities: From Concept to Manufacturing



PediGuard for Spinal Surgery



Feeding PVC Tube with Tungsten



Laryngeal Mask with LSR Cuff



Reinforced Extruded Silicone Tube

Design & Development	<ul style="list-style-type: none"> <li>Product Concept &amp; Realisation</li> <li>Electronics, Software, Metal Parts</li> </ul>	
Rapid Prototyping		
Plastic & LSR Tooling	<ul style="list-style-type: none"> <li>In-house Toolroom &amp; Design Team</li> <li>Insert Mould</li> </ul>	<ul style="list-style-type: none"> <li>Micro Mould</li> <li>2K Mould</li> <li>Stack Mould</li> </ul>
Moulding Capabilities	<ul style="list-style-type: none"> <li>Wide Range of Materials</li> <li>Injection</li> <li>Extrusion</li> </ul>	<ul style="list-style-type: none"> <li>Injection Blow</li> <li>Extrusion Blow</li> </ul>
Production	<ul style="list-style-type: none"> <li>Cleanroom Facility</li> <li>Pilot/Trial Run</li> </ul>	<ul style="list-style-type: none"> <li>Low Mix High Volume</li> <li>High Mix Low Volume</li> </ul>
Quality	<ul style="list-style-type: none"> <li>ISO 13485</li> <li>FDA 510K</li> </ul>	<ul style="list-style-type: none"> <li>CE Mark</li> <li>IQ/OQ/PQ</li> </ul>
Assembly	<ul style="list-style-type: none"> <li>Manual Assembly</li> <li>High Speed Automation</li> </ul>	
Secondary Processes	<ul style="list-style-type: none"> <li>Hydrophilic Coating</li> <li>RF Tipping &amp; Forming</li> </ul>	<ul style="list-style-type: none"> <li>Pad Printing</li> <li>Bonding &amp; Welding</li> </ul>
Packing	<ul style="list-style-type: none"> <li>Rigid Blister</li> <li>Soft Blister</li> </ul>	<ul style="list-style-type: none"> <li>Tyvek Pouch</li> <li>Pallet Optimisation</li> </ul>
Sterilisation	<ul style="list-style-type: none"> <li>EtO</li> <li>Gamma</li> </ul>	<ul style="list-style-type: none"> <li>Autoclave</li> <li>E-Beam</li> </ul>

# Our Medical Device Portfolio

- Vascular
- Pharmaceutical Bottles
- Surgical Devices
- Respiratory
- Orthodontics
- Patient monitoring devices
- Airway Management
- Cell & Gene Therapy
- Endoscopy
- Drug Delivery systems
- Diagnostics
- Enteral feeding

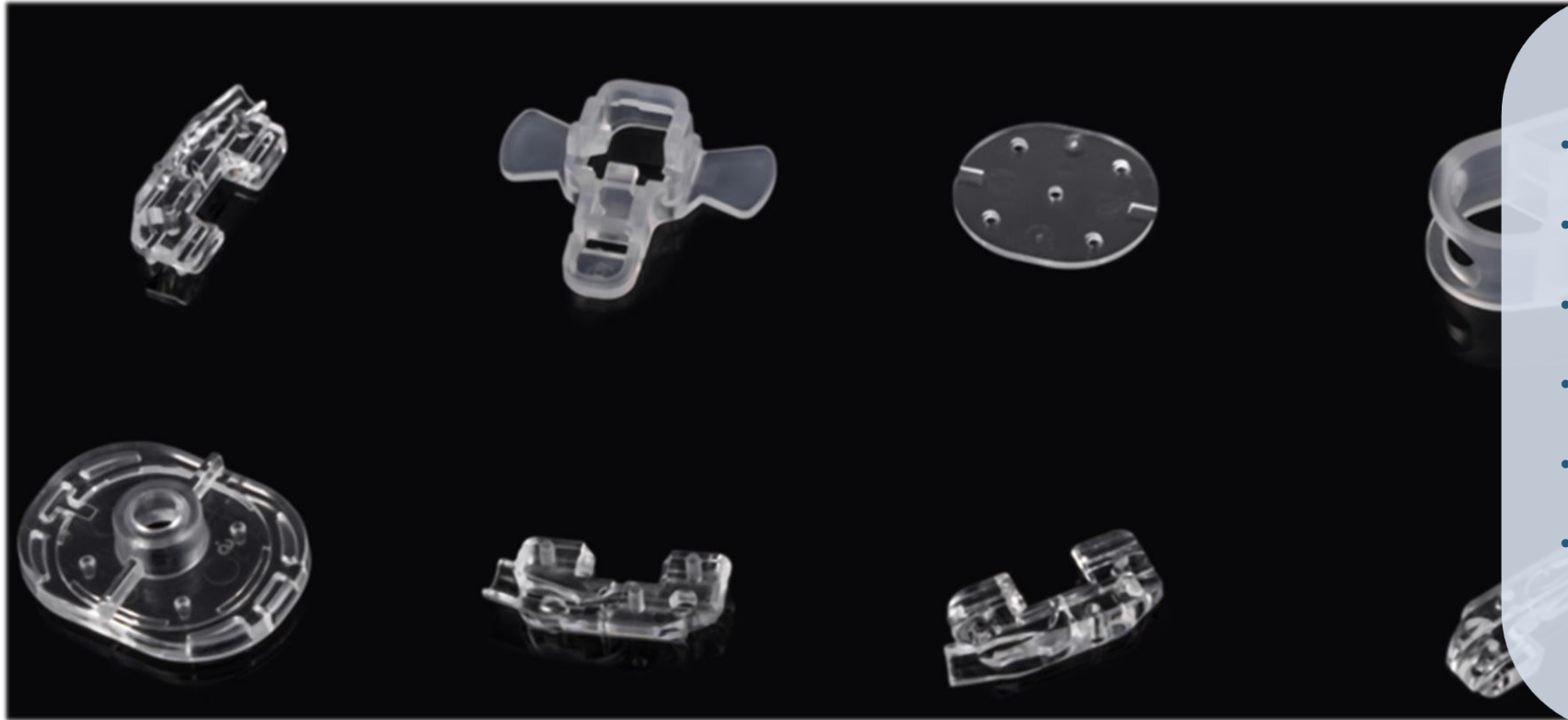
## Bringing Medical Innovations to Life

Over 92% of our products are for one time only use and are fully completed products



