

critical m&e engineering sdn bhd
(946363-w)

critical sales & services sdn bhd
(1079183-x)



data center



cleanroom &
process utilities



acmv &
plant room mep



service &
maintenance



introduction

28 March 2023

The company was established in 2011, the objective then was to fulfil the engineering needs of growing buildings and manufacturing industries, especially the Multinational Corporation (MNC).

Our services cover Mechanical, Electrical & Process (MEP)'s

- **AIR CONDITIONING & MECHANICAL VENTILATION (ACMV) & PLANT ROOM MEP**
- **CLEANROOM & PROCESS UTILITIES**
- **DATA CENTER**
- **SERVICES & MAINTENANCES**

Today, the company is a unique Engineering Services firm that offers unsurpassed critical facility support, with the extensive experience in

- **CONSULTANCY & AUDIT**
- **DESIGN & BUILD**
- **ENGINEERING & CONSTRUCTION**
- **SERVICES & MAINTENANCES**

The company approach to each project is '**LISTEN, UNDERSTAND, HANDS ON, DELIVER**', where we tailor our efforts to the specific needs of the client.

The company as an engineering firm incorporated in Malaysia, is registered with **Construction Industry Development Board Malaysia (CIDB)**, as **Grade G7**, which shall allow the company to participate to a more sizable project, which is in the company forecasted pipeline.

As an **ISO9001:2015** certified company, we commit to zero compromises to quality management system (**QMS**), in ensuring meeting customers and other stakeholder needs within statutory and regulatory requirements related to a product or service.



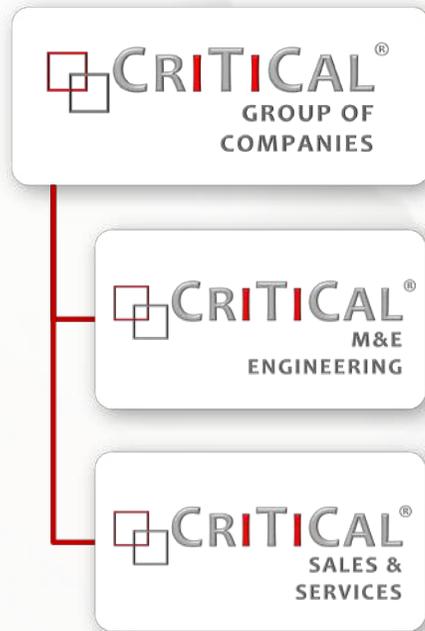
Vision

To be the leader in the critical facility industry.

Mission

A people oriented organization, team-up and share the common values, to provide unsurpassed solutions and supports, to meet customer needs and expectations, with ZERO compromise to human safety.

group of companies



registration – professional registration



Malaysia Ministry of Finance (MOF)
Registered Company



ISO 9001:2015
Certificate Reg. No. 000847-1-MY-1-QMS
(For Critical M&E Engineering Sdn. Bhd.
Penang Office Only)



Ir Tan Si Lim MBA, B.Eng (Hons), PEPC, ACPE, ATD

Malaysian / Aged 46

Co-Founder & Director (Strategic Planning, Sales & Services Operation)

Ir. Tan Si Lim holds an Honours Degree in Mechanical Engineering (B.Eng (Hons)) from the Universiti Putra Malaysia (UPM). He is a corporate member of the Institution of Engineers, Malaysia (IEM) and is a Professional Engineer (PEPC) and ASEAN Chartered Professional Engineer (ACPE) registered with the Board of Engineers Malaysia (BEM).

Ir. Tan Si Lim do also an Accredited Tier Designer (ATD) registered to Uptime Institute (UI), a Certified Data Center Professional (CDCP) registered to EPI, in supporting to mission critical facilities solutions, namely Data Center.

Ir Tan Si Lim further enhance his business management skill through pursuing Master in Business Administration (MBA).

Upon graduating from university, he began working as a service engineer in Emerson Network Power Sdn Bhd in 2001, co-founded Pan Kinetics Sdn Bhd in 2004 as Branch Manager and later promoted as Executive Director in 2013 before departing the company and co-founded Critical M&E Engineering Sdn. Bhd in 2013.

He has over 22 years of experience in the mission critical facilities solutions, namely Data Center design & build, air-conditioning, process utility and mechanical ventilation industry encompassing design, project engineering and management, site execution, budgetary, safety and quality control and assurance.

Ir Chow Chin Seang MBA, B.Eng (Hons), PEPC, ACPE

Malaysian / Aged 48

Co-Founder & Director (Finance & Project Management)

Ir. Chow Chin Seang holds an Honours Degree in Mechanical Engineering (B.Eng (Hons)) from the University of Technology Malaysia (UTM). He is a corporate member of the Institution of Engineers, Malaysia (IEM) and is a Professional Engineer (PEPC) and ASEAN Chartered Professional Engineer (ACPE) registered with the Board of Engineers Malaysia (BEM).

Ir Chow Chin Seang further enhance his business management skill through pursuing Master in Business Administration (MBA).

Upon graduating from university, he began working as a project engineer in Syarikat Ong Yoke Lin Sdn. Bhd. in 1999 and later promoted as Penang Branch Manager in 2007 before co-founded Critical M&E Engineering Sdn. Bhd in 2013. As a Branch Manager, he overseeing the operations of the branch's finance, business development, service operation and project management.

He has over 24 years of experience in the air-conditioning, process utility and mechanical ventilation industry encompassing design, project engineering and management, site execution, budgetary, safety and quality control and assurance.

registration

Name of Company	Critical M&E Engineering Sdn. Bhd.
Company Registration No.	946363-w
Paid Up Capital	RM1,000,000.00
Banker	Public Bank Berhad, Jalan Cantonment, Pulau Tikus Branch, Penang.
Company Secretary	Angelina Cheah Gaik Suan (MAICSA 7035272), Lee Mei Mei (MAICSA 7062284).

Name of Company	Critical Sales & Services Sdn. Bhd.
Company Registration No.	1079183-x
Paid Up Capital	RM750,000.00
Banker	Malayan Banking Berhad, Bayan Lepas Branch, Penang.
Company Secretary	Angelina Cheah Gaik Suan (MAICSA 7035272), Lee Mei Mei (MAICSA 7062284).

correspondence

Business Address	Penang, Malaysia 1-2-1 jalan sungai tiram 8 summerskye square 11900 bayan lepas, penang
Telephone No.	604 – 286 0033 / 649 6033
Fax No.	604 – 649 3033
Business Address	KL, Malaysia RK30A, Jalan Villa 3, Anggerik Villa, Off Jalan Semenyih 43500 Kajang, Selangor D.E.
Telephone No.	603 – 8723 2033
Fax No.	603 – 8724 2033
Email	admin@critical-eng.com



PERAKUAN PENDAFTARAN

Adalah dengan ini diperakui bahawa kontraktor yang dinyatakan di bawah ini telah berdaftar dengan Lembaga mengikut Bahagian VI Akta Lembaga Pembangunan Industri Pembinaan Malaysia 1994. Pendaftaran ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan bersama perakuan ini.

No. Pendaftaran : 0120140218-PP155237
Nama Kontraktor : CRITICAL M&E ENGINEERING SDN. BHD.
Alamat Berdaftar : SUITE S-21-H, 21ST FLOOR, MENARA NORTHAM 55 JALAN SULTAN AHMAD SHAH 10050 GEORGETOWN
Daerah : NORTHEAST PENANG ISLAND
Tarikh Mula Berdaftar : 18/02/2014

<u>GRED</u>	<u>KATEGORI</u>	<u>PENGGHUSUSAN</u>
G7	B	B04
G7	CE	CE21
G7	ME	M01 M02 M15 M18

Tarikh Mula Berkuatkuasa : 15/03/2023
Tarikh Habis Tempoh Perakuan : 05/06/2026

STATUS: AKTIF



Ketua Eksekutif
 Lembaga Pembangunan Industri Pembinaan Malaysia
 Tarikh: 15/03/2023



PERAKUAN PENDAFTARAN

Adalah dengan ini diperakui bahawa kontraktor yang dinyatakan di bawah ini telah berdaftar dengan Lembaga mengikut Bahagian VI Akta Lembaga Pembangunan Industri Pembinaan Malaysia 1994. Pendaftaran ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan bersama perakuan ini.

No. Pendaftaran : 0120190704-PP028894
Nama Kontraktor : CRITICAL SALES & SERVICES SDN. BHD.
Alamat Berdaftar : SUITE S-21-H, 21ST FLOOR, MENARA NORTHAM 55 JALAN SULTAN AHMAD SHAH 10050 GEORGETOWN
Daerah : NORTHEAST PENANG ISLAND
Tarikh Mula Berdaftar : 05/07/2019

<u>GRED</u>	<u>KATEGORI</u>	<u>PENGGHUSUSAN</u>
G7	B	B04
G7	CE	CE21
G7	ME	M01 M15

Tarikh Mula Berkuatkuasa : 10/11/2022
Tarikh Habis Tempoh Perakuan : 21/07/2023

STATUS: AKTIF



Ketua Eksekutif
 Lembaga Pembangunan Industri Pembinaan Malaysia
 Tarikh: 10/11/2022





KEMENTERIAN KEWANGAN MALAYSIA
SIJIL AKUAN PENDAFTARAN SYARIKAT

N O. SIJIL K10133035523239439
N O. RUJUKAN PENDAFTARAN 357-0002310099
TEMPOH SAH LAKU : 07/06/2022 14/08/2025

Bahawa dengan ini diperakui syarikat :

CRITICAL SALES & SERVICES SDN. BHD. (1079183-X)

1-2-1, JALAN SUNGAI TIRAM 8
SUMMERSKYE RESIDENCES
BARAT DAYA
11900 BAYAN LEPAS
PULAU PINANG, MALAYSIA

Telah berdaftar dengan Kementerian Kewangan Malaysia dalam bidang bekalan/perkhidmatan di bawah sektor, bidang dan sub-bidang seperti di Lampiran A. Kelulusan ini adalah tertakluk kepada syarat-syarat seperti yang dinyatakan di Lampiran B. Individu yang diberi kuasa oleh syarikat bagi urusan perolehan Kerajaan adalah seperti berikut :

IR CHOW CHIN SEANG	750625075719	DIRECTOR
IR TAN SI LIM	771016075775	DIRECTOR
ENCIK HIEW YIN LIN	721012055157	MANAGER

t.t

DATO' ZAMZURI BIN ABDUL AZIZ

Bahagian Perolehan Kerajaan
b.p. Ketua Setiausaha Perbendaharaan
Kementerian Kewangan Malaysia

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 07/06/2022

(Sijil ini adalah cetakan komputer dan tidak memerlukan tandatangan)

28 March 2023



CERTIFICATE

This is to certify that

Critical M&E Engineering Sdn. Bhd.

1-2-1, Jalan Sungai Tiram 8, Summerskye Residences, 11900 Bayan Lepas, Penang, Malaysia.

Quality Management System has been assessed and registered as conforming with the requirements of the ISO 9001:2015.

