

Technology for machine tools

FLUIDBAGCK®



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High tool speeds lead to changes in the formation of chips and metal sludge. The higher the speeds, the smaller the chips become, but the quantity of chips increases drastically. There is therefore a more intensive formation of metal sludge. At the same time as extracting the cooling lubricant mist from the tool working area, the metal sludge enters the suction system (suction pipe + filter systems) in the form of the finest particles. The cooling lubricant condenses in the suction system and on reflowing into the cooling lubricant circuit it takes over the task of rinsing out the metal sludge in a drain device (siphon). However the amount of metal sludge means that this no longer happens. Practice shows that conventional drain and reflow system (e.g. siphon) can no longer dispose of the large amount of metal sludge and leads to complete close up. The inadequate cooling lubricant flow through the siphon leads to the metal particles settling. Together with the cooling lubricant this leads to the chips "baking in". This leads to breakdowns.







Problem:

- The cooling lubricant flow through the siphon is no longer adequate to rinse out the metal sludge.
- Not possible to look through the siphon (is the siphon full or already caked up?) = not possible to react in an appropriate manner.
- Visual inspections are possible but time-consuming (removing the siphon, emptying, fitting, refilling), expensive (e.g. machine shutdown) personnel costs.

Above and beyond this the question arises: **How often should checks be carried out?** (This depends on the machining technology used by the machine = this is therefore complicated and no longer up-to-date.)

The solution: FLUIDBAGCK®

- a) Cooling lubricant metal mix runs directly out of the defined interface for the extraction system into the FLUIDBAGCK[®]
- b) Gas cylinder fills up
- c) Ultrasound sensor emits a signal when the specified level is reached and opens the compressed air controlled ball cock valve (open without current) further
- d) The valve opens and the **FLUIDBAGCK®** empties
- e) The valve closes again after 10–15 seconds

FLUIDBAGCK® solves several problems at the same time

- Constant monitoring of the fluid level using an ultrasound sensor (can be viewed through the gas cylinder) means that the FLUID-BAGCK[®] is always emptied completely and in good time.
- The FLUIDBAGCK[®] is also emptied when the machine is switched off (weekend, company holidays).
- 3. Using the cooling lubricant emulsion prevents the formation of microbes and moulds
- Easy visual inspection thanks to transparency.
- Fully automatic emptying.
- Fixed defined filling level using ultrasound sensor.
- FLUIDBAGCK[®] can be cleaned without the need for special tools.
- Easy to retroft
- Automatic level monitoring makes FLUIDBAGCK[®] independent from different types of machining.

Visit our WebSite to see how FLUIDBAGCK[®] as well FASS-3[®] and Pipeclean[®] work. A CD is available on request

Rerucha™

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... and also for the machine manufacturer!