

**Technical Visit to Customcraft Sdn Bhd**

by Ir. Hor Kok Luen

Ir. Hor Kok Luen is currently the Secretary in the Agricultural and Food Engineering Technical Division (AFETD).

The Agricultural and Food Technical Division had organized a visit to Customcraft (M) SDN. BHD in Bukit Kemuning, Selangor, on 28<sup>th</sup> May 2016 (Saturday). There were total of 19 participants in the visit with various discipline and engineering background. The participants left the Bangunan Ingenieur at 8.05 am sharp and arrived at Customcraft (M) SDN. BHD at 8.50 am approximately. The welcoming session was done friendly by the company General Manager (Sales Division), Mr. Lenny Sing.

The introduction session started with the briefing on the company set up and profile. Customcraft (M) SDN. BHD (CCMSB) WAS FOUNDED IN 1994 IN SHAH ALAM. The management team of the company has an average 28 years of hands-on experiences in retrofitting and servicing various types of steam turbine (Impulse and reaction), screw decanters and sand removal vortex cyclone system in palm oil mills particularly. As shared by Mr. Lenny Sing, the steam turbines that applied in palm oil mill are mainly for power generation. Palm oil mill is a self-sustained industry in power supply and consumption. The steam turbines that applied typically range from 500KW-2500KW single stage, and 3000KW – 5000KW multi-stage back pressure turbine.

For the 3-phase full stainless steel screw decanter that operated at 3500 revolution per minute (rpm), the machine is applied for oil recovery from the sludge while removing the solid effectively to bring down the solid load to the effluent treatment plant. In order to protect and prolong the life span of decanter, effective sand removal with vortex cyclone system is vital for the whole application system as sand (silica) is the biggest enemy for stainless steel based G-Force machine. In general, multi-cyclone de-sanding system commonly refers to the cyclone system for the separation of dense matters from liquids. Cyclones are extensively used by palm oil mills to separate or remove abrasive sand particles from palm oil sludge or crude palm oil depending on the requirements. The decanters are utilized for continuous recovery of palm oil from de-sanded sludge oil delivered ex-vertical clarifier tank in palm oil mill. The palm oil recovery process is accomplished efficiently without the conventional nozzle sludge separators or oil purifiers. Oil recovery from 3 phase decanter is affected by way of continuous separation of sludge into three phases e.g. light phase (recovered oil), heavy phase (sludge waste water) and solid phase (decanter cake). These are all aspects where CCMSB is proud of their specialty.

Until today, CCMSB has many existing clients and potential customers not only from Southeast Asia (Malaysia, Indonesia, Thailand, Vietnam and Cambodia) but also from America Latin. The participants were also presented on the company organization chart and the various licences obtained by the company.

During the factory site visit, Mr.Lenny Sing did share with the participants on the process flow on the routine steam turbine servicing as well as screw decanter servicing program that based on operating hours, which in the range of 4500-5500 hours, equivalent to every calendar year. This is to ease the end user to plan to shut down the machine(s) for annual service especially during the low crops months.

Customcraft (M) SDN. BHD (CCMSB) is well equipped in metalizing work, and has the capability to refurbish, redesign & modify specialized engineering equipment for all kinds of industry. According to Mr.Lenny Sing, CCMSB has also ventured into Water & Waste Water Industry, Water Reclamation System, Petro-chemical, Oil & Gas Industries, Engineering Services, In situ-machining, Chemical supply, gas valves and others. At the end of fruitful technical visit, on behalf of IEM, a token of appreciation was presented to Mr.Lenny Sing. The visit ended at 1 pm and the participants arrived in IEM HQ at 1.45 pm approximately.



Session Chairman Ir. Hor Kok Luen presenting a token of appreciation to Mr. Lenny Sing, the General Manager (Sales Division) of Customcraft (M) Sdn Bhd.



Technical briefing and presentation by Mr. Lenny Sing to the participants