

Half-Day Talk on “Power Hydraulics for Heavy Machinery: System Optimization and Cost Saving”

Date : Saturday, 11 July 2020
Venue : IEM (Southern Branch) Training Centre, 24B, Jalan Abiad, Taman Tebrau Jaya, 80400 Johor Bahru
Speaker : Ir. Assoc. Prof. Yahaya Ramli

Synopsis

Power hydraulic systems is used in many types of industrial applications, especially for heavy duty machineries. This system handles critical working parameters and applications such as heavy load, high pressure and high temperature fluid, smaller size components, high degree of material compatibility and high level of noise and vibration. Comprehensive understanding in basic principle, operation and maintenance of the power hydraulic systems and their associate equipment are essential for optimal hydraulic performance. Problem identification and review on the practical aspects of the existing hydraulic circuit and components are crucial for system optimization.

The main objective of this technical talk course is to provide some fundamental and practical aspects of power hydraulic systems for industrial heavy machinery with regards to its operating circuits, function of individual component, causes of malfunction and approach to identify problems during troubleshooting. Some basic design criteria and selection of hydraulic components will be highlighted to recognize the most critical parameters for system optimization towards minimal maintenance activity and overall cost saving.

| Time | Tentative Programme |
|-------------------------|--|
| 8.30 a.m. – 9.00 a.m. | Registration |
| 9.00 a.m. – 9.10 a.m. | - Welcome Speech By IEM (SB) Organising Committee |
| 9.10 a.m. – 10.30 a.m. | Session 1 - Industrial Power Hydraulics: Fundamental, Operational and Problem Identification |
| 10.30 a.m. – 10.45 a.m. | - Coffee Break |
| 10.45 a.m. – 12.15 p.m. | Session 2 - Optimization and Troubleshooting Towards Cost Saving |
| 12.15 p.m. – 1.00 p.m. | - Discussion/Case study - Question & Answer Session |
| 1.00 p.m. | Closing & End of Talk |

About the Speaker:

Ir. Assoc. Prof. Yahaya Ramli currently is an Associate Consultant in plant engineering servicing company. He is a retired Associate Professor from the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), Skudai, Johor and the Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia (UTHM), Batu Pahat, Johor. His field of specialization is fluid mechanics, fluids machineries, and fluid power systems (hydraulic & pneumatic). Prior to join as an academican, he has several years of practical experience in various technical and management level in palm oil, electronic and petroleum industries. He has involved in installation, operation and maintenance of water tube and fire tube boilers, steam turbines and generator set (ICE), pump and compressors while working in FELDA oil palm mill, Sobena Offshore Inc., and PETRONAS Gas Bhd. He is graduated from MARA Institute of Technology (ITM) in Mechanical Engineering and obtained his MSc (Fluid Power Systems) from University of Bath, U.K. He is a Professional Engineer (P.Eng) registered with the Board of Engineers, Malaysia (BEM) and a Cooperate Member (MIEM) of the Institute of Engineers, Malaysia (IEM). He is an Associate ASEAN Engineer registered with ASEAN Engineer Register (AER) and a Professional Technologist (P.Tech) registered with the Malaysian Board of Technologists (MBOT). Registered trainer with the Pembangunan Sumber Manusia Berhad (PSMB). Previously, he has trained to be Pegawai Penilai Dalaman (PPD) with Majlis Latihan Vokasional Kebangsaan (MLVK).

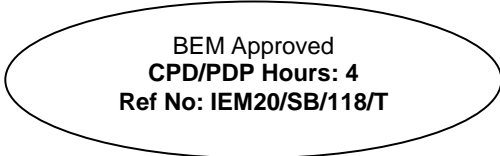
Participant Fees:

| | Online | Normal |
|--|-----------|-----------|
| IEM Corporate Member & Graduate Members (30 years and above) | RM 70.00 | RM 90.00 |
| IEM Senior Engineers (60 years and above) IEM Graduate Members (Below 30 years) | RM 60.00 | RM 80.00 |
| IEM Senior Engineers (60 years and above) | RM 60.00 | RM 80.00 |
| IEM Student Members | RM 40.00 | RM 50.00 |
| Non-Member | RM 120.00 | RM 150.00 |

Closing Date: 7th July 2020

The seminar is strictly limited to **30 participants** only. Registration will be on a first-come-first-serve basis. Kindly return the reply slip to the IEM (SB) office before **7th July 2020** together with a non-refundable cheque for the participant fees made payable to **The Institution of Engineers, Malaysia (Southern Branch)**. Alternatively, you could bank-in the participant fees into the Institution's Maybank Current Account (No. 5-013920-15708), and to facsimile both the Bank-in and Reply Slips to the Institution. The Institution requests all members co-operation in ensuring fees are paid in advance to the seminar. Please also be reminded that fees will not be refunded to absent participants who have paid, and to also note that all reservations must be paid despite participant cancellations. Thank you for your continuous support of the Institution.

Chairman, Sub-Committee on Seminar and Technical Talk, IEM (SB)



REPLY SLIP

To: Hon. Secretary, The Institution Of Engineers, Malaysia (Southern Branch) **Fax: 07 - 3363406**

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System Optimization and Cost Saving”**

Saturday, 11 July 2020, 9.00 a.m. – 1.00 p.m.

at IEM (Southern Branch), Training Centre, 24-B , Jalan Abiad, Taman Tebrau jaya, 80400 Johor Bahru, Johor

I wish to attend the above talk. I enclosed herewith a cheque no. for the amount of RM.....as payment for the participant fee.

Name of Member: Membership No:..... I/C No:
Address: Tel(O):(Fax).....
..... Tel (H/P):
.....E-mail :

Company's Name:

Signature: Date:

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