



INNOVATIVE **STANDARD & CUSTOM** WORKHOLDING  
SOLUTIONS FOR OVER  
60 YEARS.

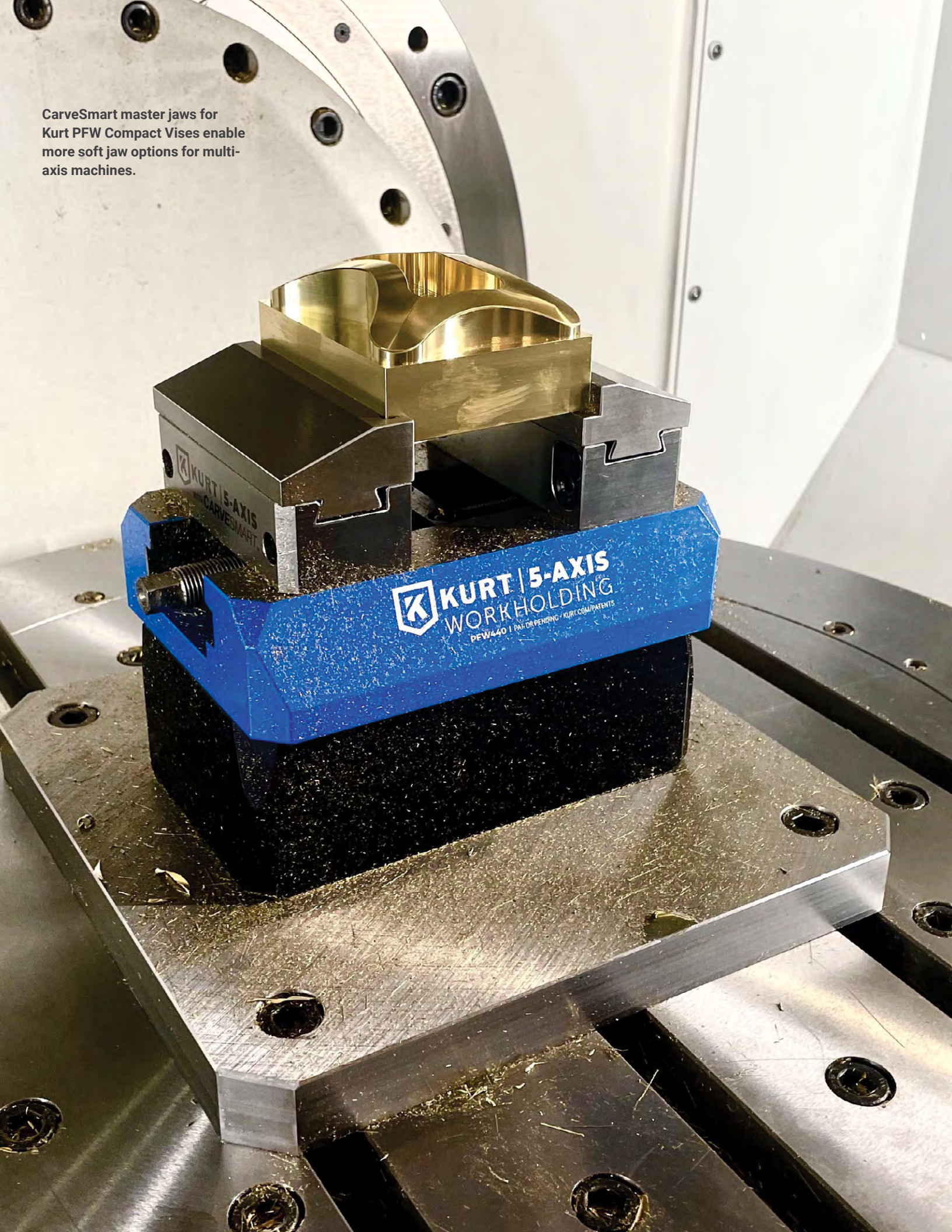
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WORKHOLDING  
SOLUTIONS GUIDE



CarveSmart master jaws for Kurt PFW Compact Vises enable more soft jaw options for multi-axis machines.





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At Kurt Workholding, our mission is to empower manufacturers with precision-engineered, American-made workholding solutions backed by our Ironclad Lifetime Warranty—delivering unwavering reliability, superior performance, and long-term value on every part, every setup, every time.

## Kurt Pneumatic Vise Options

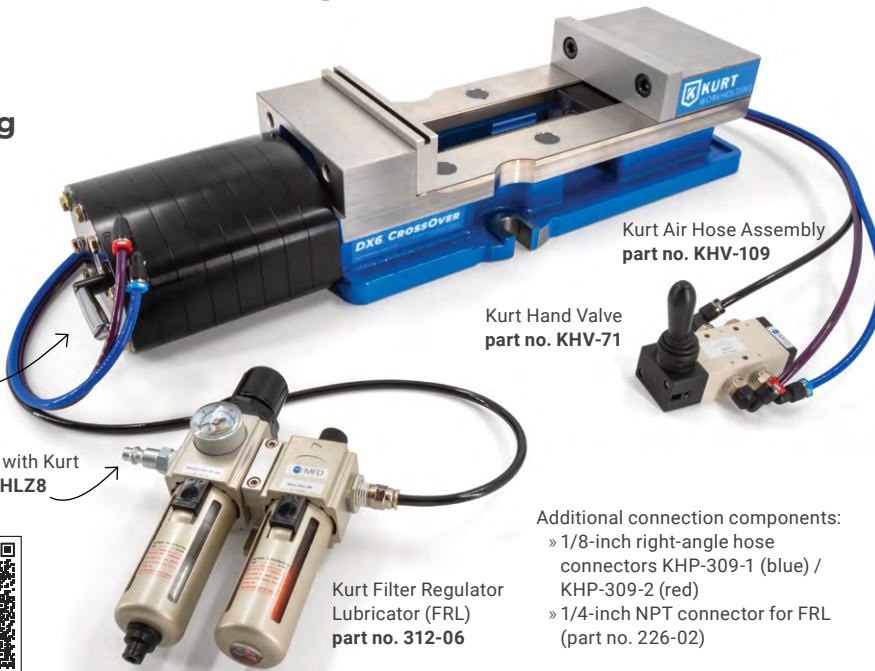
### Single-Acting Pneumatic Automation Setup

Actuation lever on vise

Connect to shop air with Kurt Air Chuck part no. 1HLZ8



LEARN MORE



Kurt Air Hose Assembly  
part no. KHV-109

Kurt Hand Valve  
part no. KHV-71

Kurt Filter Regulator  
Lubricator (FRL)  
part no. 312-06

Additional connection components:  
» 1/8-inch right-angle hose connectors KHP-309-1 (blue) / KHP-309-2 (red)  
» 1/4-inch NPT connector for FRL (part no. 226-02)

Kurt Foot Switch  
part no. KHV-71



### SWITCHING OPTIONS

Kurt offers 3 switching options for our turnkey automation including a **hand valve (KHV-71)**, a **foot switch (KFV-71)** and the **toggle switch** that comes standard on the KHP3 air-over-oil hydraulic pump.

Whether you need a semi- or fully-automated workholding setup, Kurt has you covered. We've expanded our pneumatic vise lineup to 5-Axis applications with the new **PFA620** vise and we've brought the cost down on automation with the **DX6A** pneumatic vise. Kurt's pneumatic solutions are **affordable, expandable to multiple vises, flexible**, and most of all, **easy to set up**. All you need is **shop air**, a **FRL** and a **switch** to operate the vise outside of the machine. Our most popular vise models have air-actuated versions including the DX series, PF series, VersatileLock and XL Series. **Call our sales team today and we'll help you design your perfect system.**

- » New 5-Axis vise option
- » Affordable turnkey automation
- » Easy to expand with multiple vises
- » Easy to integrate robotic control
- » Single or double acting

### PNEUMATIC SINGLE STATION



| Series               | 5-Axis Air                          | DX Series                 | VersatileLock Series          | XL Series                        |
|----------------------|-------------------------------------|---------------------------|-------------------------------|----------------------------------|
| Models               | PFA620                              | DX6A(R)                   | 3600A / 3610A / 3620A / 3630A | XL6A(R)                          |
| Vise Type / Stations | 5-Axis / Single                     | CNC machine vise / Single | CNC machine vise / Single     | Extra capacity CNC vise / Single |
| Required to Automate | Shop air / FLR / Air hose / Switch* |                           |                               |                                  |

\*Additional manifolds and solenoids required for fully automated setup.

## Kurt RV36 Robotic Gripper

The **Kurt RV36 Robotic Gripper** is a two-finger parallel gripper designed to allow automated finger/end effector changes **without gripper body changes**. An amazingly adaptable gripper by itself, is made even better with automatic finger changes. Each finger has two pull studs for automated operator-free end effector changes. Increase robotic pick and place flexibility and minimize automation costs with faster changeovers.

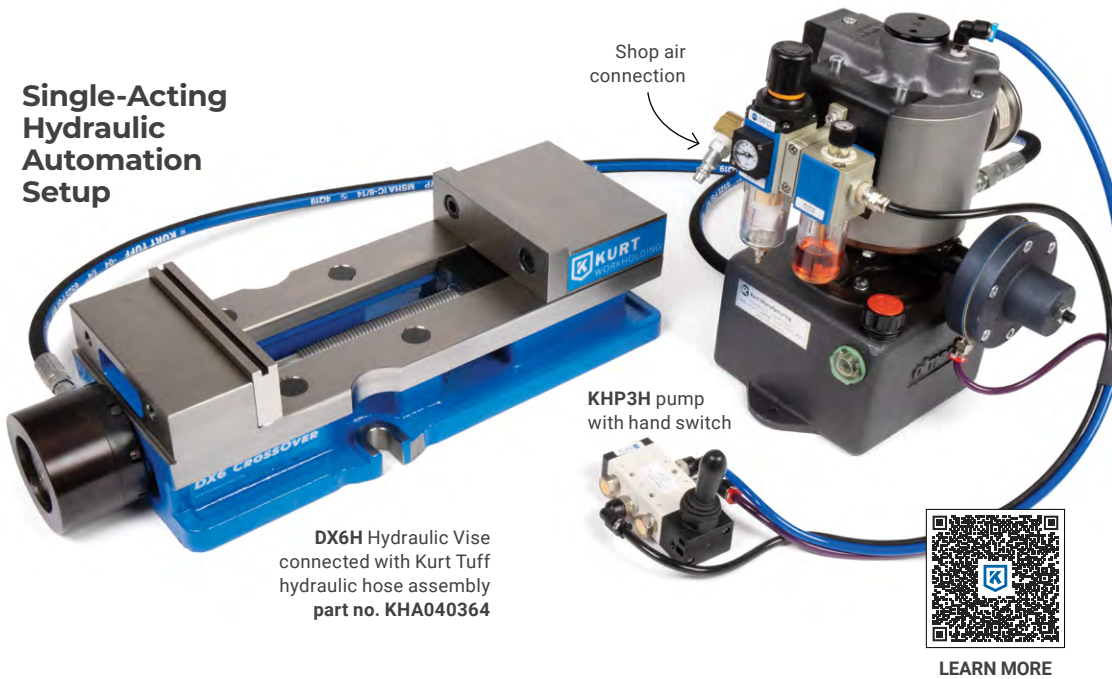
The RV36 Robotic Gripper features quick-change, pull-stud mounted fingers for automated finger changes.





## Kurt Hydraulic Vise Options

### Single-Acting Hydraulic Automation Setup



### TYPES OF SETUPS

The Kurt **KHP3** air-over-oil hydraulic pump is designed to automate Kurt hydraulic vises. Pumps and vises can be configured in a **semi-automated workspace** where an operator controls actuation with a hand lever, foot switch or toggle.

