Tips for Sampling the Online Fluids

During the operation of heat transfer fluid, samples should be taken and tested periodically to ensure the security and quality of fluid. Degradation and oxidation occur in the high temperature operation. System flaws and incorrect operation accelerate the changes of fluid and shorten its life time.

Based on long-term practical experiences, Schultz provides some tips for users.

1、Smart Sampling Spot

-Sampling spot should be located in front of pump in the main pipe loop.

-Some users have the circulation pump and heater in the same plant. Aiming for this kind of condition, sampling spot should be outside the heater plant where there is a specific and clear entrance area.

-The location of sample tap should be under the height of sampler's chest to avoid sample splash on the upper part of body. Avoid physical fatigue of sampler in the limited space.

-Some space should be reserved under the sample tap, where a marked flush bucket could be placed avoiding the sample drops dripping on the ground.

-It is better that the valve on the sample tap could be controlled with the flow rate.

2、Individual Protection

-Before online sampling, sampler should read about the information about individual protection on SDS and learn about the physico-chemical properties and dangerous information of the fluid.

-Cooler should be adopted to cool the temperature of sample down to 70℃, ensuring sample completeness.

-Sampler should put on safety equipment, including heat resistant gloves, glass, mask and protective suit, which could be taken off till the end of sampling.

3、Safety Sampling

-Avoid dripping leakage and reduce the possibility of splash. Fluid or vaporific sample can potentially splash from the sample tap.

-Take measures to avoid accidentally getting burned by high temperature fluid.

-Sampler should switch on the sample valve very slowly. A short small-bore pipe installed in the valve

outlet could help steady fluid flow rate and insert the sample kits.

-Sample tap should be flushed before sampling. Fluid sample directly flows into a dry bucket due to high temperature fluid burst after contacting with water.

-Take measures to avoid sample leaking contamination.

4、Emergency Measures

Inhalation: Transfer the injured sampler to fresh air space and keep his/her respiratory track clear or stay at the natural breath position. Oxygen therapy should be performed when the injury has difficulties in breathing. Go to hospital if the condition is worse.

Skin or Eye Contact: Take off the contaminated clothing and flush with water and soap completely. Go to hospital if the condition is worse.

Ingestion: Rinse the mouth with water immediately. Transfer the injured sampler to fresh air space. Do not take emetics without doctor's instruction.

5、Complete Sampling

-After sampling, fluid sample should be properly packed and sent to lab or testing organizations without leaking. Properly dispose the flush bucket under the sample tap.