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Maxi MV clamp with tear-off screw



Saves time : compared to welding, the mounting time of the Maxi MV clamp is considerably reduced.

The clamp with tear-off screw can be mounted easily without using any torque wrench. The tear-off head indicates accurate installation with a defined clamping force. Marking of correctly installed clamps is not necessary. This saves times and simplifies documentation.

The clamp with tear-off screw can be used for high requirements in industrial buildings, in nuclear power plants and for military applications. It fulfills international standards according to IEC 62561.



Benefits :

- Reliable mounting quality by constant torque and defined clamping force
- Easy mounting, no torque wrench needed
- Huge time savings compared to exothermic welding
- No risk for the installer by harmful welding fume
- Established technique (e.g. French nuclear power plants)
- No environmental hazard



	Standard clamp	Welding	Clamp with tear-off screw
Permanent Connection	—	✓	✓
Mounting time	✓ (60 sec) *	— (60 sec)	✓ (30 sec)
Constant installation quality	✓ *	—	✓
Environment-friendly	✓	—	✓
No specific mounting equipment needed	—	—	✓
No preparation of the connection necessary	✓	—	✓
No welding expert needed	✓	—	✓
No risk for the operator by harmful welding smoke	✓	—	✓
Mounting during rain	✓	—	✓
Corrosion-resistant	✓	✓	✓

* when using a torque wrench

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TEEAM-IEEMA Dialogue

TEEAM Officials visiting the ELECRAMA 2018 Exhibition in India took the opportunity to have a win-win dialogue with the Indian Electrical & Electronics Manufacturers' Association (IEEMA) on 12th March 2018. The 12-member delegation was led by TEEAM President, Ir Yong Ah Huat. They met IEEMA Officials, Mr Shreegopal Kabra (President), Mr R K Chugh (Vice President), Mr Sunil Misra (Director-General) and Ms Reema Shrivastava (Deputy Director). The dialogue aimed at enhancing collaboration and to get to know better regarding the Indian power industry including providing an active platform for networking. TEEAM and IEEMA do have a long standing relationship to promote business interests of members of both the associations.

IEEMA is the organiser of ELECRAMA 2018 which is the flagship showcase of the Indian electrical industry eco-system and encompasses the largest congregation of the power sector in the said geography. ELECRAMA brings together the complete spectrum of solutions that power the planet. It features not only equipment and technology but also peerless thought leadership platforms for

everything electric – ranging from technical conclaves to industry summits and more.

IEEMA is the apex industry association for manufacturers of electrical and industrial electronics plus allied equipment in India. IEEMA has approximately 800 member organisations encompassing the complete value chain in power generation, transmission and distribution equipment. IEEMA members represent a combined annual turnover in excess of USD25 billion and have successfully contributed to more than 95% of the power equipment installed in India.

IEEMA expressed their sincere thanks for the loyal support and co-operation from TEEAM in organising a large delegation to visit ELECRAMA 2018 and thus participating in the buyers business meetings by way of doing its part in making the event a grand success.

Both parties had very fruitful discussions. A souvenir exchange capped off the ground-breaking dialogue.

Networking and Fruitful Discussions with IEEMA @ ELECRAMA 2018





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State Associations News



Electrical Association of Sarawak & Sabah

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39th Anniversary Celebration

A Grand Dinner was organised by the Electrical Association of Sarawak and Sabah (EASS) to mark the occasion of its 39th Anniversary on 12th January 2018 at the Kingwood Hotel in Sibu. The dinner was also coincided with its 4th Electrical Vocational Skill (Level 2) Graduation Ceremony which made the dinner a grand occasion.

The Guest-of-Honour was the Second Finance Minister and Minister of International Trade & E-Commerce of Sarawak, The Honorable Dato' Sri Wong Soon Koh. Other VIPs were the Chairman of the Sibu Municipal Council, The Honorable Datuk Tiong Thai King and Acting Director of Electricity Supply of Sarawak, Mr Chang Seng Yu. It was a very successful Grand Dinner which was cherished by all who were present. Well done EASS!



Grand celebration – VIPs on the stage to mark the official opening of the Grand Dinner.

Technical Visits to UCTS and Shipyards

To make TEEAM's delegation trip to Sibu more fruitful, EASS helped to organise technical visits to the University College of Technology Sarawak (UCTS) and two shipyards in Rantau Panjang, namely, Vitawani Sdn Bhd and Rajang Muda Sdn Bhd. It was an eye-opener for all who were present. UCTS has state-of-the-art teaching facilities and the shipyard companies shared interesting technology on shipbuilding. It was certainly a beneficial educational trip for all who were present.



At the UCTS Auditorium – Interesting information sharing by the University.



Amazing huge ship-building dock – Photo taken at the shipyard.

EASS at the TEEAM Council Meeting in Sibu

EASS Committee Members attended the TEEAM Council Meeting which was held on 13th January 2018 at the Kingwood Hotel in Sibu. It was a good opportunity for networking and information-sharing with EASS's peers from West Malaysia.



At the TEEAM Council Meeting – EASS Committee Members, (from left) Mr Thomas Yong (Secretary), Mr Tiong Chiong King (Deputy Chairman) and Mr Kenny Yu (English Secretary).



Sarawak Electrical Association

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ELECRAMA 2018

SEA Chairman, Dato' Sri Ir Peter Lu joined the TEEAM delegation to visit the biggest electrical power engineering exhibition in Asia, ELECRAMA 2018, which was held from 10th to 14th March 2018 in New Delhi, India. Besides visiting the exhibition, Dato' Sri Ir Lu also attended the ChangeXchange, a Reverse Buyer-Seller Meet to have business meetings with the suppliers from India. It was a good exposure to new technologies in the power transmission and distribution industry of India and from all over the world as well.



Exploring business opportunities in the Indian market – (Left) SEA Chairman, Dato' Sri Ir Peter Lu at ELECRAMA 2018. With him at the TEEAM Booth is Mr Andrew Lu (TEEAM Council Member).



Networking with IEEMA Officials – (from left) Mr Sumil Misra (IEEMA Director-General), Dato' Sri Ir Peter Lu (SEA Chairman) and Mr R K Chugh (IEEMA Vice President).

