CLEAN OIL
BRIGHT IDEAS

Heat Transfer Oil
Heat Transfer Oil Plant - Food Processing Industry

CJC™ Application Study

Application Study written by:

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DALOON

CUSTOMER

Daloon in Nyborg, Denmark.

THE SYSTEM

Heat transfer oil plant, which is often utilized within the food processing industry for processing and heating of food ingredients.

THE PROBLEM

Heat transfer oil is difficult to keep clean and often contains large quantities of dirt and oxidation residues. This is mainly caused by the very high process temperature of 280 ºC which also breaks down additives, reduces the flashpoint, thus increasing the risk of selfignition.
Dirt in the heat transfer oil plant negatively affects the system, through fluctuating heat emittance increased energy consumption in daily use.

THE SOLUTION

C.C.JENSEN A/S has developed a **CJC™ Fine Filter HP 27/108** which depth filters the oil, removing the dirt from the plant.
As 280 ºC heat transfer oil cannot be depth filtered, the temperature in the heat transfer oil plant must be reduced to below 150 ºC. This can be done in periods of production stop, weekends, during downtime or maintenance overhauls. During these periods, the CJC™ Fine Depth Filter can clean the oil of dirt and oxidation residues.

THE RESULT

The positive and immediate effect of the depth filtration is a more homogenous heat distribution and lower energy consumption. At the same time the removal of the oxidation residues restore the high flash point.

The fine filter is connected directly to the existing heat transfer oil system, via a built-in thermo switch, which automatically starts and stops the filter unit.

Heat transfer oil is used in the production at Daloon in Nyborg, Denmark

For depth filtering of heat transfer oil plants, a new type CJC™ Fine Filter is developed, which can resist the high pressure in the system. The model is an HP 27/108 and is presently in operation at Daloon, filtering two huge boilers, each containing approx. 7,000 litres of heat transfer oil.

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