

Process Notes



This exchanger is a victim of its design.

Opportunity or Annoyance?

Price differentials between conventional and opportunity crudes compel refiners to process increasing percentages of lower valued opportunity crude. However, as many refiners have learned the hard way, opportunity crudes are tied to unique processing challenges. Furthermore, existing crude unit configurations may limit high-profit opportunity crude to a disappointingly small proportion of the total unit blend.

Processing a changing slate of opportunity crudes of varying compositions requires a CDU/VDU design that is flexible, reliable, and commercially proven. A good design must control chronic problems associated with many of these crudes including corrosion, exchanger fouling, tray plugging, vacuum heater and wash bed coking, and unreliable product quality prediction. CDU/VDU designs for challenging crudes should be based on proven best-practices rather than simply on a low-CAPEX strategy. For example, a poorly designed heat exchanger may operate well initially, but high fouling will quickly lower efficiency and eventually limit throughput. Up front investment in engineering experience and know-how pays dividends when units meet capacity and run-length targets.

Over the course of 20 years, Process Consulting Services has completed more than 130 revamp and grass-roots designs supported by over 75 detailed test runs. An extensive collection of test run equipment performance data and feed/product analyses enables confident prediction of real-world opportunity crude performance. PCS has enabled refiners worldwide to extend crude unit run lengths from months to years while improving yields and operability.



Test run feed and product samples



**PROCESS
CONSULTING
SERVICES, INC.**

3400 Bissonnet St.
Suite 130
Houston, TX 77005, USA

+1 (713) 665-7046
info@revamps.com
www.revamps.com