SEA at EASS 39th Anniversary Dinner

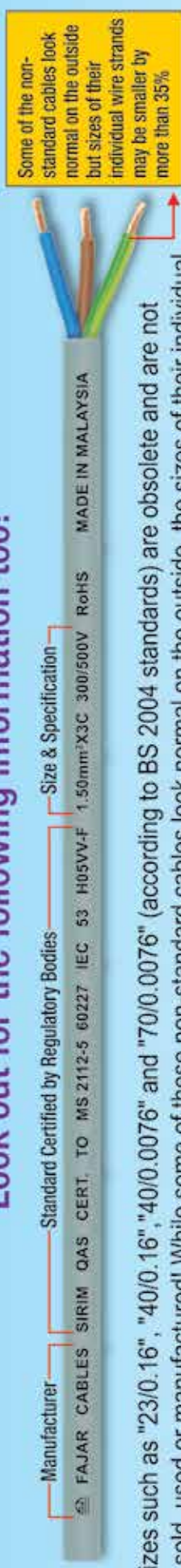
SEA was present at the Electrical Association of Sarawak & Sabah (EASS's) 39th Anniversary Dinner which was held on 12th January 2018 at the Kingwood Hotel in Sibu. SEA Chairman, Dato' Sri Ir Peter Lu together with some SEA Committee Members, were present at the celebration dinner to mark the 39th birthday of EASS and also to celebrate the achievements of EASS. It was a memorable dinner for all to cherish.



EASS 39th Anniversary Celebration – Good networking dinner.

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Penang Electrical Merchants' Association

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One Day Seminar on Lightning Protection

The Penang Electrical Merchants' Association (PEMA), with the support of Wise Pro Sdn Bhd, organised a seminar on Lightning Protection based on MS IEC 62305 Parts 1-4 & MS IEC 61643-12 at Eastin Hotel, Penang on 16th January 2018. The Organising Chairman was Ir Lee Weng Keen who is the PEMA Technical Committee Chairman. The short course covered the definition of lightning current and surge voltage; comparison of 10/350us and 8/20us energy; risk components and tolerable risks-based risk calculation, addition of measures and definition of lightning protection Levels I, II, III and V rolling sphere, etc.

Wise Pro Sdn Bhd was established in 1992. It has vast experience for the past 30 years in handling LV electrical components such as circuit-breakers, power capacitors and lightning and surge devices, automatic transfer switches, motor starters, motor protection relays and other related products. The speakers were Mr Jeffrey Ng, the Managing Director of Wise Pro, Mr SF Ng, Sales and Marketing Engineer and Mr Ritesh Lutchman, the Senior Sales and Marketing Manager of Wise Pro.

The response to the seminar was encouraging with about 60 participants taking part. The seminar was approved with ten CIDB CCD points and six BEM CPD hours. The course was also HRDF claimable. Each participant was presented with a Certificate of Attendance.



Appreciation – PEMA President, Mr Khaw Tatt Siew (left) presented a souvenir to Wise Pro speakers.



Good response – A group photo for the album.

Charity Programme at the Penang Care Centre Association

On 25th February 2018, PEMA had a good start with its charity programme for the Penang Care Centre Association. The tremendous success was a memorable moment and brought about a feeling of joyfulness in helping the Autism Spectrum Disorder (ASD) inmates, with members giving their fullest support.

Penang Care Centre Association is a charitable organisation that provides economic assistance, housing and emotional support for the ASD's assistance and other means of survival. Besides donating food and necessities for them, PEMA graciously donated RM12,000.00 to the Penang Care Centre Association.



Good memory – A group photo for the album.



Caring society – PEMA President, Mr Khaw Tatt Siew (right) was presented with a souvenir.

70th AGM & Election of Office-Bearers

PEMA 70th Annual General Meeting (AGM) and Election of Office-Bearers including the Management Council, was held at the Association premise on 25th March 2018. The meeting unanimously confirmed and adopted the minutes of the previous AGM. This was followed by the annual report for the year 2017 which was tabled by its Honorary Secretary, Ir Lee Weng Keen. The Honorary Treasurer, Mr Tang Keem Hoong tabled the audited accounts for the year ended 31st December, 2017.

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PEMA Office - Bearers for 2018-2019

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Executive Advisor	Dato' Seri Hong Yeam Wah
Association Advisors	Lai Chang Hun Foo Sing Tatt Lee Thean Chor Ir Chen Chin Peng Chiem Boon Kooi
President	Khaw Tatt Siew
Deputy President	Lee Kuan Meng
Immediate Past President	Cheah See Yeong
Honorary Secretary	Ir Lee Weng Keen
Asst Honorary Secretary	Yeap Kim Poh
Honorary Treasurer	Neoh Boon Tong
Council Members	Teoh Yew Yean Dato' Ooi Kok Kee Choo Kwang Wah Lim Kim San Tang Keem Hoong Thi Chaw Hock Chu Kerd Yee Kevin Nia Jun Hau Liong Joon Chuan Steve Koh Cheang Shern Ong Beng Siong
Contractors' Committee	Teoh Yew Yean
Manufacturer's Committee	Chu Kerd Yee
Supplier's Committee	Steve Koh Cheang Shern
Technical Committee	Ir Lee Weng Keen
Disciplinary Committee	Choo Kwang Wah
Constitution/By-Laws Committee	Cheah See Yeong
Welfare Committee	Lim Kim San
External Affairs Committee	Ong Beng Siong
Property Committee	Liong Joon Chuan
Recreation Committee	Tang Keem Hoong
Membership & Recruitment Committee	Thi Chaw Hock
Education Fund Committee	Dato' Ooi Kok Kee
IT & Multimedia Committee	Kevin Nia Jun Hau
Technical Advisors	Ir Beh Hong Pin Ir Chen Chin Peng Ir Thean Kah Kong Ir Tan Yeow Joo Ir Tan Tea Hwa
Legal Advisor	Oh Han Loon
Honorary Auditor	Lau Kok Kon
Honorary Member	Koh Ah Tee Foo Sing Tatt Lai Chang Hun Ong Choong Siang



During the PEMA election – The Election Officers checking the ballot papers.



Johor Bahru Electrical & Electronics Association

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Tel: +607 - 333 8174 Fax: +607 - 224 1923
E-mail: info@jbeea.com.my
Website: www.jbeea.com.my

2018 AGM and Pre-AGM Talk on CIPAA

The Johor Bahru Electrical & Electronics Association's (JBEEA's) 2018 Annual General Meeting (AGM) was held on 17th March 2018, a Saturday afternoon at JBEEA's very own premise.

Prior to the AGM, a Talk on CIPAA, namely, Construction Industry Payment & Adjudication Act 2012, was held in the morning and the speaker was Mr Deepak Mahadevan. He specialises in construction adjudication disputes under the CIPAA and is a partner at M/s Azmi Fadzy Maha & Sim.

