

# EXCLUSIVE FROM MALAYSIA

# EFM

E-MAGAZINE

## ADVANCING BEYOND BOUNDARIES

ISSUE #001, MARCH 2019



# INDUSTRY 4.0

## SETTING A NEW PARADIGM

Produced by:



MALAYSIA EXTERNAL TRADE DEVELOPMENT CORPORATION

# CEO's NOTE

## EDITORIAL

### Advisor

Wan Latiff Wan Musa (Dato')  
CEO of MATRADE

### EDITORIAL COMMITTEE

#### Chief Editor

Aureen Jean Nonis (Datuk)

#### Assistant Editor

Shawn Sim Kok Aun

#### Editorial Member

Nor Arina Zahari

### PUBLISHED BY



Menara MATRADE  
Jalan Sultan Haji Ahmad Shah  
50480 Kuala Lumpur, Malaysia  
Tel: +603 6207 7077  
Fax: +603 6207 7033/7037  
Email: [info@matrade.gov.my](mailto:info@matrade.gov.my)

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[www.wordlabs.com.my](http://www.wordlabs.com.my)



**W**ELCOME to the inaugural issue of the “Exclusive From Malaysia” (EFM) eMagazine. As part of our Green Initiative, we have transitioned from print to digital, prioritising convenience and access to information.

EFM is a testament to Malaysia's dedication towards forging relationships with clients; providing information on top-notch products and services, thus enabling them to secure better positioning in the marketplace.

The tagline, “Advancing Beyond Boundaries” reflects the zeal of Malaysian suppliers to transcend boundaries and their commitment to form a win-win partnership with their clients.

In this issue of EFM, we at MATRADE are delighted to present Malaysian home-grown companies that are setting a new paradigm in Industry 4.0. These companies showcase the Malaysian calibre and our nation's contribution to the manufacturing, electronics, and data technology sectors, ushering in an era of technological advancement and change.

We hope our readers would find this issue useful to forge partnerships with Malaysian leading tech companies as they move forward to champion Industry 4.0.

### Wan Latiff Wan Musa (Dato')

Chief Executive Officer

Malaysia External Trade Development Corporation (MATRADE)

EXCLUSIVE FROM MALAYSIA



ADVANCING BEYOND BOUNDARIES

EFM is an exclusive quarterly e-magazine, showcasing world-class Malaysian services and quality products. It is a reference for global partners and buyers who seek to extend their sourcing needs, thus elevating their business potential.

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# BRINGING INDUSTRY 4.0 SOLUTIONS TO CUSTOMERS



technicians to monitor the level of grain and finished products in the plant's storage tank.

- Automate the entire process, utilised in raw material handling and storage environment.
- Store data extracted from multiple processing locations in a cloud system.
- Utilise data to calibrate conditioning parameters and improve operations
- Reduce the cost of production .
- Employ best practices for stock management.
- Increase total product profitability.

## EFFICIENCY IS THE NAME OF THE GAME

BAFE's Batching and Blending System for Packaging Line and Conveying System, is the epitome of efficiency. Alongside real-time monitoring and control, the entire setup consists of weighing, blending, storage, feeding, product transfer, palletising and bagging systems that would work for any packaging and conveying plant.

This Industry 4.0-proficient system further impresses with its ability to capture and transmit real-time data via an external cloud system stored securely. This will then be plotted into the client's ERP system and utilised for production planning, inventory and delivery management, preventive maintenance – all to provide excellent customer service and forge positive relationships.

**B**ULK And Fluids Engineering Sdn Bhd (BAFE) was founded in 2004. Now a fast-growing Malaysian-based company, they provide integrated process systems and equipment, steelwork fabrication for various industries involving bulk materials and fluids process engineering, as well as support to plant automation related systems and equipment. BAFE offers consultancy and Industry 4.0 solutions to ensure customer satisfaction.

BAFE develops tailor-made equipment and IoT systems as specified by design requirements and manufacturing process, all to fulfill the need of various industries. They offer

distinctive engineering solutions to address the industry's needs for bulk solids and fluids process engineering and automation.

## SMART TECHNOLOGY IN FEED MILL INDUSTRY

BAFE have effectively enabled remote monitoring and control of the feed mill by using IoT and smart sensors. Through these feed mill industry-related solutions, they are able to:

- Control the temperature and moisture of grain in the storage tanks.
- Provide real-time interaction and monitoring, which allows

## LOOKING TOWARDS INDUSTRY 4.0 AND BEYOND

BAFE, with the collaboration of consortium partner companies, is able to access broad commercial opportunities for future growth. This allows them to deliver technologies to their clients that will prove successful in delivering a more cost-effective and flexible plant operation.

Moving forward, the company will continue to grow in the area of IoT and Industry 4.0, with the ongoing system integration and automation for various processing plants. Also, they will channel resources into digital farming and smart agriculture to bolster the Malaysian agricultural ecosystem.



### BULK AND FLUIDS ENGINEERING SDN BHD

21, Jalan Cassia Selatan 3/3,  
Taman Perindustrian Batu Kawan,  
14110 Batu Kawan, Pulau Pinang, Malaysia

Tel: +604 5070 067 / +6016 4190 941

Fax: +604 5070 078

Email: [bhcheng@bafe.com.my](mailto:bhcheng@bafe.com.my)

Contact: Mr Cheng Boon Hung

Website: [www.bafe.com.my](http://www.bafe.com.my)



# ADVANCING INTO THE AGE OF ROBOTICS



**F**OUNDED in June 2012, DF Automation & Robotics Sdn Bhd is a tech-based company that is at the leading edge of automation and robotics in the region, catering to clients from across the world. Their clientele comes from countries such as Singapore, Indonesia, Thailand, Vietnam, Philippines, India, Mexico, US and the UK.

The company specialises in designing, manufacturing, marketing and consistently improving Automated Guided Vehicle (AGV) systems for a wide range of industrial and commercial use. This is made possible by the efforts of their workforce, consisting of full-time engineers and technology specialists, with more than 15 years' experience in the design of industrial mobile robot and related products.

## ROLLING OUT AGV

DF Automation and Robotics' unique AGV solves a primary problem faced by the manufacturing industry. With thousands of goods being moved around plants each day, AGV's are able to reduce the reliability of the human workforce by automating this process, but with more flexibility than that of conveyor belts.

Their Zalpha series is the epitome of DF's expertise and experience. It is built with modular parts to allow for easy servicing and maintenance. Besides being equipped with an array of safety features, the Zalpha series has an auto charging function to enable 24 hours continuous operation. To meet the demands and requirements of Industry 4.0, Zalpha has also integrated the Internet of Things (IoT).

