

FUCHS SCHMIERSTOFFE GMBH  
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## To the users of FUCHS water-miscible quenching fluids

### Water-miscible quenching fluids - precautions in case of production stop due to COVID-19 pandemic

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Dear Sir, Madam,

since the COVID-19 situation changes daily, we want to help you preparing for a possible production downtime in your company. Therefore, we have defined the following steps when using water-miscible quenching fluids of the THERMISOL QZS and PGI series. These steps must be observed and implemented in order to overcome the downtime of the hardening systems without failure of the water-mixed quenching fluid.

#### Precautions production downtime:

- **AD HOC:** Upcoming maintenance, monitoring or adjustment procedures must be carried out. In particular, concentration adjustment of the target concentration specified for the hardening process, addition of biocide if germ infestation is detected, raising of pH value if it is outside the specified pH range and removal of scale to prevent blocking of the filters and showers during subsequent start-up.
- **AD HOC:** Make sure that you have the necessary amount of your THERMISOL product, biocides and alkalizers available.
- If possible, convert the hardening systems from weekend switching intervals to daily switching intervals; alternatively, provide aeration.
  - Allow circulation of the coolant even during downtime, if feasible.
  - Remove the quenching fluid from the system if it is in poor condition (e.g. poor hardening results, high residual contamination, contamination with tramp oils, too low pH value, excessive growth of bacteria, etc.) and refill only shortly before resuming production.

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We do not consider a pre-conservation of the water-mixed fluids to be necessary, since the biocides currently on the market do not have a depot effect. However, if bacterial growth occurs during the downtime period, the addition of biocide may be necessary. It is also necessary to check the quenching fluid for pH, concentration and weekly for bacteria during the production standstill.

After the downtime period, the functionality of the quenching fluid should be checked. For this purpose, hardened parts should be examined for their microstructure. Our laboratory offers you support by recording the quenching curve.

Parts sensitive to corrosion should be protected before the system is shut down. Products from our ANTICORIT range are available for that purpose.

With kind regards,



Janos Jenei  
(Head of Product Management  
Metalworking and Quenching Fluids)