

FH3-505 with Robot Loading System

With the FH3-505 flat honing machine including a robot loading system Stähli offers to its customers a new version of the previous FH3-505.

The FH3 machines are the most efficient way to finegrind large quantities of workpieces to a specific thickness on both sides with micrometer precision.



Technical benefits

- 3 wheel solution with robot loading system
- Loading and unloading of workpieces during machining time
- Highest productivity
- · Micrometer precision and process-controlled machining
- Flow cooling of the working wheels
- Cast mineral machine structure for highest thermal and mechanical stability
- Material removal volume comparable with throughfeed grinding process
- Integrated computer-aided measurement control
- Fault analysis by machine control
- · Remote maintenance / tele-diagnostics / online support
- · Shortest tooling times



The FH3 machine with robot loading system consists of a standard machine combined with a robot. The Stähli FH3 machines are currently available in dimensions 505 and 805 and are characterized by shortest tooling times while maintaining the usual Stähli quality. The machines enable thickness tolerances of a few micrometers, parallelism and flatness with micrometer tolerances, and high volume output.

There are two lower wheels including pin rings and drives, and one upper wheel, which work alternately. While a workpiece load is being grinded to thickness in the machine, a robot system can in parallel replace the machined workpieces by blanks in on the second wheel. When loading and flat honing have been completed, the lower unit is swiveled within a few seconds. The remaining work is done during the grinding time. This makes the overall system highly efficient and even similar to through-feed grinding processes - with significantly higher material removal and superior part quality. Feeding of parts can be implemented using conveyors, or in blisters. As usual almost any material from steel (soft and hard) through non-ferrous metals, to plastics and ceramics can be machined in a single pass with thicknesses from a few micrometers to more than 1 mm.

You will find machine animations and further information about the FH3 series at www.STAHLI.com

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