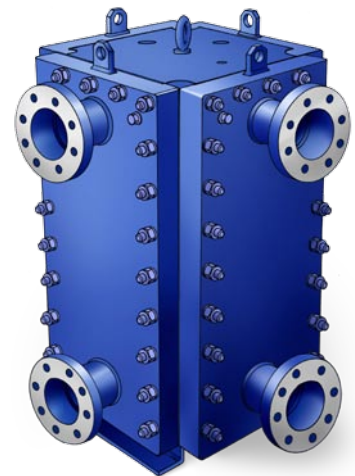


Rosneft Tuapse fuels up its energy recovery



Compabloc condensers at the Rosneft Tuapse refinery

In 2006, the Rosneft Tuapse refinery in Southern Russia decided to improve energy recovery in one of its three crude preheat trains.

A total of three Compabloc heat exchangers with plates made of 254 SMO were installed. One, with a surface area of 100 m², replaced two traditional shell-and-tube units with a total surface area of 570 m² that were unable to tackle the requirement for more effective energy recovery. The other two Compabloc units were installed to deal with new energy recovery duties.

The Compablocs were brought on line in September 2006. Among the energy-saving objectives achieved was a 8–10°C increase in the furnace inlet temperature of the crude. This resulted in both significant energy savings and reductions in emission from the heater.

Calculated payback time	
Compabloc purchase cost	EUR 475 000
Installation cost	EUR 475 000
Annual fuel savings	EUR 375 000
Annual emission savings	EUR 100 000
Annual savings	EUR 475 000
Payback time	24 months

Typical numbers as of 2007.
Crude distillation capacity = 40 000 bbl/d
Major assumptions: fuel value = EUR 30/bbl and GHG value = EUR 15/ton.



www.alfalaval.com