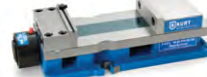
A **fully automated setup** can be configured by using a machine tool controller, PLC or a robot with the addition of solenoids, switches and a manifold.

Kurt pumps can be set up as **single acting** to close with hydraulic pressure and open via spring or **double acting** to open and close with hydraulic pressure (recommend for fully automated setups).

Kurt hydraulic automation is an affordable way to improve part holding accuracy and reliability. Our **lean hydraulic automation solutions** are flexible and allow automation systems to be set up to open and close vises with or without an operator present. Kurt hydraulic automation offers a high return on investment. **Getting started is a 3 step process: 1. Select a vise. 2. Select a semi- or fully-automated setup. 3. Add a KHP3 pump and the necessary plumbing needed for your automation setup.** Additional solenoids and a PLC, robot or machine tool controller are needed for fully automated setups. We can help you: **Call our sales team today!**

- » KHP3 pump can run multiple vises
- » Wide range of vise options—double and single station
- » Single or double acting, semi- or fully-automatic options
- » Easy robotic integration

### HYDRAULIC SINGLE STATION



| Series               | DX Series                                   | VersatileLock Series                          | HD Series                 | XL Series                        |
|----------------------|---------------------------------------------|-----------------------------------------------|---------------------------|----------------------------------|
| Models               | DX4H(R) / DX6H(R) / DX8H(R)                 | 3600H / 3610H / 3620H / 3630H / 3800H / 3810H | HDH690 / HDH691           | XL6H(R) / XL8H(R)                |
| Vise Type / Stations | 5-Axis / Single                             | CNC machine vise / Single                     | CNC machine vise / Single | Extra capacity CNC vise / Single |
| Required to Automate | KHP3 Hydraulic Pump / FLR / Hoses / Switch* |                                               |                           |                                  |

### HYDRAULIC DOUBLE STATION



| Series               | TriLock Series                              | HDL DoubleLock                                  |
|----------------------|---------------------------------------------|-------------------------------------------------|
| Models               | TL6HCS with CarveSmart Jaws                 | HDHL(M)4 / HDHL(M)6 (+ jaw variations) / DLH800 |
| Vise Type / Stations | CNC machine / Single & Double               | CNC machine vise / Double                       |
| Required to Automate | KHP3 Hydraulic Pump / FLR / Hoses / Switch* |                                                 |

\*Additional manifolds and solenoids required for fully automated setup.



## Kurt Hydraulic Cluster Towers

Kurt offers a variety of standard and off-the-shelf customized hydraulic tower options. Our custom engineered workholding team can help you design anything from a single tower system to a complex multi-tower FMS line with automated pallet changing like the ones we use for our vise manufacturing lines.

**HDL CarvLock Long Hydraulic Towers** can be configured with multiple jaw options from carvable aluminum, cast iron jaws, or even hardened steel jaws.

Kurt HDL CarvLock Long Hydraulic Towers are an off-the-shelf customized model that can be equipped with a wide range of base sizes.

### About Custom Options

- » Off-the-shelf custom options feature modifications to stock products.
- » Full custom options can also integrate stock products like caged tombstones and fixture plates.

(right) HDL CarvLock Long Cluster Tower. Can be integrated into a variety of automation setups.



LEARN MORE



(above) Custom hydraulic workholding can also be fitted to Kurt's Caged Tombstones as demonstrated on this fixture plate.

Speak to the custom workholding sales team to configure your ideal setup.

## Kurt KHP3 Hydraulic Pump the affordable, flexible hydraulic choice



Kurt's **KHP3 Hydraulic pump** is powered by normal shop air versus an electric motor. The pump uses 40-100 psi input pressure and sustains up to 3,400 psi of constant pressure into the hydraulic vises.

The KHP3 pump uses an internal load-limiting valve for protection against overload, a common problem with other hydraulic pumps. The special load-limiting valve allows the piston mechanism to cycle automatically when the systems ask for hydraulic flow at low pressures. This performance-on-demand feature keeps the pump pressurized and ready to give hydraulic flow whenever it is needed.

### MORE DETAILS

- » Air exhaust muffler for noise suppression
- » Compact foot-print of the pump is 6" x 8"
- » Each pump kit comes with all the necessary fittings, oil and choice of foot switch or hand switch.
- » Weight:  
KHP3 = 21 lb  
KHP3H = 26 lb  
KHP3F = 31 lb  
KHP3T = 25 lb
- » Usable Oil Volume is 75 Cu. In.



KHP3H Complete Pump and Hand Kit Shown



KHP3F Complete Pump and Foot Kit Shown



KHP3T Toggle Pump Shown



## Kurt DX6 Automation Conversion Kits



LEARN MORE



**DX6 Vise conversion kits** offer vise owners a range of options to upgrade their DX6. From manual-to-reverse conversion kits to manual-to-pneumatic or hydraulic upgrades.

The popular **DX6 Manual-to-Hydraulic Kit (DX6-HKIT)** includes a nut and screw assembly along with a hydraulic drive. This is also available as a **Manual-to-Hydraulic Reverse Kit (DX6-HRKIT)**.

Pneumatic upgrades are also available for the DX6 vise. The **DX6 Manual-to-Pneumatic Kit (DX6-AKIT)** includes a new screw and a pneumatic drive. Kurt DX6 conversion kits expand the capabilities of your vise for years of service.

- » Updates DX6 vises to automated models without the expense of a new vise.
- » Hydraulic and Pneumatic kits available.
- » Hydraulic reverse kit available

## Additional Pump Components needed for a fully-automated setup

**PRO TIP**

Ask Kurt's Custom Sales Team for expert advice configuring your automation setup.

The Kurt automation pump system is custom configurable to match customer applications. It features fully integrated design for plug & play operation. Just add the appropriate connectors that fit your specific CNC controller or other I/O device. Kurt's custom workholding sales team can help you configure your system.

### Valve Blocks

- » D03 Valve Mounting Pattern (top)
- » Pressure and Return ports on 3 sides
- » Actuated ports on remaining side
- » Mounting hardware included

**KHM4-303-SA**  
4 Valve  
Manifold Block



**KHM2-303-SA**  
2 Valve  
Manifold Block



**KHM-53-SA**  
Cover



### Solenoids

- » Poppet-type, "leak free," up to 350 bar (5100 PSI), 24V DC
- » D03 Valve Mounting Pattern, mounting hardware included
- » Wire connector not included (See KHS-391)



**KHS-379 Solenoid**  
Double Acting



**KHS-381 Solenoid**  
Normally Open



**KHS-380 Solenoid**  
Normally Closed

### Pressure Switch and Wire Connectors

**KHM-391 Wire Connectors**

- » M12 connector, 15' cord
- » Use with KHM-386 Pressure switch



**KHS-391 Wire Connectors**

- » ISO connector, 15' cord, lighted
- » 24V DC, 50/60 HZ
- » Use with KHS-379, -380, and -381



**KHM-386 Pressure Switch**

- » SAE 4 Male Port
- » Pressure Adjustment Range: 250-5500 PSI
- » Electrical Rating: -10 amp @ 125/250 VAC-10 amp @ 12/24 VDC
- » Wire connector not included – (See KHM-391)



## Kurt TriLock Vises with CarveSmart Jaws

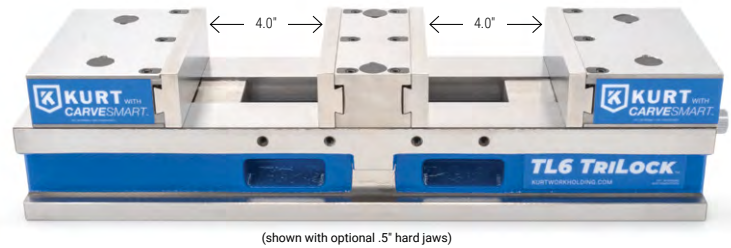
The Kurt TriLock Vise lineup has steadily grown to meet the needs of a wide range of application. **Vise options now include 4-inch and 6-inch widths, standard and short body lengths, and a 6-inch hydraulically actuated model.** Through-body, direct mounting options for standard T-slot spacing means multiple vises can fit on small to large machines with minimal spacing between vises. See the reference table below.

Each TriLock with CarveSmart model comes with the patented **CarveSmart Dovetailed Jaw System** integrated in the movable and stationary jaws. This innovation eliminates cap screws, accommodates a huge array of pre-cut jaw plate options, allows 10-second jaw changes and brings jaw changeover accuracy to within 0.001 of an inch.

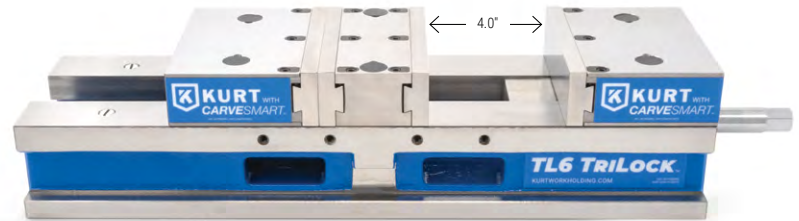
- » 3-in-1 vise design saves time and money
- » TriLock vises can be torn down for cleaning in minutes
- » Choose the CarveSmart jaws you need including: hard jaws, soft jaws, edge-gripping jaws and more
- » CarveSmart jaws come in multiple sizes and can be ordered in bulk lengths
- » Existing Kurt bolt-on jaws can still be used by reversing the movable jaws and using cap screws



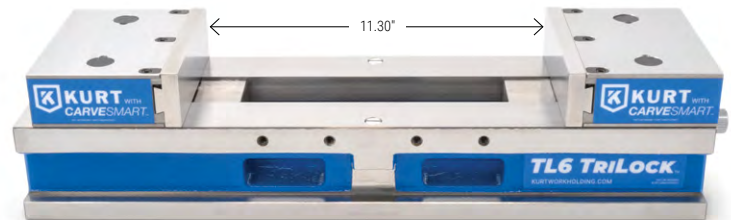
**Standard Double Station**



**Small Single Station**



**Large Single Station**



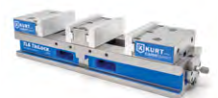
### 3-IN-1 DESIGN

The TriLock design does the work of three vises in a single vise model and converts quickly between a **double-station vise** with as much as 4-inches of part capacity on each side, a **single-station vise** large enough for a 4-inch part or a **large single-station vise** that can hold parts as large as 11 inches wide.