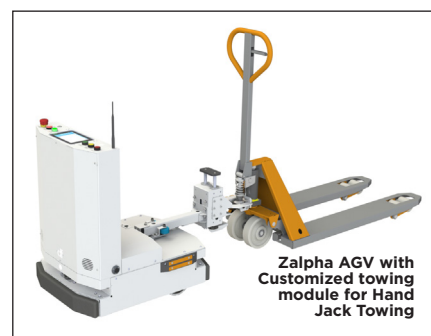


In the case of multiple AGV's being deployed in a single plant, DF Automation and Robotics offers two unique AGV Fleet Management Systems (FMS). These FMS' offer task management, scheduling control centralised monitoring of AGVs information, as well as data logging and reporting.

To further enhance the benefits that AGVs can offer, DF Automation and Robotics have also come up with an array of accessories add-ons such as a WiFi calling station, WiFi controlled remote i/o module, and Lift Interface Controller to name a few.

The journey to reach this stage has not been easy, but DF Automation and Robotics have continued to push the envelope on their offerings by investing heavily into their R&D activities for the continuous improvement of their products. Their success is a hallmark of

the potential Malaysia has in building and developing a world-class technology centre that is able to compete in the global arena.



## Achievements

- Platinum, Best Innovation at Star Outstanding Business Award (SOBA) 2018
- Frost & Sullivan 2017 Malaysia Entrepreneurial Company Of The Year Automated Guided Vehicle Market.
- Winner, Best of Industrial Applications at International APICTA Awards Dhaka 2017
- Winner, Best of Industrial Applications at MSC Malaysia APICTA 2017 Awards.
- Best Cost Effective Solution Award, Universal Robots Channel Partner Meet 2017

## Certification

- CE Certification

# HIGH PRECISION, MAXIMUM EFFICIENCY



**R**ISING from the ground up in Penang, Exclusive Master (M) Sdn Bhd was established in 1991. Equipped with almost 30 years of experience, they are proficient in providing dedicated precision automation solutions and recognised standard equipment solutions for Semiconductor and Electronics Automotive, Medical, F&B and various other industries.

Sustaining their business are two core segments: Equipment Automation, which tailors to customers' needs, and Component Solutions. These segments are supported by an eclectic mix of deft design engineers from various industries, each with vast experience to elevate their products.

The company never strays from their commitment to improve and provide reliable and quality services and solutions to meet the Quality Management System Requirements and exceed their customer's expectation.

## LASER-FOCUSED ON ADVANCEMENT

As part of the extensive suite of tech offerings, the company provides Laser Marking solution, which marks and tags materials and workpieces with a laser beam. With the help of this tagging

technology, varying processes such as engraving, staining, annealing, removing and foaming are easily discernible.

Furthermore, they also have the Laser Handler machine. It is a form of machining whereby a laser is trained on workpieces to remove material from metallic or non-metallic surfaces by using thermal energy. The laser serves to heat, vaporise or melt the targeted material.

Another notable solution is their Vision Inspection System, which comprises automated image-based inspection products that can be applied in numerous industries. This technology is equipped with multiple cameras, each with video and lighting capabilities.

Additionally, the system is capable of computing, measuring and verifying different parts to ensure correct positioning, as well as discerning different shapes and sizes. This is done at high speeds and enable companies to conduct a comprehensive inspection of parts for quality control purposes with access to full data storage for future traceability.

## ASSEMBLING THE FUTURE

Exclusive Master tailors their services to customer's needs by offering the Pick and Place System, which is a system

that detects, picks and places the object at the desired location. This system is employed for unsavoury jobs – those that are too risky, monotonous or dirty – unsuitable for humans. The system's speed, reliability and accuracy are crucial to its success in high octane production. With the usage of mechanical arms, it is able to dramatically improve product quality and increase workplace safety. The company's employees are able to focus on higher value supervisory roles and avoid hazardous environment.

Another automated system in their arsenal is the Automated Assembly System, which refers to the utilisation of automated and mechanised devices to perform various tasks in an assembly cell. The equipment is designed to follow a set sequence of assembly, combining two or more distinct parts to create a new entity which may then be incorporated into a product or as a standalone.

Ultimately, the company seeks to be the leader in the integrated design of industrial automation systems and services.



## Certification

- ISO 9001:2015



### EXCLUSIVE MASTER (M) SDN BHD

No. 30, Jalan Sungai Tiram 7,  
Taman Perusahaan Nyaman Mutiara,  
11900 Bayan Lepas, Penang, Malaysia

Tel: +604 6383 899

Fax: +604 6383 382

Email: sales@exclusive-master.com

Website: www.exclusive-master.com



# PROVIDING INTEGRATED CUSTOMISED SOLUTIONS TO ALL



**P**ENTAMASTER Corporation Berhad is a name that resonates within various sectors, especially the manufacturing industry. Based in Penang, the company was established in 1991 and now plays a major role in providing integrated and customised solutions to customers across the world. The industry sectors served range from automotive, electrical and electronics, pharmaceutical, computer, semiconductor, consumer goods, food and beverages to general manufacturing. Additionally, the company extends their offerings with high-quality and cost-effective automated and semi-automated machinery.

## CUTTING EDGE TECHNOLOGY

As one of Pentamaster's pioneer divisions, the Pentamaster Technology encompasses their Semiconductor Smart Device Testing Solutions as well as their Optics and Photonics Sensor technology. This specialised division

comes with teams of engineers, test handlers and experts to run software test solutions and functional tests using their automated test equipment.

Furthermore, the Assembly and Test Handling system has customised design for standalone high precision assembly and test for semiconductor devices. The system is fully equipped with its own control and user-friendly diagnostics interface, which is integrated with vision systems for precision alignment and quality verification.

## ROBOTICS AUGMENTING PROCESSES

It is a fact that robotics and automation have greatly improved production in the manufacturing industry. Pentamaster utilises their own intelligent Automated Robotics Manufacturing System (i-ARMS) – an extensive system that integrates numerous combinations of their Automated Manufacturing Solutions (AMS) modules with other tech solutions such as RFID tracking, and Vision Inspection Guidance System. With the help of this technology, the Pentamaster Equipment Manufacturing division is able to customise and automate processes to meet customer's needs.