Scope:

Design, Development, Installation and Maintenance Engineering Services of Industrial & Commercial Air Conditioning & Mechanical Ventilation System, Clean Room, Process Utilities & Data Center

Certificate Registration No. 000847-1-MY-1-QMS

Certified Since 24.12.2019

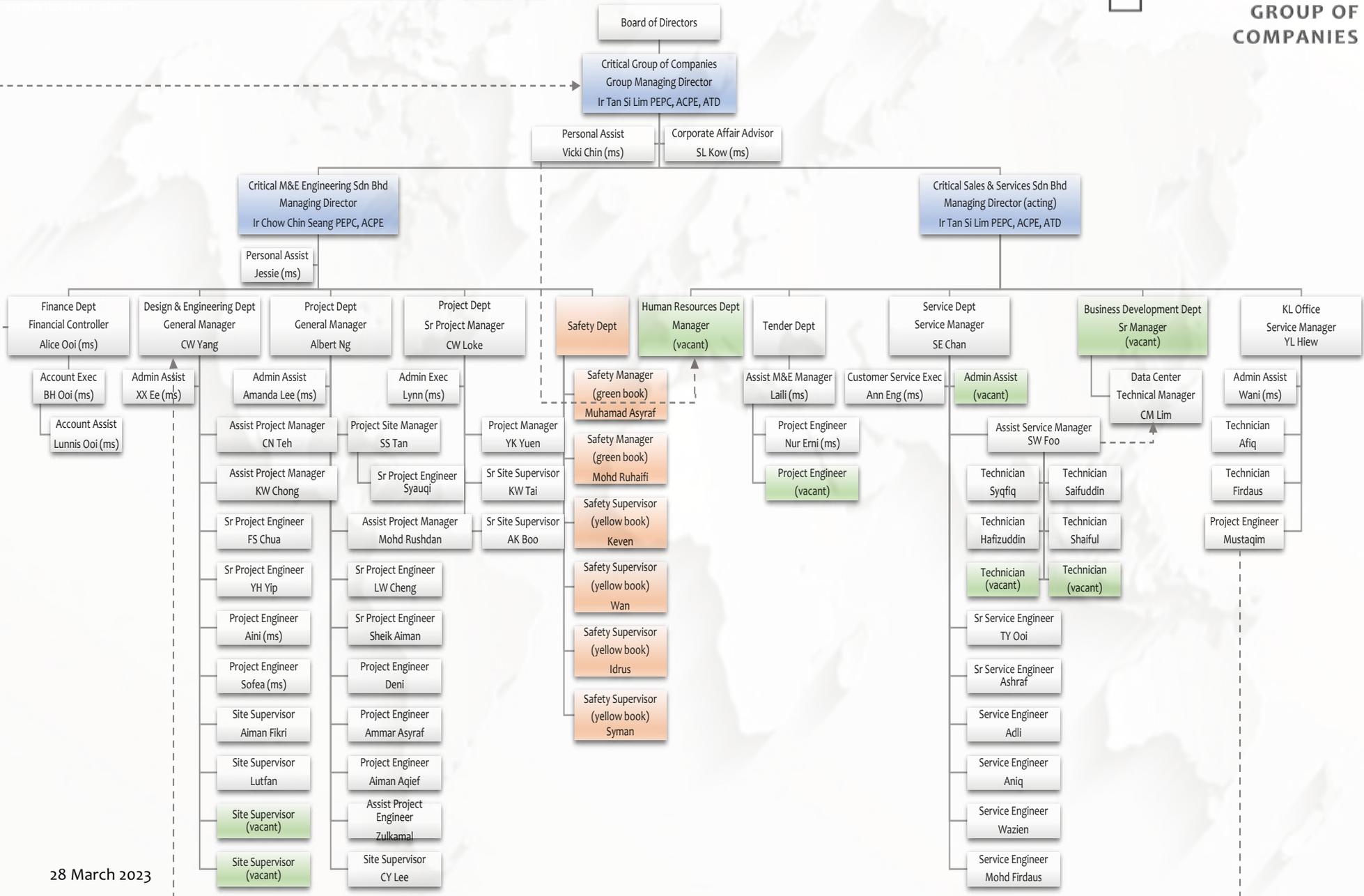
Valid from 29.11.2022

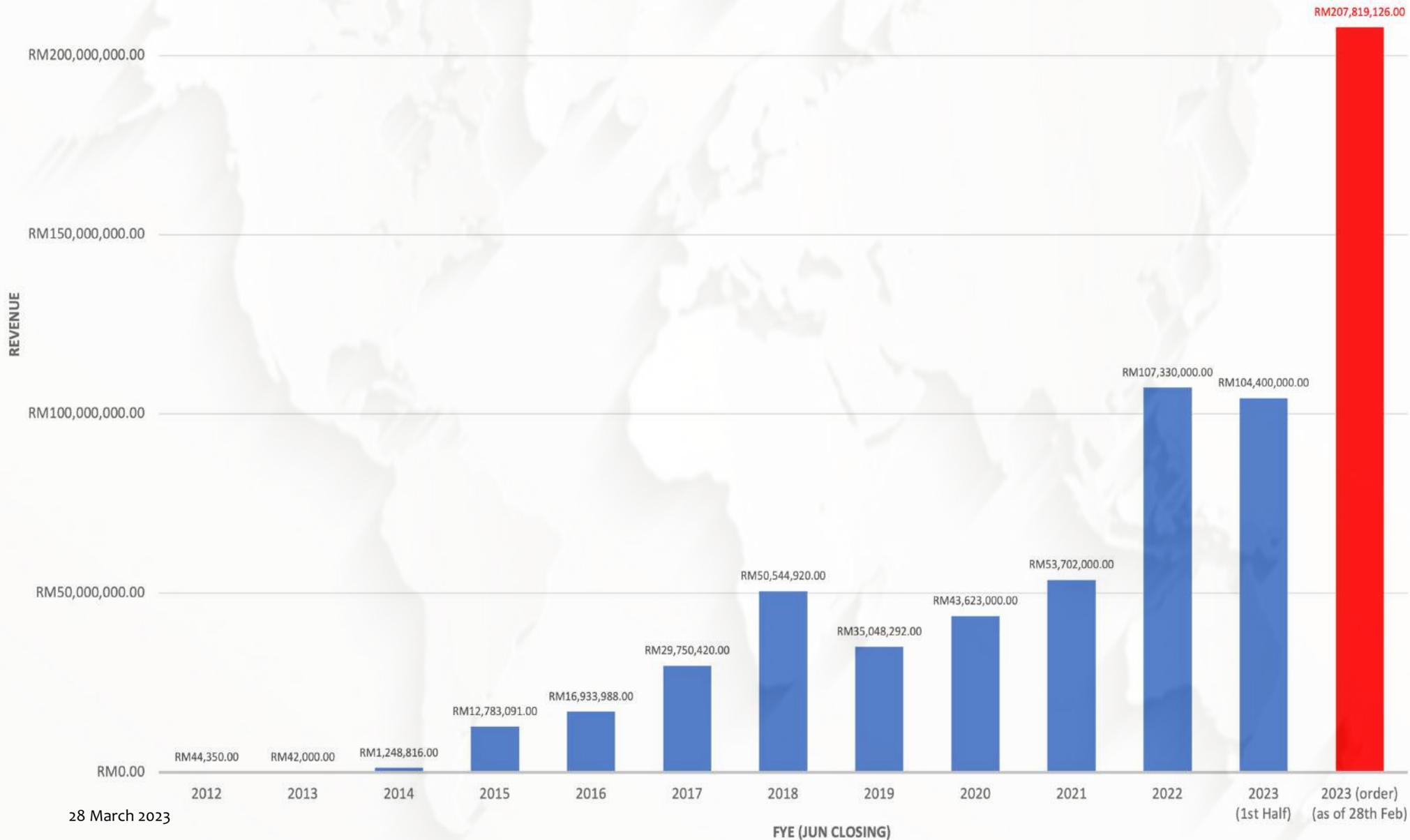
Valid until 23.12.2025

Managing Director



Business Systems Certification Pty. Ltd. (BCert) 15 Colman Close, Ropes Crossing NSW 2760, Australia
Certification is subject to satisfactory ongoing Surveillance Assessments.
The validity of this certificate can be verified at www.jas-anz.org/register
Issue No.4 Date, 29.11.2022





2011

- CMEE established

2014

- First Greenfield MEP Plantroom project secured at PKFZ, Klang, Selangor, to LEED certified & FM Global approved
- First Greenfield Cleanroom project secured at Bayan Lepas Free Industrial Zone, Penang, to NEBB & GMP certified

2016

- Single order >5.5MW UPS/FC delivered & installed

2017

- First TIER III Data Center Design & Build project at Bayan Lepas Free Industrial Park, Penang, to FM Global approved & TGA to Uptime Institutes

2018

- **FYE >RM50mil revenue**

2019

- CIDB G5 registered (CSS)
- MOF Registered (CSS)
- ISO9001:2015 certified (CMEE)

2021

- Accumulated >500,000ft2 cleanroom constructed & handover
- Single order >20,000ft2 TIER III data center MEP design & build
- Appointed 'SOLE DISTRIBUTORSHIP' for DB AIRE CRAC in MALAYSIA
- Single order >150 nos CRAC delivered & installed

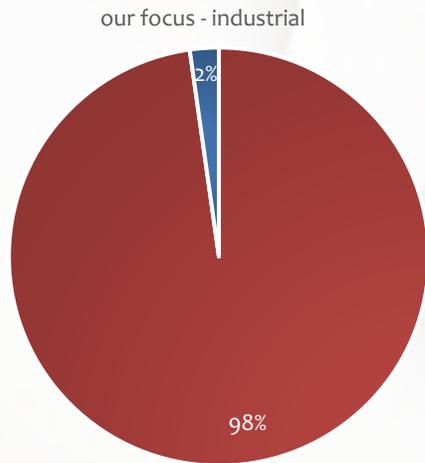
2022

- **FYE >RM100mil revenue**
- CIDB G7 upgraded (CSS)

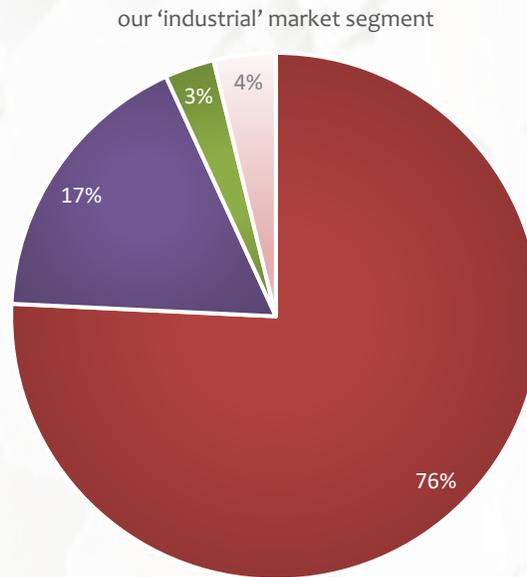
2023

- Single order 140 nos Fan Wall secured for Hyperscale Data Center/Co-Lo
- **and more ...**

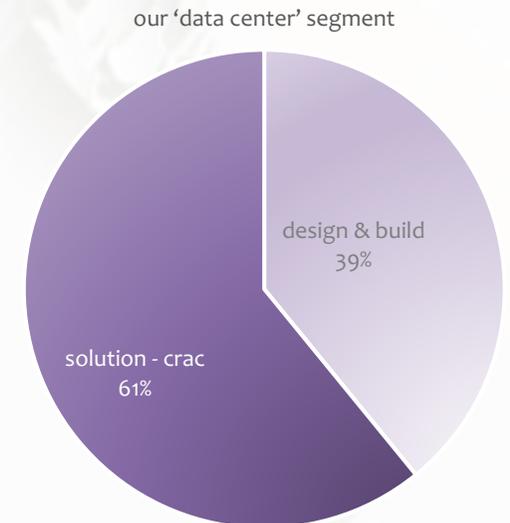
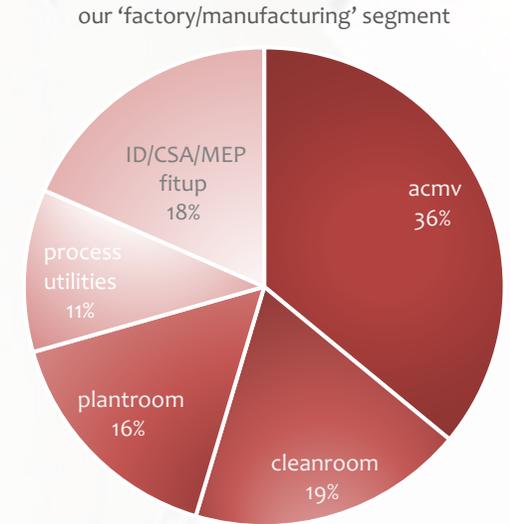
- CSS established
- CIDB G7 registered (CMEE)



■ industrial ■ commerical



■ factory/ manufacturing ■ data center ■ hospital/ healthcare ■ other



our services

Data Center

Successful data center design build construction projects require a balance that can only be maintained through a deep understanding of every element, process and requirement of your data center infrastructure.

we listen to your data center requirements, to produce a quality, constructible design that will help you achieve your business goals.

