

Leiblein

world of liquids



Cooling lubricant-central systems

Technologies for solid/liquid separation

The KSS-central system

For the central cooling lubricant maintenance

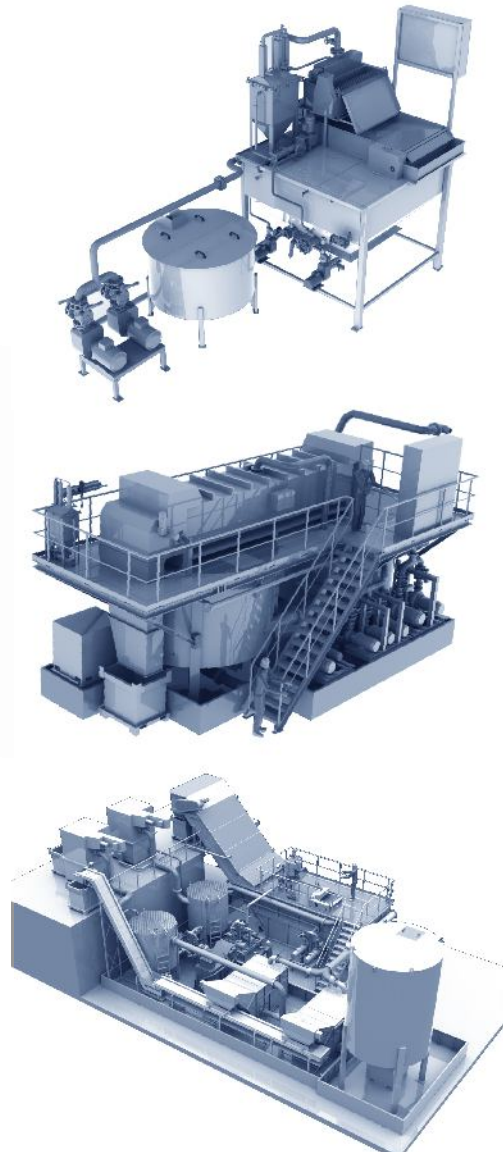
The cooling lubricants (KSS) used during the metal-processing, are contaminated over time by tramp oil, metal chips and grinding disc wear. However, in order to ensure a consistent high quality of the products, a clean cooling lubricant is essential. A long-term cost-efficient alternative for the continuous change of the cooling lubricant is a system for the cleaning of the coolant. In the KSS-central system, individual filters and separation components are combined by Leiblein in a central system. The solids (material abrasion) and free oils from cooling lubricants are separated in the circulation system.



KSS-central system with pressure belt filters

Combination options from our range of components

For the optimal design of your specific cooling lubricant cleaning



For each application the appropriate solution

Depending on the application, a KSS-central system incorporates both the following cleaning levels:

- Separation of solid particles (e.g. chippings)
- Separation of free oils (tramp oils)
- Drying of the separated residue

This is ensured using different procedures like filtration, sedimentation and coalescence.

Leiblein's filter and separator offer a large combination variety for the optimal solution of each specific requirement.

- Pressure belt filter
- Vacuum filter
- Precoat filter
- Vacuum belt filter
- Inclined filter
- Magnetic separator
- Coalescence separator

If required, other components such as cooling systems and chipping disposal are integrated in the KSS-central systems. In addition, each KSS-central system is adjusted individually to the spacial requirement, throughput and contamination degree.

KSS central system fields of applications

Multiple applications

KSS-central systems are suitable for the cleaning of larger cooling lubricant quantities, which arise during different processing procedures (Rotating, milling, grinding, honing), are centrally merged and prepared. Applications in the metal-processing industry are for example:

- **Gear manufacturing**
e.g. preparation of contaminated grinding emulsion, which occurs when grinding steel shafts and gear wheels
- **Automotive**
e.g. filtration of detergent solutions, which occur during the cleaning of parts from the lapping and honing processing
- **Medicine technology**
e.g. preparation of cooling lubricants, which occur during the manufacturing of surgical instruments and are contaminated with precious-metal containing metal chips. Along with the cleaning of the emulsion, the raw material for recycling are also prepared.
- **Pre-cleaning of slitting machines**
- **Pipe manufacturing**
- **Aluminium chipping**
- **Drive brush manufacturing**



KSS central system during the grinding oil filtration



Cleaning of emulsions in the piston production



Central system with inclined filter and coalescence separator



Coalescence separator, inclined filter and magnetic separator



KSS-central system during gear manufacturing

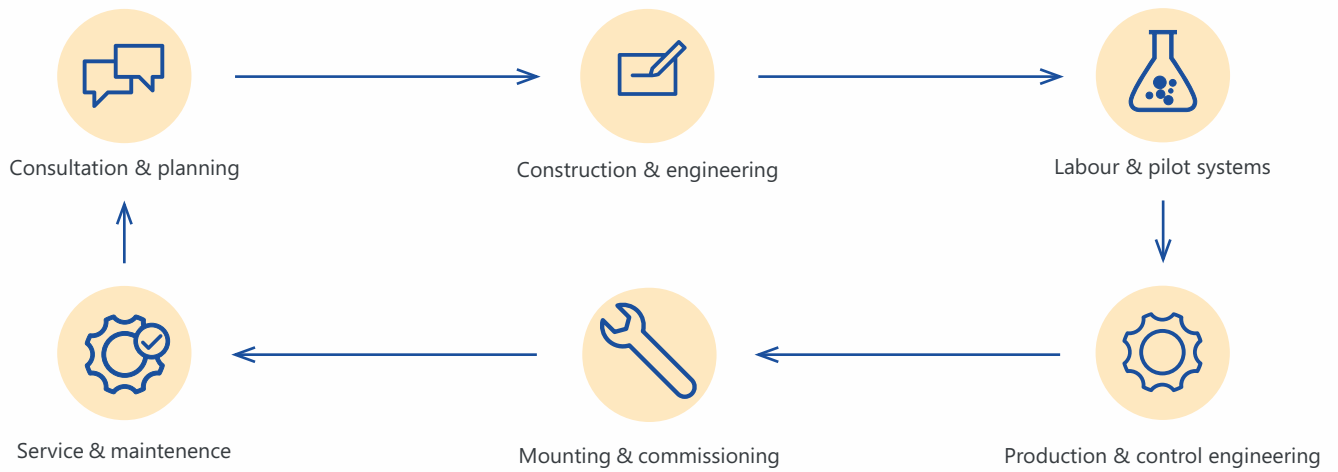
High efficiency

The advantages of our KSS central systems

- Clean, space-saving and efficient systems made of high-quality steel and stainless steel constructions
- Low-maintenance and service-friendly systems as hardly any moved parts apart from pumps are existing
- Production failures can be avoided through a redundant filter design
- High degree of flexibility as all services are provided in-house

All from one source

Our range of services



Each KSS-central system is designed for your specific application. In addition all products are available as renting systems in order to be able to execute pilot-trials on-site.

You have questions about the treatment of your medium?
Do not hesitate and contact us!
We would be pleased to advise you.



Leiblein GmbH
Adolf-Seeber-Str. 2
74736 Hardheim
GERMANY

E-mail: leiblein@leiblein.com

Phone: +49 (0) 6283 - 2220 0
Fax: +49 (0) 6283 - 2220 50

Internet: www.leiblein.com