With the integration of the AMS modules, Pentamaster is able to offer extensive automated functions for varying processes in manufacturing. Disassembling down to its constituent elements, the AMS modules comprises:

- Material handling equipment which functions as a conveyor system to

transfer items from one process to another.

- Assembly and test modules that are installed to initiate assembly and functionality tests on various stages of the manufacturing process.
- High-speed sorters to organise subjects based on test results or programmed processes.
- Manufacturing Execution System (MES), a real-time monitoring and control software platform typically utilised in the automated manufacturing system.

Elements like the MES enables real-time tracking of production throughput throughout the manufacturing process, as well as ensuring all processes follow the correct sequence in the manufacturing line.

The company envisions itself as being the top test equipment designer and manufacturer globally for Smart Sensor testing. They continue to innovate in order to stay ahead and lead the industry with their tech solutions.



## Achievements

- FOCUS – Malaysia Best Under Billion Awards 2018
  - Best Revenue Growth
  - Best Enterprise Value Growth
  - Overall Winner
- Forbes Asia Best Under A Billion 2017 & 2018
- FOCUS – Malaysia Best Under Billion Awards 2017
  - Best Return on Assets

## Certification

- ISO Certified 9001:2015



## PENTAMASTER CORPORATION BERHAD

Plot 18 & 19, Technoplex, Medan Bayan Lepas,  
Taman Perindustrian Bayan Lepas, Phase IV,  
11900 Penang, Malaysia

Tel: +604 6469 212

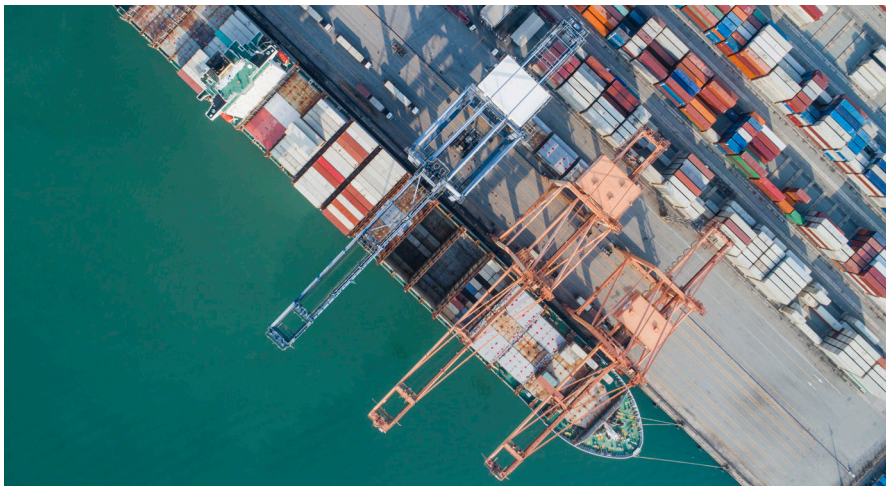
Fax: +604 6467 212

Email: [penta-online@pentamaster.com.my](mailto:penta-online@pentamaster.com.my)

Contact: Ms Ann Gan

Website: [www.pentamaster.com.my](http://www.pentamaster.com.my)

# ENHANCING CROSS-BORDER TRADE



**F**USIONEX is an established data technology provider founded in 2002 and has grown to become one of the region's leading companies that specializes in Big Data Analytics, Machine Learning and Artificial Intelligence.

The company's vision is to bridge the gap between the business world and emerging technologies, and in doing so provide a positive and unparalleled experience to their customers from across various industries.

Among its hallmark solutions that cater to Big Data Analytics; app and device management; analytics and reporting; planning, communication, and transaction management; and Cloud services.

## CONNECTING THE DOTS

Understanding the need for more

enhanced and effective trade in today's ever-advancing society, Fusionex has created its very own Electronic Trade Facilitation Platform that allows for more expeditious, secure and efficient cross-border trade.

Leveraging on their expertise in Big Data Analytics, this innovative platform amalgamates a comprehensive suite of solutions such as real-time arrival of shipment notification, electronic customs declarations, image and video recognition, and more.

High-level partners and players that have come on board this platform include Lazada, Shopee, Alibaba, and Logistics Worldwide Express, just to name a few.

## PIONEERING eWTP

Through a strategic partnership with Alibaba Cloud, Fusionex has launched

a Digital Free Trade Zone (DFTZ) e-Services platform, which is poised to being the world's first eWTP (electronic World Trade Platform) of its kind.

Serving as a one-stop digital trade facilitation platform, the DFTZ provides a common ground for trade facilitation and e-marketplace players, SMEs, freight forwarders, logistics providers and government agencies to come together with the goal of trading efficiently.

With a growing presence in Asia, Europe and the United States, Fusionex believes that the data technologies they offer have the ability to revolutionize the way business is conducted while catering to the customers of this age. Their data management platform has successfully processed billions of sales as of 2018, and continues to grow rapidly. The company has plans to accelerate this growth further by riding on the digital wave of opportunities being fuelled by a phenomenal increase in market demand.

## Achievements

- World Tourism Economic Conference – Most Innovative Award
- PIKOM ICT Leadership Award – Excellence Award
- ASOCIO Most Outstanding ICT Company Award
- Microsoft Global Partner Award
- Big Data World Asia – Data Analytics & Innovation Award
- SiTF– Best Emerging Technology & Best General Application Award

## Certifications

- CMMI Level 3
- ISO 9001
- ISO 27001

## FUSIONEX

Level 12, Tower A, Plaza 33,  
1 Jalan Kemajuan, Section 13,  
46200 Petaling Jaya, Selangor, Malaysia

Tel: +603 7711 5200  
Fax: +603 7711 5300  
Email : marcomm@adv-fusionex.com  
Contact: Ms Angie Lim  
Website: www.fusionex-international.com



# MOTOR DRIVER SERIES PROPELLING ROBOTICS, AUTOMATION



Their very first product, SK40A, is a microcontroller development board which enables the user to easily create their own robotic and electronic projects. Coming a long way, they now have their own Surface Mount Technology (SMT) line in a large factory, which is a manufacturing method to produce electronic circuits whereby components are directly assembled onto the surface of the printed circuit boards (PCBs), as opposed to conventional assembly method.

## COMPONENTS OF THE FUTURE

Cytron's signature product, the Motor Driver series, is world-renowned and ranked as the top-selling motor driver at a global leading robot marketplace. The company's Motor Driver series range from 2 Amp to 160 Amp, and are used in Automatic Guided Vehicles (AGV), solar trackers, innovation automation, combat robots, electric vehicles and more.