There's no such thing as a "one-size-fits-all" solution

- Before one piece of equipment is selected,
- Before any topology is chosen,
- Before the floor plan is envisioned,

- 12 - SERVICE & MAINTENANCE**
- PREVENTIVE/COMPREHENSIVE
 - SPARE PARTS
 - RECORDS KEEPING
 - 24X7X365

- 1 - POWER AVAILABILITY**
- UPS
 - GENSET

- 2 - POWER PROTECTION**
- UPS
 - EARTHING

- 3 - BATTERY PROTECTION**
- BATTERY MONITORING SYSTEM

- 4 - POWER DISTRIBUTION**
- PDU
 - PLC

- 5 - HEAT REMOVAL**
- CRAC
 - CRAH
 - MV

- 6 - AIR DISTRIBUTION**
- HOT/COLD AISLE CONTAINMENT
 - PERFORATED RAISED FLOORING

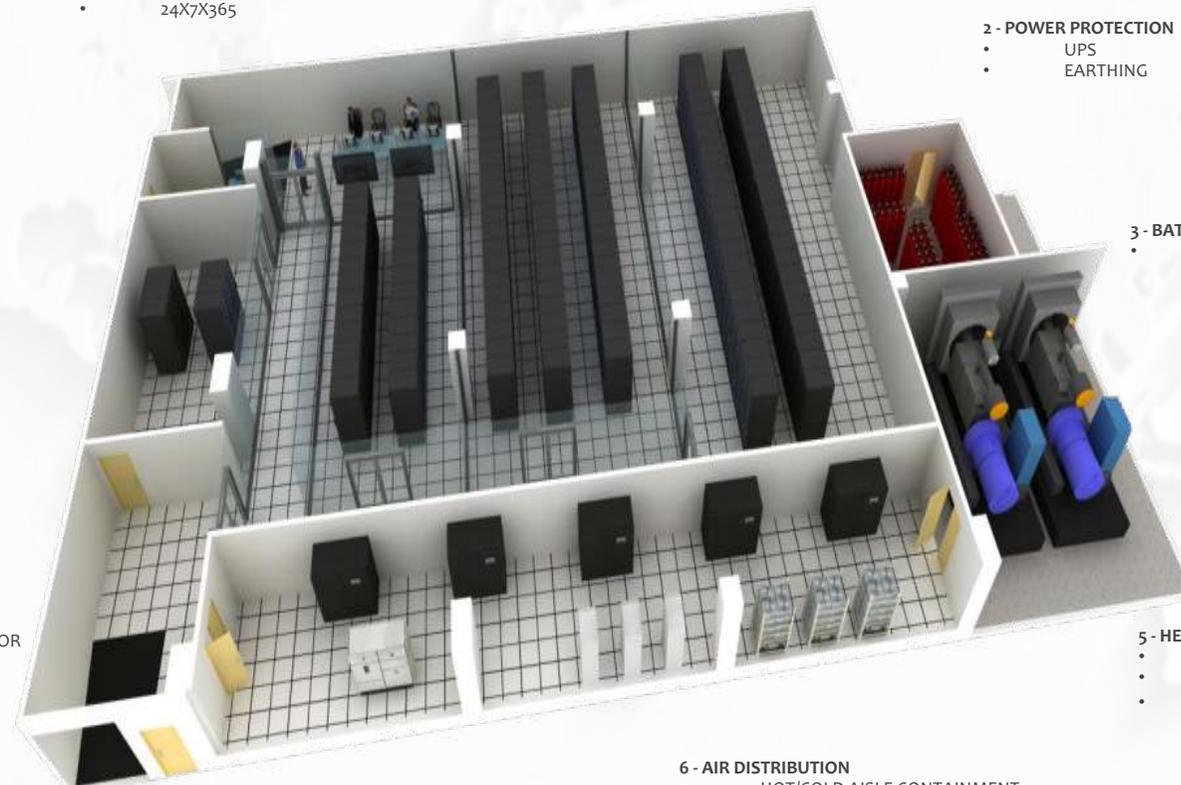
- 7 - WATER PROTECTION**
- LEAK DETECTION SYSTEM

- 8 - FIRE SUPPRESSION**
- FM200

- 11 - REMOTE MONITORING**
- WEB BASED SOFTWARE
 - EVENT TRENDING
 - REMOTE ON/OFF
 - SMS/EMAIL
 - ALARM ALERTING
 - DCIM

- 10 - SECURITY**
- CARD ACCESS
 - BIOMETRIC
 - CCTV

- 9 - FIRE DETECTION**
- VESDA
 - SMOKE/HEAT DETECTOR



Cleanroom & Process Utilities

US FED-STD-209E was a United States federal standard. It was officially cancelled by the General Services Administration on November 29, 2001, but is still widely used.

Class	Maximum Particles/ft ³					ISO Equivalent
	=> 0.1um	=> 0.2um	=> 0.3um	=> 0.5um	=> 5um	
1	35	7.5	3	1	0.007	ISO3
10	350	75	30	10	0.07	ISO4
100	3,500	750	300	100	0.7	ISO5
1,000	35,000	7,500	3,000	1,000	7	ISO6
10,000	350,000	75,000	30,000	10,000	70	ISO7
100,000	3,500,000	750,000	300,000	100,000	830	ISO8

the process utilities

Efficient and reliable utility systems are a critical requirement for the successful operation of your process facility. Utilizing the appropriate technology to meet the necessary regulatory requirements, we develop solutions that are "right sized" to your application.

We are experts in the design, testing and troubleshooting of utility systems for manufacturing facilities, including:

- Compressed Dry Air (CDA)/ Oil Free Air (OFA)
- High Purity Gas Piping
 - Nitrogen Gas (N₂)
 - Oxygen Gas (O₂)
 - Helium Gas (He)
 - Argon Gas (Ar)
- Liquid Petroleum Gas (LPG)
- Process Cooling Water (PCW)
- Hot Water Piping
- Steam Piping
- RO/DI
- Waste Water Piping
- Helium Exhaust
- General Exhaust
- Acid Scrubber

end client	industry	description	year	month	standard	class	area (ft ²)
Wen Sen Heng Sdn Bhd (Rembina)	pharmaceutical	new factory project c/w ACMV, cleanroom, process utilities	2015	apr	ISO, cGMP	ISO8	14,000
Osram Opto Semiconductor (m) Sdn Bhd	semicon	PEN5 level 4 class 100k cleanroom expansion	2016	mar	ISO	ISO8	8,000
Osram Opto Semiconductor (m) Sdn Bhd	semicon	PEN3 class 100k cleanroom expansion	2016	oct	ISO	ISO8	6,000
Hacks (M) Sdn Bhd	food	class 100k GMP certified cleanroom @ 20 degC 35%RH	2017	oct	ISO, GMP	ISO8	25,000
COHR malaysia Sdn Bhd	semicon	existing production floor to new cleanroom conversion	2017	oct	ISO	ISO8	5,000
CPI (pg) Sdn Bhd	semicon	existing production floor conversion to cleanroom	2017	Aug	ISO	ISO8	6,000
Analog Devices Sdn Bhd	semicon	existing level 5 & level 6 trim & probe cleanroom extension	2018	Sep	ISO	ISO7	19,900
CPI (pg) Sdn Bhd	semicon	existing production floor conversion to cleanroom	2018	Apr	ISO	ISO8	10,500
Qdos Flexcircuits Sdn Bhd	semicon	new batu kawan penang factory project c/w ACMV, cleanroom, process utilities	2018	may	ISO	ISO 6, ISO7	21,000
Tier I chip maker	semicon	cleanroom extension @ KM2	2018	oct	ISO	ISO8	30,000
VAT Manufacturing Malaysia Sdn Bhd	semicon	new factory project c/w ACMV, cleanroom, process utilities	2018	apr	ISO	ISO6, ISO7, ISO8	65,000
Analog Devices Sdn Bhd	semicon	existing level 5 trim & probe cleanroom extension	2019	Aug	ISO	ISO7	10,000

end client	industry	description	year	month	standard	class	area (ft2)
CPI (pg) Sdn Bhd	semicon	CADANGAN UBAHSUAI GUDANG SEDIADA KEPADA PRODUKSI DI ATAS P.T.NO 4876 , (H.S.(D)10074) MK. 12 D.B.D. DI PLOT NO. 79, LINTANG BAYAN LEPAS 7, KAWASAN PERINDUSTRIAN BAYAN LEPAS, FASA 4, PULAU PINANG.	2019	May	ISO	ISO8	6,000
Globetronics Technology Bhd	semicon	new G4 factory extension c/w ACMV, cleanroom, process utilities	2019	jan	ISO	ISO7	22,000
Hoya Electronics Sdn Bhd	semicon	Class 100 & 10 Clean Room technical cleaning & audit	2019	Dec	ISO	ISO4, ISO5	36,300
Analog Devices Sdn Bhd	semicon	existing level 2 trim & probe cleanroom extension	2020	Jan	ISO	ISO7	22,500
Gaban Spice Manufacturign (m) Sdn Bhd	food	new cleanroom & cold room expansion c/w temperature & RH control	2020	aug	ISO	ISO8	3,000
Globetronics Technology Bhd	semicon	Convert existing class 100k cleanroom to class 10k & 1K	2020	Mac	ISO	ISO 6 & ISO 7	4,800
Jabil Circuits Sdn Bhd	semicon	new batu kawan penang factory project c/w ACMV, cleanroom, process utilities	2020	apr	ISO	ISO8	80,000
Lam Research International Sdn Bhd	semicon	Existing factory retrofit c/w ACMV, cleanroom, process utilities	2020	Feb	ISO	ISO 7	8,000
Analog Devices Sdn Bhd	semicon	existing level 5 trim & probe cleanroom extension	2021	Sep	ISO	ISO7	1,500
Lam Research International Sdn Bhd	semicon	PROPOSED RENOVATION TO EXISTING 1-STOREY WAREHOUSE @ "12 WAVES" BATU KAWAN (ACMV & process utilities installation)	2021	Sept	ISO	ISO8	9,000
Nippon Express (m) Sdn Bhd c/o B Braun Medical Industrial Sdn Bhd	pharmaceutical	new modular cleanroom construction	2021	Oct	ISO; cGMP	ISO5, ISO6, ISO7	2,500
VAT Manufacturing Malaysia Sdn Bhd	semicon	Convert existing phase 1 cleanroom Iso8 to iso6	2021	Sept	ISO	ISO 6	3,500
Analog Devices Sdn Bhd	semicon	new factory project c/w ACMV, cleanroom, process utilities	Ongoing	Ongoing	ISO	ISO7	20,000

Plantroom MEP

Many large buildings, campuses, and other facilities have plants that make chilled water and distribute it to air handling units and other cooling equipment. The design operation and maintenance of these chilled water plants has a very large impact on building energy use and energy operating cost.

Not only do chilled water plants use very significant amounts of electricity (as well as gas in some cases), they also significantly contribute to the peak load of buildings. During this peak event, chilled water plants are often running at maximum capacity. When temperatures are moderate, chilled water plants are shut down or operated in stand-by mode. This variation in the rate of energy use is a major contributor to the peaks and valleys in energy demand, which is one of the problems that must be addressed by utility grid managers.

Most buildings and facilities that have chilled water plants have special utility rates where the cost of electricity depends on when it is used and the maximum rate of use. The price of electricity is several times higher during the summer on-peak than it is during the off-peak periods.

In addition to new construction, the chilled water plants of many existing buildings are being replaced or overhauled. Older chilled water plants have equipment that uses ozone-damaging refrigerants. International treaties, in particular the Montreal Protocol, call for ozone damaging chemicals (in particular CFCs) to be phased out of production. As the availability of CFCs is reduced, the price will skyrocket, creating pressure for chilled water plants to be overhauled or replaced.