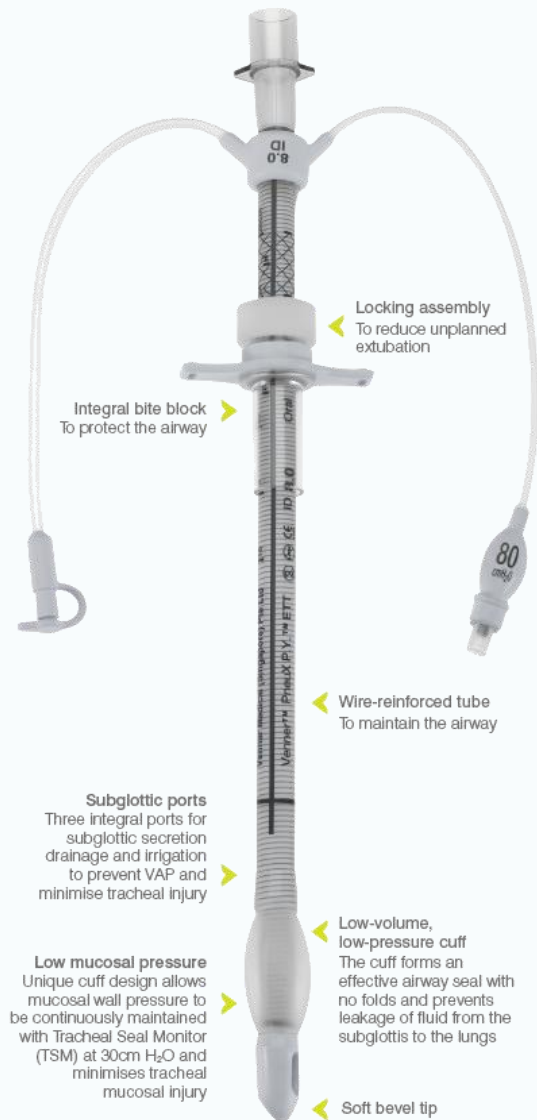


# INJECTION MOLDED MEDICAL COMPONENTS



- **Micro-Molding**
- **Insert Molding** (plastics & metals)
- **Co-Injection**
- **Multi-Shot Molding**
- **Unscrew Molding**
- **Tooling Capabilities** Stack Mold, Spin-Stack Mold, In-Mold Assembly,

# LIQUID INJECTION MOLDING (LIM) & SILICONE RUBBER EXTRUSION MOLDING



**Reusable Endotracheal Tube**



**Reusable Laryngeal Masks**

- 6 Vertical Injection Machine from Arburg & Jing Day
- Familiar with LSR resins from Key players of Wacker, Dow Corning & Momentive.
- LSR Resins from Shore A 3 to Shore A 80
- Controlled Room Operation
- Berstorff LSR Extrusion Molding Machine – HCR

# EXTRUSION MEDICAL TUBINGS

- **Multi-lumen tubes**
- **Braided tubes**
- **Co Extrusion**
- **Multi Color/Layer Extrusion**
- **Small bore tubes**  
(catheters)
- **Spiral / Corrugated Tubes**
- **Specialty Tubes** (Radio Opaque Additives added tube)



**Tri - Tubing**



**Varying Diameter Tubing**



**Coiled Tubing**

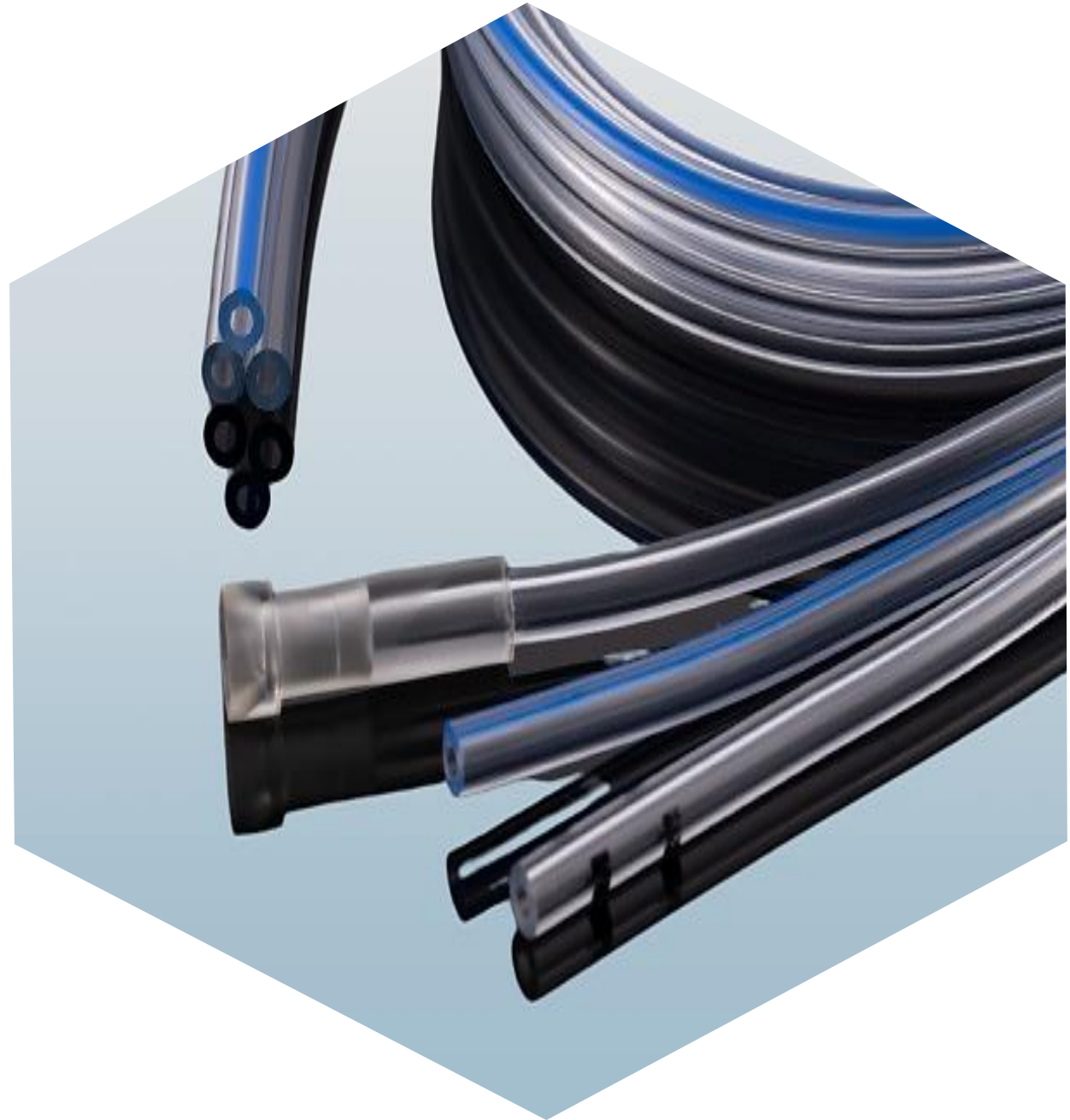


# TRI TUBING SUB ASSEMBLY

Extrusion | Assembly

## Secondary Processes Involved

- **CYC Bonding**
- **Pad Printing**



# BLOW MOLDING OF MEDICAL BOTTLES

## Nasal Spray Bottle

Product Development | Injection | Extrusion | Blow Molding | Assembly | Packaging | Sterilisation