A Motor Driver functions as a current amplifier, converting low-current into a high-current control signal in order to propel a motor. What makes Cytron's product stand out, is its durability and low failure rate.

Some of the products such as the 30A 5-30V Single Brushed DC Motor Driver also keeps the user in mind, with reverse polarity protection to guarantee safety. With solid-state components integrated into the products, Cytron's motor drivers promise quicker response time and prevent deterioration of the mechanical relay.

Having been in the overseas market since 2010, they have more than 30 distributors worldwide, enabling purchase in the USA, Canada, UK, France, Japan, Korea, India, Singapore and Thailand. Their perpetually expanding market reflects healthy growth in the ecosystem as well as the proliferation of forward-thinking individuals in the world.

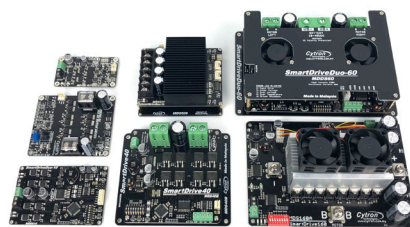


**R**OBOTICS and automation are more than just a buzzword these days, and with the exponential advancement in technology, the demand for components is soaring. Cytron Technologies Sdn Bhd turns this into a strength and leverages on the increasing demands within the robotic ecosystem to support the advancement of robotics.

Cytron Technologies kickstarted its journey in 2004 and have come a long way since. The name was inspired by the founding team's love for the movie Transformers – "Cybertron", being the homeworld of the Transformers – and the love of building robots. The team's victory at ROBOCON Malaysia eventually led to the formation of Cytron. Once a small team of five, its workforce is now 35 strong.

## BRINGING ROBOTICS TO THE MASSES

While achieving penetration into the global market is indeed a feat, they continue to drive innovation to ensure



they stay relevant. Their motto of Robot. Head to Toe has driven the company to design and develop over 100+ products ranging from Motor Drivers, Sensors and Robot Controllers, to various kinds of Shields and HATS.

The company believes in education and constantly organises workshops and execute projects to educate people with little background in the field. They strive to provide solutions for educators and students while encouraging the development of smart electronic and robotic projects. This is done to promote a more a tech-savvy and progressive society in the country.

## Achievements

- Gold Award of ASEAN ICT Awards 2015 in R&D
- Malaysia Superbrands Award in 2018



## CYTRON TECHNOLOGIES SDN BHD

1, Lorong Industri Impian 1,  
Taman Industri Impian,  
14000 Bukit Mertajam, Penang, Malaysia

Tel: +604 5480 668  
Fax: +604 5480 669  
Email: [engtong@cytron.io](mailto:engtong@cytron.io)  
Contact: Mr Tan Eng Tong  
Website: [www.cytron.io](http://www.cytron.io)

# DESIGNING THE FUTURE



**A** leader in the field of precision engineering and machinery in Malaysia, Setsu Precision Technology (M) Sdn Bhd (SPT) has significant global presence since 1997. The company specialises in high-speed Computer Numerical Control (CNC) Milling and Turning, engineering numerous types of metal, plastics, and machine parts from a range of materials.

Essentially the backbone of the company, their sizeable team of competent professionals strives to meet its vast production demands. With a strong focus on clients, they aim to provide better service by optimising operations and integrating cutting-edge technology into production processes. This high-octane commitment translates across multiple industries, and SPT guarantees top-notch products that can contribute to production efficiency and robust business growths.

In addition to housing a dedicated team of local and foreign employees, SPT has ample space in their plant to accommodate state-of-the-art CNC machining. Their production capabilities are also enhanced by key partnerships with numerous suppliers which supplements their processes with laser-cut, water-cut, and gun-drill processes to uphold their policy of being a one-stop service centre for customers.

## CREATING WITH PURPOSE

SPT's strong capability in precision

engineering, fixtures and machine designing puts them at a clear advantage wherein they are able to meet complex technical specifications made by clients. They also have a low tolerance towards inaccuracies and inefficiencies, thus ensuring their processes are on par or above industry standards.

Also, they stick to their promise of the following variations:

- $\pm 2\text{-}5\mu\text{m}$  for CNC Wire-Cut
- $\pm 5\mu\text{m}$  for Cylindrical Grinding
- $\pm 3\text{-}5\mu\text{m}$  for Surface Grinding
- $\pm 4\mu\text{m}$  for CNC Turning Process
- $\pm 5\mu\text{m}$  for CNC Milling Process

Additionally, some of the industries they serve are:

- Machine Builders (46%) - 5 Axis Tool Grinding, Wire Bonding Machine, Grinding Machine, Die Bonding Machine
- Customised Automation Machine Builders (27%) - Printer, Automotive, Aerospace, Metrology, Medical
- Equipment Builders (15%) - Rescue Equipment, Environmental, Medical, Irrigation, Electric Power Tools
- Machinery Components (6%)
- Energy (5%)
- Automotive (1%)

And also Engineering Plastics, such as:

- PI, Vespel
- PAI, Torlon
- PVDF, Kynar
- PTFE, Teflon

SPT spares no expense in ensuring their engineers have a thorough understanding of the nature and properties of each material, allowing excellent machining in different types of materials such as Aluminium alloy, Stainless Steel, Copper, Brass, Bronze; numerous exotic metals like the likes of Titanium, Carbide and Waspalloy; and thermosetting such as Bakelite.

Leveraging technology, SPT has long implemented Enterprise Resource Planning (ERP) systems to fortify their business processes. From the moment a Purchase Order (PO) is received until shipment, ERP is utilised for better compliance; higher efficiency; greater visibility, traceability and repeatability for sustained growth.

## NO OCEAN TOO WIDE

Focused on extending their services worldwide, SPT ceaselessly expands their network and develop sustainable synergies with various clients around the globe. With a strong sense of dedication and abidance by their motto, they continuously populate the market with goods of the highest standard, thus marking their footprint in several countries. These countries are Australia, Singapore, China, Holland, Sweden, India, Thailand, Ireland, UK, USA and Japan.

Their goal is to be a leading global technical corporation, one that is distinguished by the quality and precision of its products, as they move forward into Industry 4.0 and beyond.