The main agenda for this year's AGM was the election for the 2018-2020 term. JBEEA is pleased to announce that Mr Lee Chee Boon was once again elected as the Chairman and he won uncontested. The JBEEA Committee is as follows:

JBEEA Committee for the Term 2018-2020

Chairman	Mr Lee Chee Boon
Vice Chairman	Mr Steven Lim Kee Teck
Honorary Secretary	Mr Javy Kam Choon Wah
Assistant Honorary Secretary	Mr Kelvin Yap Tai Sin
Honorary Treasurer	Mr Chor Chin Wah
Assistant Honorary Treasurer	Mr Wong Chen Choy
Committee Members	Mr Lee Hai Soon Mr Wong Jiunn Shyong Mr Ngoe Wee Min Mr Chua Kian Kok Mr Tiow Yok Seng Mr Lim Kia Seng Mr Lee Chee Hao



Attentive – CIPAA Talk in progress.

Networking Events in Sibü

JBEEA Chairman, Mr Lee Chee Boon, together with JBEEA Honorary Treasurer, Mr Chor Chin Wah, attended the Electrical Association of Sarawak & Sabah (EASS) 39th Anniversary Dinner



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..... Continue State Associations News

by the invitation of EASS. The Dinner was held in the evening of 12th January 2018 at the Kingwood Hotel in Sibü. Upon arrival at Sibü in the morning, they took the opportunity to visit the University College of Technology Sarawak (UCTS) together with other members of TEEAM and the EASS Council. It was indeed a fruitful tour for JBEEA whereby they were able to network with other State Associations.



At UCTS – (from left) Mr Lee Chee Boon (JBEEA Chairman), Mr Andrew Lu (TEEAM Council Member from Kuching) and Mr Hii Hua Chuon (EASS Chairman, Sibü)



JBEEA at EASS 39th Anniversary Dinner – Sharing a light moment with VIPs from other states. (From left) Mr Choong Soon Yean (PKPPE President), Mr Chor Chin Wah (JBEEA Honorary Treasurer), Mr Lee Chee Boon (JBEEA Chairman) and Dato' Sri Ir Peter Lu (SEA Chairman).



Good catch-up – (left) Mr Lee Chee Boon (JBEEA Chairman) and Mr Lee Peng Sian (TEEAM Council Member).



The Perak Electrical Association

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31650 Ipoh, Perak Darul Ridzuan.

Tel: +605 - 254 1502 Fax: +605 - 250 9145

E-mail: multipower99@gmail.com / peaipoh@gmail.com

CNY Open House

The Perak Electrical Association (PEA) organised a reunion open house for its auspicious Chinese New Year Celebration on 18th February 2018 at its own premises. There were lion dance performances and traditional “Yee-Sang” was served. It was certainly a joyous occasion for all PEA Committee and Members.



Group photo – PEA CNY Open House 2018.

Charity Events

In conjunction with Chinese New Year Celebrations, the PEA Committee paid visits to an Old Folks' Home and a Dialysis Centre on 24th February 2018. They cheerfully made contributions by giving “Ang Pau” to the inmates to bring them joy and happiness.



Good cause – Photo taken at the PMA Chan Meng Khor Dialysis Centre in Bercham.



Bringing CNY joy – PEA contributing “Ang Pau” for the elderly.



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PEA at EASS's 39th Anniversary Dinner

PEA President, Mr Chan Kaim Sam and his pro-active Committee Members were invited to the Electrical Association of Sarawak & Sabah (EASS) 39th Anniversary Dinner on 12th January 2018 at Sibul, Sarawak. It was a night of fellowship and bonding, with good food served and invigorating entertainment.



Enjoyable night – PEA and TEEAM Council Members at the Anniversary Dinner.

Technical Visit in Sibul & TEEAM Council Meeting

On the morning of 13th January 2018, PEA President, Mr Chan Kaim Sam and his Committee joined the TEEAM Council to visit a shipyard in Sibul, Sarawak. It was a good opportunity to understand the shipbuilding industry located in Sibul. After the Shipyard Visit, PEA attended the TEEAM Council Meeting in the afternoon. It was held at the Kingwood Hotel in Sibul.



Shipyard Visit – Group photo at Rajang Muda Sdn Bhd.



PEA's cordial presence – TEEAM Council Meeting in progress.



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Half Day Seminar on “Energy Delivery System – Understanding Power Cables and Connections”

PKPPE, in collaboration with IEM (The Institution of Engineers, Malaysia) and YES (Young Engineer Section) Perak Branch, organised a half day seminar on “Energy Delivery System – Understanding Power Cables and Connections” on 27th January 2018 at the IEM Perak branch office. The seminar was attended by 46 IEM and PKPPE members plus non-members.

After the welcome remarks by Mr Wong Seak Wai (PKPPE Secretary and IEM YES Electrical Representative), the Speaker, Mr Albert Tan (General Manager of Conway Terminals Manufacturer Sdn Bhd) started the presentation by explaining cause and effect of a good electrical connection compared to the bad connection. According to the speaker, electrical wiring faults usually occur in joints or terminations because connectors, crimping tools/dies are not regulated. Workmanship is also a big factor that is difficult to monitor and control.

Then, Mr Ng Choon Guan (Managing Director of Conway Terminals Manufacturer Sdn Bhd) continued to cover the important factors in executing a good electrical connection, with actual cases of applications with proper and suitable crimping tools and die. He also highlighted the common problems which arise with various tools without considering the suitability of their dies to match with the connectors.

After a refreshment in the second part, Ir Tan Chow Heang (Specialist in Underground Cable Performance & Diagnostic of Asset Management & Design Standard Distribution Network Department of TNB Distribution Division) continued on the important component of power cables in energy delivery systems. In-depth understanding of cable design such as conductor metals, current ratings, insulation types, protection against external damage and installed environment were highlighted. Cable construction of low voltage cables, medium and high voltage cables and conductor screens were also covered.



Thank you – Ir Loh Bak Kim (left) presented a token of appreciation to Mr Ng Choon Guan and Ir Tan Chow Heang (right).



Group Photo – PKPPE Members with the Seminar Speakers, (2nd from left) Mr Albert Tan, (3rd from right) Mr Ng Choon Guan and (2nd from right) Ir Tan Chow Heang.