**4-Inch TriLock Vises**

**6-Inch TriLock Vises**

### TRILOCK VISES WITH CARVESMART DOVETAIL JAWS

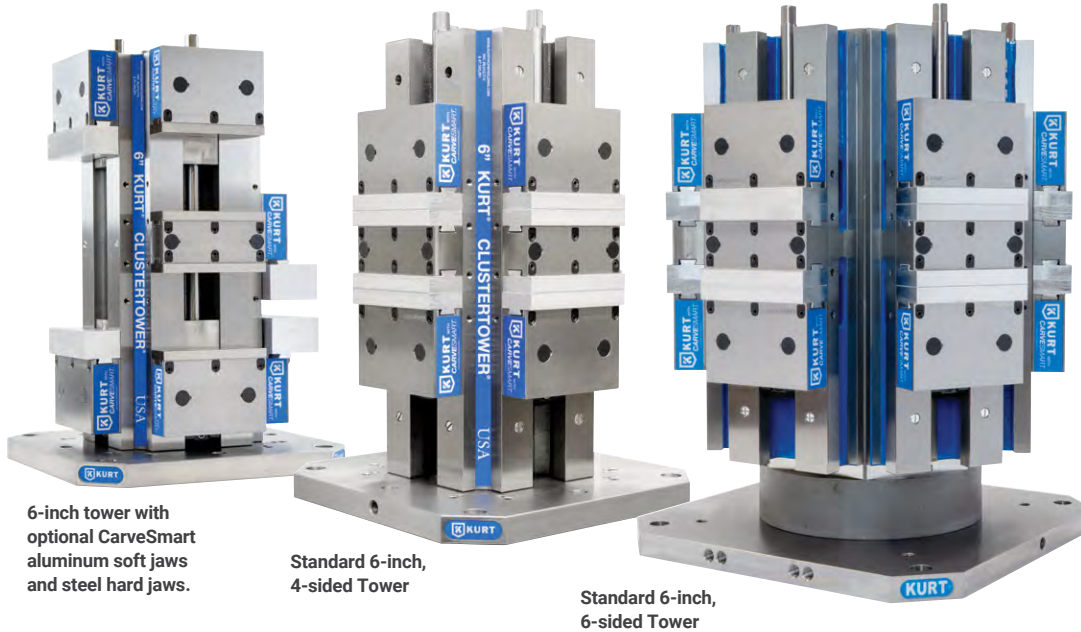


| Part Number                                            | TL4CS                                              | TL4SCS                 | TL6CS                | TL6SCS                                   | TL6HCS               |
|--------------------------------------------------------|----------------------------------------------------|------------------------|----------------------|------------------------------------------|----------------------|
| <b>Vise Type</b>                                       | Manual                                             | Manual Short           | Manual               | Manual Short                             | Hydraulic            |
| <b>Size</b>                                            | 4" x 17.75" x 4.063"                               | 4" x 15.19" x 4.063"   | 6" x 22.54" x 4.183" | 6" x 18.96" x 4.183"                     | 6" x 22.58" x 4.183" |
| <b>Weight</b>                                          | 45 lb                                              | 41.25 lb               | 95 lb                | 90 lb                                    | 98 lb                |
| <b>Bed Height</b>                                      | 2.375"                                             | 2.375"                 | 3.125"               | 3.125"                                   | 3.125"               |
| <b>Jaw Width</b>                                       | 4"                                                 | 4"                     | 6"                   | 6"                                       | 6"                   |
| <b>Jaw Opening:</b><br>Double / Single / Large Single* | 2.8" / 2.8" / 8.8"                                 | 1.875" / 1.875" / 7.0" | 4.0" / 4.0" / 11.0"  | 2.82" / 2.82" / 8.88"                    | 4.0" / 4.0" / 11.0"  |
| <b>Mounting Options</b>                                | Bolts & locates on 100 mm & 125 mm T-slot patterns |                        |                      | Bolts & locates on 80 mm T-slot patterns |                      |

\*As measured with stock 1/2 inch jaw plates installed. All TriLock Vises and Cluster Towers with CarveSmart Jaws ship with 1/2-inch aluminum soft jaws preinstalled.



# Kurt TriLock Towers with CarveSmart Jaws


[LEARN MORE](#)


6-inch tower with optional CarveSmart aluminum soft jaws and steel hard jaws.

Standard 6-inch, 4-sided Tower

Standard 6-inch, 6-sided Tower

The new **Kurt TriLock 4-inch** and **6-inch Towers with CarveSmart** have a revolutionary design that transforms a Kurt 4-sided tower into a multi-configuration workholding work horse. Each of the four TriLock vise jaw sets can be reconfigured into three different vise sizes in minutes and can be completely disassembled for cleaning or setup in under 3 minutes. Patented CarveSmart jaws mount using a dovetail system that locates precisely with every jaw change and hold parts as solid as any bolt-on jaw. CarveSmart movable and stationary jaws fitted with aluminum soft jaws are preinstalled in each vise.

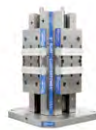
## 5 PART HOLDING SETUPS

You can put the part in the right spot with the TriLock Tower. The unique design lets you quickly reconfigured as a **double-station, bottom small single station, top small single station, bottom large single station** and a **top large single station**.

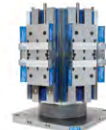
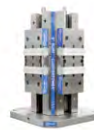
## KEY BENEFITS

- » Save money and setups with 3-in-1 vise design
- » 5 unique part-holding configurations with the TriLock Tower design
- » TriLock vises can be torn down for cleaning in just minutes by removing several caps and screws
- » Choose the CarveSmart jaws you need—hard jaws, soft jaws, edge-gripping jaws and more
- » CarveSmart jaws come in multiple sizes and can be ordered in bulk lengths
- » CarveSmart jaws can be changed in seconds with just a hex wrench
- » Flexible jaw station configuration allows for maximum part density or several machining ops held in the same tower
- » Includes deep-socket vise handle and 2 hex wrenches

### 4-Inch TriLock Towers



### 6-Inch TriLock Towers



## TRILOCK TOWERS WITH CARVESMART DOVETAIL JAWS

| Part Number                                  | CTTL43CS / CTTL44CS / CTTL45CS                 | CTTL64CS / CTTL65CS / CTTL66CS | TB6A500-TL6         |
|----------------------------------------------|------------------------------------------------|--------------------------------|---------------------|
| Tower Height                                 | 18.875"                                        | 22.5"                          | 22.5"               |
| Base Sizes                                   | 300 mm / 400 mm / 500 mm                       | 400 mm / 500 mm / 630 mm       | 500 mm              |
| Weight                                       | call for specific model weights and dimensions |                                |                     |
| Jaw Width                                    | 4"                                             | 6"                             | 6"                  |
| Jaw Opening: Double / Single / Large Single* | 2.8" / 2.8" / 8.8"                             | 4.0" / 4.0" / 11.0"            | 4.0" / 4.0" / 11.0" |
| Mounting Options                             | call for machine-specific mounting options     |                                |                     |

\*As measured with stock 1/2 inch jaw plates installed. All TriLock Vises and Cluster Towers with CarveSmart Jaws ship with 1/2-inch aluminum soft jaws preinstalled.

## The CarveSmart Advantage

### The Original Quick-Change Dovetail Vise Jaw System


[LEARN MORE](#)

**Product Options:** Multiple TriLock Vise and Tower options PLUS Master Jaw Sets.

**No More Cap Screws:** CarveSmart jaws replace time-consuming cap screws.

**Better Clearance:** Narrower dovetailed jaws can hold more parts with less material without dodging cap screws.

**Jaw Changes Are Fast:** CarveSmart jaws can be changed in 10 seconds.

**Machinable Options:** CarveSmart aluminum jaws and 1018 steel jaws are machinable and can save shops a lot of money in machine downtime.

**Multiple Jaw Profiles:** Extruded aluminum jaw stock is available in 5 profiles, pre-cut lengths and bulk sizes as long as 94 inches for custom-length jaws. 1018 steel jaws and jaw stock are available in 2 profiles, multiple pre-cut lengths and bulk sizing.



#### Steel Jaws

1018 cold rolled steel jaws are available in two profiles and several pre-cut lengths with SMARTstops including: 4", 6", and 8" sizes. Also available in 31" lengths to cut to any size.

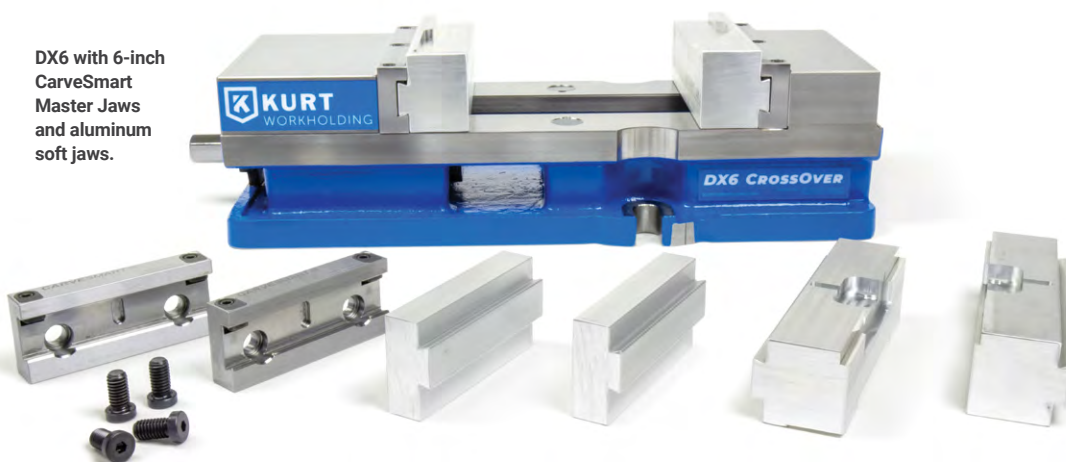
#### Aluminum Jaws

6061 extruded aluminum jaws are available in five profiles and several pre-cut lengths with SMARTstops including: 4", 6", and 8" sizes and 31" and 94" lengths for custom sizing.

## MASTER JAW SETS

Now, anyone with a Kurt vise or another brand that takes jaws with cap screws, can **bolt on a set of CarveSmart Master Jaws** and experience the revolution—no more cap screws, a huge array of pre-cut jaw plate options, 10-second jaw changes, and changeover accuracy to within .0003 of an inch.

DX6 with 6-inch CarveSmart Master Jaws and aluminum soft jaws.



## CARVESMART MASTER JAW SETS



| Part Number        | 40000                                                                  | 10000                                                                  | 10005                                                                       | 20000                                                                 | 50000                                                                  |
|--------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Description</b> | Master Jaw Set: two jaws ground with SMARTstop, & 3/8-16 LHCS & wrench | Master Jaw Set: two jaws ground with SMARTstop, & 1/2-13 LHCS & wrench | 6" Master Jaw for 5" Vises: two jaws with SMARTstop & 7/16-14 LHCS & wrench | Master Jaw Set: two jaws ground with SMARTstop & 1/2-13 LHCS & wrench | Master Jaw Set: two jaws ground with SMARTstop, & 5/8-11 LHCS & wrench |
| <b>Jaw Width</b>   | 4" (all 4-inch Kurt vises)                                             | 6" (all 6-inch Kurt vises)                                             | 6" (fits 5-inch vise jaws)                                                  | 6" (all 6-inch Kurt vises)                                            | 8" (all 8-inch Kurt vises)                                             |
| <b>Material</b>    | Steel                                                                  | Steel                                                                  | Steel                                                                       | Aluminum                                                              | Steel                                                                  |



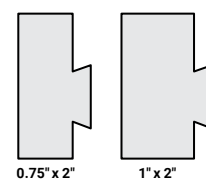
## CarveSmart Jaws with SMARTstops

### Precut jaw plates with maximum repeatability

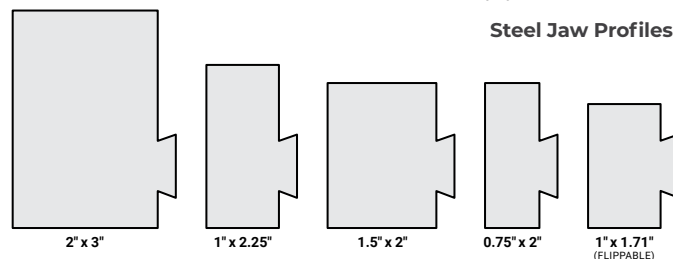
SMARTstopped Products are available in **machinable steel** and **aluminum versions, hardened steel options, and dovetailed tooling options**—in multiple sizes—featuring preinstalled SMARTstop™ pins for the CarveSmart internal vertical slot locating system.