## Achievements

- MPC Recognition of Practice (Silver) 2018 in Lean Management
- SME Corp 4-Star Competitiveness Rating for Enhancement 2017
- Winner of MPC Productivity Award 2010
- MITI Industry Excellence Award 2009
- SME Corp 4-Star Competitiveness Rating for Enhancement 2009

## Certifications

- ISO 9001:2015
- OHSAS 18001
- ISO 14001:2015

## SETSU PRECISION TECHNOLOGY (M) SDN BHD

41, Lorong Sungai Puloh 1A/KU6,  
Taman Teknologi Gemilang,  
Kawasan Perindustrian Sungai Puloh,  
42100 Klang, Selangor, Malaysia.

Tel: +603 3291 1979  
Email: suresh@setsuprecision.com  
Contact: Mr Suresh Vaithilingam  
Website: www.setsuprecision.com





# AUTOMATION SOLUTIONS POWERING INDUSTRY 4.0



Tofi Bridge

**F**OUNDED in 2007, Sophic Automation Sdn Bhd has continuously delivered on its mission to provide innovative and effective Industrial Automation Solutions. Throughout its operations, the company has actively leveraged on cutting-edge technologies and technical competency which has resulted in a successful growth in providing world-class business solutions, services and products.

## HARNESSING POTENTIAL OF INDUSTRY 4.0 TECHNOLOGIES (GET CONNECTED, GET SMARTER)

With Industry 4.0 changing the manufacturing ecosystem, the race to stay ahead of the game is well on its way. At the forefront of this changing landscape is Sophic Automation, who have paved the way in terms of Industry 4.0 connectivity solutions and smart machines. A pure play technology company, Sophic has delivered proven automation solutions to more than 50 MNCs & SMEs in South East Asia.

One of their key achievements in Industry 4.0 connectivity offering includes the Tofi Bridge, which is a platform that allows for adapting and translating all types of manufacturing data into IoT Gateway-ready and compatible data.

Leveraging cloud technology, Sophic has also developed an end to end asset monitoring solution, an actionable generating visualisation platform for factory equipment, asset sensor and

machine monitoring on the production floor. The perks of its application include an increase in productivity and efficiency across operations.

Besides that, Mobilert – another Industry 4.0 solution under their belt – is used to provide real-time alerts that enable quicker response time, transparency, better resource planning, also able to measure key performance indicator of the worker. In terms of asset storage and security, the company has developed a Smart Cabinet System which uses RFID to enable 24-hour access to lockers and the ability to track all the activities performed on the locker.

The company is also an expert in the field of smart machines for manufacturing and semiconductor Automation SOLUTIONS Powering Industry 4.0 companies, which include the Automated Wafer Inspection System and PythoniC – one of a kind universal solution for volumetric validation test.

## POISED FOR GROWTH

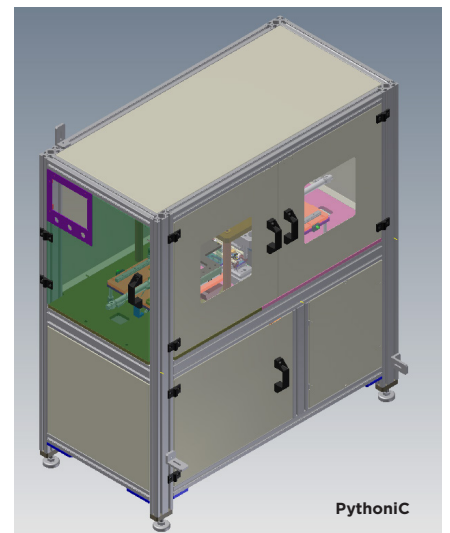
Thus far, the company has successfully maintained a CAGR growth of 30% since its establishment and has expanded their operations beyond Penang, to cities such as Kuala Lumpur and Ho Chi Minh. Sophic Automation is on a mission to become a global specialist in enabling smart Manufacturing implementations for factories and enterprises worldwide using their integrated Industrial Internet of Things (IoT) solutions.



Mobilert



Automated Wafer Inspection System



PythoniC

## Achievement

- Award for Outstanding Investee Companies, 2016

## Certification

- ISO 9001:2015



## SOPHIC AUTOMATION SDN. BHD.

PSDC Building, 2nd Floor,  
No.1, Jalan Sultan Azlan Shah,  
11900 Bayan Lepas, Penang, Malaysia.

Tel: +604 640 9087 / 9088 / 9089

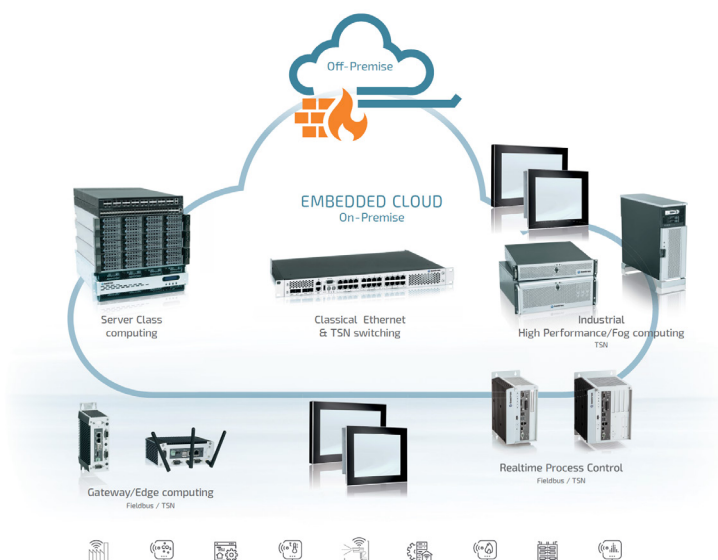
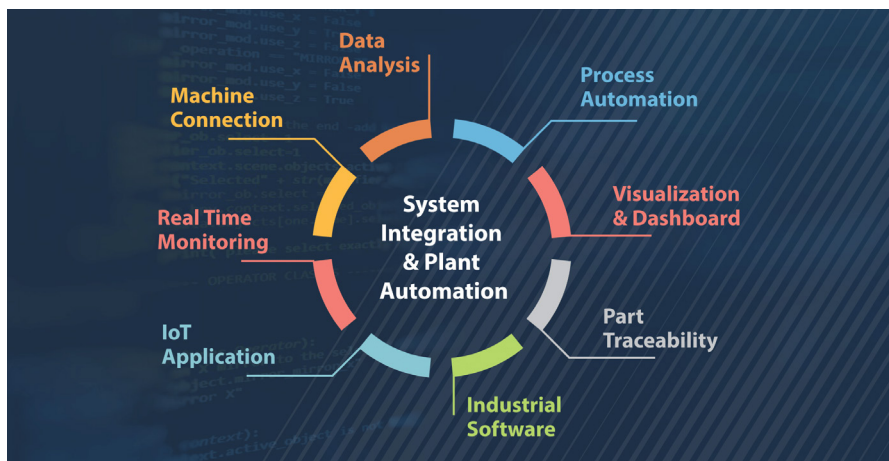
Fax: +604 240 9288

Email: [dimkuan@sophicaautomation.com](mailto:dimkuan@sophicaautomation.com)

Contact: Mr Koh Dim Kuan

[www.sophicaautomation.com](http://www.sophicaautomation.com)

# POWERING END-TO-END INDUSTRY 4.0 SOLUTIONS



**ELLIANCE SDN BHD** has grown to become one of the leading Industry 4.0 Consultancy and Solutions providers for local industries. The company specialises in the provision of industrial LAN/Cloud-based automation solutions, catering primarily to the manufacturing industry.