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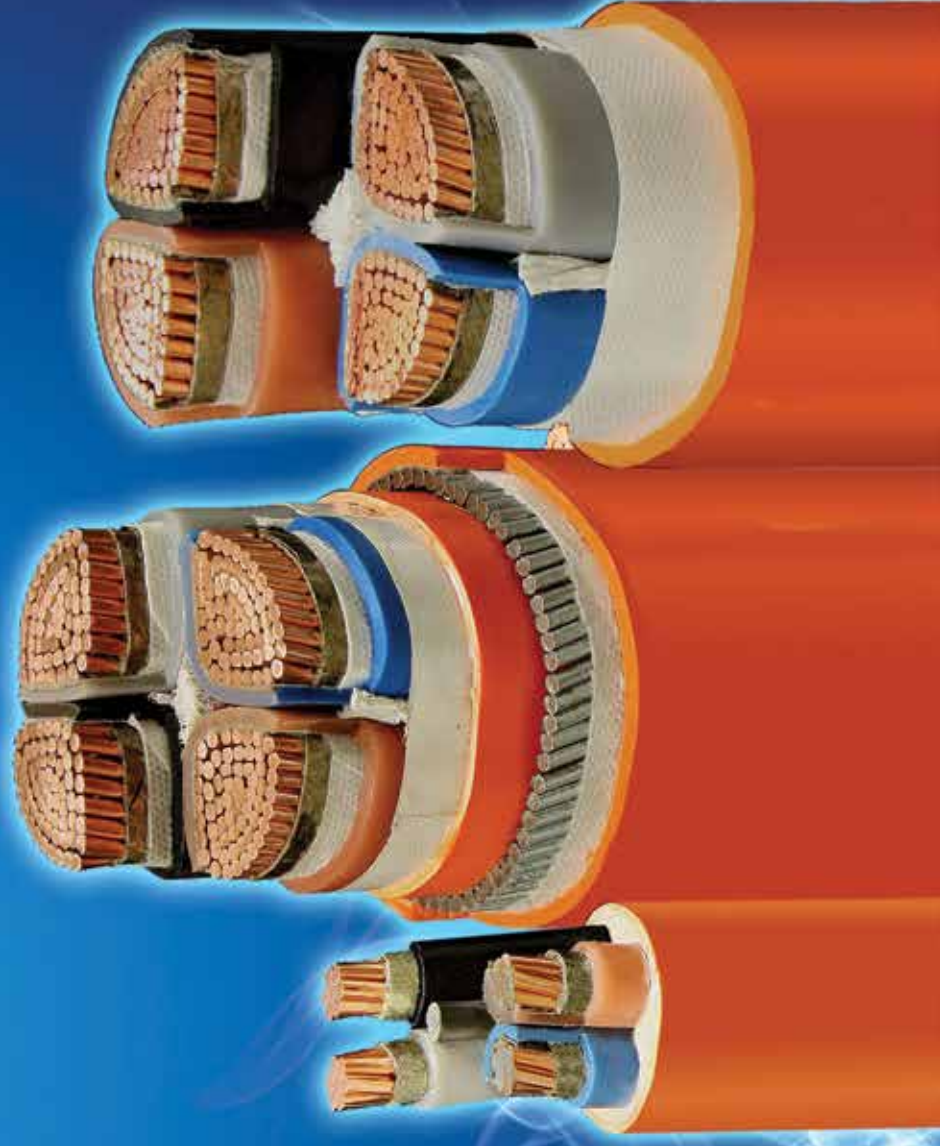
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Last but not least, the Organising Chairman Ir Loh Bak Kim, on behalf of the IEM Perak branch, presented tokens of appreciation to Ir Tan Chow Heang and Mr Ng Choon Guan. The seminar ended at 1:30pm with a sumptuous lunch provided to all participants.

Courtesy Visit by IEM Electrical Engineering Technical Division (EETD)

IEM EETD paid a courtesy visit to the IEM Perak Branch and PKPPE on 10th February 2018. They held a discussion regarding AFEO ASEAN Engineering Inspectorate (AFEO AEI) – Malaysia National Working Group (NWG): White Paper for Electrical Installation Standards in Buildings Amongst ASEAN Countries.



Briefing – Ir Ng Win Siau of IEM EETD presented the history and objectives of AFEO AEI.

Mr Leong Kok Wah (Technical Advisor), Mr Choong Soon Yean (President), Mr Wong Seak Wai (Secretary), Mr Nick Liew Kar Hoe (Vice Secretary) and Mr Tony Leong Kwong How (Committee Member) of PKPPE attended the discussion. Meanwhile, the IEM Perak Branch representatives were Ir Chow Kok Sun (Honorary Secretary), Mr Darren Chin (YES Chairman), Mr Bryan Ng (YES Secretary) and Mr Koh Ju Ann (YES Activities).

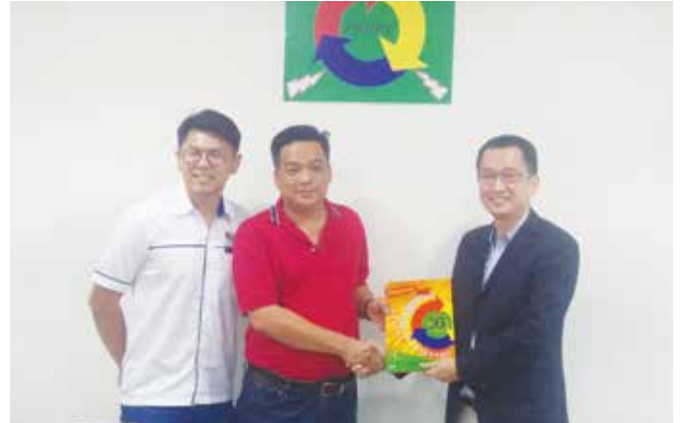
The IEM EETD working group was led by Ir Yau Chau Fong, Ir Lim Kim Ten, Ir Ng Win Siau, Dr Siow Chun Lim, Mr Alex Looi Tink Huey and Mr Low Pek Jun. During the discussion, Ir Ng Win Siau briefed on the history of AFEO AEI and presented the draft of the White Paper for Electrical Installation Standards in Buildings Amongst ASEAN Countries during the 35th CAFEO in Bangkok to all ASEAN Stakeholders from EIT-Thailand, PII-Indonesia, IES-Singapore, VUSTA-Vietnam, PTC-Philippines, Myanmar Engineering Society (MES), BEC-Cambodia, PUJA-Brunei & LUSEA-Laos. The Bangkok Declaration signed at CAFEO 35 signifies the commitment to develop the AEI Guidelines on Electrical Installation to harmonise and standardise the electrical installation system amongst ASEAN countries by 2025, to bring greater mobility of engineers and allow further cross-border projects within ASEAN.



Smiles – Group Photo during the visit.

The main objective of the visit was to update the IEM Perak Branch and PKPPE on the AFEO AEI's study regarding the various ASEAN countries' electrical installation standards and applications in each country and also to invite stakeholders to participate in the harmonisation of ASEAN electrical installation standards in line with the ASEAN initiatives of ASEAN Connectivity 2025.

IEM EETD also expressed appreciation that PKPPE and IEM Perak branch could assign the relevant personnel or Committee Members in electrical installation expertise to meet the AFEO AEI-Malaysian NWG Committee in the future for further discussion.



Fruitful discussion – PKPPE President, Mr Choong Soon Yean (centre) presented a token of appreciation to Ir Ng Win Siau (IEM EETD).

The courtesy visit and discussion provided PKPPE Committees with useful information on AFEO AEI, and PKPPE would consider to give suggestions and opinions including support in the future. The visit was capped off by the presentation of souvenirs.

