

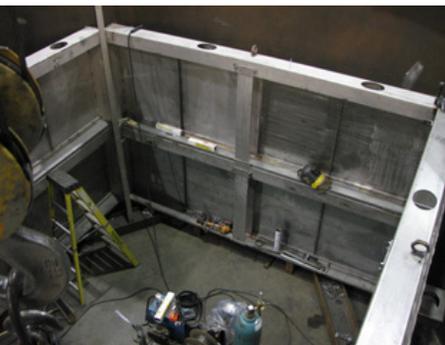
CASE STUDY

INDUSTRY: SAGD Oil Production

LOCATION: Western Canada

YEAR BUILT:

PROJECT DESCRIPTION: Upgraded high-efficiency separation system for elimination of discharge oil mist



The Situation

An oil production facility needed to modify a separation system to remove entrained oil from a steam vent system. The original system did not work properly, resulting in “a rain of oil” over the facility and onto parked cars.

The Challenge

The customer was experiencing an unacceptable discharge of oil mist, damaging cars in the facility parking lot. Due to the environmental emissions concerns, an improved, high-efficiency separation system was required.

The Solution

A CECO Peerless vane-type separator proved to be the ideal solution for this challenge. The design incorporated removable vane internals which can be replaced if the highly corrosive fluids eventually break down the base materials.

The CECO Advantage

CECO Peerless performed advanced site inspections to confirm the nature of the oil contaminants that needed to be separated. Based on this evaluation, the appropriate vane type was selected to maximize efficiency and allow for periodic inspection of oily residue buildup. Employing “removable” vanes allows the operator to maintain this system if excessive clogging occurs in the future.

The Operational Results

- Value 1: High-efficiency separation to eliminate oil discharge
- Value 2: Corrosion resistant materials
- Value 3: Design for potential replacement of internals
- Value 4: Initial site inspection and review of options with the operator to assure all aspects were evaluated upfront.

The Environmental Benefits

- The vented steam no longer had any traces of oil residue.