Comprised of expert consultants in the field of Industry 4.0, the company's focus is on aiding clients in their journey towards becoming a smart factory and how new technologies can be integrated into their operations to reach this goal.

The company provides a host of services on Industry 4.0 implementation

in system integration and plant automation, which consists of process automation, visualisation and dashboard, part traceability, industrial software, IoT application, real-time monitoring, machine connection and data analysis.

## ONE STOP SOLUTION CENTRE

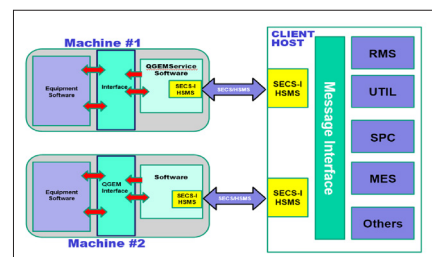
One notable solution offered is the IoT Cloud-Based SCADA, which is primarily used in LAN/Cloud-based applications. This solution allows management to monitor machines in their plant remotely and enables them to make decisions quickly, efficiently and in real-time. Hence, any issues can be successfully addressed and resolved within minutes.

Another solution offered is the SECS/ GEM M2M Communication Solution, a communications solution that enables multiple machines to communicate data amongst themselves and the central management. The data accumulated can be accessed easily by the management to be analysed and scrutinised.

When it comes to data gathering, it is Elliance's EDGE Computing INFINITEbox that comes to the fore. The INFINITEbox is an impressive device that is capable of gathering signal data from a wide range of sensors including – but not limited to – temperature, level, vibration, voltage/current, pH, humidity, chemical composition, and motion. This particular solution is optimally placed on a production floor to enable accurate and diverse data sets.

Elliance also provides Kontron Embedded Solutions which essentially deals with software or hardware configurations whose purpose is to measure and obtain data from their respective sensors. This solution takes it a step further especially in the agricultural field, by allowing data to be measured from orchards and farms.

Currently, Elliance is the leader of a consortium that consists of industry players such as Bulk and Fluids Engineering (BAFE), Quest Adaptations, TXMR, and ISSES to name a few. All of the services and solutions they provide are flexible and customisable, further cementing their stand as an end-to-end Industry 4.0 solutions provider. The company has plans to open a Centre of Excellence for MNC's and SME's to prepare them for Industry 4.0.



## Achievement

- Certificate of Merit in Star Outstanding Business Awards (SOBA)



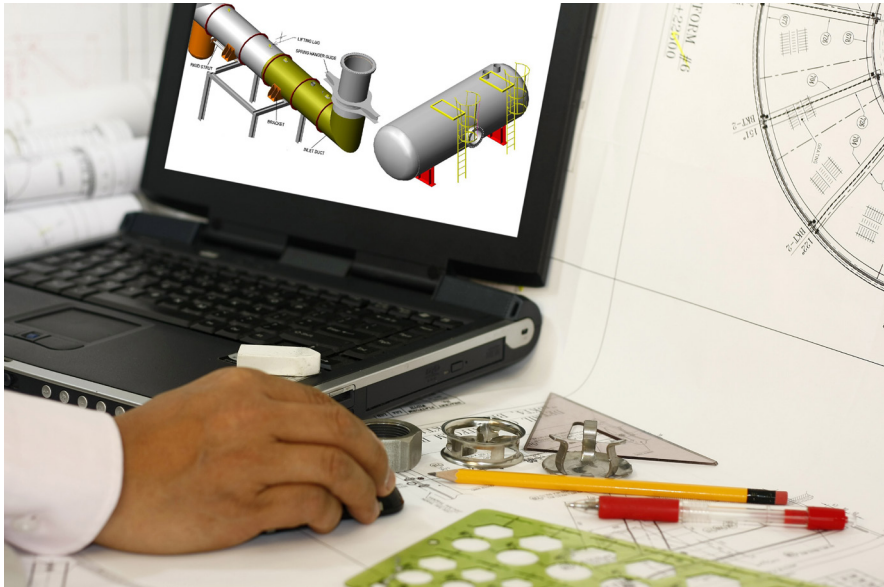
## ELLIANCE SDN BHD

31-13A-17, The CEO,  
Lebuh Nipah 5, 11950 Bayan Lepas,  
Penang, Malaysia

Tel: +604 6118 076  
Email: [enquiry@elliancesystem.com](mailto:enquiry@elliancesystem.com)  
Contact: Mr Cheng Boon Seng  
Website: [www.elliancesystem.com](http://www.elliancesystem.com)



# REINVENTING PLM SOLUTIONS OF THE FUTURE



Engineering, 3D CAD, Modeling, Simulation, Data Management and Process Management.

## ADVANCED ENGINEERING SOLUTIONS TO THE FORE

Another strong suit for the company lies in their prowess when it comes to engineering solutions. Two of their most acclaimed solutions include Reverse Engineering (RE) and Rapid Prototyping (RP).

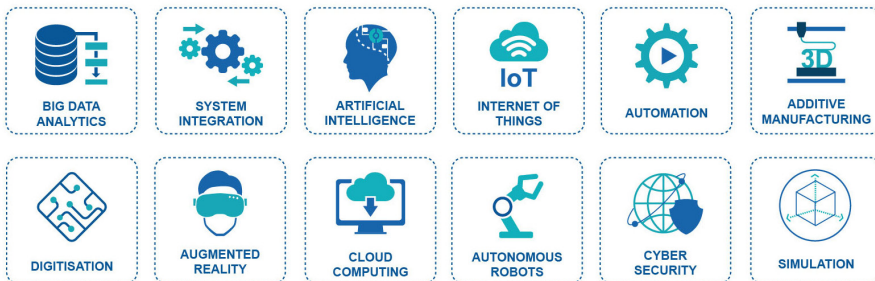
RE utilises 3D scanning technology and design knowledge to remodel a physical object, which can be advantageous when developing a new model, reconstruction of models without any drawings, and data recreation for simulation and manufacturing.

