

Five-Axis Quick-Change System Elevates the Work

BY PETER ZELINSKI

Five-axis machining centers are expensive compared to three-axis machines. For shops to get value out of these machines, it's particularly important to be efficient in the ways work is set up.

One aspect of that efficiency is change-over time. Workholding product supplier Jergens Inc. specializes in this; the company is known for its "Ball-Lock" quick-change system. However, another workholding requirement for effective five-axis machining is that it allow the tool to reach features, faces and surfaces from many directions. Clamps that obscure or cover the part prevent five-axis machines from achieving all they can. Jergens says its new 5-Axis Workholding System aims to bring the same quick-change concepts that have been applied to three- and four-axis machining to five-axis machines. The new system permits multisided access to pallet-mounted workpieces, providing precise locating accuracy along with part-to-part change-over times of less than a minute.

Jergens summarizes the merits of this system as "raise the part, rigidly clamp it and rapidly change it out." That first element—raise the part—is what is new for five-axis. To allow access to various

The system includes risers that lift the part from the table. A five-axis vise provides stable clamping without obstructing features of the part, while the underlying subplate can provide for quick change, so the entire setup to be taken on and off the machine quickly.

part faces, including undercuts, the modular system includes risers that lift the part from the table. The underlying subplate can then be equipped with the Ball Lock system, enabling the complete setup to be both rigidly locked in place and quickly taken on and off the machine. For holding the workpiece itself, five-axis vises provide sufficient strength to withstand high cutting forces. ■



For more information from Jergens Inc., enter the company name at mmsonline.com/suppliers or call 877-486-1454.



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Get More Uptime with the 5-Axis Quick Change Fixturing System.

If your workholding is diminishing the value of your 5-axis machine, the manufacturing efficiency experts at Jergens can help. This complete system raises your part off the table and rigidly clamps it for full 5-axis machining. Use the patent-pending pallet changer to switch out vises and fixtures in seconds, without re-indicating. Just drop it, lock it, and go!

KEY BENEFITS:

- **PRECISION**
Accurate & repeatable
- **SPEED**
Reduce changeover time
- **ADAPTABILITY**
Mount to any machine tool

Jergens
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WORKHOLDING SOLUTIONS



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- Adapter Plates
- Risers
- Locating Pins
- Ball Lock® Shanks
- Subplates

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