- » SMARTstop™ is an accurate, internal, vertical slot and pin system
- » Jaws relocate  $\pm 0.0003$ " in the same ground steel master jaw after one use
- » 1/4" x 3/8" dowel pins available for CarveSmart bulk aluminum extrusions or steel jaw stock
- » SMARTstop™ allows vises to be mounted jaw to jaw

#### Machinable jaw Profiles



Steel Jaw Profiles



Aluminum Jaw Profiles

|                           | ITEM                                                                                                       | PART NO. | BOX QTY  | DESCRIPTION                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|----------|----------|------------------------------------------------------------------------------------------------------------------------|
| HARDENED STEEL            | <br>Hard Jaws             | 33004    | One Pair | 2 pcs Hard Jaw 60-62Rc A2 Ground Flat and Parallel Within 0.0005". SMARTstopped - 1/2" x 1.75" x 4"                    |
|                           |                                                                                                            | 33006    | One Pair | 2 pcs Hard Jaw 60-62Rc A2 Ground Flat and Parallel Within 0.0005". SMARTstopped - 1/2" x 1.75" x 6"                    |
| HARDENED STEEL            | <br>Combo Jaw Sets      | 32006    | One Pair | 2 pcs 6" Flippable Hard Jaw to a Knife Edge Jaw 60/62rc Ground within 0.0005". SMARTstopped - 1/2" x 1.71" x 6"        |
| MACHINABLE HARDENED STEEL | <br>Perma Jaw Sets      | 52004    | One Pair | 2 pcs 4" 50rc Machinable Tool Steel Hard Jaw Flippable SMARTstopped 1/2" x 1.71" x 4"                                  |
|                           |                                                                                                            | 52006    | One Pair | 2 pcs 6" 50rc Machinable Tool Steel Hard Jaw Flippable SMARTstopped 1/2" x 1.71" x 6"                                  |
|                           |                                                                                                            | 54106    | One Pair | 2 pcs 6" 50rc Machinable Tool Steel Hard Jaw Flippable SMARTstopped 1" x 1.71" x 6"                                    |
| EDGE-GRIPPING JAWS        | <br>Grip-N-Rip Jaw Sets | 55006    | One Pair | 2 pcs 6" Flippable TalonGrip to VersaGrip 1018 Dovetailed SMARTstopped 1" x 1.71" x 6" (MiteeBite Clamps not included) |

|                     | ITEM                                                                                                                                                | PART NO. | BOX QTY  | DESCRIPTION                                                                                        |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------------------------------------------------------------------------------------------------|
| EDGE-GRIPPING JAWS  | <br><b>Talon Top Jaw Sets</b>                                      | 60006    | One Pair | 2 pcs 6" Talon Top 1018 Dovetailed SMARTstopped 3/4" x 2" x 6"<br>(Talon Grip Clamps not included) |
|                     |                                                                                                                                                     | 60008    | One Pair | 2 pcs 8" Talon Top 1018 Dovetailed SMARTstopped 3/4" x 2" x 8"<br>(Talon Grip Clamps not included) |
| MACHINABLE STEEL    | <br><b>3/4" x 2" 1018 Cold Rolled Steel Machinable Jaw Stock</b>   | 31031    | One      | 1 pc Mild Steel Jaw Stock Cut to Any Length 3/4" x 2" x 31"                                        |
|                     |                                                                                                                                                     | 31104    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 3/4" x 2" x 4"                                              |
|                     |                                                                                                                                                     | 31106    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 3/4" x 2" x 6"                                              |
|                     |                                                                                                                                                     | 31108    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 3/4" x 2" x 8"                                              |
| MACHINABLE STEEL    | <br><b>1" x 2" 1018 Cold Rolled Steel Machinable Jaw Stock</b>    | 36031    | One      | 1 pc Mild Steel Jaw Stock Cut to Any Length 1" x 2" x 31"                                          |
|                     |                                                                                                                                                     | 36104    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 1" x 2" x 4"                                                |
|                     |                                                                                                                                                     | 36106    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 1" x 2" x 6"                                                |
|                     |                                                                                                                                                     | 36108    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 1" x 2" x 8"                                                |
|                     |                                                                                                                                                     | 34106    | Two      | 2 pcs Soft Jaw 1018 Steel Flippable SMARTstopped 1" x 1.71" x 6"                                   |
|                     |                                                                                                                                                     | 37106    | Two      | 2 pcs Soft Jaw 1018 Steel SMARTstopped 1" x 2.25" x 6"                                             |
| MACHINABLE ALUMINUM | <br><b>3/4" x 2" 6061 Extruded Aluminum Jaw Stock</b>            | 21094    | One      | 1 pc Cut to Any Length Aluminum Extrusion 3/4" x 2" x 94"                                          |
|                     |                                                                                                                                                     | 21031    | One      | 1 pc Cut to Any Length Aluminum Extrusion 3/4" x 2" x 31"                                          |
|                     |                                                                                                                                                     | 21104    | Two      | 2 pcs Soft Jaw Aluminum SMARTstopped 3/4" x 2" x 4"                                                |
|                     |                                                                                                                                                     | 21106    | Two      | 2 pcs Soft Jaw Aluminum SMARTstopped 3/4" x 2" x 6"                                                |
|                     |                                                                                                                                                     | 21108    | Two      | 2 pcs Soft Jaw Aluminum SMARTstopped 3/4" x 2" x 8"                                                |
| MACHINABLE ALUMINUM | <br><b>1" x 1.71" Flippable 6061 Extruded Aluminum Jaw Stock</b> | 24094    | One      | 1 pc Cut to Any Length Aluminum Extrusion Flippable 1" x 1.71" x 94"                               |
|                     |                                                                                                                                                     | 24031    | One      | 1 pc Cut to Any Length Aluminum Extrusion Flippable 1" x 1.71" x 31"                               |
|                     |                                                                                                                                                     | 24104    | Two      | 2 pcs Soft Jaw Aluminum Flippable SMARTstopped 1" x 1.71" x 4"                                     |
|                     |                                                                                                                                                     | 24106    | Two      | 2 pcs Soft Jaw Aluminum Flippable SMARTstopped 1" x 1.71" x 6"                                     |
|                     |                                                                                                                                                     | 24108    | Two      | 2 pcs Soft Jaw Aluminum Flippable SMARTstopped 1" x 1.71" x 8"                                     |



|                     | ITEM                                                                                                                                     | PART NO. | BOX QTY | DESCRIPTION                                                 |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|-------------------------------------------------------------|
| MACHINABLE ALUMINUM | <br><b>1" x 2-1/4" 6061 Extruded Aluminum Jaw Stock</b> | 22094    | One     | 1 pc Cut to Any Length Aluminum Extrusion 1" x 2-1/4" x 94" |
|                     |                                                                                                                                          | 22031    | One     | 1 pc Cut to Any Length Aluminum Extrusion 1" x 2-1/4" x 31" |
|                     |                                                                                                                                          | 22104    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1" x 2-1/4" x 4"       |
|                     |                                                                                                                                          | 22106    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1" x 2-1/4" x 6"       |
|                     |                                                                                                                                          | 22108    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1" x 2-1/4" x 8"       |
| MACHINABLE ALUMINUM | <br><b>1-1/2" x 2" 6061 Extruded Aluminum Jaw Stock</b> | 25094    | One     | 1 pc Cut to Any Length Aluminum Extrusion 1-1/2" x 2" x 94" |
|                     |                                                                                                                                          | 25031    | One     | 1 pc Cut to Any Length Aluminum Extrusion 1-1/2" x 2" x 31" |
|                     |                                                                                                                                          | 25104    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1-1/2" x 2" x 4"       |
|                     |                                                                                                                                          | 25106    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1-1/2" x 2" x 6"       |
|                     |                                                                                                                                          | 25108    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 1-1/2" x 2" x 8"       |
| MACHINABLE ALUMINUM | <br><b>2" x 3" 6061 Extruded Aluminum Jaw Stock</b>    | 23094    | One     | 1 pc Cut to Any Length Aluminum Extrusion 2" x 3" x 94"     |
|                     |                                                                                                                                          | 23031    | One     | 1 pc Cut to Any Length Aluminum Extrusion 2" x 3" x 31"     |
|                     |                                                                                                                                          | 23106    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 2" x 3" x 6"           |
|                     |                                                                                                                                          | 23108    | Two     | 2 pcs Soft Jaw Aluminum SMARTstopped 2" x 3" x 8"           |

## CarveSmart Upgrade Kits

Have an HD690 or HDL6? Want CarveSmart Jaws?

LEARN MORE



### HDL(M)6TL-KIT

Convert HDL(M)6 nut and screw assembly to the TriLock nut and screw assembly, eliminates the HDL clutch and adds partial TriLock vise functionality, including quick clean. Enables rapid changes between double- and small single-station vise configurations. CarveSmart jaw plates not included.



### HDL6CS-JAWKIT

Designed to convert a current HDL(M)6 vise into a vise with CarveSmart jaws. Snap new movable jaws into place like the old HDL jaws. Add stationary jaw using provided adapter. Includes one CarveSmart stationary jaw and two CarveSmart movable jaws. CarveSmart jaw plates are not included.



### HDL(M)6TL-CONVKIT

The new HDL6 CarveSmart Upgrade Kit replaces an HDL6 vise's internals and jaws with a TL6-3-SA screw and nut assembly and CarveSmart quick-change dovetailed jaws. Shops with inventories of jaw plates with cap screws can still use them by rotating the CarveSmart movable jaws 180 degrees.



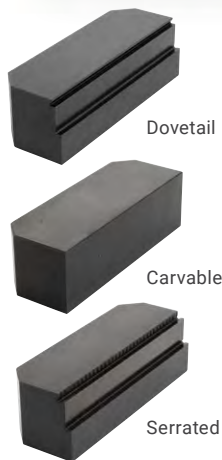
### HD690CS(T)-JAWKIT

Converts a Kurt HD690 to CarveSmart quick-change jaws. Jaw kits come with or without a talon top (T). Includes stationary and movable jaws. Just bolt on the stationary and snap on the movable. Movable jaw is reversible to accommodate standard Kurt jaws using cap screws.

## Kurt 5-Axis Manual 4-Inch Vises



LEARN MORE



Available in 3 lengths, **Kurt PF Series 5-Axis Vises** and **PFW Series 5-Axis Vises** are engineered for high-efficiency machining and robotic integration. 52 mm or 96 mm base pull-stud spacing patterns mount on Kurt zero-point receiver bases for fast setups, vise swaps, and robotic pick and place.

← **Tool-free quick-change jaws** snap on and off in seconds and come in three profiles. Maximum jaw openings range from 2.625" to 6.625". Kurt's patented AngLock® design drives jaws down and forward for maximum grip with minimal clamp force.

User-friendly features include quick centerline adjustment and easy lash adjustment without removing the vise from the machine. Kurt PF and PFW 5-Axis Vises are compatible with other receiver base brands using the proper pull studs.

### KEY FEATURES

- » Quick-change, snap-on/off jaws
- » 96 mm or 52 mm pull-stud spacing for zero-point pallet systems
- » End effector ready for automation
- » Carvable, Dovetail and Serrated
- » AngLock design minimizes jaw lift
- » High clamping force
- » Easy center-line adjustment
- » Quick lash adjustment

### 52 mm Pattern Vises

### 96 mm Pattern Vises

### PF & PFW SERIES MANUAL 5-AXIS VISE MODELS



| Part Number                        | PF420               | PF440               | PF460               | PFW420                         | PFW440                 | PFW460                 |
|------------------------------------|---------------------|---------------------|---------------------|--------------------------------|------------------------|------------------------|
| <b>Size</b>                        | 4" x 5.875" x 2.92" | 4" x 7.875" x 2.92" | 4" x 9.875" x 2.92" | 4.92" x 5.875" x 2.92"         | 4.92" x 7.875" x 2.92" | 4.92" x 9.875" x 2.92" |
| <b>Weight</b>                      | 9.85 lb             | 12.19 lb            | 14.88 lb            | 11.16 lb                       | 13.91 lb               | 17 lb                  |
| <b>Bed Height</b>                  | 1.672"              | 1.672"              | 1.672"              | 1.672"                         | 1.672"                 | 1.672"                 |
| <b>Jaw Width</b>                   | 4"                  | 4"                  | 4"                  | 4"                             | 4"                     | 4"                     |
| <b>Max Jaw Opening</b>             | 2.625"              | 4.625"              | 6.625"              | 2.625"                         | 4.625"                 | 6.625"                 |
| <b>Pull Stud Spacing</b>           | 52 mm               | 52 mm               | 52 mm               | 96 mm                          | 96 mm                  | 96 mm                  |
| <b>Compatible Zero-Point Bases</b> | 52-A125             |                     |                     | APW420 / 96-A178 / 96-A178R100 |                        |                        |



## Quick Change Manual Receiver Bases (52 mm / 96 mm spacing)



PFW420 5-Axis  
Vise on a 96-A178  
Receiver Base  
(96 mm)



LEARN MORE



A Kurt Caged Tombstone loaded with 3 PFW vises and 96 mm bases and a DX6 mounted with pull studs to a quick-change base.