Service & Maintenance

Data Center

- Computer Room Air Conditioning (CRAC)
- Uninterruptible Power Supply (UPS)
- Batteries
- Power Line Conditioner (PLC)
- Water Detection System (WDS)
- Aspirating Smoke Detection (ASD)
- Transient Voltage Surge Suppressor (TVSS)
- Automatic Transfer Switch (ATS)
- Environmental Monitoring System (EMS)
- Building Management System (BMS)

ACMV Plant Room

- Chiller
- Pump
- Cooling Tower
- AHU/MAU/FCU/ACSU

Process Utilities

- Compressed Dry Air
- He, Ar, O₂, N₂
- Hot Water, Steam
- RO/DI
- Scrubber
- Exhaust

Cleanroom

- Fan Filter Unit (FFU)
- Dry Cooling Coil



24 hours a day
7 days a week
365 days a year

our client tele
- approved vendor list (avl)

28 March 2023



BOSCH



OSRAM



Panasonic



**Western
Digital.**



PLEXUS



dyson



**PHILIPS
LUMILEDS**

SCHAWK!



AMETEK



**HOYA
ELECTRONICS**

Schlumberger



JABIL

flex

Mi
EQUIPMENT

Aemulus

PARADIGM
METAL INDUSTRIES SDN. BHD.
(Formerly Known as Allied Stamping Corporation Sdn. Bhd.)



VITrox[®]

KOBAY
TECHNOLOGY BHD

Carsem
Your Technology Partner

Hume Cement
Quality You Can Trust

Globetronics
Technology Bhd.



ASE GROUP

QDOS
Substrate Excellence. Engineered.

CPI

SIMMTECH[®]

AG[™]
ASPEN GLOVE

LATEXX
PARTNERS BERHAD
A MEMBER OF THE SEMPERIT-GROUP



RANBAXY

HACKS

STERIS
Applied Sterilization Technologies

B|BRAUN
SHARING EXPERTISE

Dexcom[®]

SUN
PHARMA

ST. JUDE MEDICAL[™]

GE Healthcare

SAMSUNG



NIPPON EXPRESS





our testimonial

28 March 2023





**Dell Global Business Center Sdn.Bhd
(742481-H)**

Plot 27, Bayan Lepas Industrial Zone,
Phase IV, 11900 Bayan Lepas, Penang,
Malaysia.

Tel: 604-6334888 Fax: 604-6338888

March 20th 2020

To Whom It May Concern:

Re: Certification Letter

This letter is to certify that the **Critical M&E Engineering Sdn Bhd (946363-W)** business address: 6 & 8 , Changkat Bukit Belah, 11920 Bayan Lepas, Penang, has been appointed as Dell EMC's authorized vendor since 1st October 2019.

Critical M&E Engineering Sdn Bhd provides Data Center critical equipment, crack units system, DC temperature, humidity support and maintenance to Dell EMC's office premises at the following locations:

Dell Global Business Center

Plot 27, Jalan Sungai Kluang, Bayan Lepas Free Industrial Zone Phase 4, 11900 Bayan Lepas, Pulau Pinang

Dell Global Business Center

Plot 76 , Mukim 11, Jalan Bukit Tengah, Bukit Tengah Industrial Park, 14000 Bukit Mertajam, Pulau Pinang

Please contact the undersigned should you have any concerns or clarifications.

For and on behalf of
Dell Global Business Center Sdn Bhd

Chew Kian Hoo
Director, Facilities Management
Contact no: Office + 6 04 504 5394, , Mobile +6 016 454 3914, fax + 6 04 633 7394
Email: Kian.Hoo.Chew@dell.com



Dell Global Business Center Sdn. Bhd. (742481-H)
Plot P27, Bayan Lepas Industrial Zone
Phase IV, 11900 Bayan Lepas
Penang, Malaysia
Tel: 604-6334888 Fax: 604-6337135



Critical M&E Engineering Sdn Bhd
4,6, & 8, Cangkat Bukit Belah
119200 Bayan Lepas
Pulau Pinang

30th Oct 2022

Ir Tan Si Lim

RE: Dell APCC2 Penang – Data Center and BMS Upgrade

In recognition of Critical M&E Engineering Sdn Bhd, I would like to record our appreciation to Critical M&E Engineering team in completing the DESIGN AND BUILD of Dell APCC2 Penang Data Center and BMS Upgrading project recently.

I am pretty impressed with the team engineering knowledge and skills capability shown in respect to compliance to UPTIME Institute guidelines and FM Global Institute requirement. Furthermore, it must be noted that the whole upgrading project was done with a life Data Center without any downtime and incidents. KUDOS to the team.

Greatly impressed with Critical's team efficient, coordination with Dell's team, patience, and support to have the project completed safely, in time and within budgeted.

Best wishes for your continued success in such projects in the future.

Regards

Senior Facility Manager
Ng Keng Ann

 **DELL**Technologies

Critical M&E Engineering Sdn Bhd
4,6,& 8 Cangkat Bukit Belah
11920 Bayan Lepas
Pulau Pinang

30th Oct 2022

Ir Tan Si Lim

RE: Dell APCC1 Phase 4 Workspace Transformation Fit Out Project

I wish to expressed our sincere gratitude and in recognizing the excellent work produced by Critical M&E Engineering team that has successfully completed Phase 4 Workspace Transformation Fit Out in APCC1 office recently.

Your team has shown good project skills by completing renovation work on time, within our budget, with good safety record and good coordination with Dell team members.

I am appreciative of the professionalism and dedication exhibited by your engineering team.

Regards


.....
Senior Facility Manager
Ng Keng Ann



our present

28 March 2023

Sales & Services Offices

Penang

1-2-1 jalan sungai tiram 8
summerskye residences
11900 bayan lepas, penang

Kuala Lumpur

RK30A, Jalan Villa 3
Anggerik Villa, Off Jalan Semenyih
43500 Kajang
Selangor DE, Malaysia
T / +603 8723 2033



our key reference

call center – CSA, ID, MEP fit up

client dell global business center – phase 4
 location penang free industrial zone, malaysia
 year 2021
 type of project retrofit
 contract amount RM5,000,000.00
 scope 25,000ft2 office **CSA/ID/MEP fit up**
 standard fm approved



call center – CSA, ID, MEP fit up

client dell global business center – new 500pax office
 location penang free industrial zone, malaysia
 year 2020
 type of project base build
 contract amount RM2,600,000.00
 scope New 20,000ft2 office c/w CSA (piling, slab, structure, ceiling & roof) & MEP (ACMV, Fire protection & electrical)
 standard fm approved



28 March 2023

semiconductor – CSA, ID, MEP fit up

client ametek engineered materials sdn bhd – plant 2
 location penang free industrial zone, malaysia
 year 2021
 type of project retrofit
 contract amount RM8,000,000.00
 scope 2-storey office **CSA/ID/MEP fit up**
 40,000ft2 production floor CSA/MEP installation
 - 11kV trans & gear upgrading
 - 6 x 40rt air cooled chiller c/w associated air side AHU/FCU
 - 2 x 50hp oil free air compressor c/w receiver tank, air dryer
 - GEX & fume exhaust
 - fire sprinkle system c/w tank, pumps
 - electrical & distribution board hook up for production machine



call center – MEP

client aia berhad
 location strait quay, penang, malaysia
 year 2018
 type of project retrofit
 contract amount RM1,900,000.00
 scope New Customer Service & Call Centre involving M&E services
 installation – Air Conditioning & Ventilation, Fire, Electrical,
 incorporated into the in-house ID main con. design



call center – CSA, ID, MEP fit up

client KLA-tencor (malaysia) sdn bhd
 main con nil
 location kulim hi-tech park, kedah, malaysia
 year oct 2022
 type of project retrofit
 contract amount RM750,000.00
 scope 4,000ft² **CSA/ID/MEP fit up**
 standard fm approved



call center – CSA, ID, MEP fit up (on-going)

client dell global business center – phase 5,6 & café
 main con nil
 location penang free industrial zone, malaysia
 year target handover dec 2023
 type of project retrofit
 contract amount RM21,800,000.00
 scope 60,000ft² **CSA/ID/MEP fit up**
 standard fm approved



semiconductor - MEP

client	lam research international sdn bhd
main con	lb brothers sdn bhd
location	batu kawan, penang, malaysia
year	2021
type of project	retrofit
contract amount	RM1,100,000.00
scope	9,000ft2 ISO8 cleanroom (modular cleanroom) 3 x 50hp rooftop unit c/w associated cleanroom solutions - FFU

**semiconductor - MEP**

client	analog devices sdn bhd – plant 3, 7-storeys
main con	rimbaco sdn bhd
location	penang free industrial zone, malaysia
year	2021
type of project	base build
contract amount	RM16,000,000.00
scope	3 x 400rt water cooled chiller, chw pumps, fm approved cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation 2 (350kW + 200kW) oil free air compressor; 1 x vacuum pump c/w copper type L piping installation 20,000ft2 ISO8 cleanroom
standard	fm approved



semiconductor - MEP

client qdos flexcircuits sdn bhd
 main con kok construction sdn bhd
 location batu kawan, penang, malaysia
 year 2018
 type of project base build
 contract amount RM10,800,000.00
 scope acmv
 iso 8, iso 7, iso 6 cleanroom
 process utilities c/w scrubber system, cda system, ro/di, gex system,
 machine hook up



semiconductor - MEP

client vat manufacturing Malaysia sdn bhd
 main con byg projects sdn bhd
 location batu kawan, penang, malaysia
 year 2018
 type of project base build
 contract amount RM8,000,000.00
 scope New factory expansion involving 170,000ft2 area ACMV set up,
 including of 55,000ft2 cleanroom (ISO6 & ISO8) c/w 15ft Height,
 walkable ceiling, 2 nos Oil Free Air Compressor, Helium Exhaust,
 smoke spill system, Dry Cooling Coil, 3 nos chiller, and other
 associated services



28 March 2023

semiconductor - MEP

client jabil sdn bhd
 main con kok construction sdn bhd
 location kulim industrial park, kedah, malaysia
 year 2021
 type of project retrofit
 contract amount RM9,000,000.00
 scope 3 x 250rt air cooled chiller c/w associated water & air side, ducting & chw piping installation
 5.0 (99.999%) high purity piping system installation for he, n2, ar gas
 2 x ofa system c/w ss304 piping installation



semiconductor - MEP

client lam research international sdn bhd
 main con lb brothers sdn bhd
 location penang free industrial zone, malaysia
 year 2020
 type of project retrofit
 contract amount RM3,800,000.00
 scope installation of 3 sets of VRF systems cover its 3 level offices & café,
 3 nos air cooled chiller c/w associated services for ACMV,
 ISO7 Cleanroom,
 process utilities that cover OFA, PCW, GEX &
 High Purity Gasses piping (Grade 5.0 or 99.999%).



