



TFS SERVICE

# HT FLUIDFIT HEALTH

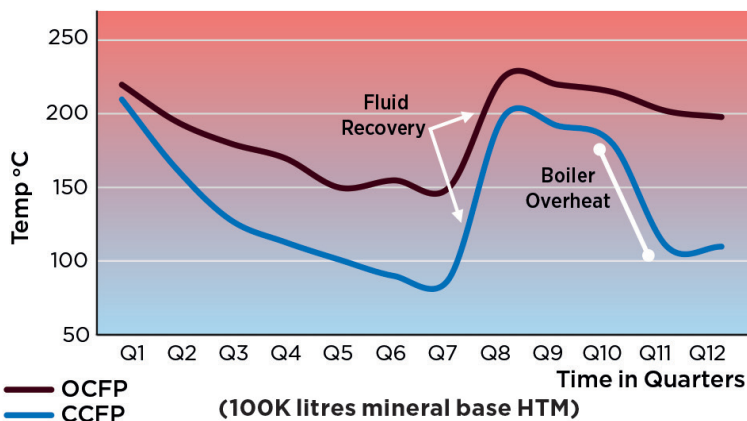
For the maintenance and safety of thermal fluids

Through controlled sampling of the thermal fluid in your process, testing of the key variables in our dedicated laboratory and subsequent analysis of the results by our process professionals, we are able to provide a unique insight into the performance of your thermal fluid system and, as a result, ensure that your system efficiency, safety and resulting production performance are always optimal.

## HT FLUIDFIT OFFERS:

1. Worry-free sampling service provided by experienced and knowledgeable TFS technicians
2. Accredited in-house laboratory with dedicated thermal fluid test suite and industry leading expertise in fluid analysis and diagnosis
3. Analytical review by our in-house experts with comprehensive recommendations on system health and any remedial actions required
4. Proactive fluid maintenance programmes where we ensure that your fluid condition is regularly monitored and reported

Flashpoint trends provide insight into system performance





# THERMAL FLUID SOLUTIONS

20 Hallsteads, Doveholes, Derbyshire, SK17 8BJ. UK  
25587 Conifer Road Suite 105-606 Conifer, CO USA 80433  
+ 44 (0) 1298 815862 (UK) + 1 864-516-7506 (USA)  
[www.thermalfluidsolutions.com](http://www.thermalfluidsolutions.com)

## CALL IN THE EXPERTS

Many process industries use thermal oil to transfer heat around the process plant. However, these oils degrade over time due to factors such as high temperatures, high film temperatures and oxidation, causing loss of thermal efficiency, increased flammability, cavitation, mechanical failure, system downtime and associated costs. More importantly, when combined with other system conditions, plant safety can be drastically compromised – and it is now a legal requirement to maintain minimum flashpoints.

## FLUID AGEING

All thermal fluids go through an ageing process during use and their performance, usability and safety reduce over time. The rate and characteristics of this degradation are a function of a number of process factors including the fluid heat input parameters, mechanical work rate and process design and integrity. These in turn result in unique decomposition kinematics of the host fluid which when analysed provide significant insight into the health and integrity of the thermal fluid system.

Fluid ageing is a consequence of the breakdown of molecular bonds in response to heat and mechanical energy input. These lighter fragments which may be loosely bound within the bulk fluid are not removed by simple separators or de-aerators although they may give some improvement in process efficiency. Formation of larger polymeric compounds contributes to viscosity change and sludge formation which also have a significant effect on thermal fluid performance.

## SAMPLE & ANALYSIS SERVICE

Part of the 'FluidFit' range of products and services from TFS, our sampling service is backed by our many years of expertise and process understanding.

Relative combinations of decomposition products, fluid characteristics, such as viscosity and carbon content, along with more straightforward measurement of flashpoints detailed in our fluid report, identifies issues that may exist already or give early warning of problems that may arise in service and can be included as part of future routine maintenance procedures.

Our service is tailored to meet your needs and is based on the measured performance of your system. We aim to give you peace of mind through proactive and managed routine testing and reporting which ensures that you meet regulatory and insurance requirements.

## OUR SAMPLE & REPORTING CONTRACT INCLUDES:

- Scheduled sampling service at a frequency matched to your system degradation rate
- Full service contract including collected samples or bottle only service
- We can provide a dedicated sample station if required
- Full analysis and report with online portal to access historic reports and what they mean
- Technical advice to manage the required outcomes
- Access to other services in the HT FluidFit range including:
  - Fluid regeneration when required using our dedicated HT FluidFix recovery rigs
  - Fluid replenishment from our full range of thermal fluid options
  - Training and on-site system assessment

## DID YOU KNOW?

The sampling and analysis of any fluid operating above its closed cup flash point is a requirement within DSEAR (Dangerous Substances and Explosive Atmospheres Regulations) and other EU implementations of the ATEX Directive and the fluid must be conditioned or changed when the fluid falls out of specification.