**Kurt Manual Quick Change Receiver Bases** are available in two 96 mm pull stud pattern sizes (**96-A178**, **96-A178R100**) for use with Kurt PFW 5-Axis vise models and one 52 mm (**52-A125**) pull stud pattern option for Kurt PF 5-axis vises. An asset for small shops or scalable for large enterprise applications, Kurt's new 5-axis modular vise and pallet system allows minimal initial investment and easy expansion with more Kurt vises and pallets as needed.

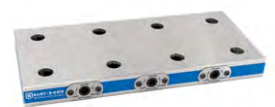
With quick-change receiver bases, it's easy to load up tombstones or machine tables with multiple vises. Kurt DX6 models will also be available with 96 mm pull stud patterns for quick on/off mounting on towers or tables.

### MANUAL BASES

- » 96 mm & 52 mm options
- » Fast hex-wrench vise mounting
- » Obstruction-free machining on five sides of a workpiece
- » Reduce setup times and costs
- » Designed to work with Kurt 5-Axis vises and other brands with the proper pull studs
- » Can be mounted for vertical and horizontal machining applications

#### 52 mm Pattern Base

#### 96 mm Pattern Bases



### MANUAL QUICK CHANGE RECEIVER BASES

| Part Number                      | 52-A125                           | 96-A178            | 96-A178R100        | 3-position receiver base |
|----------------------------------|-----------------------------------|--------------------|--------------------|--------------------------|
| <b>Size</b>                      | 4.92" x 4.92" x 1.25"             | 7" x 6.22" x 1.25" | 7" x 6.22" x 1.25" | 14" x 6.25" x 1.25"      |
| <b>Weight</b>                    | 6.70 lb                           | 13.23 lb           | 13 lb              | 25.33 lb                 |
| <b>Pull Stud Spacing</b>         | 52 mm                             | 96 mm              | 96 mm              | 96 mm                    |
| <b>Mounting System</b>           | Manual                            | Manual             | Manual             | Manual                   |
| <b>Compatible Vises</b>          | PF 5-Axis                         | PFW 5-Axis         | PFW 5-Axis         | PFW 5-Axis               |
| <b>Compatible with non-Kurt?</b> | Yes                               | Yes                | Yes                | Yes                      |
| <b>Compatible machines</b>       | 3-axis, 4-axis, 5-axis, multiaxis |                    |                    |                          |

96 mm Pull Stud Kit (96-STUDKIT) Weight: 0.44 lb  
52 mm Pull Stud Kit (52-STUDKIT) Weight: 0.27 lb

## Kurt 5-Axis Pneumatic Receiver Base

### Kurt APW420 Pneumatic Riser Bases

are designed for vises that use a 96 mm pull stud mounting pattern. Connects to shop air with minimal setup to allow rapid vise changes. With a few extra components, the base can be integrated in robotic pick and place vise swaps.

### PNEUMATIC BASE

- » 96 mm pull stud mounting
- » Remote pallet actuation with a Kurt FLR and a hand or foot switch (sold separately)
- » Connects to shop air source
- » Fast, pneumatic actuation
- » Designed to work with Kurt 5-Axis vises and other brands with the proper pull studs



Kurt Air Receiver base holding a PFW 5-Axis vise.



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## Kurt 5-Axis Pneumatic Vise

Unlike any other air vise, the **Kurt PFA620** allows manual full-stroke adjustment on parts of varying sizes combined with air opening and closing for reliable part holding. Versatile and user friendly, just clamp a large or small part using the handle to set the jaws and then clamp and unclamp the part with the .25" pneumatic stroke.

### PNEUMATIC VISE

- » Quick-change, snap-on/off jaws
- » 96 mm or 52 mm pull-stud spacing for zero-point pallet systems
- » Machinable, Dovetail and Serrated
- » AngLock design minimizes jaw lift
- » Automation-ready for easy robotic load and unload
- » High clamping force



PFA620 5-AXIS AIR VISE



4-Inch Pneumatic Vise



Pneumatic 96 mm Pattern Base



### APW420 5-AXIS PNEUMATIC BASE & PFA620 PNEUMATIC BASE

| Part Number                | PFA620                          | APW420                                   |
|----------------------------|---------------------------------|------------------------------------------|
| Size                       | 6" x 9" x 4.75"                 | 4.92" x 6" x 2.285"                      |
| Weight                     | 34.46 lb                        | 14.13 lb                                 |
| Bed Height                 | 3.5"                            | 3" Rise                                  |
| Jaw Width                  | 4"                              | Receiver base / pneumatic hold & release |
| Max Jaw Opening / Machined | 2.43" / 6.93" (machinable jaws) | N/A                                      |
| Mounting                   | Bolt down or custom plate       | Through-pallet bolt down                 |



## PF840 8-Inch 5-Axis Vise

The industry's largest 5-Axis Vise! The **Kurt PF840** has 8-inch jaws and a **maximum jaw opening of 8 inches**. It's a great option for large multi-axis machining centers or mounted on a pallet as part of a FMS line—like we use them at Kurt. Patented AngLock® design minimizes jaw lift and deflection. Machinable jaws come standard for precise part conformity with optimal clamping force.

The 8-inch PF840 vise is our largest self-centering vise (shown with 4-inch PF vises).

[LEARN MORE](#)


### WISE FEATURES

- » 8-inch-wide machinable jaws
- » Our largest 5-Axis vise
- » Can work with large pallet systems and FMS lines
- » Holds large parts with the maximum part-clearance needed for done-in-one operation
- » AngLock® design minimizes jaw lift
- » Easy center-line & quick lash adjustments



## Kurt 45° Pyramid

The **45-degree Pyramid (PRM-356)** is designed to hold 3 vises and provide maximum access to all machined surfaces and enhance spindle and cutting tool clearances. The Kurt Pyramid can accommodate multiple Kurt vise models: PFW series, PF series, SCMX series, and DT series vises.

Constructed of 7075 anodized aluminum, with a 12" diameter base, the Pyramid will fit a wide range of 5-axis CNC machines. Predrilled holes makes it easy to mount to most machine tables, pallets or sub plates.

### KEY FEATURES

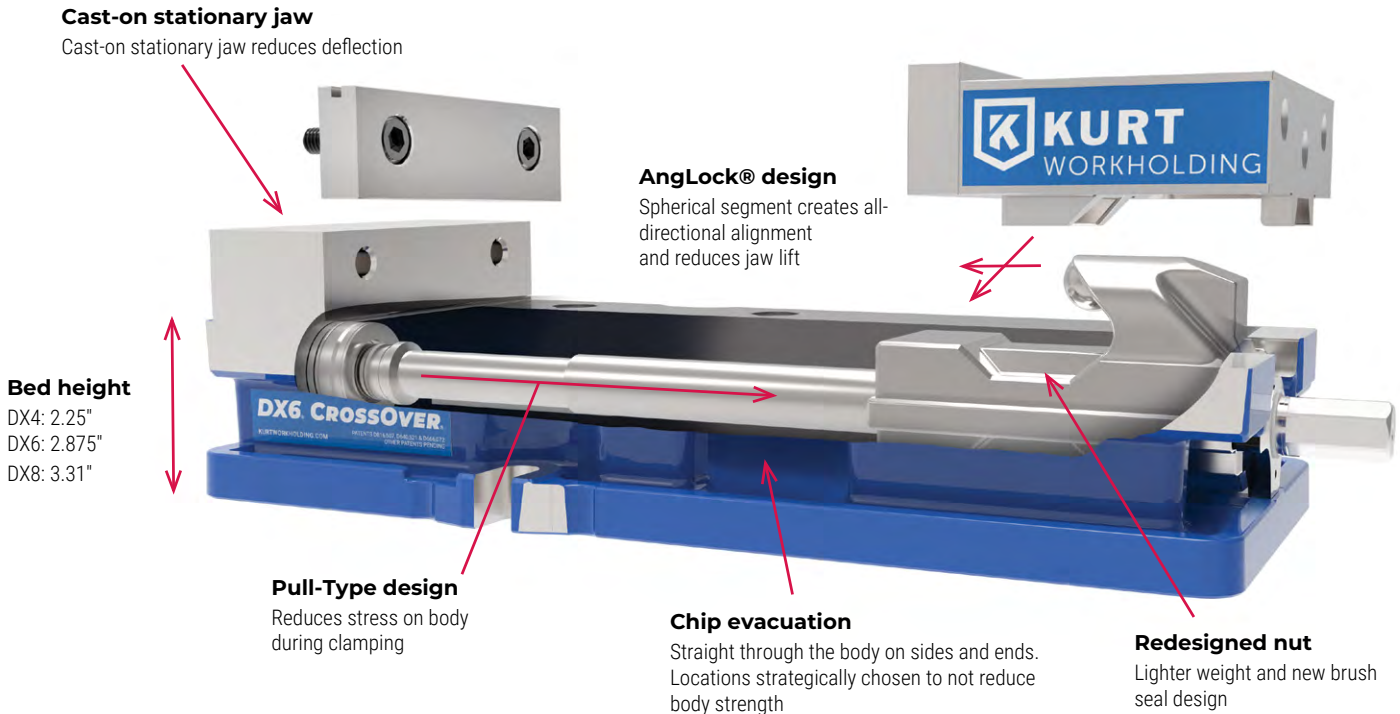
- » Enhanced spindle and cutting tool clearance
- » Fits multiple Kurt vise models
- » 7075 anodized aluminum
- » 12" diameter base
- » Fits range of CNC machines
- » Pre drilled for easy mounting to most machine tables, pallets or wide variety of sub plates



### PF840 8-INCH VISE / KURT PYRAMID



| Part Number                | PF840                              | PRM-356               |
|----------------------------|------------------------------------|-----------------------|
| Size                       | 8" x 11.75" x 5.875"               | 12" Diameter x 4.5" H |
| Weight                     | 84 lb                              | 35 lb                 |
| Bed Height                 | 3.375"                             | N/A                   |
| Jaw Width                  | 8"                                 | N/A                   |
| Max Jaw Opening / Machined | 4" / 8" max when jaws are machined | N/A                   |
| Mounting Options           | Bolt down                          | Bolt down             |

