

• HYDRAULICS

Monitoring of cylinders, Valves, Motors

### Frequency Transformers

Transforming process ocures heat on the Coils - which has to be coolded down ---> Cooling circuits

#### Heat Transformers

Flow measurement to evaluate the heat amount. Measurement and Switching

- VKM, VKG, VKA, OVZ
- SMV, SMA, DSS, DVO, SWK, DF

• SMV, SMA, DVO, DF, PSR



Welding Machines

**Cooling of the welding electrodes** 

Welding Robots

Specially for the automation industrie, mostly calorimetric sensors are beeing used

#### Breweries

Vessels needs to be monitored with Bypass-Level-Indicators. For CIP circuitries flow monitors where used

- DSV, KAL-K, DF, SMA, DCM, DVO
- KAL-KS, DF, SWK, SMA, DKF

• NBK, KAL-KH, KAL-EH, KSM, KSK, Food instr.



Glas Manufacturing

Cooling circuits for ovens and machineries

### • Mining

Lubrication circuits on hydraulic systems, water circulation for the air conditioning system

### Rubber Industrie

Cooling circuits for rubber ovens and production machineries and work-up process

- SMV. SMA, KAL-K, KAL-L
- VKM, KAL-K, KAL-A, PME

• SMV, SMA, VKM, KAL-K, RCD





#### Compressors

Screw cooling for screw compressors. Oil sump monitoring

### Refrigerating Machines

Cooling circuitry monitoring, simple flow switches are beeing used

### Laquer Machineries

Automated systems does not use air anymore. Only for hand pistols air is used

- NWS, OPT, SWK, SMA, DVM
- PSR, DVM, DVO, SMV, SMA

• DSS, DVM, SMA, PMG, SCH-...





Paper Machines

Old systems are running on low velocity. New machines or reworked ones must be lubricated with oil

- Pump Manufacturer Dry run monitoring
- Part Cleaning Machines Cleaning fluid for oily and greasy parts has to be monitored. If process under vacuum air flow has to be monitored

• VKM, VKG, VGK, VKA

• KAL-K

• SMV, SMA, DSS, DVM, KAL-K, KSK, KSM



• Railways / Trains

Flowmonitoring inside the air conditioning systems

Lubrication Circuits

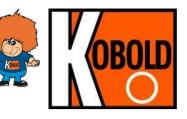
Paper Machines, Power Turbines (SIEMENS, VOITH)

### Packing Machines

Packing machines for food menues. A folie is used to seperate from the environment, the folie has to be heated and the heating process has to be monitored

• KAL-K, KAL-L, SMV

- VKM, VKA, VKG, VGK, PSR
- DSS, SMA, DVM, KAL-K





• Car Washing Machines

Washing water controlling / monitoring on the orifices to ensure that the car paint is scratched. Water treatment plants for the machinery has to be equipped with level monitoring device • DSS, SMA, KAL-K, NES, SWK, SVM





#### • GENERAL RULE

# HEATING PROCESS NEEDS



## **FLOW MONITORING**

