

Process Notes



A Time for Grass Roots Thinking?

Within the past year or two spiking crude prices and surging refinery margins have led to overheated talk about increasing refinery capacity worldwide. Plans for construction of as many 60 grass roots refineries have been discussed. But stretched out lead times for major equipment and inflated prices, as well as declining margins and a final realization that there is not enough crude to meet demand, have brought sober thinking to the table. Recent societal changes in India and China do indeed indicate

a need for new refineries but volatile politics in Latin America, looming demographic crises in Europe and explosive conditions in the Mid-East have rendered long range grass roots plans for these regions unrealistic.

Might it not be more prudent to revamp existing capacity? Many refineries have been over-designed from the start to compensate for poor process and equipment design, one way to compensate for a low level of equipment knowhow and a questionable reliance on vendors to design equipment. With the right revamp design, however, such excess capacity and equipment can be utilized to raise throughput, improve product quality and reduce energy consumption while minimizing new CAPEX. At the

same time process changes can be made to adjust for the nasty crudes more and more entering the world market.

Revamps will succeed, however, only if a painstaking study is first made of existing plant to identify both limitations on present operation and opportunities for improvement. But such a study is not made sitting in the control room collecting operating history. It has to be done by revamp engineers getting their hands dirty helping operators gather field measurements. Only when these data are obtained can reliable computer models be put together and FEED package work begun. And note too that experienced revamp engineers have been able to fast-track jobs in months rather than years, producing revenue rapidly.

Prudent entrepreneurs will minimize funds at risk while meeting project objectives. At no time has such prudence been more needed than now. At no time has it been more important to think twice about grass roots projects.



For a more involved discussion
www.digitalrefining.com/article/1000114



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