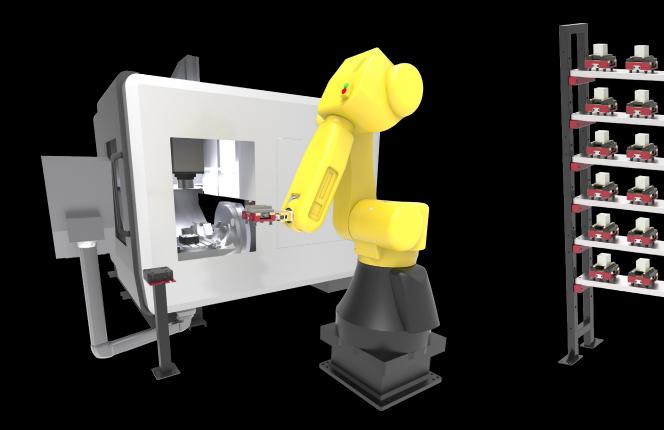


5thAXIS

VISES - FIXTURES - QUICK CHANGE SYSTEMS

WORKHOLDING EVOLVED.

2023 Short Catalog



5"AXIS

RockLock Overview

Swap Vises &

Fixtures Quickly

A standard mounting pattern allows for

easy movement of vises, fixtures, and tooling from machine to machine no setup

BOCKLOCK

Maximum efficiency with 52mm & 96mm



time.



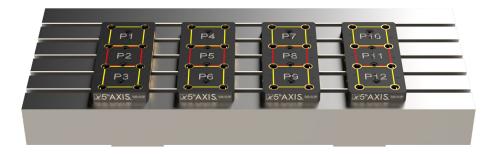
TIME = MONEY Reduce setup times by 80-95%



¢

High Accuracy

Patented free float design ensures equal force on all 4 pull studs guaranteeing repeatability of less than .0003" (8 microns)



Simplify Programming

Established work offsets help speed up programming time when adjusting for different jobs and top tooling.



Solutions Available for 3, 4, & 5 Axis Machines



Simple Modular Design



Reduce Setup and Changeover Time





Self-Centering Vises



4 Jaw Bolt Mounting

4 bolt jaw mounting increased clamping

force and rigidity by 30% compared to

the original 2 bolt version.

¢

Higher Accuracy

Redesigned truck features a key and dowel pin for better accuracy and repeatability.





Compact Footprint

Overall height + width + length is the same as the original vise design. Vise mounting also matches the original design.

Self-Centering Vises





Built in 45° dovetail can be utilized for increased clamping force



Serrated gripper teeth for superior bite into soft material



Quick change jaws without disassembling vise

Double Station Vises

BOCKLOCK



MORE PARTS. MORE PROFIT.



Independent Jaw

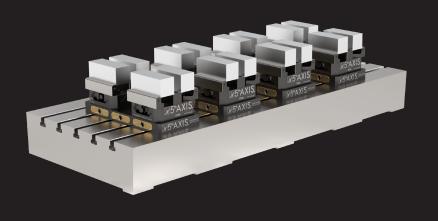
Movement

Friction pins on the vise trucks allow for independent movement on the lead screw while still providing maximum clamping force.



Low Profile, Small Footprint

Fit more vises on your machine table and watch your parts per cycle soar. Increase throughput, decrease tool change time and machine down time between operations.



More Parts Small Per Cycle

Make your existing equipment more efficient by running multiple parts per cycle. Hold larger parts with the DV510, or load up on smaller parts with the DV75150X.

Reversible Jaws

Have a larger part? Jaws can easily reverse to accommodate larger stock. Convert the double-station to a single-station for even more clamping range. One vise, many options.





Gripper Teeth + Dovetail

Serrated teeth on each jaw provide maximum grip on stock less than HRC 35. For harder material, the built-in dovetail provides exceptional clamping force with less torque and eliminates the need for a stamping machine.





WHY DOVETAIL?

Locating/Stop Pin For Accuracy

A precision locating pin ensures the stock is centered in the fixture while ensuring the stock cannot be forced out of the fixture during machining.

The locating pin also provides high repeatability for in process inspection / movement from machine to machine.





Mechanically Locked

Make your existing equipment more efficient by running multiple parts per cycle.

Hold larger parts with the DV510, or load up on smaller parts with the DV75150X.

Fast, Simple Prep Operation

Dovetailing a part is a quick, simple machining operation that prepares your stock for our dovetail fixtures / vises.

A small time investment on the front ends equals unmatched holding power- and unmatched precision- for the rest of your manufacturing process.



More Parts Small Per Cycle

Make your existing equipment more efficient by running multiple parts per cycle. Hold larger parts with the DV510, or load up on smaller parts with the DV75150X.





Automation

ROCKLOCK



Rubust Automation Hardware

RockLock automation hardware features industry standard 52mm and 96mm spacing. Pallet loading without the need for a pallet!

The benefit of fixture exchange is the robot programming. The robot is always picking up from the same point, so there is no need for different grippers or changing the robot program based on individual parts.





Robot Compatible Tooling

4 bolt jaw mounting increased clamping force and rigidity by 30% compared to the original 2 bolt version.



Pneumatic Grippers & Chucks

Redesigned truck features a key and dowel pin for better accuracy and repeatability.



Shelving & Storage

Overall height + width + length is the same as the original vise design. Vise mounting also matches the original design.

Pneumatic Chucks



Pneumatic RockLock[™] receiver chucks come with industry standard 52mm or 96mm mounting, along with bottom or side air-port options. Lifters on the unit assist robot in picking and placing the tooling, and can also provide a burst of clean air to remove chips.

Tailored Grippers



5th Axis grippers are offered in 12kg and 25kg options compatible with the low profile cleats and RockLock™ Products. The grippers have a high quality Schunk body and 5-axis machined hardened gripper fingers for durability.

Rack & Shelf Kits



Our automation rack and shelf kits are simple to assemble and flexible by design, making it easy to customize your setup. The shelves are reversible to fit 52mm and 96mm RockLock[™] products. Create a rack and shelf kit that is customized for your needs.

Transport Cleats



Low profile cleats are offered in two weight capacities 12kg and 25kg. Create new fixtures or easily retrofit and add to new top tooling setups to your project with ease.



New Products

V562X-5RG Round Stock Gripper Jaw



X-Series compatible hard jaws to support round, raw stock. Jaws will support materials ranging from 1.5" – 8" diameter on the V510X Vise, and 1.5 – 5.5" in diameter on the V562X.

R96-BR Blank Round



- Size: 8" diameter x 1.181" overall height
- 6061 Aluminum
- Quickly build your own fixture / subplate

R96-BL Blank Rectangle



- Size: 13.95" x 5.95" x 1.95"
- Quickly build your own fixture / subplate
- Pull studs: 8x PS20F

RL96A-10

- 96mm Low Profile Base
 - Aluminum
- DIY Mounting Ø248mm



RL96A-6695

- 96mm Low Profile Base
- Aluminum
- 2x M12 @180° on 96.14mm PCD

Full New Line of Tombstones

Full range of 300, 400 and 500mm steel and aluminum RockLock quick change tombstones now available.







7140 Engineer Rd. San Diego, CA 92111 p: 858-505-0432 f: 858-505-9344 e: workholding@5thaxis.com 5thaxis.com



