

Julius Klinke has eliminated the bottleneck in the washing process and optimised production flow significantly



Julius Klinke Präzisionsdrehteile Klavierbestandteile manufactures simple as well as complex precision turned components of all appropriate materials and in all sizes up to Ø65mm on automatic bar machines and up to Ø250mm on face lathes.

The products are available with all heat treatments and surface treatments. Castings and forgings are processed and modules are mounted. For further information visit: www.julius-klinke.de



At Julius Klinke, there will be no more components with dried-up oil and emulsion as a result of a prolonged and highly elaborate process in connection with bath change. At the same time, quality will not be compromised and the washing process is now fully stable.

Julius Klinke manufactures simple as well as highly complex precision turned components. Large amounts of oil or emulsions are used for turning components in the

high-tech machines. Having processed the components, it is important to wash them quickly in order to prevent the oil or emulsion from drying.

Washing takes place in two continuously running plants. Before changing to DST-DEGREEZ®, the washing plant included an Aquaclean evaporator with a thermal performance of 18kW. Both washing plants had a bath temperature of 80°C. The process also included very arduous,

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manual handling of used degreasing products. Trial and error methods were often needed adding different agents just to achieve a fairly satisfactory result.

The big bottleneck at the washing plants occurred during the bath change which could easily take up to two days. First the water had to be cooled from 80°C down to a temperature where it could be disposed of. The entire washing machine then had to be cleaned and new water filled which then had to be heated to 80°C. The inevitable happened during the long process: the oil and emulsion dried

and unrivalled. The product is now being dosed automatically with the water which ensures that the same fantastic quality is achieved in every wash.

The bath temperature has been lowered from 80°C to 45°C just as the time of a bath change has been reduced significantly. As a result, bath plants are no longer a bottleneck as the bath change will be completed easily in half a shift. The baths are also running considerably longer. Moreover, the energy-consuming evaporator has been turned off and cut from the washing process where it has

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on the components ready to be washed which resulted in many re-washes. The long wait often also caused rejects of brass components in particular: It was simply impossible to clean brass of dried-up emulsion. When the washing machines were finally running again, the many re-washes of dried-up components resulted in additional washing delays of new components. This meant that a bath change could result in delays of several days; and the bath had to be changed every 6 to 8 weeks!

been replaced by an oil skimmer. This not only saves energy as a result of the significantly lowered temperature but large quantities of water are also saved as a result of the reduced number of bath changes needed. Production manager Udo Nattermüller's biggest wish has been fulfilled: a stable washing process and thus stable production flow. An indirect result of this is that several shifts are possible, without any cleaning technical problems.

Production manager Udo Nattermüller knew quite well that production flow had to be improved drastically. He heard about DST-DEGREEZ® in early 2007, and the changeovers of all washing plants were soon completed. Despite the increased use of DST-DEGREEZ® products, the results are obvious: the quality of the washed components is constant

"Our goal was a stable washing process which we achieved with DST-DEGREEZ®"

Production manager Udo Nattermüller



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