

BLUE Coolant

Sustainability | Energy Efficiency



Series

MC

MCI

MCH

MCH-C

H

F

C

Control

SIEMENS Powerline

SIEMENS Solutionline

Via intelligent control of the high-pressure coolant pump, BLUE Coolant allows you to save energy in a sustainable manner for a significant reduction in operating costs – without any compromise.

Characteristics

- _ Control of high pressure pump with frequency converter
- _ Direct adjustment of the high pressure coolant pump's volume flow and hence the energy consumption to the machining task concerned
- _ Motor and pump are retained
- _ Compared to the standard high-pressure coolant pump:
Energy savings per year (exemplarily for H2000 Gen.2): - 7,200 kWh*
- _ CO2 savings per year (exemplarily for H2000 Gen.2): -3,125 kg CO2*
- _ * = Assumption energy statuses per day - STANDBY 4h, OPERATIONAL 4h, WORKING (with maximum cooling capacity in spindle warm-up) 16h. Energy statuses pursuant to VDMA form 34179, carbon emission according to the current fuel mix in Germany 434 g/kWh, with 250 working days per year

Benefits

- _ Up to approx. 70% energy savings depending on the machining process, compared to a system without frequency control
- _ Process-adapted speed results in lower noise level
- _ Longer service life of the high-pressure coolant pump
- _ Reduction of long-term maintenance costs
- _ Potential additional savings with use of coolant cooling

Requirements

- _ Coolant unit (manufacturer KNOLL)