Overview the Materials Selection for Engineering Work Practice

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The material selection diagram (MSD) is an engineering drawing, which shows material selection information and specification of the piping and equipment in a process unit/facility. Process Engineer, Material Engineer and the metallurgist of project normally develops the MSD from simplified Process Flow Diagrams (PFDs).

The MSDs are important documents and generate in the first process work practice for the engineering works. One MSD document consists of equipment, piping and unit package that is specified the materials type, corrosion allowance, corrosion conditions, international standard references, and special requirements in NOTE for a specific project.

On this session will present to the key parameters of MSD for consideration. The frequency question is *"Is necessary to require the MSD for FEED Project?"* For engineering work practices in FEED, EPCa, EPCm, PMC projects require the MSDs for all projects. The MSD and the material selection philosophy document should have the heat & material balance, PFD, BEDD and process descriptions for the consideration.

In technically, the MSD shall be reviewed by metallurgist and process engineer together. It is very important to the FEED project and all disciplines.