28 March 2023



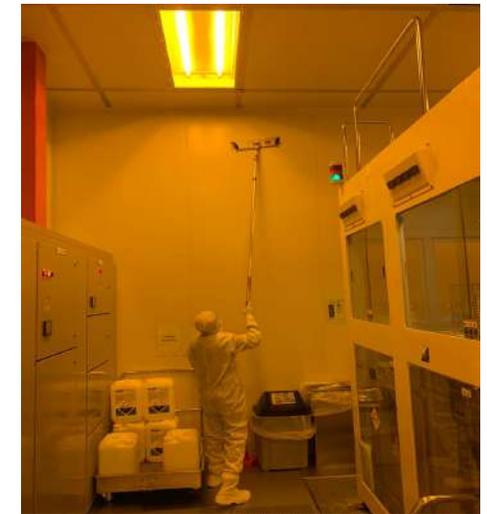
semiconductor - MEP

client analog devices sdn bhd
location penang free industrial zone, malaysia
year 2018
type of project retrofit
contract amount RM1,750,000.00
scope **21,000ft2 cold shell area conversion to iso7 cleanroom**
standard fm approved



semiconductor - MEP

client hoyo electronics sdn bhd
location kulim hi-tech park, kedah, malaysia
year 2020
type of project retrofit
contract amount RM800,000.00
scope To perform a total technical cleaning to HOYA Class 10 & Class 100 Cleanroom c/w NEBB certification
To supply and install Centralized Particle Monitoring System (PMS) to its Class 100 Cleanroom, to continuous monitoring to its cleanroom cleanliness



warehouse - MEP

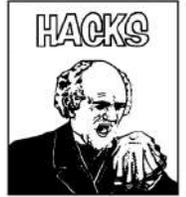
client nippon express (m) sdn bhd
 location penang free industrial zone, malaysia
 year 2021
 type of project retrofit
 contract amount RM2,300,000.00
 scope 2 x air cooled chiller c/w associated air & water side, ducting & piping installation
 ISO8 & ISO 7 cleanroom
 cGMP certified



NIPPON EXPRESS

food - MEP

client hacks Malaysia sdn bhd
 main con estagold sdn bhd
 location juru industrial park, penang, malaysia
 year xx2017
 type of project base build
 contract amount RM4,500,000.00
 scope class 100k **GMP certified cleanroom @ 20 degC 35%RH**
 3 x 150rt air cooled chiller c/w air & water side installation
 2 x 11,000cmh desiccant dehumidifier system
 steam piping system c/w calcium carbonate insulation



28 March 2023

semiconductor - MEP

client	micron memory malaysia sdn bhd – block 2
main con	tialoc sdn bhd
location	batu kawan, penang, malaysia
year	target handover apr 2023
type of project	base build
contract amount	RM65,500,000.00
scope	iso8 cleanroom chw piping installation 150 nos crac c/w installation bms instruments & sensor c/w installation
standard	fm approved

**semiconductor – MEP**

client	analog devices sdn bhd – plant 3, 7-storeys, level 5
main con	nil
location	penang free industrial zone, malaysia
year	feb 2023
type of project	retrofit
contract amount	RM15,000,000.00
scope	1 x 400rt water cooled chiller, chw pumps, fm approved cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation 2 (350kW + 200kW) oil free air compressor; 1 x vacuum pump c/w copper type L piping installation 1 x electrical system 1 x BMS system 20,000ft2 ISO7 cleanroom
standard	fm approved



semiconductor - MEP

client	Flextronics technology (penang) sdn bhd – H1B
main con	nil
location	bukit minyak industrial park, penang, malaysia
year	jan 2023
type of project	retrofit
contract amount	RM17,000,000.00
scope	25,000ft2 ISO8 cleanroom MEP & Cleanroom Architecture
standard	fm approved


medical/ pharmaceutical - MEP

client	synergy sterilisation (malaysia) sdn bhd
location	kuala kertil industrial park, kedah,, malaysia
year	2021
type of project	base build
contract amount	RM6,000,000.00
scope	2 x 250rt air cooled chiller c/w associated air side AHU/MAU/FCU for production; 1 x vrf system for office block concrete wall cooling for rhodotron x-ray horn (ss316 coil instead of copper coil, to avoid coil material melting)




medical/ pharmaceutical - MEP

client	dexcom (m) sdn bhd
main con	byg projects sdn bhd
location	batu kawan, penang, malaysia
year	2021
type of project	retrofit
contract amount	RM3,300,000.00
scope	2 x 190rt air cooled chiller c/w associated air & water side, ducting & piping installation 2 x ofa system c/w ss304 piping installation

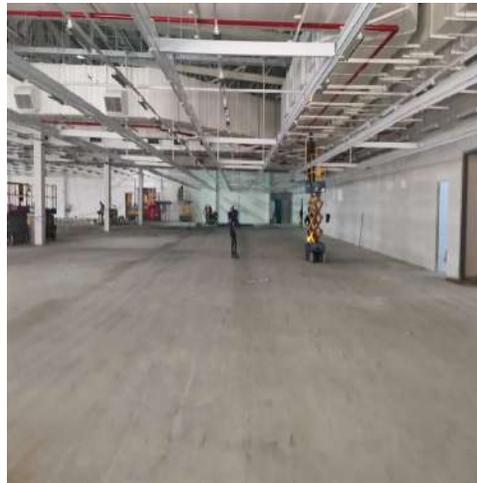

**semiconductor - MEP**

client	robert bosch (malaysia) sdn bhd
main con	south island building sdn bhd
location	penang free industrial zone, malaysia
year	2019
type of project	retrofit
contract amount	RM2,180,000.00
scope	acmv




semiconductor - MEP

client bcm electronics corporation sdn bhd – plant 2
 main con kok construction sdn bhd
 location kulim hi-tech ark, kedah, malaysia
 year 2021
 type of project base build
 contract amount RM3,000,000.00
 scope 1 x 400rt water cooled chiller, chw pumps, cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation
 cda piping installatiomn & setup



28 March 2023

semiconductor - MEP

client ni malaysia sdn bhd– new warehouse
 main con kok construction sdn bhd
 location penang free industrial zone, malaysia
 year 2021
 type of project base build
 contract amount RM3,500,000.00
 scope 50,000ft2 x 50ft height warehouse
 2 x 175rt vfd air cooled chiller, chw pumps, cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation
 standard fm approved

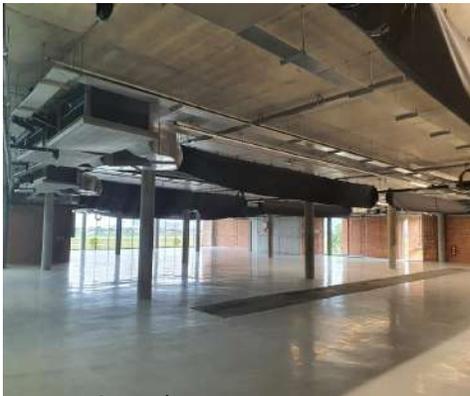


semiconductor - MEP

client	aemulus sdn bhd
main con	mlg design & construction sdn bhd
location	penang free industrial zone, malaysia
year	2020
type of project	base build
contract amount	RM1,500,000.00
scope	OPEN CONCEPT & BARE FINISHED Factory Building Energy efficient VRF c/w fabric ducting installation in the expose way suit to architect's building conceptual design, and GREEN

**semiconductor - MEP**

client	osram opto sdn bhd
location	kulim hi-tech park, kedah, malaysia
year	2019
type of project	basebuild
contract amount	RM1,300,000.00
scope	New factory involving PCW set up, covering stainless steel ducting , PP process piping, SCH80 PVC process piping



28 March 2023

semiconductor - MEP

client jabil sdn bhd
main con tialoc sdn bhd
location batu kawan, penang, malaysia
year 2020
type of project base build
contract amount RM10,100,000.00
scope acmv
Standard FM approved



semiconductor - MEP

client mi autobotics sdn bhd
main con kok construction sdn bhd
location batu kawan, penang, malaysia
year 2020
type of project base build
contract amount RM3,500,000.00
scope acmv



semiconductor - MEP

client rgt berhad – new B2, B3, B4 & B5 building
 main con kok construction sdn bhd
 location penang science park, malaysia
 year 2021
 type of project base build
 contract amount RM5,000,000.00
 scope 2 x 230rt water cooled chiller c/w air & water side equipment, ducting & piping installation
 6 x 40rt air cooled chiller c/w associated water & air side equipment, and ducting & piping installation
 2 x vrf system c/w piping & ducting installation
 2 x cda system c/w piping installation

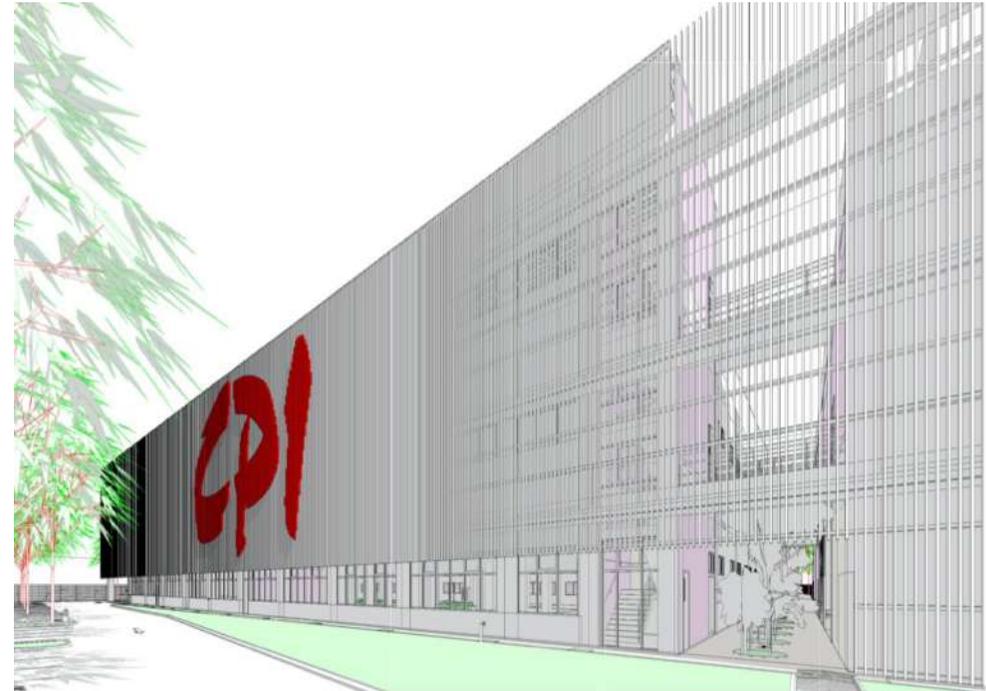


semiconductor - MEP

client cpi (pg) sdn bhd – plant 2 (electronics)
 main con kok construction sdn bhd
 location penang free industrial zone, malaysia
 year 2021
 type of project base build
 contract amount RM3,500,000.00
 scope 2 x 300rt water cooled chiller c/w air & water side equipment, ducting & piping installation
 2 x cda system c/w piping installation



28 March 2023



semiconductor - MEP

client	globetronics technology bhd
main con	hong poh engineering & construction sdn bhd
location	penang free industrial zone, malaysia
year	2021
type of project	base build
contract amount	RM2,000,000.00
scope	2 x 230rt water cooled chiller c/w air & water side equipment, ducting & piping installation

**warehouse - MEP**

client	dhl supply chain (malaysia) sdn bhd warehouse
location	batu kawan, penang, malaysia
year	2021
type of project	retrofit
contract amount	RM4,000,000.00
scope	180,000ft ² x 50ft height warehouse (kew1, kew2, etika) c/w control temperature & RH; 540rt air cooled roof top unit, ducting & SSF system installation



28 March 2023



hotel – MEP

client	gleneagle hospital
location	penang, malaysia
year	2018
type of project	retrofit
contract amount	RM2,000,000.00
scope	Chiller plant room upgrading involving replacement of 3 nos water cooled chiller, 1000RT cooling tower, MCC, CHW & CW pump, chiller cooler insulation with PU c/w GI jacketing

**hotel – MEP**

client	bayview beach hospital
location	penang, malaysia
year	2018
type of project	retrofit
contract amount	RM2,000,000.00
scope	Project involving chiller plant room upgrading, 3 nos (1VSD + 2 Fix Speed) water cooled chiller, 3000Amp MCC panel, upgrading and associated work @ basement level



28 March 2023

oil & gas - MEP

client schlumberger asia center for reliability and efficiency
 main con tialoc sdn bhd
 location pkfz, selangor, malaysia
 year 2015
 type of project base build
 contract amount RM3,700,000.00
 scope Project involving supply, install, testing & commissioning ACMV, CDA, Desiccant Wheel System, Smoke Spill System, Process Utility & BMS
 standard **leed certified**
fm approved



medical/ pharmaceutical - MEP (on-going)

client synergy sterilisation (malaysia) sdn bhd
 main con nil
 location batu kawan, penang, malaysia
 year target handover Oct 2023
 type of project base build
 contract amount RM8,000,000.00
 scope 2x150RT air cooled chiller system c/w associated air & water side, ducting & piping installation
 2x900kW hot water boiler system
 3xdegassing system + 3xprecond system
 1 x BMS system



28 March 2023

semiconductor – MEP (on-going)

client	ASE electronics (M) sdn bhd
main con	IJM corp berhad
location	bayan lepas free industrial zone, penang, malaysia
year	target handover Aug 2025
type of project	base build
contract amount	RM57,150,000.00
scope	4 (1+3) 750RT water cooled chiller system c/w associated air & water side, ducting & piping installation 1 x VRF system for office total 23,120cfm oil Free Air Compressor system c/w pre-cooler, desiccant dehumidifier, pre- & after- filter, air receiver tank, piping installation N2 piping system 1 x BMS system