Annual General Meeting 2018

PKPPE successfully held its Annual General Meeting (AGM) 2018 on Saturday, 3rd March 2018 at the PKPPE premises. The Committee for 2016-2017 was dissolved and a new Committee for 2018-2019 was elected during this AGM.

A simple yet delicious buffet lunch was served before the AGM started.

The AGM started at 2:00 pm and the PKPPE President, Mr Choong Soon Yean expressed his sincere appreciation to members for attending the AGM. He reviewed all the past events, issues arisen and expressed the difficulties and also happiness during his term of service as President. He also hoped all the members would be more active in participating and supporting the newly-elected Committee.



Keynote address – Speech by the PKPPE President, Mr Choong Soon Yean.



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Congratulations! – Group photo of the new PKPPE Committee Members for 2018-2019.

The meeting approved the minutes of the previous AGM. The Secretary, Mr Wong Seak Wai, presented the annual report on the PKPPE 2017 activities. The audited annual account for the year was then presented by the Treasurer, Mr Chew Kam Hoong. Both documents were adopted in the AGM.

After the Report was presented, Mr Wong Seak Wai (Secretary) gave a brief introduction of all qualified competent personnel's curriculum-vitae, to all the members before the election of the new Committee started.

Mr Choong Soon Yean was re-elected as the President to lead PKPPE. Mr Nick Liew Kar Hoe was elected as the Deputy President. The PKPPE President, Mr Choong Soon Yean, expressed his appreciation to all the members who had continued to support him for the second term. He wished that all Committee Members could work closely and continue to bring the Association to a better future. The AGM adjourned at 4:30 pm.

PKPPE Committee Members for 2018-2019

President	Mr Choong Soon Yean
Deputy President	Mr Nick Liew Kar Hoe
Vice Presidents	Mr Yong Chee Choong
	Mr Tan Soo Choy
	Mr Stanley Wong Chen Yu
	Mr Tony Leong Kwong How
	Mr Ong Kean Seng
Secretary	Mr Wong Seak Wai
Treasurer	Mr Chew Kam Hoong
Vice Secretary	Mr Andrew Lee Chan Wah
Committees	Mr Lam Kwong Heng
	Mr Steven Kong Kean Wei
	Mr Bryan Chong Sing Lim
	Mr Tan Thow Keen
	Mr Kelvin Khoo Soon Seng
	Mr Quah Hoo Kooi
	Mr Gan Si Mia
Auditors	Mr Kan Kok Meng
	Mr Khoo Choo Boon

Oath-Taking Ceremony

The Oath-Taking Ceremony-cum-Dinner for the newly-elected PKPPE Committee was held on 8th March 2018 at the East Ocean Seafood Restaurant in Menglembu. All honorary guests including the Founder, Advisor, Honorary Presidents, Press Members and outgoing Committee Members were invited to witness the ceremony.

The Dinner started with a welcome address by the Emcee, Mr Andrew Lee. He gave an introduction and briefed on the dinner programme. In his speech, the President, Mr Choong Soon Yean, thanked all the Advisors, Honorary Presidents, the Press-Media and the Committee

for gracing and supporting the event. He also hoped the Association would keep organising more seminars on electrical safety and quality control learning activities. Furthermore, PKPPE should also keep a good working relationship with the relevant government departments and other associations so that its social role can be upgraded for the benefit of its peers and society. Mr Choong appreciated the great support from the Media for publishing news of the association and helping to promote the association's reputation. The President hoped that the Media will further contribute to the association's goals by conducting a series of safety awareness activities in the future and conveying to the public a better understanding of electricity.



Taking oath – The ceremony was witnessed by Mr Cheah Koon Yeong (Founder, Past & Honorary President), Ir Fong Chin On (Electrical Advisor) and Ir Lee Cheow Tong (Electrical Advisor).

All the new Committee Members were introduced to each other and this was followed by the installation and Oath-taking Ceremony that was witnessed by Mr Cheah Koon Yeong (Founder, Past & Honorary President), Ir Fong Chin On (Electrical Advisor) and Ir Lee Cheow Tong (Electrical Advisor).



New Line-up – PKPPE Committee Members for the year 2018-2019.

After the Oath-taking Ceremony, a group photo was taken for memory sake. The Dinner continued with the presentation of appreciation Certificates as a recognition to the outgoing Committee for 2016-2017. The Certificates were presented by Mr Cheah Koon Yeong, Ir Fong Chin On and Ir Lee Cheow Tong accompanied by Mr Choong Soon Yean (President), Mr Nick Liew Kar Hoe (Deputy President) and Mr Chew Kam Hoong (Treasurer).

The night was filled with laughter and excitement. There were delicious food and amazing cocktails to savour.

PERDA Chinese New Year Dinner 2018

A Chinese New Year Dinner hosted by the Perak Electrical & Radio Dealer's Association (PERDA) was held at the Mun Cheong Restaurant in Pasir Puteh, Ipoh on 10th March 2018. PKPPE had been officially invited and the Dinner was attended by Mr Choong Soon Yean (President), Mr Chew Kam Hoong (Treasurer) and Mr Tan Thow Keen (Committee).

The Dinner started with a lion dance. In his speech, the PERDA President, Mr Wong Tet Woon AMP, called on his members to take advantage of the government's permission to replace formal classes



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..... Continue State Associations News

and exams with work experience and to consequently seize the opportunity to obtain the Malaysian Skills Certificate (SKM) as soon as possible. He highlighted that the Energy Commission had started to pay attention to whether the home appliance business technicians have the relevant certificates.

He also mentioned that the New Year reunion offers meet-ups and co-celebration platforms to promote mutual friendship. He hoped that members would participate enthusiastically every year and welcomed everyone to help the old and the young alike.

The Dinner Organising Chairman, Mr Toh Chong Soon, in his welcome address said that under the impact of online shopping, the traditional electrical appliance industry should re-double its efforts to create better services to attract customers to buy and to also get a good after-sales-service. He pointed out the transformation of the traditional home appliance industry into the e-commerce sector is a current trend and that one cannot stay out of it. The dinner ended at 10.30 pm.



Happy moment – Photo of PKPPE and PEA Committee Members.



Celebration – Chinese tradition “Lau Sang” on the stage.

Malaysia Yannong Federation Networking Lunch

A networking lunch was hosted by the Malaysia Yannong Federation on 25th March 2018 at the Kok Thai Restaurant in Tasek, Perak. There were about 90 participants from all over Malaysia who attended this event including PKPPE. Mr Nick Liew Kar Hoe (Deputy President) together with Mr Tony Leong Kwong How (Vice President), Mr Yong Chee Choong (Vice President), Mr Khoo Choo Boon (Auditor) and Mr Lam Meng Yang (Technical Team Member) showed their support too.

