



ESDU SPC-M3-3i

Modellization of two phase flow with application to asphaltenes deposition and removal

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MODELLIZATION OF TWO PHASE FLOW WITH APPLICATION TO APHALTENES DEPOSITION AND REMOVAL

Part of the CROF Theme III: Modelling

Sub-project C

Student: Daniele Sileri
Supervisors: O. K. Matar, G. Hewitt

Imperial College
London

FOULING IN HEAT EXCHANGER OF CRUDE DISTILLATION UNITS

- Heat exchangers use the largest fraction of the energy needed in oil refining.
- Fouling tends to increase the amount of energy required for the process.
- Pressure drop and worsening of thermal performances.
- The mechanism of deposition and removal is not yet fully understood.
- Even though complete elimination is not possible, it's important to achieve asymptotic levels to minimise effects of fouling.