# FULL DEVICE – HIGH PRESSURE INFLATION DEVICE

Presto HPID

Injection | Assembly | Packaging | Sterilisation



## Secondary Processes Involved

- **Assembly**
- **Pad Printing**
- **Adhesive/Solvent Bonding**
- **UV Curing**
- **Tray sealing & Packaging**

# FULL DEVICE - EMG ETT

CHINA MARKET AUTHORISATION HOLDER MODEL

**EMG Endotracheal Tube** is intended for use as a means of providing both an open airway for patient ventilation and for intraoperative monitoring of EMG activity of the intrinsic laryngeal musculature when connected to an appropriate EMG monitor.

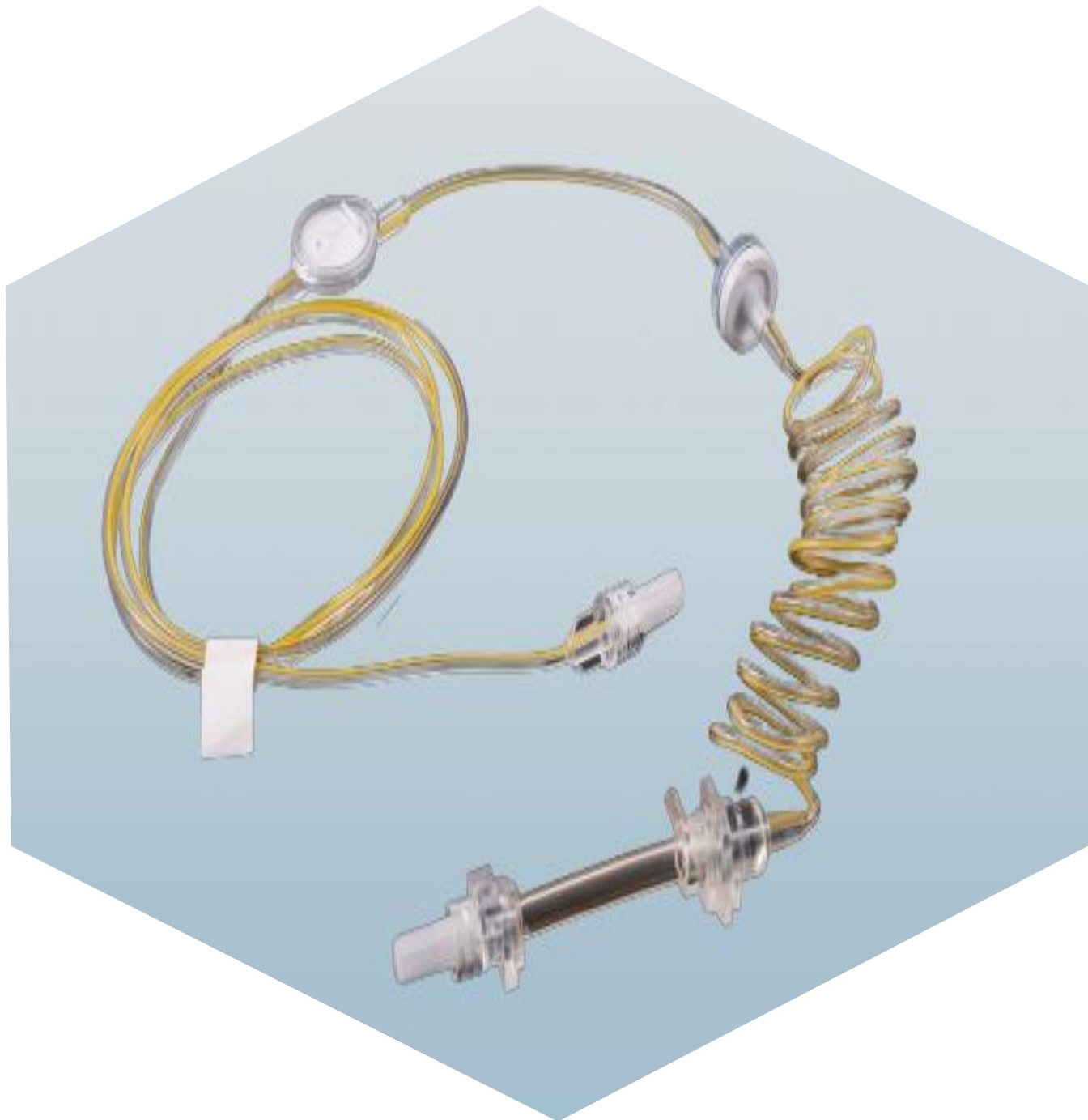






# FULL DEVICE - INFUSION SET

Injection | Extrusion | Assembly | Packaging | Sterilisation



# FULL DEVICE - INFUSION SET

Injection | Extrusion | Assembly | Packaging | Sterilisation

# FULL DEVICE - LARYNGEAL MASK

Injection | Extrusion | Blow | Assembly | Packaging | Sterilisation

## Laryngeal Mask

a medical device that keeps a patient's airway open during anaesthesia or unconsciousness



## Secondary Processes

- **Assembly**
- **Shape Forming**
- **Pad Printing**
- **Adhesive/Solvent Bonding**
- **UV Curing**
- **Form, Fill & Seal**

# FULL DEVICE – SAFETY WING INFUSION SETS

Injection | Extrusion | High Speed Assembly | Packaging | Sterilisation

## Secondary Processes

- **Assembly**
- **Shape Forming**
- **Pad Printing**
- **Adhesive/Solvent Bonding**
- **UV Curing**



# FULL DEVICE - JEJUNAL & NASO GASTRIC FEEDING TUBE

## Secondary Processes

- **Assembly**
- **Hydrophilic Coating**
- **Adhesive/Solvent Bonding**
- **UV Curing**
- **Tyvek Pouch Packaging**

Product Development | Injection | Extrusion | Assembly | Packaging | Sterilisation



