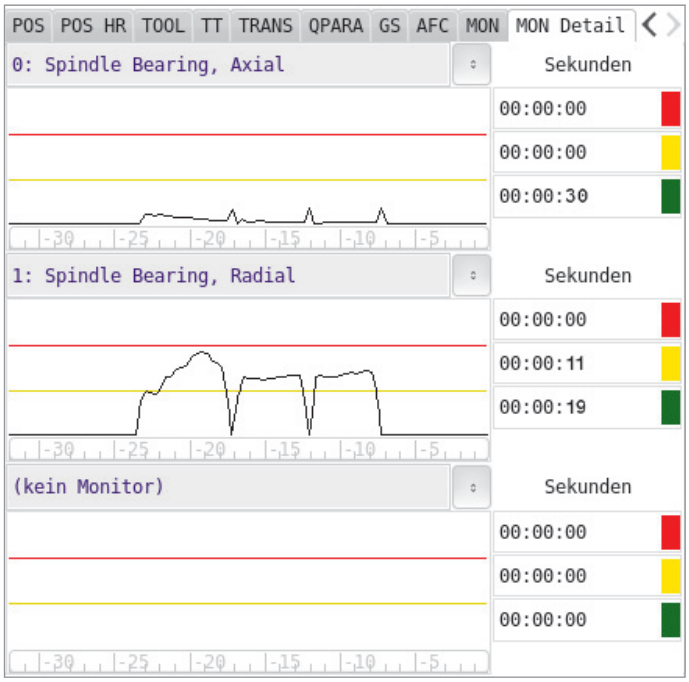
Machining functions
Component Monitoring

Defective main-spindle bearings are one of the most common causes of machine standstill. During the milling process, the main-spindle bearings are often subjected to very high loads. Both excessive continuous loading and short-term overloading can damage the spindle bearing. Unfortunately, the machine operator cannot readily assess whether the spindle bearing will incur damage from a given machining process.

Component Monitoring (software option 155), however, allows you to detect machine-component overloading and wear based on internal control signals, letting you react early enough to avoid machine downtime. These control signals can be evaluated with formulas provided by the machine manufacturer for determining the amount of load on the components.
The machine manufacturer can also define warning and error thresholds, as well as appropriate reactions when these thresholds are exceeded. Significant damage can thus be avoided.

Cycle 238, MEASURE MACHINE STATUS*, is part of software option 155, Component Monitoring. This cycle allows you to ascertain and record the current machine status. Through data comparison, deviations in machine parameters can be detected and documented over extended periods of time, allowing you to track the machine aging processes.

* Available for NC-SW 34059x-10 (TNC 640) and 81760x-07 (TNC 620) or higher



Component Monitoring	Option 155	ID 1226833-01
TNC 640 HSCI **TNC 620 HSCI** **TNC 320**	NC SW 34059x-09 or higher NC SW 81760x-06 or higher –	
Installation by the machine manufacturer		
Further information	–	