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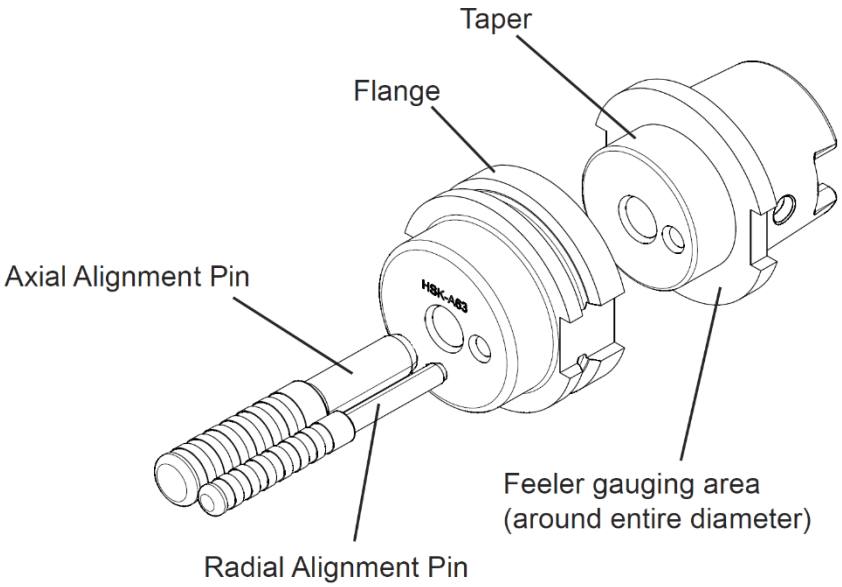
Operating Instruction

Tool Changer Alignment Gauge HSK

Overview

The tool changer alignment gauge is designed to verify correct alignment of the machine spindle to the automatic tool changer (ATC). The gauge consists of components as shown in the diagram.



Incorrect alignment will influence the repeatability of the tool interface, and can result in abnormal wear, faulty clamping, dropped tools, personal injury, etc.

Warning:
Be sure appropriate steps have been taken to ensure the machine is safe to work on before proceeding.

The alignment tool should be handled with care, as many dents or nicks may interfere with the ability to verify correct tool change position.

Installing the Tool

Before starting, clean all interface surfaces. Insert and clamp the Taper in the spindle. Next, insert the Flange into the ATC. Run the machine in steps until the ATC reaches the final tool change position in front of the spindle.

Using the Gauge Pins

Begin by inserting the Axial Alignment Pin in the center hole. If the pin passes through both halves of the tool, alignment is correct. If the pin cannot be inserted, adjust te ATC and/or the spindle/clamping unit as necessary to correct the misalignment. Verify that the Flange and Taper faces are parallel and flush to ech other.

For HSK-A and KM machines: With the Axial Alignment Pin fully inserted, insert the Radial Alignment Pin. If the pin can be inserted through both halves of the tool, alignment is correct. If the pin cannot be inserted, adjust the ATC and/or the spindle/clamping unit as necessary to correct the misalignment.

By using a feeler gauge in the area shown, it is possible to determine which axis is not correctly aligned.