## **Jejunal Gastric Decompression Tube**

Designed for easy insertion through Bard Percutaneous Endoscopic Gastrostomy (PEG) Tube



# FOREFRONT IN THE AI + ORTHODONTICS SPACE



## FULL DEVICE – SCANBOX

Injection | Assembly | Packaging



# TEXTILE MANUFACTURING

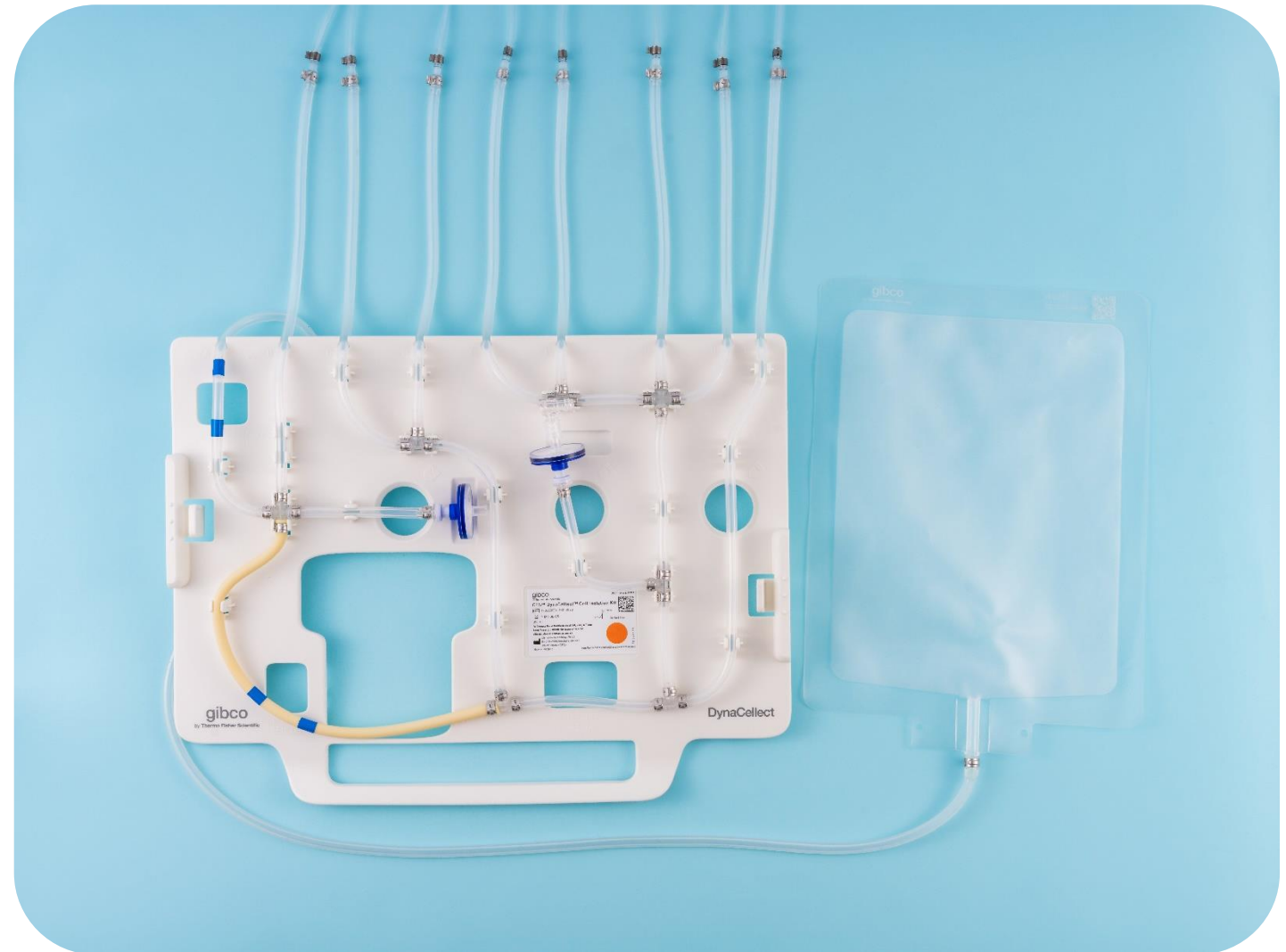


# LIFE SCIENCE



## Automag

Isolate T-cells from Donor.  
Engineer T-cells to become  
mighty soldier to fight  
against cancer



**Isolation**



# LIFE SCIENCE



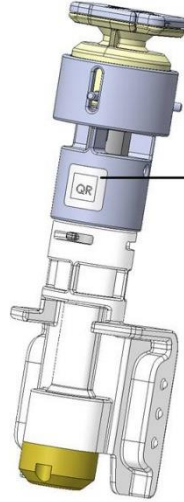
## Mavericks

Xenon 1ml a.k.a Single Shot



## Mavericks

Xenon 5-25ml a.k.a Multi Shot



### Plastic Molding

Majority of the Plastic Components are produced in Forefront Xiamen

### Gold Plating

Some of the metal parts are Gold Plated to ensure that there is no reactive between the metal and cells

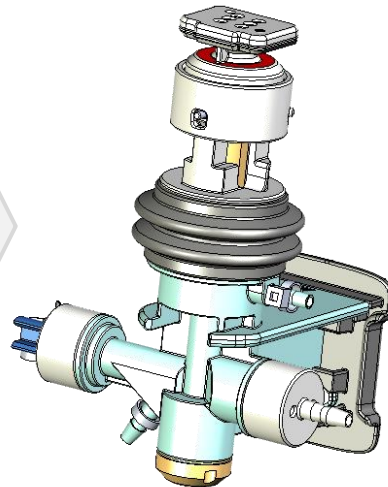
### Tubing Connection

Forefront have acquired various ways of Tubing Connection via this project.

### Helium Leak test

Most Stringent leak testing method in Forefront so far.