Under its RP arm, the company uses Additive Manufacturing (AM) to make a three-dimensional solid object from a digital model. This surpasses the limitations of traditional manufacturing, thus allowing manufacturers to be able to innovate products of higher complexity.

With AM, design and innovation can be brought into the forefront. It takes away the worries of cost and time, and allow for creative freedom as engineers can then create numerous versions of the particular design.

These technologies ensure that MAWEA Industries remain at the vanguard of the Industry 4.0 advancement, coaxing their stakeholders – both internal and external – to walk the path of the Fourth Industrial Revolution.

## INDUSTRY 4.0 – ACCELERATING DIGITAL MANUFACTURING



**M**AWEA Industries was established in 1995 and is a member of IME Group of companies. The company is one of the leading Product Lifecycle Management (PLM) solution providers in Malaysia, working to empower businesses with the right tools to innovate, utilising a holistic PLM programme.

MAWEA Industries initially started out as a Computer Numerical Control (CNC) service provider, and later moved to provide business innovations with hardware and software solutions, particularly in two key industries – Aerospace and Automotive. Currently, this portfolio of PLM solutions has expanded to cover 11 industries.

## FULL SUITE PLM ECOSYSTEM

Realising the need for a solution or system to manage product life cycles, the company created a customised PLM ecosystem – allowing for constant monitoring and iterations within the company – to fulfill that very same need.

PLM solutions offered are developed by the world's leading software company Dassault Systèmes, which not only increases value creation within an organisation but also aids in the adoption of new technologies.

As of now, MAWEA Industries provides best in class product development software applications, delivered on the 3DEXPERIENCE platform, such as CATIA, ENOVIA, DELMIA, SIMULIA, enabling 3D Design

## Achievements

- 2017: Digital and Technology Award, Sin Chew Business Excellence Awards
- 2016: Digital and Technology Award, Sin Chew Business Excellence Awards
- 2015: SME100 Awards Fast Moving Companies

## Certification

- ISO 9001:2015



## MAWEA INDUSTRIES SDN BHD

30, Jalan PJS 1/46,  
Taman Petaling Utama,  
46000 Petaling Jaya, Selangor.

Tel: +603 7783 3459  
Email: [marketing@cadcam.com.my](mailto:marketing@cadcam.com.my)  
Contact: Ms Amanda Teoh  
Website: [www.mawea.com.my](http://www.mawea.com.my)

# PROVIDING THE FINEST OF INNOVATION



**PENCHEM** Technologies Sdn Bhd, a Malaysian manufacturing company, designs and manufactures innovative advanced solutions for electronic and automotive industries. Based in Penang, the company is structured to provide for customers in Europe, the US, and the Far East since 1999.

Decades later, Penchem has evolved beyond its initial offerings and now provides a versatile range of high quality, advanced material products and solutions. These include performance polymer composite materials for thermal interfaces, LED and lighting, conductive inks, medical devices, fibre optics, general electronics and other customised products.

## CEMENTING CUSTOMER'S TRUST

The company maintains a strong and unshakeable bond with their customers in order to obtain a comprehensive understanding of their requirements. For two decades, Penchem has exported more than 70% of their manufactured products overseas, namely the US, China, Europe, Taiwan, Thailand, Singapore and the Philippines.



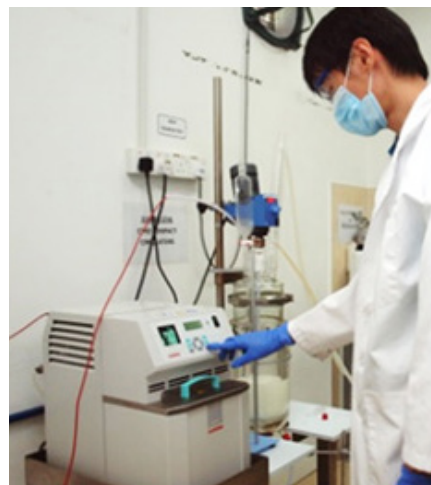
The nucleus of their business lies in the manufacturers of telecommunication and electronic industries; thus, their tailor-made solutions are formulated fast, value for money, and adhere to multiple international quality standards. Taking it a step further, they do not compromise on technical competency, customer service and ensure that every interaction with customers gives them peace of mind.

## TOP-TIER PRODUCTS AND SERVICES

Some of their Electronic products are the Chip-On-Board epoxy (COB), which has outstanding thermo-mechanical properties and adhesion strength for maximum protection to the components; SMT epoxy which is formulated for high speed dispensing with optimised thixotropy and viscosity, thus avoiding tailing and bleeding; and UV epoxy, which is designed and optimised to bond fibre optics components, LCD panels and electronic panels.

Along with the electronic components, Penchem also offers various thermally conductive products for thermal management. Components and devices that overheats will incur more costs as they would need to be replaced more often. The Silicone Thermal Pad provides thermal conductivity up to 10W/mK with options of tacky or non-tacky surfaces.

Their Silicone Potting, often used in high-power tools and LED lighting assembly, can be used to fill up cavities



and provide flowability and maximum protection to devices. Aside from that, their Silicone and Non-Silicone Putty or Silicone Grease would also do the job to fill gaps or rough surfaces. Furthermore, the products are self-levelling and have good adhesive strength on various substrates like metal and plastic.

These are but a few of their product offerings. They look to expand their technological capabilities, as they move into Industry 4.0 to better serve and maintain good rapport with their customers from all over the globe.

## Product Features

- Strong, weather resistant materials
- Excellent quality and reliability
- Customised exact material performance
- Industry leading price competitiveness
- Prompt and competent technical support

## Achievements

- FMM Excellence Award 2013
- Enterprise 50 Award 2013
- Malaysia Most Innovative SME Award 2012
- Quality Management Excellence Award 2011

## Certifications

- IATF 16949:2016
- ISO 9001:2015
- ISO 14001:2015

# PENCHEM

## PENCHEM TECHNOLOGIES SDN BHD

1015, Jalan Perindustrian Bukit Minyak 7,  
14100 Penang, Malaysia

Tel: +604 5015 976  
Email: [cheemang@penchem.com](mailto:cheemang@penchem.com)  
Contact: Dr Ng Chee Mang  
Website: [www.penchem.com](http://www.penchem.com)



# FULL SUITE OF SERVICES



**P**ACKAGING Sales & Services (M) Sdn Bhd (PSS) established its operations in 1991 and has since grown to become one of the top contenders among the big players of the packaging industry. The company is a proud leader in manufacturing packaging machines in various industries such as cosmetics, F&B, industrial and pharmaceutical for approximately three decades.