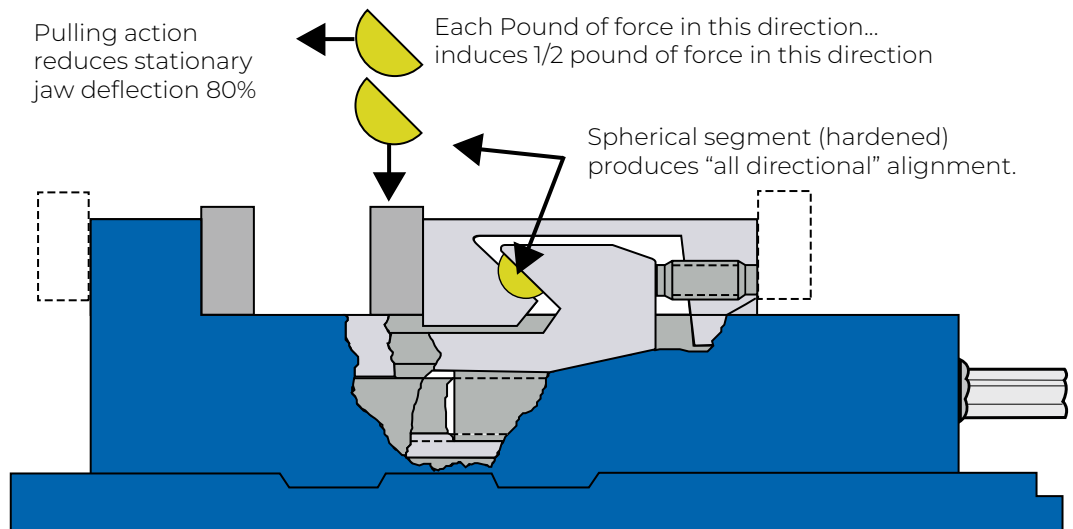


# Kurt DX Vises: Setting the Industry Standard for CNC Machining Vises

**Now in 4-inch 6-inch and 8-inch jaw sizes** with manual, reverse, pneumatic and hydraulic options

## FEATURES FOUND ON ALL DX SERIES VISES

- » AngLock design assures the movable jaw does not lift (right)
- » Standard bed height of  $\pm 0.001$ "
- » Hardened vise bed
- » Hardened jaw plates
- » Semi-hard steel screw
- » 80,000-PSI ductile iron body
- » Precision mounting with sine keys





## Kurt DX4 Vises / Manual / Reverse / Hydraulic


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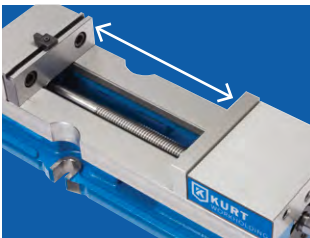

DX4 Manual

The **DX4® CrossOver® Vise** is our smallest DX-Series vise with 4-inch jaws and state-of-the-art workholding features. The new, one-piece body design achieves high levels of precision and performance where flatness and parallelism are important. 4 versions of the DX4 are available including manual and reverse vises and hydraulic models for affordable turnkey automation. Kurt's automation solutions make it easy to add a level of productivity to your shop without breaking your budget.

The DX4 offers a full **6.5" inch jaw opening** in standard configuration and is compatible with our **CarveSmart Master Jaw Kits** for use with quick-change dovetailed jaw options. DX4 vise models include our Lifetime Ironclad Warranty.

### KEY FEATURES

- » Easy turnkey automation options with DX4H Hydraulic Vises
- » Hardened vise bed/jaw plates
- » Large 6.5" opening
- » GrooveLock® jaw plate and workstop included
- » New brush seal nut design makes it easier to replace
- » Accepts sine keys for alignment (not included)
- » Chip evacuation straight through the body
- » Lifetime Iron Clad Warranty
- » 4-inch CarveSmart Master Jaw compatible



Full 6.5" opening

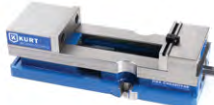


Cast on stationary jaw: 30% less pushback deflection



Through body chip evacuation &amp; integrated handle

### DX4 VISE MODELS



| Part Number             | DX4                                                                                             | DX4R                      | DX4H                     | DX4HR                    |
|-------------------------|-------------------------------------------------------------------------------------------------|---------------------------|--------------------------|--------------------------|
| <b>Vise Type</b>        | Manual                                                                                          | Manual Reverse            | Hydraulic                | Hydraulic Reverse        |
| <b>Size</b>             | 4.962" x 13.735" x 3.485"                                                                       | 4.962" x 13.735" x 3.485" | 4.962" x 16.41" x 3.485" | 4.962" x 16.41" x 3.485" |
| <b>Weight</b>           | 30 lb                                                                                           | 30 lb                     | 33 lb                    | 33 lb                    |
| <b>Bed Height</b>       | 2.25"                                                                                           | 2.25"                     | 2.25"                    | 2.25"                    |
| <b>Jaw Width</b>        | 4"                                                                                              | 4"                        | 4"                       | 4"                       |
| <b>Max Jaw Opening</b>  | 6.5"                                                                                            | 6.5"                      | 6.5"                     | 6.5"                     |
| <b>Mounting Options</b> | Bolts and locates on 40 mm, 50 mm and 2" grid patterns / Uses locating sine keys (not included) |                           |                          |                          |

# Kurt DX6 Vises / Manual / Reverse / Pneumatic / Hydraulic



LEARN MORE



DX6 Manual



## CUSTOM OPTIONS

**All Kurt Vises:** Can be configured for **back to back mounting** by our Custom Team. It usually takes about a week. **Kurt 4", 6", and 8"** vises transform into compact towers for horizontal machining centers.

The **Kurt DX6 CrossOver vise** is the industry standard 6-inch CNC milling vise. Steadily upgraded since its inception, the vise features a one-piece body design for 30% less horizontal deflection. The DX6 is **available in 6 models**, including pneumatic, hydraulic, manual and reverse configurations. DX6 air and hydraulic vises are at the heart of Kurt's affordable turnkey automation setups. DX6 vises are also compatible with our **CarveSmart 6-inch Master Jaw Sets** for even faster part changeovers. Talk to our Custom Workholding team for a 96 mm pull stud pattern in the base.

## KEY FEATURES

- » Pull-type design
- » 6-inch CarveSmart Master Jaw compatible
- » Cast-on stationary jaw
- » Hardened vise bed/jaw plates
- » Large 9" opening
- » Accepts sine keys
- » Lifetime Iron Clad Warranty
- » Air and hydraulic options
- » DX6-RKIT conversion kits available to convert standard a DX6 to a reverse model
- » DX6 Metric models available
- » Easy turnkey hydraulic or air automation options



Cast on stationary jaw: 30% less pushback deflection



Through body chip evacuation & integrated handle

## DX6 VISE MODELS



| Part Number                    | DX6                                                                                             | DX6R                   | DX6A                   | DX6AR                  | DX6H                   | DX6HR                  |
|--------------------------------|-------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>Vise Type</b>               | Manual                                                                                          | Manual Reverse         | Pneumatic              | Pneumatic Reverse      | Hydraulic              | Hydraulic Reverse      |
| <b>Size</b>                    | 7.39" x 18.26" x 4.61"                                                                          | 7.39" x 18.33" x 4.61" | 7.39" x 25.63" x 4.61" | 7.39" x 25.63" x 4.61" | 7.39" x 20.77" x 4.61" | 7.39" x 20.83" x 4.61" |
| <b>Weight</b>                  | 65 lb                                                                                           | 65 lb                  | 70 lb                  | 70 lb                  | 68 lb                  | 68 lb                  |
| <b>Bed Height</b>              | 2.875"                                                                                          | 2.875"                 | 2.875"                 | 2.875"                 | 2.875"                 | 2.875"                 |
| <b>Jaw Width / Max Opening</b> | 6" / 9"                                                                                         | 6" / 9"                | 6" / 9"                | 6" / 9"                | 6" / 9"                | 6" / 9"                |
| <b>Mounting Options</b>        | Bolts and locates on 40 mm, 50 mm and 2" grid patterns / Uses locating sine keys (not included) |                        |                        |                        |                        |                        |



# Kurt DX8 Vises / Manual / Reverse / Pneumatic / Hydraulic



LEARN MORE



DX8 Manual

The **Kurt DX8 CrossOver vise** is the largest vise in the DX Series. It is an evolution of the best features of our 8-inch machining vise with state-of-the-art features that set a new standard in precision flatness, parallelism and repeatability. The DX8 is available in 4 models, including a hydraulic vise that can **easily integrate in automation setups**.

The DX-Series features a one-piece body design with 30% less horizontal push-back deflection than previous 8-inch models. A lifting handle is integrated on the back of the stationary jaw for easy positioning. The entire DX vise lineup features the proprietary Kurt AngLock® design to create all-directional alignment, reduce jaw lift and improve performance. All DX vises use locating sine keys for easy, accurate mounting and feature Kurt's Lifetime Ironclad Warranty.

## KEY FEATURES

- » Pull-type design
- » 8-inch CarveSmart Master Jaw compatible
- » Cast-on stationary jaw
- » Hardened vise bed/jaw plates
- » Semi-hard steel screw
- » 80,000 psi ductile iron body, nut and movable jaw
- » Large 10" opening
- » Accepts sine keys
- » Enhanced through-body chip evacuation
- » Lifetime Iron Clad Warranty
- » Hydraulic & reverse options
- » Easy turnkey automation options with DX8H Hydraulic Vises



Full 10" opening



Cast on stationary jaw: 30% less pushback deflection



Through body chip evacuation &amp; integrated handle

## DX8 VISE MODELS



| Part Number                    | DX8                                                                                             | DX8R                   | DX8H                   | DX8HR                  |
|--------------------------------|-------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|
| <b>Vise Type</b>               | Manual                                                                                          | Manual Reverse         | Hydraulic              | Hydraulic Reverse      |
| <b>Size</b>                    | 8.99" x 24.02" x 5.51"                                                                          | 8.99" x 24.02" x 5.51" | 8.99" x 27.42" x 5.51" | 8.99" x 27.42" x 5.51" |
| <b>Weight</b>                  | 160 lb                                                                                          | 160 lb                 | 165 lb                 | 165 lb                 |
| <b>Bed Height</b>              | 3.31"                                                                                           | 3.31"                  | 3.31"                  | 3.31"                  |
| <b>Jaw Width / Max Opening</b> | 8" / 10.63"                                                                                     | 8" / 10.63"            | 8" / 10.63"            | 8" / 10.63"            |
| <b>Mounting Options</b>        | Bolts and locates on 40 mm, 50 mm and 2" grid patterns / Uses locating sine keys (not included) |                        |                        |                        |

## 4-Inch VersatileLock Vises / Manual / Reverse / Hydraulic


[LEARN MORE](#)


**3400V VersatileLock  
Manual Vise**



### MASTER JAW KITS

#### CarveSmart Master Jaw

**Kits:** Bolt on in place of traditional jaw plates on **ANY Kurt 4", 6", or 8" vise**. Brings instant compatibility with a range of quick-changed dovetailed jaw options.

**4-inch VersatileLock** models are available in standard, reverse, manual, and hydraulic options. VersatileLock vises feature the patented Kurt AngLock design, "pull-type" jaw clamping to reduce stationary jaw deflection by at least 80%. The one-piece vise body and stationary jaw provide greater strength while reducing weight. Vises are machined on the top and both side allowing side or standard mounting.

VersatileLock hydraulic vises are easy to integrate in an automation setup. Vises can be set up as double- or single-acting with a **Kurt KHP3 hydraulic pump** and a few other accessories and connectors.

VersatileLock vises are available in reverse configuration for easier part programming in "Y axis" positive direction. Reverse models also reduces "reach-over" distance to make part loading safer and easier for the operator.