**semiconductor - MEP (on-going)**

client	ferrotec AMC malaysia sdn bhd
main con	rimbaco sdn bhd
location	kulim hi-tech park, kedah, malaysia
year	target handover Oct 2023
type of project	base build
contract amount	RM27,000,000.00
scope	total capacity 1,259RT VRF system c/w ducting & piping installation smoke spill system



28 March 2023



call center – MEP

client	dell global business center
location	penang free industrial zone, malaysia
year	2021
type of project	retrofit
contract amount	RM3,000,000.00
scope	1 x 650rt vfd water cooled chiller c/w fm approved cooling tower, chw pump & cw pump, mcc & associated electrical wiring & piping installation
standard	fm approved



data center - MEP

client jabatan pengaliran & saluran (jps), selangor, malaysia
 location kl, malaysia
 year 2017
 type of project retrofit
 contract amount RM720,000.00
 scope New TIER III Data Center set up involving 3 nos DX Row Cooling, Cold Aisle Containment, VESDA, EMS, 2 lots IG55, Water Detection System



data center - MEP

client dell global business center
 location penang free industrial zone, malaysia
 year 2021
 type of project 'live' upgrade
 scope to construct a TIER III data center, with Dual Active Path (both capacity & distribution). The data center set to house 80 nos of racks (phase 1), each 9kW, of total 16,000ft2 white space, to support to its existing 500,000ft2 manufacturing plant, and also provide redundancy to its Asia Pacific operation. The facility cover 9 x 30ft dual cooling crac, 3 x 600amp sts, 2 x 250kW modular ups, vesda, water detection system, 2 x hot aisle containment
 standard fm approved



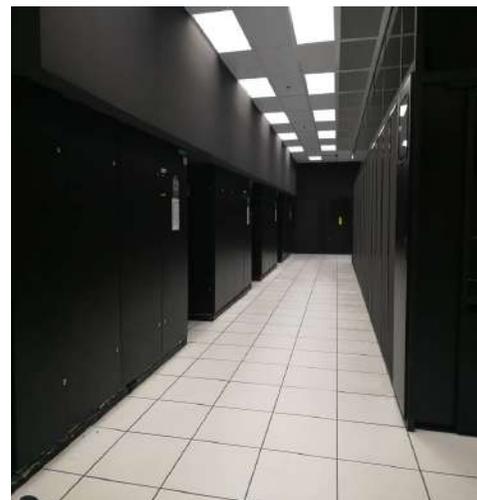
data center – MEP (on-going)

client	YTL data center
main con	nil
location	kulai, johor, malaysia
year	target handover Dec 2027
type of project	base build
contract amount	RM39,000,000.00
scope	140 x fanwall system c/w associated air & water side, ducting & piping installation

YTL Data Centers
YTL GROUP

**data center – MEP**

client	dell global business center
location	penang free industrial zone, malaysia
year	2018
type of project	live upgrade
scope	Life TIEW III Data Center Design & Build upgrade, CSA & MEP supporting up to 600kW of server loading
standard	fm approved



	<p>Owner Main Con Year Location Contract Amount Type of Project Scope Compliance</p>	<p>Western Digital Tialoc Sdn Bhd 2015 Penang RM570,000.00 Retrofit new Data Center installation FM approved</p>		<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Dell Jun 2017 APCC1 DC2 Penang RM1,800,000.00 New Installation new Tier III Data Center Installation FM Global Approved</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Motorola Aug 2015 Penang RM620,000.00 Retrofit 2 new Data Center installation</p>		<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Jabatab Pengaliran & Saluran (JPS) ETE Sdn Bhd Sep 2017 Ampang, Selangor RM720,000.00 Retrofit New TIER III Data Center set up</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Dell Feb 2014 APCC1 DC1 Penang RM340,000.00 Retrofit Data Center ACMV Upgrading FM Global Approved</p>		<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Dell Feb 2018 APCC1 DC2 Penang RM3,600,000.00 NEW DATA CENTER Data Center ACMV Upgrading FM Global Approved</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>First Solar Jun 2015 Kulim Hi-Tech Park, Kedah RM775,000.00 Retrofit New Data Center CRAC Upgrading (4 Data Centers) FM Global Approved</p>		<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Dell Feb 2018 APCC1 CEDAR LAB, Penang RM2,800,000.00 NEW REGIONAL TRAINING CENTER Data Center CRAC, UPS, EMS, BMS installation FM Global Approved</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Dell Sep 2016 APCC2 DC1 Bukit Minyak Penang RM800,000.00 New Installation Project involving Data Center Battery Monitoring System (BMS) Installation FM Global Approved</p>		<p>Owner Contractor Target Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Micron Polycool HTE Engineering Sdn Bhd Aug 2020 Batu Kawan Industrial Zone, Penang RM1,200,000.00 Base Build 12 nos 22RT dual cooling (DX+CHW) PAC for Data Center Fm approved</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Dell Global Business Centre Sdn – AP2 2020 Bukit Minyak, Penang, Malaysia RM3,500,000.00 Upgrading to construct a TIER III data center, with Dual Active Path (both capacity & distribution). The data center set to house 80 nos of racks (phase 1), each 9kW, of total 9,000ft² white space, to support to its existing 500,000ft² manufacturing plant, and also provide redundancy to its Asia Pacific operation.</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Dell Global Business Centre Sdn – AP2 2023 Bukit Minyak, Penang, Malaysia RM1,100,000.00 Upgrading New construction of new IDF room c/w 2 chw in row cooler, 2 air cooled chiller, and air and water side ducting and piping installation</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Dell Global Business Centre Sdn – Jurung, Singapore 2023 Jurung, Singapore RM900,000.00 Upgrading New EMS system upgrading to existing data center and corporate office</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Dell Global Business Centre Sdn – Changi, Singapore Wah Loon Engineering Ltd 2023 Changi, Singapore RM1,200,000.00 Upgrading New EMS system upgrading to existing data center and corporate office</p>

	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>ams-osram Intradeco sdn bhd 2023 Bukit kulim hi-tech park, kedah, malaysia RM3,000,000.00 Base build New TIER III data center construction c/w 2 150RT air cooled chiller and its associated equipment and installation</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>YTL data center Target handover 2027 Kulai, johor, Malaysia RM39,000,000.00 Base build 140 x fanwall system c/w associated air & water side, ducting & piping installation</p>

	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	AIA Facility Link/ Ivana Deco 2018 Straight Quey, Penang RM3,100,000.00 New Call Center Set Up Project involving all M&E services
	Owner Year Completion Location Contract Amount Type of Project Scope Compliance	DELL APCC1 Jan 2020 Bayan Lepas Industrial Zone, Penang RM1,950,000.00 Retrofit 20,000ft2 office space covering CSA, MEP FM Global Approved
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Robert Bosch (M) Sdn Bhd South Island Building Sdn Bhd Jan 2020 Penang, Malaysia RM2,300,000.00 Upgrading ACMV upgrading to its office & café
	Owner Main Con Architect Year Completion Location Contract Amount Type of Project Scope	Aemulus Holding Berhad MLG Design & Construction Sdn Bhd Design Unit Jun 2020 Penang RM1,500,000.00 'OPEN CONCEPT & BARE FINISHED' Factory Building Energy efficient VRF c/w fabric ducting installation in the expose way suit to architect's building conceptual design, and GREEN
 28 March 2023	Owner Year Completion Location Contract Amount Type of Project Scope	Dell Global Business Centre Sdn – AP1 Dec 2020 Bayan Lepas Free Industrial Zone, Penang, Malaysia RM2,000,000.00 Upgrading ACMV & Fire Protection upgrade for Dell Phase 1,2&3 office zone area

	client location year type of project contract amount scope standard	dell global business center – phase 4 penang free industrial zone, malaysia 2021 retrofit RM5,000,000.00 25,000ft2 office CSA/ID/MEP fit up (phase 4) fm approved
	client location year type of project contract amount scope standard	dell global business center – phase 5,6,cafe penang free industrial zone, malaysia target handover Dec 2023 retrofit RM21,800,000.00 60,000ft2 office CSA/ID/MEP fit up (phase 4) fm approved
	client location year type of project contract amount scope standard	KLA-tencor (malaysia) sdn bhd kulim hi-tech park, kedah, malaysia oct 2022 retrofit RM750,000.00 4,000ft2 office CSA/ID/MEP fit up (phase 4) fm approved

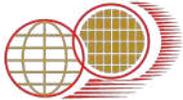
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>U Mobile Nov 2015 Subang Hi-Tech, Selangor RM1,490,000.00 Retrofit Project involving new TELCO ACMV upgrading, 7 nos CRAC, 2 nos 240kW Modular UPS, 3 sets CAC, and associated services</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Maxis Nov 2016 Subang Hi-Tech, Selangor RM450,000.00 Retrofit Project involving new TELCO ACMV's CRAC unit outdoor condenser total change-out</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Maxis Jan 2018 Nationwide RM6,200,000.00 Retrofit Project involving new 900 nos TELCO outdoor free-cooling total change-out</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p> <p>Compliance</p>	<p>First Solar Apr 2016 Kulim Hi-Tech Park, Kedah RM1,035,000.00 Retrofit Project Involving New Acid Scrubber System Installation FM Global Approved</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>TS Solartech Jun 2016 Penang Science Park RM3,300,000.00 New Installation Project involving supply, install, testing & commissioning UPS/FC system, having capacity up to 5.5MW</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p> <p>Compliance</p>	<p>First Solar Dec 2016 Kulim Hi-Tech Park, Kedah RM1,700,000.00 Retrofit Project Involving KLM 1&2 T&R New ACMV Installation FM Global Approved</p>

	Owner Year Completion Location Contract Amount Type of Project Scope Compliance	Entegris Nov 2015 Kulim Hi-Tech Park, Kedah RM950,000.00 Retrofit Project involving ACMV Upgrading, 3 nos air cooled chiller, associated mechanical work FM Global Approved
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Classified (Top Tier Semincon Player) Johnson Control Dec 2015 Penang RM180,000.00 Retrofit Project involving chiller plant room upgrading, 1 nos 800RT water cooled chiller replacement
	Owner Year Completion Location Contract Amount Type of Project Scope Compliance	Latexx (Semperit) Dec 2015 Taiping, Perak RM4,700,000.00 Base Build Project involving Process Utility pipe work, Boiler pipe work, Natural Gas pipe work, & mechanical Ventilation system FM Global Approved
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	VAT BYG Projects Sdn Bhd Mar 2016 Penang RM380,000.00 Retrofit Project involving new ISO6 & ISO8 cleanroom set up
	Owner Year Completion Location Contract Amount Type of Project Scope	Osram Jan 2017 Penang RM950,000.00 Retrofit New Oil Free Compressed Air System in Wafer Plant

28 March 2023

	Owner Year Completion Location Contract Amount Type of Project Scope	Osram Aug 2017 Penang RM800,000.00 Retrofit New PEN5 ISO8 Cleanroom set up
	Owner Year Completion Location Contract Amount Type of Project Scope	CPI Oct 2017 Penang RM1,800,000.00 Retrofit New ISO8 cleanroom set up, having total area of 32,000ft2. PU ducting instead of GI ducting deployed, to achieve to a better workmanship
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	TF-AMD Tialoc Sdn Bhd Oct 2017 Penang RM4,000,000.00 Base Build New factory set up involving total CHW, CW, CDA, Process Piping Work
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	VAT BYG Projects Sdn Bhd Jun 2018 Penang RM7,000,000.00 Base Build New factory expansion involving 170,000ft2 area ACMV set up, including of 55,000ft2 cleanroom (ISO6 & ISO8), OFA, smoke spill system, DCC, 3 nos chiller, and other associated services