## Manufacturing Processes in Forefront Medical Technology



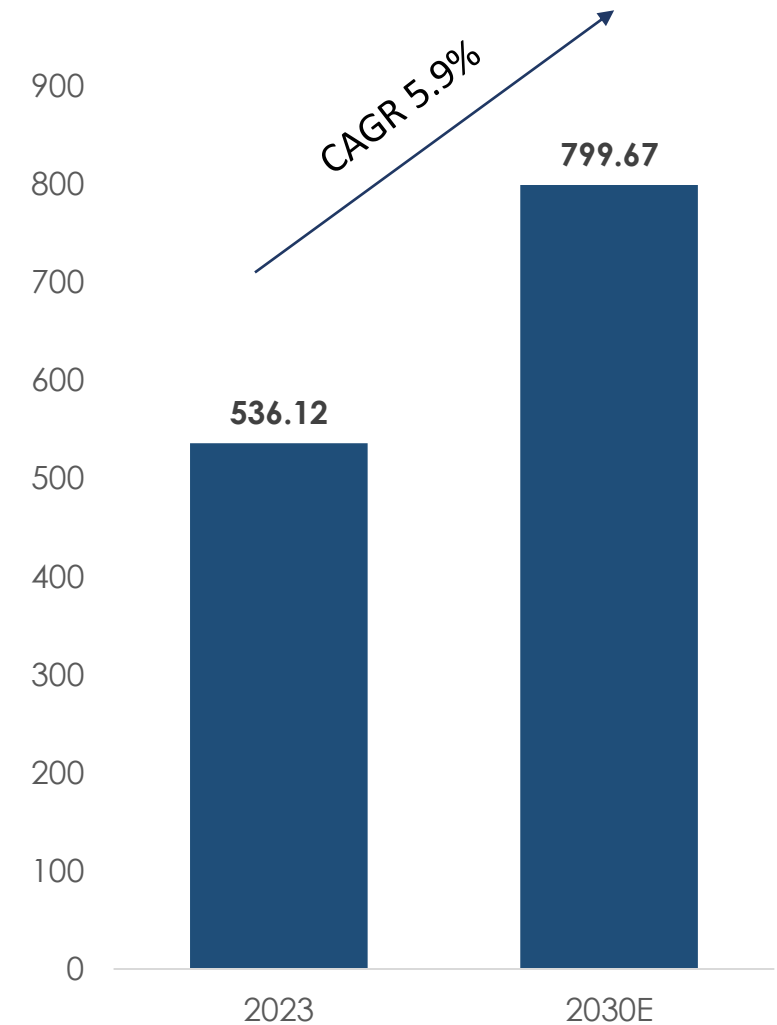
# Opportunities in Medtech Industry

The global medical devices market is projected to grow from \$536.12 billion in 2023 to \$799.67 billion by 2030 at a CAGR of 5.9% during the forecast period.\*

## Key drivers:

- Growing prevalence of chronic diseases and increasing emphasis of healthcare agencies toward early diagnosis and treatment
- Rise in number of inpatient admissions and increasing number of surgical and diagnostic procedures
- Rising investments from leading healthcare market players and medtech companies for R&D and favourable scenarios provided by regulatory authorities

**Global Medical Devices Market Size  
(in USD Billions)**



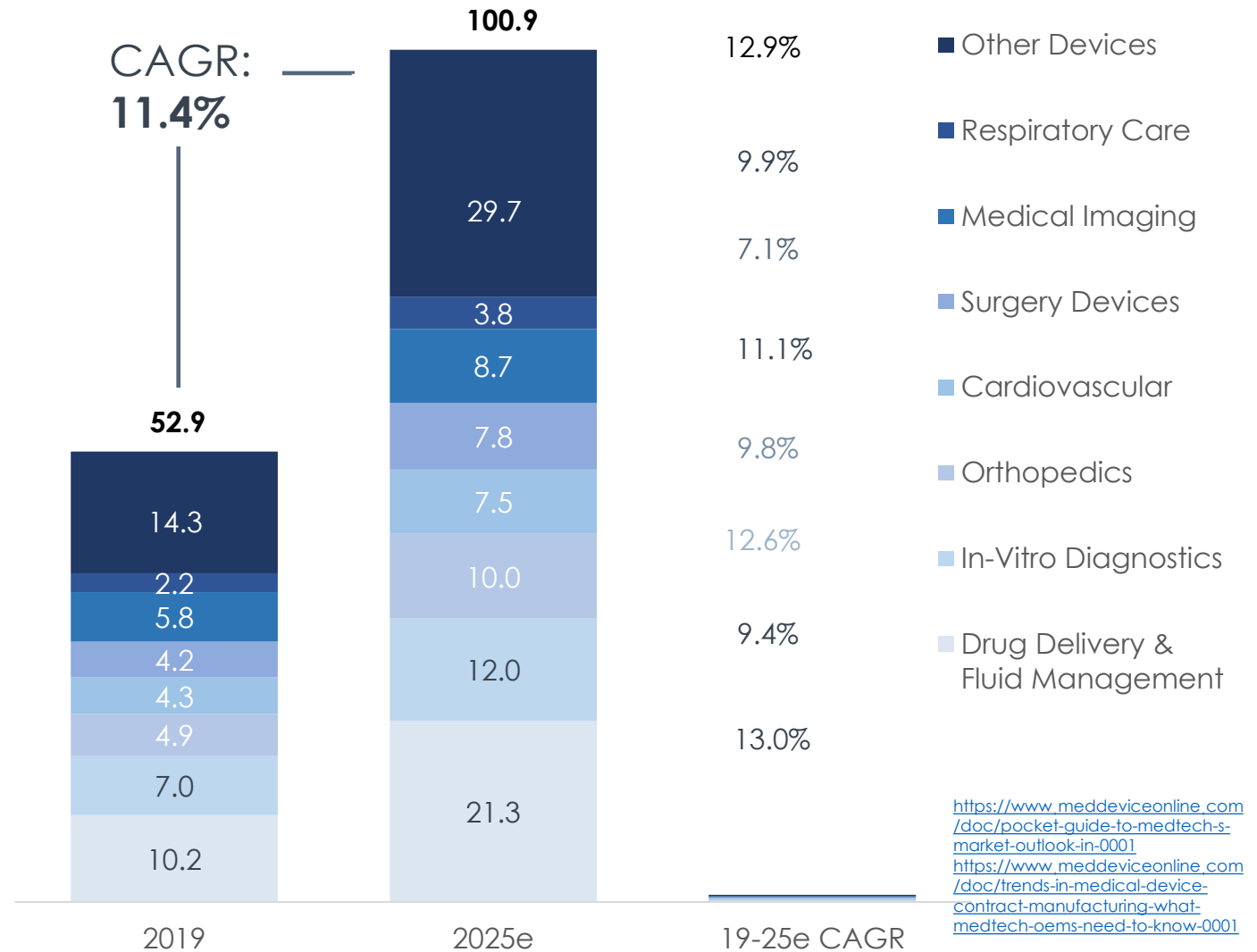
# Contract Dev & Manufacturing Market is Growing

The MedTech contract development and manufacturing organisation (CDMO) market is expected to grow by an average of 11.4% year-on-year through 2025.