In the luncheon agenda, PKPPE was invited to do a presentation to all participants on the PA system and electrical protection for the swallow house. PKPPE Committee Member, Mr Lam Meng Yang, made a presentation on PA system wiring and installation. A demo control board was also prepared by Mr Tony Leong for demonstration purposes, followed by the explanation on the functionalities of the Auto Recloser RCCB and Surge Protection Device, by Mr Nick Liew.

After the presentation, it was a lively and interesting Q&A session. The lunch ended at 2.00 pm.



Thank you – President of the Malaysia Yannong Federation, Mr Steven Wong (right) awarded a Certificate to Mr Nick Liew after his interesting presentation.



Networking lunch – Support from PKPPE.

One Day Seminar On “Electrical Services and Engineering Practice in Compliance to Rules and Regulations”

On 31st March 2018, PKPPE together with IEM Perak Branch organised a seminar on “Electrical Services and Engineering Practice in Compliance to Rules and Regulations” at the IEM Perak Branch Office. Some 46 members of PKPPE and IEM attended the event.



Speaker – Ir Loh Bak Kim delivered his presentation.

The first topic was “Electrical Services” and it was presented by Ir Loh Bak Kim AMN. Topics covered included Design Procedure and Criteria; Rules, Regulations and Authorities Requirements to be complied; Planning, Co-ordination and some common electrical designs in building works.

After the refreshment, Ir Loh continued with topics on Electrical Loading Design according to standards such as MS 1936:2207, MS IEC 60364-5-52:2003, etc. He also gave some case studies for calculation for lighting, power, water-heater, air-conditioner, water pump, etc. Furthermore, he also covered some common methods of starting induction motors such as DOL, Star-Delta, Auto-Transformer, Rotor Resistance and AC Semiconductor Motor Controller and Starter.

On behalf of IEM Perak, a token of appreciation was presented by Ir Chow Kok Sun to Ir Loh Bak Kim after his presentation.



Fruitful seminar – Group photo to cap off the session.



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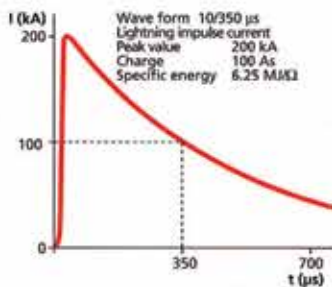
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In the afternoon session, the seminar continued with the topics on "Selection of Switchgear for LV Power distribution and Re-active Power & Harmonic Mitigation" by Mr Apurba Ghosh from Larsen & Toubro Limited. Some other topics from Mr Apurba Ghosh included: Low voltage switchgear terminologies related to voltage and current; Behavior under normal and overload conditions, short-circuit conditions; Switchgear Selection; Fault level Calculation; Bus Bar Design in LV Switchboards; Discrimination/Selectivity in Power System and so on.

The session ended with the presentation of a token of appreciation to Mr Apurba Ghosh, by Ir Loh Bak Kim from IEM Perak. The course was very informative with a lot of case studies given by both presenters. The course ended at 5.30 pm.

Technical Visits in Sibü

In conjunction with the Electrical Association of Sarawak & Sabah (EASS's) 39th Anniversary celebration, the PKPPE President, Mr Choong Soon Yean, together with the Treasurer, Mr Chew Kam Hoong, joined the TEEAM Council to a technical visit in Sibü. In the morning of 12th January 2018, they visited the famous University College of Technology Sarawak (UCTS). It was a good exposure to the modern technologies and facilities that were available at the University.



Networking at UCTS – Delegates posing with UCTS official.



Amazing shipyard – A memorable and eye-opening visit for all.

For the next day's programme, both Mr Choong and Mr Chew visited the shipyard in Rantau Panjang, Sibü. It was an eye-opener visit to a ship-building yard.

PKPPE at the EASS Anniversary Dinner

On 12th January 2018, Mr Choong Soon Yean (President) and Mr Chew Kam Hoong (Treasurer) attended the Electrical Association of Sarawak & Sabah (EASS's) 39th Anniversary Dinner at Kingwood Hotel, Sibü. This was by the invitation of EASS. Overall, it was a great occasion to build a stronger relationship between East and West Malaysia E&E professionals.



Support from Perak – (From left) Mr Chan Kaim Sam (PEA President), Mr Chew Kam Hoong (PKPPE Treasurer) and Mr Choong Soon Yean (PKPPE President).

Courtesy Visit by EASS

On 15th April 2018, the Chairman of the Electrical Association of Sarawak and Sabah (EASS), Mr Hii Hua Chuon, and Mr Young Leh Luang (Secretary), paid a courtesy visit to PKPPE to exchange knowledge, further develop acquaintances and understanding better on the latest market development, as well as to keep abreast of updated news in the electrical industry. The objective was to enhance

the chances for the association further development. EASS received a warm welcome by the PKPPE President, Mr Choong Soon Yean, and his Committee Members.

During the visit, PKPPE shared and exchanged information on the association's historical background and its facilities. The Committee shared the events of the past and shared technical knowledge with EASS. In addition to that, Mr Hii took the opportunity to introduce the Sarawak electricity company, Syarikat SESCO Berhad (formerly known as Sarawak Electricity Supply Corporation – SESCO). It is responsible for the generation, transmission and distribution of electricity in Sarawak.

The PKPPE Committee was also briefed on the functions and duties of the Electrical Inspectorate Unit (EIU) in Sarawak – which was to strengthen the implementation and enforcement of the provisions in the Ordinance and the Electricity Rules of the State. Both associations exchanged tokens of appreciation at the end of the fruitful visit.



Better Understanding – A short introduction by Mr Choong Soon Yean (PKPPE President).



Souvenir presentation – It was certainly worth visiting and keeping in good memory.

Other State Association Members' contacts:



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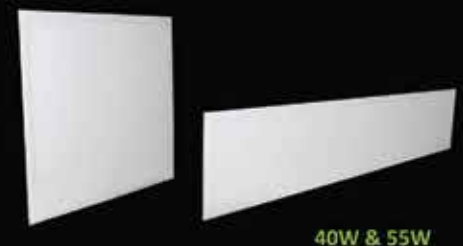
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How to Connect and Terminate Aluminium Cables Correctly

Mr Ng Choon Guan
Conway Terminals Manufacturer Sdn Bhd

What is a Good Electrical Connection?

A good electrical connection is one that is able to conduct current safely at a low temperature, resulting in energy saving. It should also be able to last for many years (up to 30 years or even longer).

A bad electrical connection on the other hand conducts current poorly at a higher temperature, creating heat loss and even risk of fire. For a building that consists of many joints and terminations, every connection's heat loss adds up. Even if each connection were to lose a few Watts, the lost multiples by many numbers of connections, over a period of 24 hours for 365 days in a year, will equate to a big heat loss and wastage.