	Owner Year Completion Location Contract Amount Type of Project Scope	Coherent Mar 2018 Penang RM1,000,000.00 New Factory Extension As the main contractor for the entire project upgrading, that scope of the contract stretching from civil & structural upgrading, new mechanical (ACMV, Process Utility, Fire Protection) & electrical installation.
	Owner Year Completion Location Contract Amount Type of Project Scope	CPI 2018 Penang RM1,200,000.00 Retrofit New ISO8 cleanroom set up, having total area of 20,000ft2
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	QDOS KOK CONSTRUCTION SDN BHD JAN 2018 Batu Kawan Industrial Park, Penang RM8,000,000.00 Base Build New factory set up involving total CHW, CW, CDA, Process Piping Work, and all equipment
	Owner Year Completion Location Contract Amount Type of Project Scope	QDOS Dec 2018 Phase 2, Penang Free Trade Zone, Penang RM2,650,000.00 Upgrading Factory upgrade involving total CHW, CW, CDA, Process Piping Work and all equipment
	Owner Year Completion Location Contract Amount Type of Project Scope	Globetronics 2018 Penang RM2,500,000.00 New Factory Extension New 20,000ft2 class 10k cleanroom, inclusive of chiller plant room, ahv room, and necessary services

	Owner Year Completion Location Contract Amount Type of Project	ADI 2018 Free Trade Zone, Penang RM1,800,000.00 New 20,000ft2 class 100k & 10k cleanroom
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Osram Tialoc Sdn Bhd 2018 Kulim Hi-Tech Park, Kedah RM1,350,000.00 Retrofit New process utility system set up
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Classified MNC Tialoc Sdn Bhd 2018 Kulim Hi-tech Park, Kedah RM2,300,000.00 Re-trofit Exisiting factory mechanical & electrical services dismantling
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Classified MNC Tialoc Sdn Bhd 2018 Kulim Hi-tech Park, Kedah RM5,200,000.00 Re-trofit ACMV ducting, CHW & CW piping, and process utility piping installation
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Classified MNC Tialoc Sdn Bhd 2018 Kulim Hi-tech Park, Kedah RM3,500,000.00 Re-trofit ACMV ducting, CHW & CW piping, and process utility piping installation

	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Classified MNC JLL 2018 Free Trade Zone, Penang RM1,100,000.00 Re-trofit CDA upgrading consisting of air compressor c/w air dryer, filters and other associated services
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Carsem (M) Sdn Bhd York (M) Sdn Bhd 2018 Jelapang, Ipoh, Perak RM900,000.00 Retrofit ACMV upgrading involving CHW & CW piping installation, pumps, and other necessary services
	Owner Year Completion Location Contract Amount Type of Project Scope	Bosch 2019 Penang Free Trade Zone RM780,000.00 Re-trofit Compressed dry air system cover oil free air compressor, air dryer, filters, piping, wiring, and other necessary services
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Infineon Kulim York (M) Sdn Bhd Target 2019 Kulim Hi-Tech Park, Kulim, Kedah RM480,000.00 Re-trofit Chiller condenser body insulation & AHU installation
 28 March 2023	Owner Year Completion Location Contract Amount Type of Project Scope	CPI 2019 Penang RM450,000.00 Retrofit New ISO7 cleanroom set up, smoke spill system & CDA system

	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Aemulus Corporation (SEMICON) MLG Design & Construction Sdn Bhd Target 2019 Free Trade Industrial Zone, Penang RM1,500,000.00 Base Built ACMV by installing energy efficient VRF system
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Jabil Circuit Tialoc Sdn Bhd Jun 2020 Batu Kawan Industrial Park, Penang RM6,500,000.00 Base Built New ACMV ducting work
	Owner Year Completion Location Contract Amount Type of Project Scope	Dell Global Business Centre Sdn – AP2 Target Sep 2020 Bukit Minyak, Penang, Malaysia RM1,700,000.00 Upgrading Chiller plant room upgrade c/w 800rt water cooled chiller, FM approved cooling tower, MCC, CHWP & CWP c/w VSD control
	Owner Year Completion Location Contract Amount Type of Project Scope Compliance	DELL APCC1 Jan 2020 Bayan Lepas Industrial Zone, Penang RM600,000.00 Retrofit BMS system covering DELL Malaysia – Penang, Cyberjaya, monitoring ACMV & Data Center MEP FM Global Approved
	Owner Year Completion Location Contract Amount Type of Project Scope	Hoya Electronics Feb 2020 Kulim Hi-Tech Park, Kedah RM490,000.00 Retrofit New online life particle monitoring system for Class 100 cleanroom

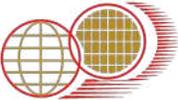
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Hoya Electronics Mar 2020 Kulim Hi-Tech Park, Kedah RM180,000.00 Retrofit Class 100 & Class 10 technical cleaning</p>
	<p>Owner Contractor Target Completion Location Contract Amount Type of Project Scope</p>	<p>Micron Polycool HTE Engineering Sdn Bhd Feb 2020 Batu Kawan Industrial Zone, Penang RM3,500,000.00 Base Build 51 nos 32RT CHW PAC for class 100k cleanroom</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Paradigm Metal Industries Dec 2019 Prai Industrial Park, Penang RM2,350,000.00 Base Up ACMV covering Air Cond, Smoke Spill System, Process Utilise covering Compressed Air System, General Exhaust System</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Mi Equipment Kok Construction Sdn Bhd Dec 2019 Batu Kawan Industrial Park, Penang RM4,000,000.00 Base Build 300rt chilled water system for production, warehouse, 120RT VRF for offices, smoke spill system, compressed dry air system, general exhaust system, etc</p>
 28 March 2023	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Analog Devices Dec 2019 Bayan Lepas Industrial Zone, Penang RM1,480,000.00 Re-trofit Cleanroom conversion from class 100k to class 10k FM Global</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Analog Devices Dec 2019 Bayan Lepas Industrial Zone, Penang RM350,000.00 Re-trofit New link bridge office MEP services FM Global</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Micron Dec 2019 Prai Industrial Zone, Penang RM980,000.00 Base Build 12 nos 26RT DX PAC for class 100k cleanroom</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Jabil Circuit Sdn Bhd Kok Construction Sdn Bhd Target Jan 2021 Kulim Industrial Park, Kedah RM7,500,000.00 Base Built To construct a new manufacturing facilities covering ACMV & Process Utilities such as OFA, PCW, GEX, High Purity Gasses (Grade 5.0 or 99.999%) piping</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Bosch South Island Builder Sdn Bhd 2019 Penang Free Trade Zone RM600,000.00 Re-trofit Demolition of existing old factory, to supply and install new ACMV system</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>CPI (Penang) Sdn Bhd Target Jun 2021 Bayan Lepas Free Trade Zone, Penang, Malaysia RM3,000,000.00 Green Field New ACMV, Class 100k Cleanroom & Process Utilities System for new 4-storey semiconductor factory</p>

	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>RGT Berhad KOK Construction Sdn Bhd May 2021 Bukit Minyak Industrial Park, Penang RM4,500,000.00 Greenfield New ACMV c/w 4 nos chiller system, AHU, FCU & VRF system; process utilities system, smoke spill system</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Ametek engineered materials sdn bhd 2021 Penang RM8,000,000.00 retrofit 2-storey office CSA/ID/MEP fit up 40,000ft2 production floor CSA/MEP installation - 11kV trans & gear upgrading - 6 x 40rt air cooled chiller c/w associated air side AHU/FCU - 2 x 50hp oil free air compressor c/w receiver tank, air dryer - GEX & fume exhaust - fire sprinkle system c/w tank, pumps - electrical & distribution board hook up for production machine</p>
	<p>semiconductor - MEP client main con location year type of project contract amount scope</p>	<p>bcm electronics corporation sdn bhd kok construction sdn bhd kulim hi-tech ark, kedah, malaysia 2021 base build RM3,000,000.00 1 x 400rt water cooled chiller, chw pumps, cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation cda piping installation & setup</p>

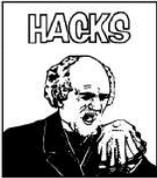
	<p>client main con location year type of project contract amount scope standard</p>	<p>ni malaysia sdn bhd– new warehouse kok construction sdn bhd penang free industrial zone, malaysia 2021 base build RM3,500,000.00 50,000ft2 x 50ft height warehouse 2 x 175rt vfd air cooled chiller, chw pumps, cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation fm approved</p>
	<p>client main con location year type of project contract amount scope</p>	<p>sustio sdn bhd tialoc sdn bhd batu kawan, penang, malaysia 2022 base build RM5,000,000.00 acmv & process utilities piping installation</p>
	<p>client main con location year type of project contract amount scope standard</p>	<p>analog devices sdn bhd – plant 3, 7-storeys, level 5 nil penang free industrial zone, malaysia feb 2023 retrofit RM15,000,000.00 1 x 400rt water cooled chiller, chw pumps, fm approved cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation 2 (350kW + 200kW) oil free air compressor; 1 x vacuum pump c/w copper type L piping installation 1 x electrical system 1 x BMS system 20,000ft2 ISO7 cleanroom fm approved</p>

 <p>ANALOG DEVICES AHEAD OF WHAT'S POSSIBLE™</p>	<p>client main con location year type of project contract amount scope</p>	<p>analog devices sdn bhd – plant 3, 7-storeys rimbaco sdn bhd penang free industrial zone, malaysia feb 2023 base build RM16,000,000.00 2 x 400rt water cooled chiller, chw pumps, fm approved cooling tower c/w associated air side AHU/MAU/FCU, ducting & piping installation 2 (350kW + 200kW) oil free air compressor; 1 x vacuum pump c/w copper type L piping installation 1 x electrical system 1 x BMS system 20,000ft2 ISO7 cleanroom fm approved</p> <p>standard</p>
	<p>client main con location year type of project contract amount scope</p>	<p>micron memory malaysia sdn bhd – block 2 tialoc sdn bhd batu kawan, penang, malaysia 2021 base build RM60,000,000.00 iso8 cleanroom chw piping installation 150 nos crac c/w installation bms instruments & sensor c/w installation</p>
	<p>client main con location year type of project contract amount scope</p>	<p>Osram FEK2 Tialoc Malaysia Sdn Bhd Kulim Hi-Tech Park, Kedah, Malaysia target 2023 base build RM1,500,000.00 condenser water filtration system</p>

	<p>client main con location year type of project contract amount scope</p>	<p>Flextronics technology (penang) sdn bhd – H1B nil bukit minyak industrial park, penang, malaysia jan 2023 retrofit RM17,000,000.00 25,000ft2 ISO8 cleanroom MEP & Cleanroom Architecture fm approved</p> <p>standard</p>
	<p>client main con location year type of project contract amount scope</p>	<p>Globetronics technology berhad nil penang free industrial zone, malaysia 2023 retrofit RM5,000,000.00 ISO8 cleanroom MEP & architecture</p>
	<p>client main con location year type of project contract amount scope</p>	<p>ferrotec AMC malaysia sdn bhd rimbaco sdn bhd kulim hi-tech park, kedah, malaysia target handover Oct 2023 base build RM27,000,000.00 total capacity 1,259RT VRF system c/w ducting & piping installation, smoke spill system</p>
	<p>client main con location year type of project contract amount scope</p>	<p>ASE electronics (M) sdn bhd IJM corp berhad bayan lepas free industrial zone, penang, target handover Aug 2025 base build RM57,150,000.00 4 (1+3) 750RT water cooled chiller system c/w associated air & water side, ducting & piping installation 1 x VRF system for office total 23,120cfm oil Free Air Compressor system c/w pre-cooler, desiccant dehumidifier, pre- & after- filter, air receiver tank, piping installation N2 piping system 1 x BMS system</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>DHL Supply Chain (Malaysia) Sdn Bhd Aug 2020 Kulim Industrial Park (KEW1, KEW2, ETIKA) RM4,000,000.00 retrofit 180,000ft² x 50ft height warehouse (kew1, kew2, etika) c/w control temperature & RH; 540rt air cooled roof top unit, ducting & SSF system installation</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Nippon Express April 2021 Bayan Lepas Industrial Park, Penang RM2,500,000.00 Retrofit ISO6 & ISO8 Cleanroom, and Coldroom for new warehousing storage requirement from Nippon Express's ultimate client</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>DHL Supply Chain (Malaysia) Sdn Bhd Jan 2023 Kulim Industrial Park KEW2 phase 2 RM4,000,000.00 retrofit 90,000ft² x 50ft height warehouse c/w control temperature & RH; 2 x 265RT air cooled chiller, 4 x 50,000cfm AHU, 1 x 10,000cfm MAU, and air side and water side piping and ducting installation</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>DHL Supply Chain (Malaysia) Sdn Bhd Jan 2023 Bayan Lepas Free Industrial Zone PLH3 RM1,000,000.00 retrofit 60,000ft² x 50ft height warehouse c/w control temperature & RH; 540rt air cooled roof top unit, ducting & SSF system installation</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>DHL Supply Chain (Malaysia) Sdn Bhd Jan 2023 Bayan Lepas Free Industrial Zone PLH4 RM2,000,000.00 Base built 90,000ft² x 50ft height warehouse c/w control temperature & RH; 350rt air cooled roof top unit, ducting & SSF system installation</p>
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	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p> <p>Compliance</p>	<p>Hacks Estagold Sdn Bhd Oct 2017 Penang RM5,800,000.00 Base Build New factory involving ACMV set up, production having 20degC 35%RH environment GMP certified</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope Compliance</p>	<p>Sun Phama Mar 2017 Sg Petani, Kedah RM320,000.00 Retrofit Water cooled chiller replacement GMP certified</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p> <p>Compliance</p>	<p>Rembina Sdn Bhd South Island Sdn Bhd Jan 2016 Penang RM1,750,000.00 Base Build Project involving ACMV, CDA ISO8 Cleanroom, Smoke Spill System, BMS system GMP Certified</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Aspen Glove Sdn Bhd Tialoc Sdn Bhd Target Mar 2021 Kulim Hi-Tech Park, Kedah, Malaysia RM2,500,000.00 Greenfield New chilled water & process piping system supporting entire glove manufacturing factory</p>