## Key drivers:

- Ageing population
- Increased demand for improved healthcare in developing markets
- Continued willingness by product owners to outsource manufacturing to trusted partners that can fully support product and process innovation in the right geographical locations

MedTech CDMO Market by Application: 2019-2025e (US\$B)

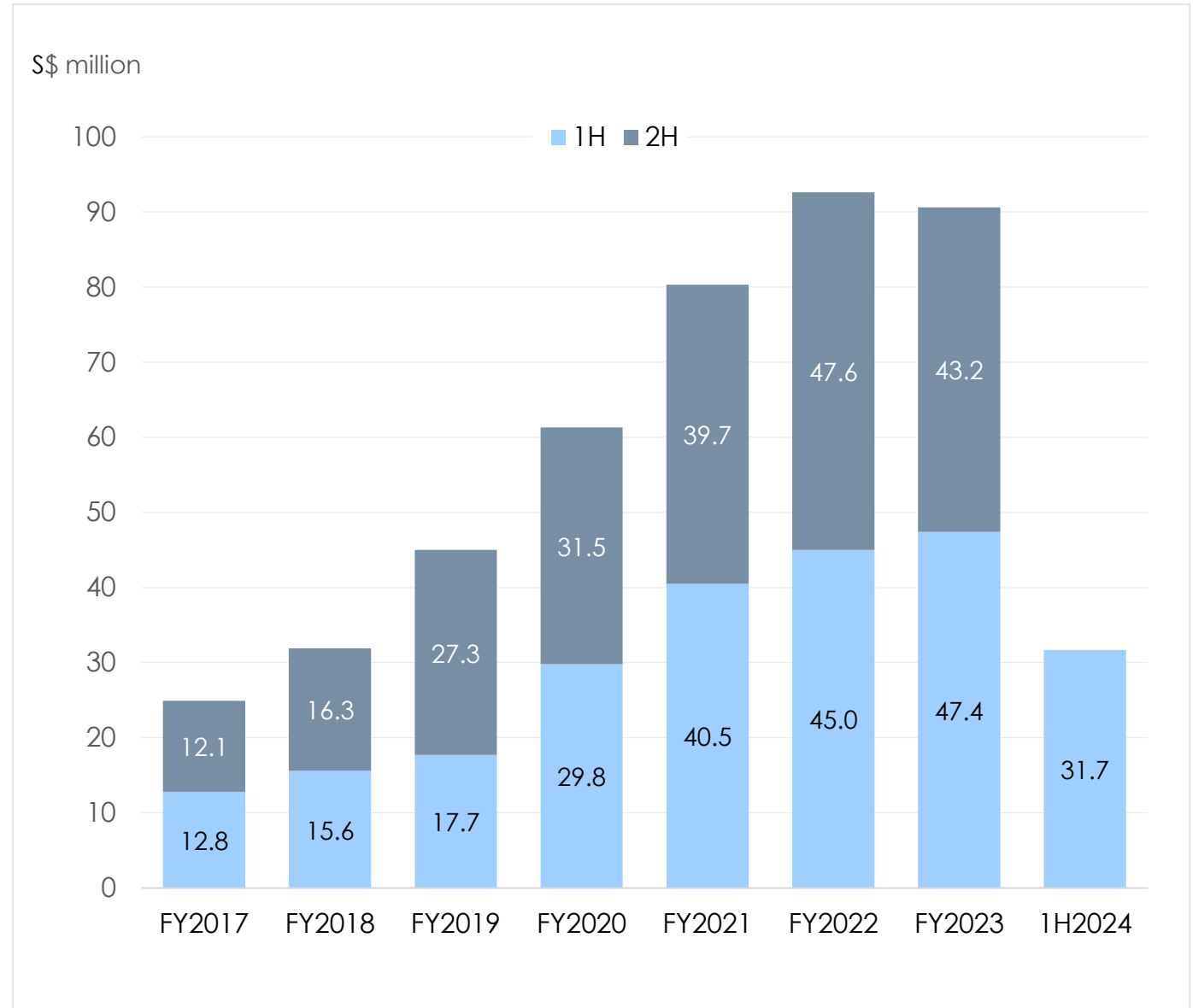




# 1H2024 HIGHLIGHTS

- 1H2024 results were negatively impacted by certain customers rebalancing their inventories as they clear excess stock that may have been ordered as safety stock during the uncertain days of the pandemic. This led to a reduction in new orders and this temporary phase will continue until their inventory levels have stabilised
- There were also increased operating expenses such as the Changzhou plant extension operating costs, business development costs, marketing initiative costs and startup costs related to the new Mexico plant
- Segment continues to focus on building up new capabilities and developing the new Mexico plant to improve collaboration and offerings to its global customer base
- Mexico plant has been handed over and is currently in the midst of an internal fitout which includes clean rooms
- Onboarded additional technical staff in China and Singapore to meet future demand for new project commercialisations from customers

WE AIM FOR  
SUSTAINABLE  
LONG TERM  
GROWTH



# Achieving Our Vision: Strategic Intent

To improve profitability by delivering great solutions for our customers and building sustainable value for all our stakeholders

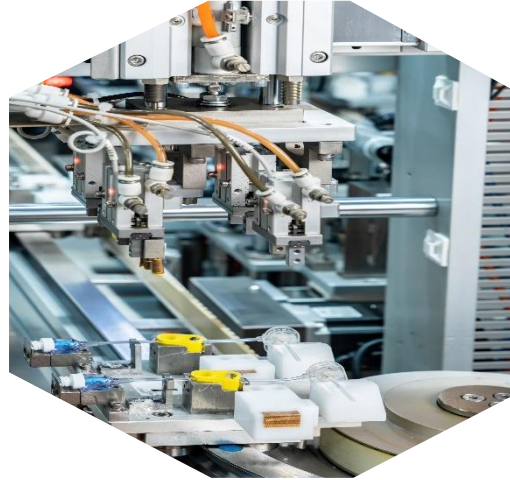


# Strategic Priorities



## Accelerate Capital Investments

- Broaden global manufacturing footprint to satisfy demand and improve flexibility of supply chains for new and existing customers
  - Changzhou extension completed & utilisation improving
  - Juarez, Mexico plant progressing well



## Drive Capability Improvements & Innovation

- Build expanded capabilities in medical extrusions, cell and gene therapy and electro-mechanical devices to strengthen new revenue streams
- Continue efficiency improvements and cost reductions at all manufacturing locations



## Build A High Performance Team To Drive Growth

- Continue to develop and provide opportunities for our highly engaged & tenured team
- Invest in additional MedTech talent pool to drive new revenue streams and manage growth

