

Thermal disinfection of cooling lubricants - ThermoDes -



(Fungi before)

Requirement

The life of cooling lubricants depends amongst others things on the bacterial attack. A heavily contaminated cooling lubricant leads to performance decrease and is harmful for the employees and the system. Biocides or fungicides which are currently used against the bacterial attack are expensive and may result in health risks. The new CLP regulations have tightened the classification of such substances and restricted the usage.



(Bacteria before)

Serie ThermoDes for the thermal disinfection

The separate equipment serie ThermoDes could be used for the thermal sterilisation of emulsion, cooling water, cleaning media and process water. In the disinfection mode the medium is heated up to 65°C and thus the proportion of germs can be significantly reduced. The system is equipped with a heat recovery system so that the returned emulsion is cooled down and the energy consumption is reduced. The inlet temperature is monitored; thus the max. bath temperature can be adjusted by the customer. The power consumption is approx. 4 KW.



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Advantages of the thermal disinfection 1000

EK:

- Gentle disinfection of the emulsion
- No expensive and harmful biocides are necessary
- The system can be used in bypass mode during active operation. the intake temperature is monitored.
- Longer life time of the liquids
 - >>> reduced consumption and disposal costs
 - >>> less stand still times of the corresponding machine



(Fungi after)



(Bacteria after)

Technical datas of ThermoDes-5:

Water volume disinfection:	300 l/h
Power consumption	4 KW
Temperature disinfection	65 - 70 °C
Temperatur return flow:	Max. 50°C
Adjustable temperature of the inflow: (Bath temperature)	30 – 50°C
Filtration to protect the device components: (Suction just from the “clean“ tank area of the liquid)	25µm