	<p>client location year type of project contract amount scope</p>	<p>synergy sterilisation (malaysia) sdn bhd kuala kertil industrial park, kedah,, malaysia 2021 base build RM6,000,000.00 2 x 250rt air cooled chiller c/w associated air side AHU/MAU/FCU for production; 1 x vrf system for office block concrete wall cooling for rhodotron x-ray horn (ss316 coil instead of copper coil, to avoid coil material melting)</p>
	<p>client main con location year type of project contract amount scope</p>	<p>dexcom (m) sdn bhd byg projects sdn bhd batu kawan, penang, malaysia 2021 retrofit RM3,300,000.00 2 x 190rt air cooled chiller c/w associated air & water side, ducting & piping installation 2 x ofa system c/w ss304 piping installation</p>
	<p>client main con location year type of project contract amount scope</p>	<p>synergy sterilisation (malaysia) sdn bhd nil batu kawan, penang, malaysia target handover Oct 2023 base build RM8,000,000.00 2x150RT air cooled chiller system c/w associated air & water side, ducting & piping installation 1 x VRF system 2x900kW hot water boiler system 3xdegassing system + 3xprecond system 1 x BMS system</p>

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Pantai Hospital Sep 2015 Sg Petani, Kedah RM720,000.00 Retrofit Project involving 2 nos 300RT water cooled chiller replacement @ level 3 Sustainable Energy Development Authority Malaysia (SEDA)</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Pantai Hospital Oct 2017 Penang RM1,800,000.00 Retrofit Project involving chiller plant room upgrading, 3 nos 300RT water cooled chiller, 2 nos 500Rt cooling tower, 2000Amp MCC panel, and associated work @ Level 6 roof top</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Pantai Hospital SP LK Design Sdn Bhd Target 2019 SP, Kedah RM350,000.00 Re-trofit New ACMV installation cover AHU, FCU, for CDR room</p>
	<p>client main con location year type of project contract amount scope</p>	<p>Gleneagles Hospital EEC Construction Sdn Bhd georgetown, penang, malaysia target 2023 base build RM1,500,000.00 ACMV for 17-storey hospital</p>

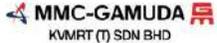
	Owner	Schlumberger
	Year Completion	Jun 2015
	Main Con	Tialoc Malaysia Sdn Bhd
	Location	Port Klang Free Zone (PKFZ), Klang, Selangor
	Contract Amount	RM3,700,000.00
	Type of Project Scope	Base Build Project involving supply, install, testing & commissioning ACMV, CDA, Desiccant Wheel System, Smoke Spill System, Process Utility & BMS
	Compliance	LEED Certified by U.S Green (SEDA)

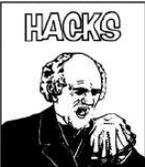
	Owner Year Completion Main Con Location Contract Amount Type of Project Scope	TUDM (Air Force) Malaysia Jan 2015 Sapura Defence Sdn Bhd Butterworth, Penang RM930,000.00 Retrofit Project involving supply, install, testing & commissioning ACMV, 2*150RT air cooled chiller, CRAC, and BMS
	Owner Year Completion Main Con Location Contract Amount Type of Project Scope	TUDM (Air Force) Malaysia Dec 2015 Wekajaya Sdn Bhd Kota Samarahan, Kuching, Sarawak, Malaysia RM2,900,000.00 Base Build Project involving supply, install, testing & commissioning ACMV, 2*300RT water cooled chiller, Smoke Spill System, and BMS
	Owner Year Completion Main Con Location Contract Amount Type of Project Scope	TUDM (Air Force) Malaysia Dec 2016 Wekajaya Sdn Bhd Gunung Ngili, Kuching, Sarawak, Malaysia RM1,590,000.00 Base Build Project involving supply, install, testing & commissioning ACMV, UPS systems, BMS
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Thai Consulate Prestige Construction Oct 2017 Penang RM700,000.00 Base Build New consulate building completed with full VRV system, and associated services

	Owner Year Completion Location Contract Amount Type of Project Scope	Putrajaya Holding Oct 2017 Putrajaya, Selangor RM1,050,000.00 New Installation Project involving supply, install, testing & commissioning UPS system, having capacity up to 1.2MW (4 nos 300kVA)
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	SOC II, TUDM Kuantan, Pahang Bumitegap Sdn Bhd Target 2019 Kuantan, Pahang RM500,000.00 Base Build 14 nos Precision Air Cond (PAC) installation
	Owner Main Con Year Completion Location Contract Amount Type of Project Scope	Thai Consulate LK Design & Construction Target Dec 2020 Penang RM200,000.00 Upgrading Existing old consulate building completed with full VRV system, and associated services

	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Bayview Beach Resort May 2018 Batu Ferringhi, Penang RM1,500,000.00 Retrofit Project involving chiller plant room upgrading, 3 nos (1VSD + 2 Fix Speed) water cooled chiller, 3000Amp MCC panel, upgrading and associated work @ basement level</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>ET Hospitality Sdn Bhd 2017 Georgetown, Penang RM480,000.00 Base Built Boutique Hotel having new VRV installation for all the guest room, hall, and other associated services</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Persatuan Buddist Liulishan 2018 Tangjong Sepat, Sepang, Selangor RM1,020,000.00 Base Built ACMV cover entire building inclusive of rooms, by installing VRF system for energy efficient environment</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>100 Suits+Residence (HOTEL) LSH Construction Sdn Bhd Target 2019 Bayan Baru, Penang RM1,390,000.00 Base Built ACMV cover air pressurization and smoke venting system</p>
<p>28 March 2023</p>	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Mahindarama Buddhist Temple Onice Bina Sdn Bhd Target 2019 Georgetown, Penang RM430,000.00 Base Built ACMV cover aircond, air pressurization and smoke venting system</p>

	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Brown Hotel Main Construction (M) Sdn Bhd Target 2019 Georgetown, Penang RM330,000.00 Base Built ACMV cover 10 storey guest rooms aircond, air pressurization and smoke venting system</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>The Gallivant Hotel AE Advanced Sdn Bhd 2020 Penang RM350,000.00 Base Built ACMV involving air conditioning for 5 storey guest rooms, smoke venting system & air pressurization</p>
	<p>Owner Main Con Year Completion Location Contract Amount Type of Project Scope</p>	<p>Kedah State Government (TOURISM) Jayasarana Target 2019 Kuah Town, Langkawi RM3,300,000.00 Base Built ACMV by installing energy efficient VRF system</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Venice Properties Sdn Bhd (HOTEL) March 2020 Penang RM2,300,000.00 Base Built ACMV involving air conditioning, smoke venting system & air pressurization. Heat Pump system for hot water</p>
	<p>Owner Year Completion Location Contract Amount Type of Project Scope</p>	<p>Fairview International School Target Feb 2021 Bukit Jambul, Penang, Malaysia RM500,000.00 Retrofit New ACMV system for the new building</p>

	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>First Solar Kulim Hi-Tech Park, Kedah Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, CRAC, UPS service, maintenance & hook-up FM Global</p>		<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Hume Cement Gopeng, Perak Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, UPS service, maintenance & hook-up</p>
	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Pantai Hospital Sungai Petani, Kedah Facilities Maintenance Yearly renewal contract covering ACMV, service, maintenance & hook-up MSQH Compliance</p>		<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Western Digital Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up FM Global Approved</p>
	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Amanjaya Hospital Sungai Petani, Kedah Facilities Maintenance Yearly renewal contract covering ACMV, service, maintenance & hook-up MSQH Compliance</p>		<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Philips Lumileds Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up FM Global Approved</p>
	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Robert Bosch Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up FM Global</p>		<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>DELL APCC1 Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up FM Global Approved</p>
	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Loh Guan Lye Hospital Penang Facilities Maintenance Yearly renewal contract covering ACMV, UPS service, maintenance & hook-up MSQH Compliance</p>		<p>Owner Location Type of Contract Scope</p>	<p>Nippon Express Penang Facilities Maintenance Yearly renewal contract covering ACMV service, maintenance & hook-up</p>
	<p>Owner Location Type of Contract Scope</p> <p>Compliance</p>	<p>Island Hospital Penang Facilities Maintenance Yearly renewal contract covering ACMV, UPS service, maintenance & hook-up MSQH Compliance</p>		<p>Owner Location Type of Contract Scope</p>	<p>MMC-Gamuda KL Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up</p>

	Owner Location Type of Contract Scope	Royal Thai Consulate Penang Facilities Maintenance Yearly renewal contract covering ACMV, & UPS service & maintenance
	Owner Location Type of Contract Scope	Flex Bukit Minyak, Penang Facilities Maintenance Service & Maintenance covering ACMV, Process Utility, service, maintenance & hook-up
	Owner Location Type of Contract Scope	VAT Batu Kawan Industrial PARK, Penang Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up
	Owner Location Type of Contract Scope	Motorola Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up
	Owner Location Type of Contract Scope	Sanmina Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up
	Owner Location Type of Contract Scope	Hacks Bukit Minyak, Penang Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up

	Owner Location Type of Contract Scope	St Jude Medical Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up
	Owner Location Type of Contract Scope	Entegris Kulim Hi-Tech Park, Kedah Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up
	Owner Location Type of Contract Scope	The Edison Hotel Penang Facilities Maintenance Yearly renewal contract covering ACMV service & maintenance
	Owner Location Type of Contract Scope	Abbott Kulim Hi-Tech Park, Kedah Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up
	Owner Location Type of Contract Scope	Schawki Imaging by SGK Group Bukit Minyak Industrial Park, Penang Facilities Maintenance Yearly renewal contract covering Data Center's CRAC, UPS, WLD, EMS, VESDA service, maintenance & hook-up
	Owner Location Type of Contract Scope	Rembina Bayan Lepas Industrial Zone, Penang Facilities Maintenance Yearly renewal contract covering ACMV, Process Utility, service, maintenance & hook-up

	<p>Owner Location Type of Contract Scope</p>	<p>Jabil Circuit Bayan Lepas Industrial Zone, Penang Facilities Maintenance Service & Maintenance covering ACMV, Process Utility, service, maintenance & hook-up</p>
	<p>Owner Location Type of Contract Scope</p>	<p>Analog Devices Bayan Lepas Industrial Zone, Penang Facilities Maintenance Service & Maintenance covering ACMV, Process Utility, service, maintenance & hook-up</p>