Aluminium Conductor as an Alternative to Copper

When it comes to conductivity, Aluminium is the best alternative to Copper in terms of commercial value and engineering properties. Compared to Copper, the specific gravity of Aluminium is only a third but its electrical conductivity is up to 60% of Copper. Aluminium is also about 70% cheaper than Copper. Due to its light weight and low cost relatively, Aluminium conductors are widely used in electrical projects today.

However, Aluminium that comes in contact with Copper can cause corrosion in a short span of time resulting in a damaged contact. Since Aluminium and Copper have different electrical potentials and expansion ratios, the hot and cold cycles with exposure to air will increase resistance and subsequently corrode the contact. This phenomenon is known as the coupling effect, or galvanizing.

In the absence of proper connectors, many Aluminium conductors that were installed in the early days have been found to break down after a short period of operation. This has caused the consultant engineers, contractors and owners to shy away from using Aluminium conductors, making it less popular to be used for indoor electrical wiring.

Bi-metal Cable Lugs and Links

This setback however has now changed with the invention of friction-welding type Bi-metal lugs and links from Europe, which are now widely used. The Bi-metal lug is today the best solution to solve the contact problem between Aluminium and Copper. Tenaga Nasional

Berhad (TNB) has been using Aluminium cables and Bi-metal lugs for the last twenty years without any problems. This proves that the modified Aluminium conductors are equally good and reliable as Copper conductors.

In the International market, quality Bi-metal lugs and links are mainly produced from Europe, with the most outstanding product coming from France. Its governing standard is the HN 68-S-90 titled "Connection of Aluminium Conductor Insulated Cables by Deep Indentation". This standard covers the specification of materials, dimension of connectors, friction welding area, crimping method and die, type test and acceptance test. It is today recognized and used internationally.

Equally important is the IEC testing standard, IEC 61238-1 titled "Compression and Mechanical Connectors for Power Cable for Rated Voltages up to 30kV", which is also widely accepted. TNB also adopts both the above standards and accepts the type test. Therefore, a Bi-metal lug that is in compliance to the above standards and type test can be accepted for electrical projects that use Aluminium cables.

The fabrication of Bi-metal lugs involves Aluminium and Copper being fused together in a process called friction-welding. This is done by spinning Aluminium and Copper on a machine to allow the metals to rub against each other to produce high heat. During this stage, a strong force is applied to weld the two metals together. A good quality friction welding has the two metal surfaces sealed perfectly without any air gaps, which will prevent corrosion on the contact. A good and sufficient welding area also contributes to good conductivity and mechanical strength of the connection. It is easy to understand the manufacturing processes, but the actual production of Bi-metal connectors is a complicated process, which requires the latest advancement in machinery technology, technical skill and know-how with proper quality control in place.

Malaysian Standard for Bi-metal Lugs

To cater for the application of Bi-metal cable lugs on Aluminium cables, Standards Malaysia in collaboration with TEEAM as a Standards Writing Organization (SWO), has since developed the MS



A Standard-compliant Bi-metal Lug



Comparison between a Standard-compliant and Sub-standard 300mm² Bi-metal Lug

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KYODO PIPE Standard Galvanised Steel Conduit BS 31 CLASS B (SCREWED) / MANUFACTURER'S STANDARD

NOMINAL SIZE	OUTSIDE DIAMETER				WALL THICKNESS				CALCULATED WEIGHT WITH COUPLER	NUMBERS OF THREADS	LENGTH OF THREADS					
	MINIMUM		MAXIMUM		MINIMUM		MAXIMUM				MINIMUM		MAXIMUM			
	in	mm	in	mm	in	mm	in	mm			in	mm	in	mm		
¾	18.76	0.7387	19.05	0.7500	1.52	0.060	1.53	0.064	0.713	0.217	0.479	16	12.70	0.5000	14.29	0.5625
1	25.11	0.9887	25.40	1.0000	1.52	0.060	1.53	0.064	0.972	0.296	0.653	16	15.88	0.6250	17.46	0.6875
1¼	31.46	1.2387	31.75	1.2500	1.52	0.060	1.53	0.064	1.240	0.376	0.830	16	17.46	0.6875	19.05	0.7500
1½	37.80	1.4880	38.10	1.5000	1.73	0.068	1.83	0.072	1.680	0.511	1.130	14	19.05	0.7500	20.64	0.8125
2	50.50	1.9880	50.80	2.0000	1.93	0.076	2.03	0.080	2.510	0.765	1.690	14	22.23	0.8750	23.81	0.9375

MS 275 / BS 4568 CLASS 3 (SCREWED) / MANUFACTURER'S STANDARD

NOMINAL SIZE	OUTER DIAMETER		WALL THICKNESS	CALCULATED WEIGHT WITH COUPLER		PITCH	LENGTH OF THREADS	
	MINIMUM	MAXIMUM		MINIMUM	MAXIMUM		MINIMUM	MAXIMUM
mm	mm	mm	mm	kg/m	kg/m	mm	mm	mm
20	19.7	20.0	1.6 ± 0.15	0.643	0.783	1.5	13	15
25	24.6	25.0	1.6 ± 0.15	0.811	0.995	1.5	16	18
32	31.6	32.0	1.6 ± 0.15	1.069	1.301	1.5	18	20

MS IEC 61386-1 / MS 61386-21 Conduit Systems for Cable Management.

NOMINAL SIZE	OUTER DIAMETER		INSIDE DIAMETER	EXTERNAL THREAD LENGTHS
	MINIMUM	MAXIMUM		
mm	mm	mm	mm	mm
20	19.7	20.0	16.2	14.0
25	24.6	25.0	21.1	17.0

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TEEAM-MBAM Dialogue

TEEAM had a friendly dialogue with the Master Builders Association of Malaysia (MBAM) on 23rd January 2018. A 6-member delegation headed by TEEAM President, Ir Yong Ah Huat, paid a courtesy visit to the MBAM Headquarters. The other five TEEAM Delegation members were Mr Suresh Kumar Gorasia (International Affairs Chairman & Past President), Mr Ooi Eng Guan (Assistant Honorary Treasurer & Publication Chairman), Mr How Chee Seng (Council Member), Mr Lawrence Lai (Council Member), and Ms Winnie Khong (Executive Secretary).

Officials of MBAM who were on hand to meet the TEEAM delegation were Mr Foo Chek Lee (President), Mr Kenneth Liew (Treasurer-General-cum-Chairman of the Mechanical & Electrical (M&E) Committee), Mr Chong Tat Yam (Council Member-cum-Deputy Chairman of the M&E Committee), Mr Vincent Lim, Mr Chia Moh Cheang and Mr Looi Hong Wei (M&E Committee Members), Ms Loh Mei Ling (Executive Director), Mr Michael Thong (Assistant General Manager), Mr Leon Leong (Assistant Manager) and Mr Muhammad Fadzley (IT & Admin Executive).