# Business Outlook

- Segmental revenue expected to remain constrained as rightsizing of customer inventories is still in progress
- After this phase is over, segment will be well-positioned to further grow its global customer base in key markets such as USA, Europe and Japan, and expand its capability to service new projects for the China market
- Segmental result may also be impacted by higher operating costs, inflationary pressures and higher development and expansion costs
- Long term prospects remain bright as segment continues to prioritise new capabilities, expand its manufacturing footprint, investment in sales & marketing resources, and continue to make targeted efficiency improvements
- Cautiously optimistic but keeping a vigilant watch on challenges that may arise from uncertainties in the global macroeconomic environment, plus ongoing inflationary and interest rate pressures





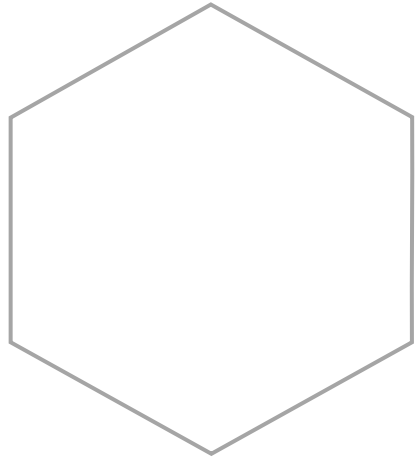
# Vicplas Pipes & Pipe Fittings

Presented by

**Jay Cheng**

Group Operations  
Director





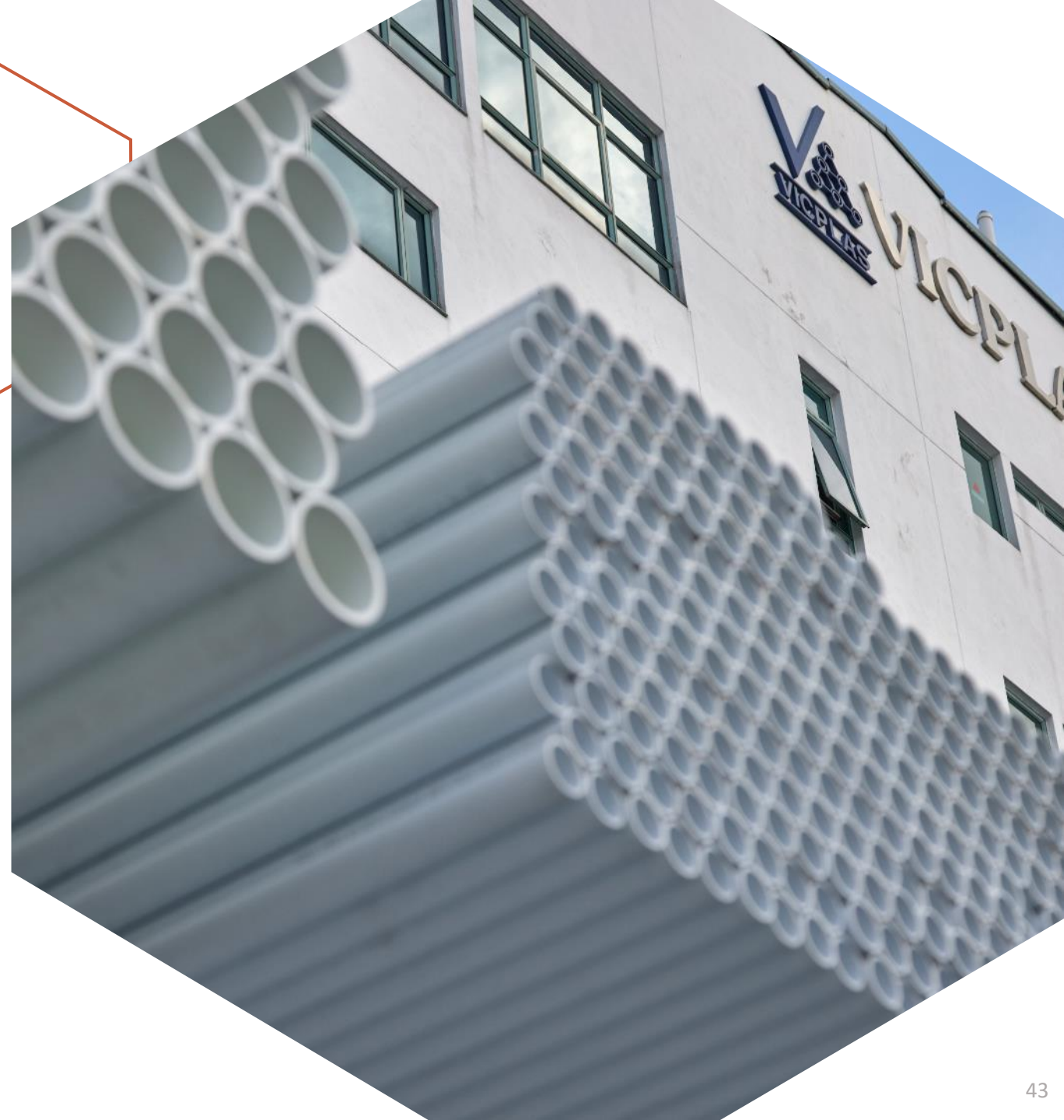
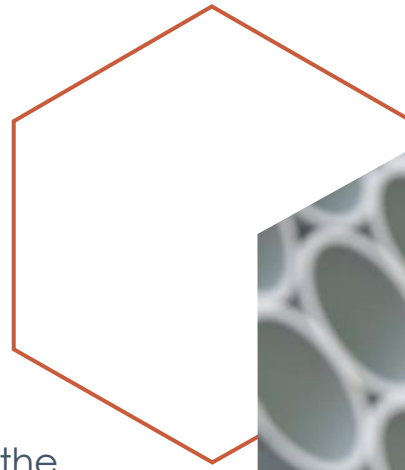
# A SUSTAINABLE BUSINESS