### KEY FEATURES

- » Full 6" Opening
- » 4-inch CarveSmart Master Jaw compatible
- » Can be mounted upright or on either side
- » Matched stationary jaw to keyway including the body height  $\pm 0.001"$
- » 0.0005" clamping repeatability
- » Footprint is less than 13"
- » All hydraulic units feature a 1/4" vise stroke
- » GrooveLock workstop included

#### Manual Vises

#### Hydraulic Vises

### 4-INCH VERSATILELOCK VISES



| Part Number                    | 3400V                                                                              | 3410V                   | 3400H               | 3410H                      |
|--------------------------------|------------------------------------------------------------------------------------|-------------------------|---------------------|----------------------------|
| <b>Vise Type</b>               | standard manual                                                                    | standard manual reverse | standard hydraulic  | standard hydraulic reverse |
| <b>Size</b>                    | 4" x 13.59" x 3.61"                                                                | 4" x 13.59" x 3.61"     | 4" x 16.21" x 3.61" | 4" x 16.21" x 3.61"        |
| <b>Weight</b>                  | 28 lb                                                                              | 28 lb                   | 31 lb               | 31 lb                      |
| <b>Bed Height</b>              | 2.375"                                                                             | 2.375"                  | 2.375"              | 2.375"                     |
| <b>Jaw Width / Max Opening</b> | 4" / 6"                                                                            | 4" / 6"                 | 4" / 6"             | 4" / 6"                    |
| <b>Mounting Options</b>        | Upright or side mountable / Bolts and locates on 40 mm, 50 mm and 2" grid patterns |                         |                     |                            |



## 6-Inch VersatileLock Vises / Manual / Reverse / Pneumatic / Hydraulic


[LEARN MORE](#)


3600V VersatileLock  
Manual Vise

The **6-inch VersatileLock** vise features the **most variations** of any Kurt vise including: manual, air, and hydraulic actuation options and reverse, short, and standard sizes. 6-inch wide VersatileLock vises offer ultra-precision, side and standard mounting and our patented AngLock® jaw design. "Pull-type" jaw clamping reduces stationary jaw deflection by at least 80%, while the one-piece vise body and stationary jaw provide greater strength and reduced weight.

VersatileLock vises are available in reverse configuration for the added benefit of easier part programming in "Y axis" positive direction. Reverse models also reduces "reach-over" distance to make part loading safer and easier for the operator.

Pneumatic or hydraulic VersatileLock vise automations are easy to configure and set up in a machine. Kurt offers turnkey solutions including pumps and plumbing necessary for shop setups. Pneumatic VersatileLock vises only require shop air and a filter/lubricator to create a single-acting setup. **Ask our automation experts at Kurt Custom Engineered workholding** for help setting up an automated system.

### KEY FEATURES

- » Mount upright or on either side
- » 6-inch CarveSmart Master Jaw compatible
- » Matched stationary jaw to keyway including the body height  $\pm 0.001"$
- » 0.0005" clamping repeatability
- » Short vise is only 13 inches long
- » Hydraulic & pneumatic models
- » Optional internal hex available for 3600V only. (3600V-INT)

#### Manual Vises

#### Pneumatic Vises

#### Hydraulic Vises

### 6-INCH VERSATILELOCK VISES



| Part Number                    | 3600V / 3610V / 3600V-INT                                                          | 3620V / 3630V         | 3600A / 3610A                       | 3620A / 3630A                 | 3600H / 3610H                          | 3620H / 3630H                             |
|--------------------------------|------------------------------------------------------------------------------------|-----------------------|-------------------------------------|-------------------------------|----------------------------------------|-------------------------------------------|
| <b>Vise Type</b>               | standard / reverse / internal hex                                                  | short / short reverse | standard air / standard air reverse | short air / short air reverse | standard hydraulic / hydraulic reverse | short hydraulic / short hydraulic reverse |
| <b>Size</b>                    | 6" x 16.94" x 4.92"                                                                | 6" x 14.88" x 4.92"   | 6" x 24.22" x 4.92"                 | 6" x 20.1" x 4.92"            | 6" x 19.6" x 4.92"                     | 6" x 17.29" x 4.92"                       |
| <b>Weight</b>                  | 69 lb                                                                              | 64 lb                 | 75 lb                               | 70 lb                         | 74 lb                                  | 69 lb                                     |
| <b>Bed Height</b>              | 3.187"                                                                             | 3.187"                | 3.187"                              | 3.187"                        | 3.187"                                 | 3.187"                                    |
| <b>Jaw Width / Max Opening</b> | 6" / 6"                                                                            | 6" / 4"               | 6" / 6"                             | 6" / 4"                       | 6" / 6"                                | 6" / 4"                                   |
| <b>Mounting Options</b>        | Upright or side mountable / Bolts and locates on 40 mm, 50 mm and 2" grid patterns |                       |                                     |                               |                                        |                                           |

## 8-Inch VersatileLock Vises / Manual / Reverse / Pneumatic / Hydraulic


[LEARN MORE](#)


3800V VersatileLock  
Manual Vise

The **8-inch VersatileLock** vise offers ultra-precision function through these important design features: The original, time proven Kurt AngLock design prevents parts from lifting upward under heavy clamping loads. The “pull-type” jaw clamping reduces stationary jaw deflection by at least 80%. The one-piece vise body and stationary jaw provide greater strength while reducing weight. Vises are machined on the top and both side allowing side or standard mounting.

VersatileLock vises are available in reverse configuration for the added benefit of easier part programming in “Y axis” positive direction. Reverse models also reduces “reach-over” distance to make part loading safer and easier for the operator.

8-inch models are available in standard and reverse and manual and hydraulic. Adding a hydraulic VersatileLock vise to an automation setup is easy with Kurt's turnkey solutions. Vises can be set up as double- or single-acting with a Kurt KHP3 hydraulic pump and a few other accessories and connectors. **Ask our automation experts at Kurt Custom Engineered workholding** for help setting up an automated system.

### KEY FEATURES

- » Full 10" opening
- » 8-inch CarveSmart Master Jaw compatible
- » Mount upright or on either side
- » Matched stationary jaw to keyway including the body height  $\pm 0.001"$
- » 0.0005" clamping repeatability
- » Sine key compatible for easy locating on machine tables
- » All hydraulic units feature a 1/4" vise stroke
- » 6,550 lb maximum clamping force

#### Manual Vises

#### Hydraulic Vises

### 8-INCH VERSATILELOCK VISES



| Part Number                    | 3800V                                                                              | 3810V                   | 3800H               | 3810H                      |
|--------------------------------|------------------------------------------------------------------------------------|-------------------------|---------------------|----------------------------|
| <b>Vise Type</b>               | standard manual                                                                    | standard manual reverse | standard hydraulic  | standard hydraulic reverse |
| <b>Size</b>                    | 8" x 24" x 5.95"                                                                   | 8" x 24" x 5.95"        | 8" x 26.98" x 5.95" | 8" x 26.98" x 5.95"        |
| <b>Weight</b>                  | 148 lb                                                                             | 148 lb                  | 155 lb              | 155 lb                     |
| <b>Bed Height</b>              | 3.75"                                                                              | 3.75"                   | 3.75"               | 3.75"                      |
| <b>Jaw Width / Max Opening</b> | 8" / 10.25"                                                                        | 8" / 10.25"             | 8" / 10.25"         | 8" / 10.25"                |
| <b>Mounting Options</b>        | Upright or side mountable / Bolts and locates on 40 mm, 50 mm and 2" grid patterns |                         |                     |                            |

# HD690/HD691 Vises / Manual / Reverse / Pneumatic / Hydraulic



LEARN MORE



NEW HD690CS with  
CarveSmart Jaws

Kurt **HD690** vises are 6-inch pull-type vises with 9.0 inch openings. HD690 models feature a narrower body and slightly taller bed height than both the VersatileLock and DX models making them a good option for anyone looking for more access under a part and more vises on a table. Bed heights are matched within 0.0005" for side-by-side loading or multiple vises holding a single large part.

HD690 vises are available in a range of configurations including: manual and hydraulic actuation, metric and reverse options. The **NEW HD690CS with CarveSmart** comes with the added versatility of **CarveSmart quick-change dovetailed jaws** and a wide variety of pre-cut hard and soft jaws to choose from. Available with or without a Talon Top edge.

The **reversible movable jaw** can be set up with two different jaw plate options and snaps on and off without tools. The bolt-down stationary jaw attaches with 4 bolts to reduce stress and deflection in the body and hold parts flat.

**HDH690 hydraulic** models can be set up as **single acting** (with hydraulic clamping and spring return for unclamping) or as **double acting** (with hydraulic clamping and unclamping). Includes fittings for both configurations.

## KEY FEATURES

- » HD690CS model features stock CarveSmart Jaws
- » 9" jaw opening
- » Wide, bolt-down stationary jaw for less deflection
- » Quick change movable jaw
- » CarveSmart with Talon Top model available
- » Narrower body for more vises in the same work envelope
- » Uses sine keys for alignment
- » Body height matched  $\pm 0.0005"$
- » Ironclad Lifetime Warranty

### Manual Vises with CarveSmart Jaws

### Manual Vises

### Hydraulic Vises

## 6-INCH HD690/HD691 VISES



| Part Number             | HD690CS                                                | HD690CST               | HD690 / HDM690         | HD691 / HDM691         | HDH690                 | HDH691                 |
|-------------------------|--------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Vise Type               | standard manual                                        | standard manual        | standard / metric      | metric manual          | standard hydraulic     | metric hydraulic       |
| Size                    | 7.34" x 18.32" x 4.86"                                 | 7.34" x 18.32" x 4.86" | 7.34" x 18.32" x 4.86" | 7.34" x 18.32" x 4.86" | 7.34" x 20.82" x 4.86" | 7.34" x 20.82" x 4.86" |
| Weight                  | 75 lb                                                  | 75 lb                  | 75 lb                  | 75 lb                  | 80 lb                  | 80 lb                  |
| Bed Height              | 3.125"                                                 | 3.125"                 | 3.125"                 | 3.125"                 | 3.125"                 | 3.125"                 |
| Jaw Width / Max Opening | 6 in / 9.06"                                           | 6 in / 9.06"           | 6 in / 9.06"           | 6 in / 9.06"           | 6 in / 9.06"           | 6 in / 9.06"           |
| Mounting Options        | Bolts and locates on 40 mm, 50 mm and 2" grid patterns |                        |                        |                        |                        |                        |



## XL6 & XL8 Extra Capacity Vises Manual / Reverse / Pneumatic / Hydraulic

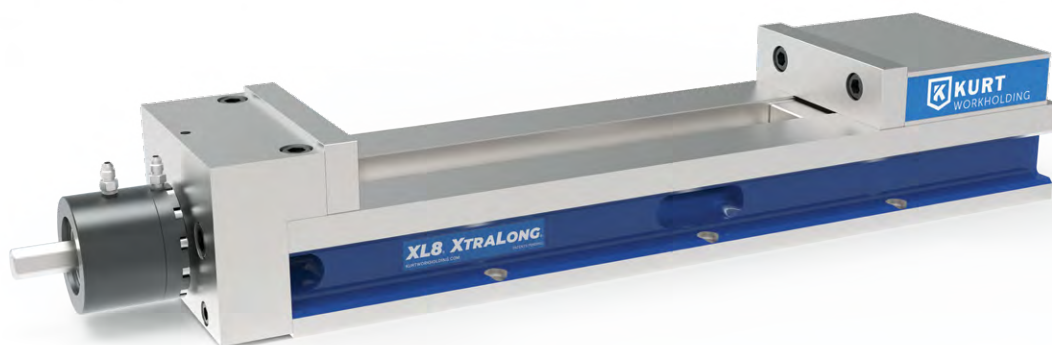

[LEARN MORE](#)


### KEY FEATURES

- » Full 10" opening
- » CarveSmart Master Jaw compatible
- » Mount upright or on either side
- » Matched stationary jaw to keyway including the body height  $\pm 0.001$ "
- » 0.0005" clamping repeatability
- » Sine key compatible for easy locating on machine tables
- » All hydraulic units feature a 1/4" vise stroke
- » Over 20,000 lb maximum clamping force (XL8)

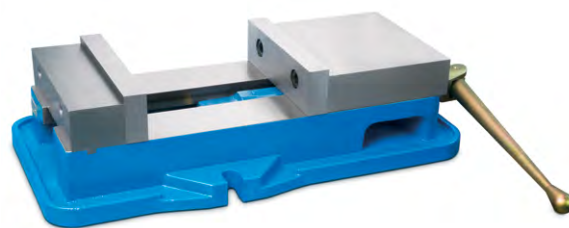
**Kurt XL vises** are designed for clamping extremely large parts for both die and CNC applications. With maximum jaw openings 19.25" to 28.75", **XL6 & XL8** vises are ideal for high horsepower "hogging out" operations. All models are accurate to within 0.001" for precise, easy alignment in multiples.