The objectives were to enhance closer collaboration and to foster a better understanding between both the associations. The dialogue started with an MBAM Corporate Video presentation plus one on the 44th IFAWPCA Convention video. MBAM

invited TEEAM to participate in their networking activities, exhibitions and also to consider joining as an MBAM Affiliate Member.

The dialogue discussed both associations' roles, functions, membership and activities. The dialogue went on to discuss possible collaboration in education and training including addressing government procurement plus foreign worker issues. Both parties had very fruitful discussions. A group photo capped off the meaningful dialogue session.



After the fruitful dialogue – TEEAM and MBAM Officials posing for the album.



..... Continue How to Connect and Terminate Aluminium Cables Correctly

2584:2014 – Specification for the Material, Marking, Dimensions and Type Test Crimp type Copper Aluminium Bi-metal lugs for use with XLPE insulated and compact Aluminium Conductors in single and multi-core Power Cables' applications up to 36 kV.

Currently Bi-metal lugs type-tested to IEC 61238-1 and in compliance to MS 2584:2014 with matching tools and dies are available in Malaysia and commonly used in electrical projects. However, many sub-standard Bi-metal lugs are also imported into Malaysia. These non-compliant lugs do not match the specification and dies for standard-compliant lugs. They are usually small in size and fabricated poorly resulting in temperature rise in the area of connections. Using these lugs will result in heat loss, energy waste and fire risk.

In order to achieve good connections for Aluminium cables, it is important to specify and use Bi-metal lugs that are type-tested to IEC 61238-1 or MS 2584:2014 standards. In any termination or jointing of connectors, the selection of matching tool and die are equally as important in order to achieve the perfect connection. For Aluminium cable connections, indent dies are commonly used. The tools are mainly hand-operated hydraulic tools but the electric pump is also popular for fast and easy operation.

Lastly, the human factor is equally as important in achieving a good electrical connection. It is vital that wiremen and electricians be willing to work according to the Manufacturer's instructions. For bigger connectors, crimping should be done more than once, or according to the Manufacturer's instruction. In Malaysia, tools

with standard-compliant dies are now easily available. Therefore, when the right connectors and tools are used and work is carried out in compliance to procedure, good connections can be easily achieved.



Indenting Tool and Container Dies for Bi-metal Lugs

Mr Ng Choon Guan is the Managing Director of Conway Terminals Manufacturer Sdn Bhd. He has more than 38 years of experience in manufacturing electrical connectors and crimping tools. He can be reached by phone at 03-5122 1223 or E-mail: ask@conway.com.my



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IEM-EETD & TEEAM Dialogue with SEDA

The Electrical Engineering Technical Division of the Institution of Engineers Malaysia (IEM-EETD) together with TEEAM, paid a courtesy visit to the Sustainable Energy Development Authority Malaysia (SEDA) and had a friendly dialogue on 20th February 2018.

SEDA Chief Operating Officer, Ir Akmal Rahimi, welcomed IEM-EETD Committee Members and the TEEAM President. They then proceeded with the introduction of the SEDA Management Team. Thereafter, the IEM-EETD Chairman, Ir Chong Chew Fan, introduced his Committee Members and also the TEEAM President, Ir Yong Ah Huat.

Among the key issues discussed at the Dialogue were the following:

- Assist SEDA in conducting survey and research for new Renewable Energy (RE) and Energy Efficiency (EE) policies whereby SEDA shall share information with IEM-EETD and TEEAM on the current and future development of new policies related to RE and EE.
- Conduct joint workshops and seminars with SEDA on Large Scale Solar (LSS) and biogas and also jointly organise technical visits to RE and EE sites such as the Ulu Kanchong Biogas Power Plant in Negeri Sembilan.
- Development and promotion of Malaysia Standard (MS) related to RE and EE to the stakeholders.
- Supporting the ASEAN Federation of Engineering Organisations' (AFEO) Initiatives and White Papers in RE and EE. IEM-EETD to share with SEDA the ASEAN Green Energy White Paper developed under AFEO.



Fruitful meet – IEM-EETD Committee Members and TEEAM President, Ir Yong Ah Huat (sixth from left) posing with SEDA Officials. At the centre is Ir Akmal Rahimi (SEDA COO).

- To look into standards and policies on the harmonisation of RE and EE in ASEAN countries.
- SEDA invited to support the IEM-Standards Malaysia-Suruhanjaya Tenaga-organised ASEAN Electro-technical Symposium & Exhibition 2018.
- IEM-EETD to liaise with SEDA's Human Resource and Training Department to organise its Route to PE workshops.

It was a highly fruitful discussion among the three parties and it is hereby hoped that all can pro-actively contribute to the resounding development of the RE and EE industries for the nation.



AFEEC-FAPECA Conference & Meeting 2018, Philippines

**In-conjunction with Electrical, Energy & Power Philippines 2018 (EE & P 2018)
50th Anniversary of Society of Philippine Electro-Technical Constructors and Suppliers, Inc**

The Conference and Meeting of the ASEAN Federation of Electrical Engineering Contractors (AFEEC) and the Federation of Asian Pacific Electrical Contractors Associations (FAPECA) for 2018 will be held from 20th to 21st September 2018 at SMX Convention Centre, Pasay City, Philippines. The theme for this year's Conference is "Energy Solutions". The event will be hosted by the Society of Philippine Electro-Technical Constructors and Suppliers, Inc (SPECS).

The conference and meeting will draw participation from national associations including the Association of Indonesia Electrical and Mechanical Contractors (AKLI), Korea Electrical Contractors Association (KECA), National Electrical and Communications Association, Australia (NECA Australia), Singapore Electrical Contractors and Licensed Electrical Workers Association (SECA), Taiwan Electrical Contractors Association (TECA), Thai Electrical & Mechanical Contractors Association (TEMCA), Hong Kong Electrical Contractors Association (HKECA), SPECS and TEEAM.



TEEAM will be organising a delegation to attend the above events and TEEAM members are invited to participate. This is an excellent platform to network with M & E contractors from ASEAN and the Asia-Pacific region.

Itinerary:

- Sept 19th : Arrival & Golf Tournament at Manila Southwoods
- Sept 20th : Opening Ceremony
Conference
Welcome Dinner
- Sept 21st : AFEEC Council Meeting
FAPECA Board Meeting
Farewell Dinner
- Sept 22nd: Departure

For more details & registration, please contact the TEEAM Secretariat at teeam52@gmail.com.



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