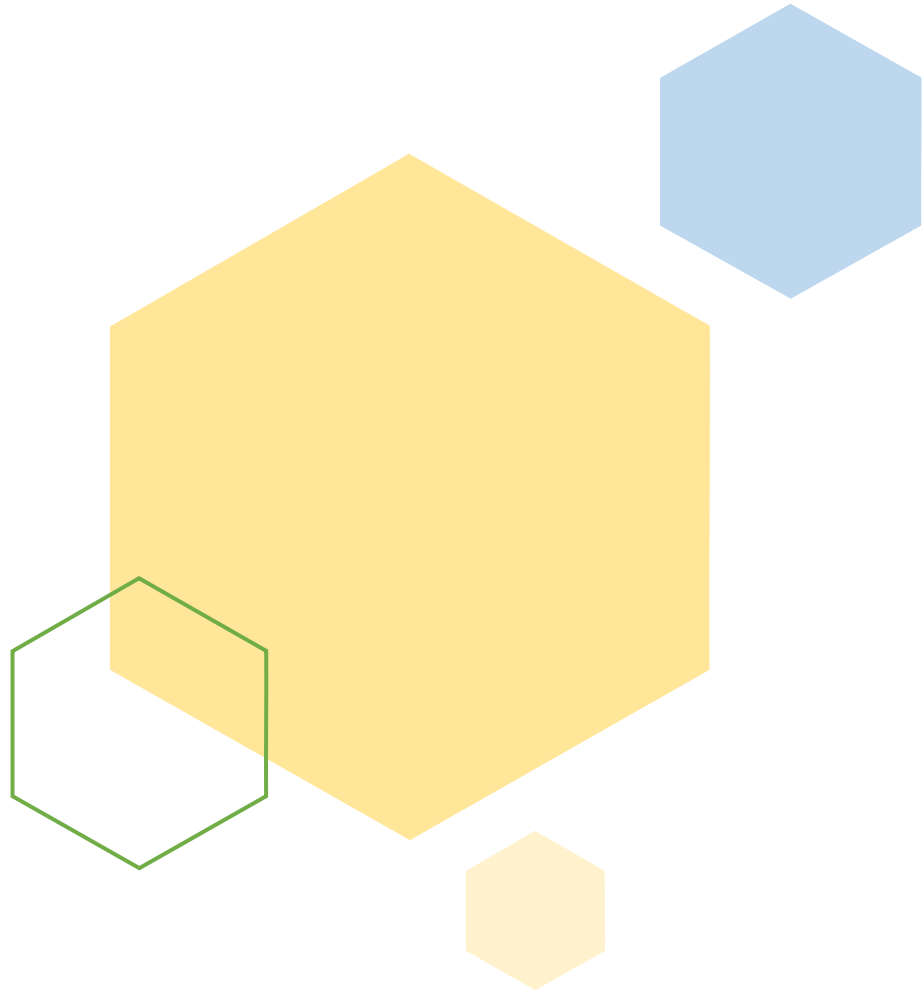


# About Us

Vicplas Pipes is a leading solutions provider in the plastic pipe manufacturing industry. Our uPVC piping systems are found in a majority of residential homes across Singapore. Our market leadership is built on the quality and reliability of our products. They are commonly found in:

- **Plumbing and Electrical Works** across residential, commercial, institutional, industrial and other buildings
- **Civil Engineering Works** ranging from telecommunication and power grid pipelines to infrastructure works





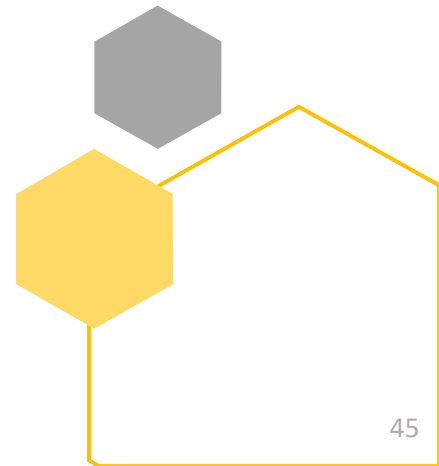
# Delivering Green and Innovative solutions beyond the built environment

Driving us forward

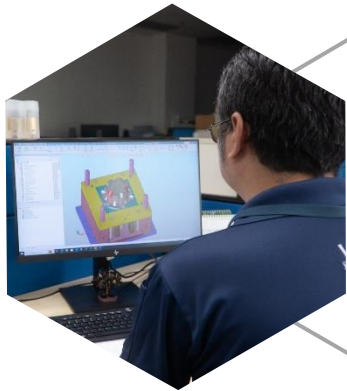
# Industry Leader in the built environment



- SGBP Green Mark Scheme – 4<sup>th</sup> Green Marks accrue the maximum point rating for products used towards the project's Green Mark Rating
- 4<sup>th</sup> Green Marks achieved – Vicplas is now the recognised industry leader for waste and potable water piping systems
- Also the 1<sup>st</sup> uPVC pipes and pipe fittings producer in Singapore to be Green Mark certified
- 4<sup>th</sup> Green Marks creates new opportunities for Vicplas pipes to expand beyond Singapore as the built environment regionally adopts green certified products more widely



# Core Capabilities



## Product Design

Develop practical, cost-efficient solutions that evolve with the changing needs of customers



## Processing Techniques

Proficient across a range of polymer processing techniques and able to offer injection, extrusion, thermal forming and fabrications



## Tool Fabrication

Equipped with in-house mould design and fabrication capabilities



## Materials Know-how

Extensive working knowledge of polymeric materials such as engineering plastics, specialty elastomers, composites and more



# Value Proposition To Customers

## **Solutions Provider**

Proactively look for new product development opportunities to fill industry gaps and meet emerging needs



## **Product Reliability**

Conduct regular quality checks to ensure that products meet stringent quality and regulatory requirements

## **Research & Development**

Constantly explore new possibilities in the design and manufacture of our products

## **Operational Efficiency**

Invest in new technologies and improve existing process to enhance operational and manufacturing efficiency

## **Green Initiatives**

Contribute to a cleaner and greener future by developing environmentally friendly products

# Application



## Buildings

- Residential homes
- Commercial/ Institutional buildings
- Industrial and others



## Hydro-agriculture

- Irrigation pipelines
- Grow Channels



## Civil Engineering

- Telecommunication pipelines
- Power grid pipelines
- Infrastructure works





# 1H2024 HIGHLIGHTS

- Segmental revenue in 1H2024 increased by 1.7% to S\$19.4 million from 1H2023 as construction activities in Singapore improved
- 1H2024 segmental result saw a 30.7% increase to S\$4.1 million as compared to 1H2023 due to cost and efficiency improvements in its manufacturing plants

# Business Outlook

- Well-positioned to meet the increase in demand from public housing to be launched over the next few years
- Leveraging manufacturing presence in Singapore coupled with diverse range of high-quality products certified with 4 Green Marks from the Singapore Green Building Council, segment is well positioned to support customer requirements
- Continue to focus on civil engineering projects driven by demand from infrastructure works for upcoming residential and mega projects in Singapore and product expansion beyond the built environment
- Although the segment is expected to record sales from the greater activities in the built environment, it continues to face challenges from intensified competition, cost pressures and credit risk exposures



