



Background:

Vikoma's T9 disc skimming system reduced water content in slops in an API type separator in a refinery, which halved the disposal costs of the slops. An automated system was provided with significant savings on manpower, compared to their previous skim pipe (C-pipe) solution.

Single bay API type separator in a distribution area of a specialist product refinery.

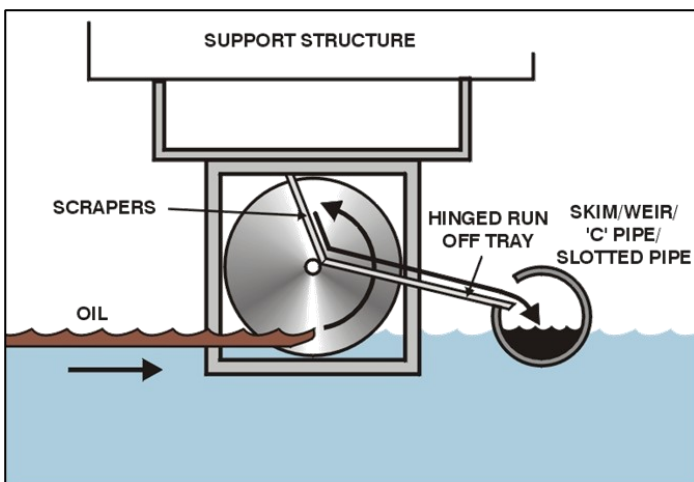
- Feedstock - High viscosity crude oil.
- Oil on separator - Hydraulic, lube oil, diesel & crude.
- Separator area - No operator access without gas safety checks.
- Classification - Zone 1.
- Problem - Existing skim pipe recovery method (C-pipe) collected large quantities of water in the slops. It also required manual input to operate the skim pipe, which required operator's access to a hazardous area.

Objective:

- Customer objective 1
Feedback Reduce water content of slops.
Slops water content significantly reduced by over 50%, reducing cost of disposal.
- Customer objective 2
Feedback Skimmer to discharge recovered oil, under gravity, into existing skim pipe and discharge pipework.
Recovered oil discharged via a run off tray into the existing skim pipe.
- Customer objective 3
Feedback Skimmer to be capable of dealing with varying oil types and quantities.
Skimmer picking up varying types and quantities of oil from the separator.
- Customer objective 4
Feedback Reduced manual input for health & safety as well as economic reasons.
Skimmer is operating automatically and no manual input is required other than occasional visual check resulting in manpower cost savings.
- Customer objective 5
Feedback System to be automatic and requires only annual maintenance check.
System operating for many years with no manual input other than annual maintenance.

Solution:

Vikoma installed a single fixed T9 skimmer module located in the API separator on a beam structure. The oil was recovered by the rotating T discs and discharged, under gravity, via a hinged run off tray into the existing skim pipe.



For further details please contact your Vikoma partner or contact us directly on sales@vikoma.com