They also provide a comprehensive solution in automation of powder, granular, solid and liquid product lines, including filling, primary and secondary packaging, and palletising. Offering the full package deal, PSS provides machines such as cartoning machine, palletiser, de-palletiser, case packer,

conveyors, weight checker, and product handling systems that are essential in the packaging line.

Once a small entity that sprang up in 1979, it is now a mammoth in the industry. Their headquarters spans more than 30,000 sq. feet and is sited at one of the nation's most established industrial hubs, Shah Alam. They have also set up numerous branches in the states of Penang, Johor and Selangor.

## IN A LEAGUE OF ITS OWN

With PSS, customers are dealing directly with a machine manufacturer that specialises in packaging equipment, and bolstered by teams of expert engineers with profound technical expertise. Their unique selling proposition is that they are

fully turnkey for the production line, sales of packaging systems and integrations, and being entirely automated from packing to tracking. This is made possible by integrating relevant software solutions and equipment.

Utilising state-of-the-art technology, PSS' Pack and Track System allows for traceability of every packed item while adhering to customer's requirements. The System can be customised to trace products from the primary packing stage, warehouse storage, to the distribution network and all the way to the end user.

They also provide check weighing services which utilise metal detectors. Deploying high-tech machinery sourced from the UK, they conform to all the highest standards of inspection to ensure the products are not compromised. Also, they built their own checkweigher for both dynamic and static check weighing to ensure packaged commodities are within the specified weight limit. These are but a few of the vast offerings that PSS has to offer.

## GAZING TOWARDS INDUSTRY 4.0

As the industry becomes increasingly demanding, they understand that customers would have to retrofit their machines to meet Industry 4.0 standards in terms of automation, upgradability, reduced maintenance costs, higher performance and effective production. Therefore, the teams of Machine Specialists at PSS would analyse the customer's existing machines and offer recommendations or services to futureproof their customers by way of installing IoT-ready components. All implementation adheres to numerous safety standards such as the Safety Standard CAT3.

Moving forward, they welcome the change that the Fourth Industrial Revolution brings. PSS aspires to be at the foremost of the packaging manufacturing industry while advancing Industry 4.0 technology in Southeast Asia.

## Achievement

- Member of MATA Financial Year 2018



### PACKAGING SALES & SERVICES (M) SDN BHD

No.4A, Jalan Teluk Pulau 27/88,  
Seksyen 27, 40400 Shah Alam,  
Selangor, Malaysia

Tel: +603 5191 5958

Fax: +603 5191 6108

Email: [mano@pss.com.my](mailto:mano@pss.com.my)/[venuchander@pss.com.my](mailto:venuchander@pss.com.my)

Contact: Mr Venuchander

Website: [www.pss.com.my](http://www.pss.com.my)

# CONNECTING VISIONS THROUGH V-ONE



**VITROX CORPORATION BERHAD** core business is in designing and manufacturing state-of-the-art, innovative and cost-effective automated vision inspection equipment, as well as system-on-chip embedded electronics devices. Since its inception in 2000, their main products such as Machine Vision System (MVS), Automated Board Inspection (ABI) and Electronics Communication System (ECS) have helped the semiconductor and electronics packaging industries.

Never one to rest on its laurels, Vitrox has received numerous accolades and garnered both international and national recognition for its outstanding corporate performance, as well as its product and human resource development initiatives. In 2017, they won the Global Technology Award, which recognises their V910i Advanced Robotic Vision System. Their proven track record has bolstered confidence in customers who continue to engage them for their services.

## INDUSTRY 4.0 SOLUTIONS, ONLY A CLICK AWAY

In a world of ever-increasing challenges, Vitrox offers solutions, in the form of V-ONE. Driven by and preparing itself for Industry 4.0, Vitrox's V-ONE is a software-based solution and a highly customisable platform that enables data-driven decisions to be made in the manufacturing process.

This is done by allowing stakeholders to control, visualise, monitor and implement condition-based alerts. Combining both IoT technology and Big Data Analytic, the extensive smart software suite actively collects data from different production and inspection systems. Implementing these technologies on process indicators allow users to detect issues on the go, and receive updates and alerts on abnormalities via a mobile application, email or SMS.

## FULL SUITE OF SOLUTIONS

V-ONE enables users to access and monitor their personalised dashboard from wherever they are, on any kind of smart devices. Furthermore, the V-ONE facilitates operators and technicians to manage assigned work orders and maintenance activities as well.

The latest version of V-ONE is equipped with yet another feature – the e-ticketing system that works on desktop and mobile devices. The company will provide templates of customised e-tickets and users may also request for new templates based on requirements, or develop a new one themselves on the V-ONE platform to handle various requests.

## V-ONE is able to provide customers with:

1. Increased product quality.
2. Reduced operating costs.
3. Prevention of production downtimes.
4. Increase throughput in the production process.
5. Unlimited geographical access.
6. Faster integration and streaming of data.
7. Extensive process insights.



## Achievements

- The Edge Billion Ringgit 2018 Award
- Sin Chew Business Excellence Awards 2018
- MATRADE Export Award 2018
- Global Technology Award 2017
- Best Company For Investor Relation & Best, MIRA 2017 Investor Relations Awards
- HR Excellence Awards 2017
- The Edge Billion Ringgit 2017 Award
- ASE Best Supplier Award
- ASEAN SME Excellence Awards - Innovation
- Forbes Asia's 200 Best Under a Billion List 2015
- NPI Award 2014
- Prime Minister's Award for Employer Excellence (Private Sector) 2013
- EM Asia Innovation Award 2013

## Certifications

- ISO 9001:2015
- 1-Innocert



## VITROX CORPORATION BERHAD

746, Persiaran Cassia Selatan 3,  
Batu Kawan Industrial Park,  
14110 Bandar Cassia, Penang, Malaysia

Tel: +604 5459 988  
Fax: +604 5459 987  
Email: enquiry@vitrox.com  
Website: www.vitrox.com



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Don't think

**BIG**  
think  
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