



A Half Day Workshop on Shell-and-Tube Exchanger Thermal Design

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A half day workshop on Shell and Tube Exchanger Thermal Design was organised by Chemical Engineering Technical Division (CETD) IEM. It was delivered by Ir. Anwar Ahmad. A total of 17 participants attended the said workshop.

The aim of the workshop was to provide an overview on the thermal design for Shell and Tube Heat Exchanger (STEX) by considering elements of design, operation and maintenance.

In the introduction, Ir. Anwar Ahmad explained the fundamentals of thermal design of STEX where heat exchange between two fluids must be balanced. The importance of data design for sizing STEX was emphasized in order to meet the degree-of-freedom criteria. “Design criteria for both tube and shell sides have to be presented during the design of STEX so that it is sized to satisfy the balance of heat transfer”, said Ir. Anwar Ahmad.

In addition, some considerations on thermal design for STEX were discussed: fouling considerations; latest technology; and maintenance procedures. The speaker also shared his working experience in undertaking mechanical and chemical cleanings.

Towards the end, the Q and A session was particularly lively, as attendees looked for appropriate solutions and wished to clarify matters encountered from their working experience.

Note: Slides of the presentation is made available on the Facebook page of CETD – <https://www.facebook.com/CETD.IEM>

