Extraction of fluid samples from lines of an operating system

■ **Corresponding standard : JIS　B9936 / ISO4021**

Outline

Analysis result differs from sampling point and method. To obtain an accurate analysis result,
It is necessary to extract oil in the correct method.

Extraction Method

Extract oil samples from a main working flow line of an operating hydraulic system
If it is difficult to extract it from the main fluid line, then extract it from oil reservoir.

・Sampling from fluid lines
Sampling is recommended in a section right after major equipment, in the upstream of
filter and where flow conditions exist. (A in sketch)
・Sampling from reservoir
If you extract sample from reservoir, use vacuum sampler and etc.
Sampling is recommended at the depth of 1/2 below the fluid surface and return line of
hydraulic circuit. (B in sketch)
You need a lot of attention since precipitated impurity is accumulated on the reservoir
bottom, reservoir side or around drain.

■Sample bottle
Use thoroughly cleaned and verified sample bottle in accordance with ISO3722
Extreme care should be taken to protect the bottle covers from contamination during
extracting.

The sample bottle shall be provided with a label bearing the following information
・Sample reference number
・System reference
・date of sample
・Sampling location
・Oil amount in the reservoir
・Last sampling date
・Filtration rate in use

Test Circuit outline (example)

Motor

Cylinder

Solenoid valves

Sampling Port

A

Sampling Kit

Pumps

Filter

B