CLEAN OIL TANKS



SMA delivers clean hydraulic oil tanks, in line with the cleanliness level required by your hydraulic system, according to ISO and SAE class level.

REDUCTION OF WARRANTY AND INSPECTION COSTS, BREAKDOWNS AND DOWNTIMES

Contamination is a main cause of wear and failure of the modern hydraulic systems.

Oil tank can be one of the major sources of contamination, dirt and metal particles, which are extremely damaging. Harsh environment, materials itself (powder, grease and rust on the steel) and manufacturing process (welding, grinding, cutting and punching) produce contaminations inside oil tanks. Main contaminants are:

- weld spatters
- metal scales
- emery and rust particles

HOW SMA DELIVERS CLEAN TANKS

Sma takes care of the production process, workers and manufacturing environment, from the point of view of technical cleanliness as well. When agreed with the customer, Sma arranges for:

- 1. the design of oil tanks, minimizing production of contamination and maximizing the effectiveness and easiness of the rinsing
- 2. the execution of an effective final rinsing process

RINSING PROCESS can be made using a mechanical flushing unit:

- with specific spray nozzles of different shapes and dimensions which covers the whole internal surface
- pump 100 litres/minute at 10 bar
- cleaning agent filtered 5 µm with heavy degreasing action and protective against corrosion
- specific tank tools to facilitate drainage
- collection, filtering and recycling of the fluid



RINSING PROCESS WITH SPECIFIC SPRAY

MEASUREMENT

SMA measures the oil tank cleanliness through in-house tests and external laboratory ones. Solid particles contamination measurement is mainly based on counting, weighing, size measuring and comparing, according to ISO 4406, SAE AS 4059 and VDA Bd.19.



CLEANLINESS
ANALYSED BY DIGITAL
AND ELECTRONIC
MICROSCOPE