XL vises can also be used as receivers for other workholding devices so it's easy to keep one on a machine at all times. Manual, pneumatic, hydraulic and reverse models are available. **CarveSmart Master Jaw compatible.**



## D100 10-Inch Vise

The **Kurt D100** 10-inch vise is our largest and strongest general purpose vise. With a 9-3/4" jaw opening and up to **16,163 pounds of clamping force**, it has the capacity and strength to take on your highest horsepower milling cuts. The D100 AngLock® vise is designed for precision part clamping on basic machine tools and machining centers. It is ideal for running precision production parts where datums, flatness, and parallelism are requirements.



6-inch Extra Capacity Vises

8-inch Extra Capacity Vises

10-inch Vise

### KURT EXTRA CAPACITY VISE MODELS



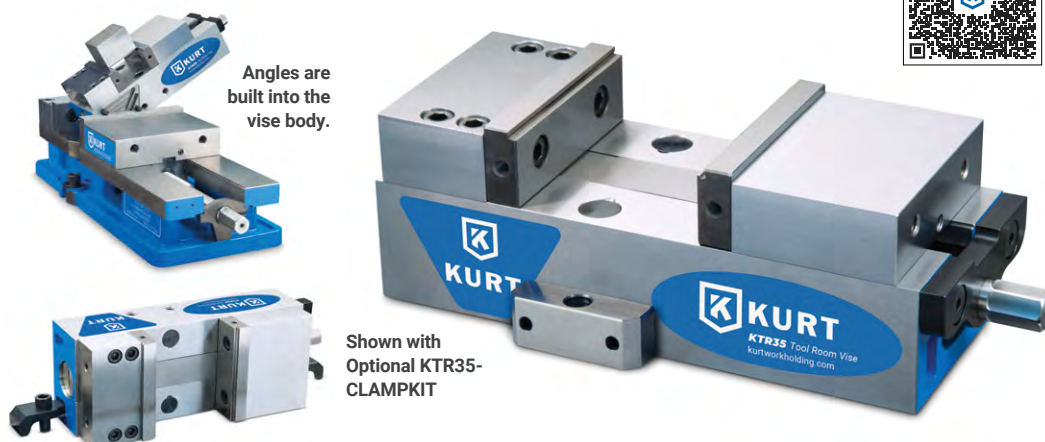
| Part Number                    | XL6 / XL6R                                             | XL6A / XL6AR                  | XL6H / XL6HR                  | XL8 / XL8R          | XL8H / XL8HR                  | D100                   |
|--------------------------------|--------------------------------------------------------|-------------------------------|-------------------------------|---------------------|-------------------------------|------------------------|
| <b>Vise Type</b>               | manual / reverse                                       | pneumatic / pneumatic reverse | hydraulic / hydraulic reverse | metric manual       | hydraulic / hydraulic reverse | manual                 |
| <b>Size</b>                    | 6" x 23.9" x 4.86"                                     | 6" x 31.12" x 4.86"           | 6" x 26.4" x 4.86"            | 8" x 34.42" x 5.95" | 8" x 36.92" x 5.95"           | 14.5" x 29.19" x 6.81" |
| <b>Weight</b>                  | 100 lb                                                 | 106 lb                        | 105 lb                        | 230 lb              | 235 lb                        | 300 lb                 |
| <b>Bed Height</b>              | 3.125"                                                 | 3.125"                        | 3.125"                        | 3.75"               | 3.75"                         | 3.875"                 |
| <b>Jaw Width / Max Opening</b> | 6" / 14.5"                                             | 6" / 14.5"                    | 6" / 14.5"                    | 8" / 21.5"          | 8" / 21.5"                    | 10 in / 9.75"          |
| <b>Mounting Options</b>        | Bolts and locates on 40 mm, 50 mm and 2" grid patterns |                               |                               |                     |                               | Direct bolt down       |

## Kurt KTR35 Tool Room / Sine Vise

LEARN MORE



Sold exclusively through the Kurt Workholding website, the KTR35 – Kurt Tool Room Vise is an extremely versatile vise designed to fit on the smallest of machine tables. The **KTR35** vise is ground on all sides to allow multiple vises to be mounted side by side using through-the-body mounting or the optional toe clamp kit. This vise can also be used as a sine vise when using another vise as a receiver.



## SideWinder SDW35

Sold exclusively through the Kurt Workholding website, the Kurt **SDW35 SideWinder** is designed to hold parts vertically while for doing 2nd op work. The vise mounts to the back of any Kurt industry standard 6" or 8" vise. The SideWinder includes a stabilization leg that mounts to the table on the movable end of the vise and a workstop to position the height of the part. Increase spindle time with you machine two parts on two vises in the same setup with the SideWinder. The sleek design won't interfere with the host vise. Kurt's patented AngLock design prevents jaw lift.

## SCD640 Self-Centering Vise

The 6-inch **Self-Centering SCD640** has an 8-inch maximum opening and centering accuracy of 0.0006" and 0.0002" repeatability. Both movable jaws are feature the AngLock design for zero lift. An adjustable centerline perfectly sets the jaws—this is especially important when mounting several vises on one machine where all centerlines must match. Kurt's custom engineered team often uses this model for custom servo-vise automations. Self-centering vises can be used for both horizontal and vertical machining.

### KURT SPECIALTY VISE MODELS

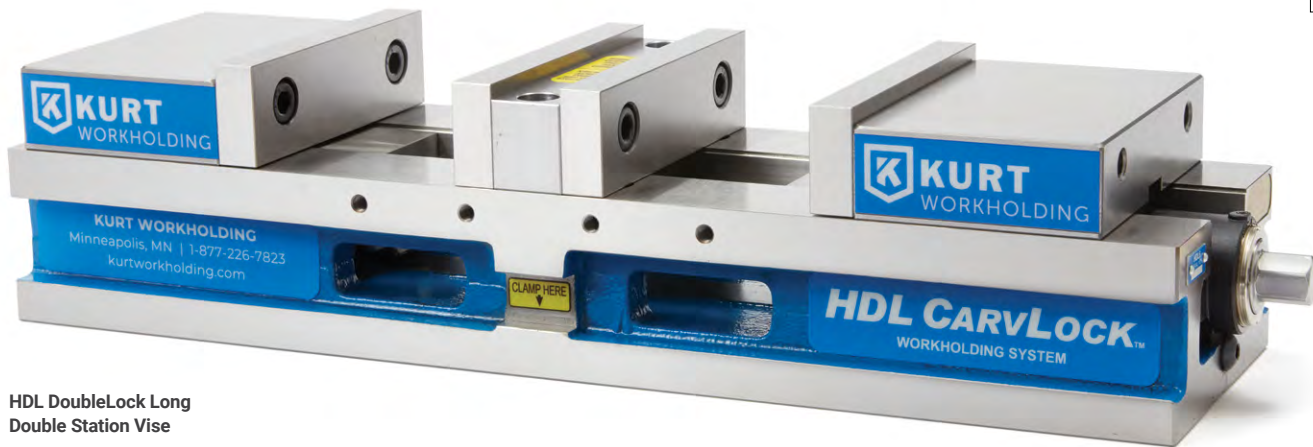


| Part Number                    | KTR35                                | SDW35                                | SCD640                            |
|--------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|
| <b>Vise Type</b>               | manual tool room / sine              | vertical 2nd operations              | manual self-centering             |
| <b>Size</b>                    | 3.5" x 10.49" x 3.24"                | 3.24" x 20.86" x 10.7"               | 6" x 23.5" x 4.86"                |
| <b>Weight</b>                  | 20 lb                                | 45 lb                                | 100 lb                            |
| <b>Bed Height</b>              | 2.0"                                 | 2.0"                                 | 3.125"                            |
| <b>Jaw Width / Max Opening</b> | 3.5" /                               | 3.5" /                               | 6" / 8"                           |
| <b>Mounting Options</b>        | Bolt directly or hold in larger vise | Mounts to back of Kurt 6" & 8" vises | 40 mm, 50 mm and 2" grid patterns |

# HDL DoubleLock Long Vises / Manual / Hydraulic



LEARN MORE



**HDL DoubleLock Long  
Double Station Vise**

**Kurt HDL DoubleLock Visers** are high density long vises with two clamping stations. Available in 4-, 6- and 8-inch jaw widths and manual, metric and hydraulic models.

DoubleLock vises are extremely accurate with clamping repeatability to 0.0002". Multiple part workholding combined with heavy-duty features will increase efficiency in any shop. Designed on a rugged 80,000 PSI ductile iron body with steel components, all models provide strength, rigidity and long term accuracy while absorbing machining vibration.

Hydraulic models are easy to automate using a Kurt KHP3 Hydraulic Pump and other Kurt automation accessories (see page 4).

## KEY FEATURES

- » Quick change jaws / indexable 180°
- » Manual and hydraulic models available
- » Multiple jaw options including: hard jaws, and machinable soft jaws
- » CarveSmart Master Jaw compatible
- » Can be converted into single station with kit
- » Holding block features the ability to clamp same or dissimilar sized parts and provides pre-loading ability in the front or back jaw (manual version)
- » Maximizes the number of parts in the work envelope
- » Lifetime Iron Clad Warranty



## CONVERSION KITS

### Double Station to Single Station

**Conversion Kits:** Bolt-on kits convert a double station vise or tower to a large single station vise or tower. Available for 4" & 6" HDL vise models and 4" & 6" CTHDL cluster tower models.

### Manual Visers

### Hydraulic Visers

## HDL DOUBLELOCK LONG VISERS



| Part Number                    | HDL4 / HDLM4                                                                                              | HDL6 / HDLM6             | DL800               | HDHL4 / HDHLM4              | HDHL6 / HDHLM6              | DLH800              |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------|---------------------|-----------------------------|-----------------------------|---------------------|
| <b>Vise Type</b>               | standard / metric manual                                                                                  | standard / metric manual | standard manual     | standard / metric hydraulic | standard / metric hydraulic | standard hydraulic  |
| <b>Size</b>                    | 4" x 17.76" x 3.61"                                                                                       | 6" x 22.51" x 4.86"      | 8" x 34.25" x 5.95" | 4" x 17.76" x 3.61"         | 6" x 22.51" x 4.86"         | 8" x 36.49" x 5.95" |
| <b>Weight</b>                  | 34 lb                                                                                                     | 71 lb                    | 250 lb              | 34 lb                       | 71 lb                       | 360 lb              |
| <b>Bed Height</b>              | 2.375"                                                                                                    | 3.125"                   | 3.75"               | 2.375"                      | 3.125"                      | 3.75"               |
| <b>Jaw Width / Max Opening</b> | 4" / 2.984"                                                                                               | 6" / 4"                  | 8" / 6"             | 4" / 2.984"                 | 6" / 4"                     | 8" / 6"             |
| <b>Jaw Options</b>             | hard jaws / machinable aluminum jaws (two heights) / machinable ductile iron jaws / no jaws - see website |                          |                     |                             |                             |                     |
| <b>Mounting Options</b>        | Bolts and locates on 40 mm, 50 mm and 2" grid patterns                                                    |                          |                     |                             |                             |                     |



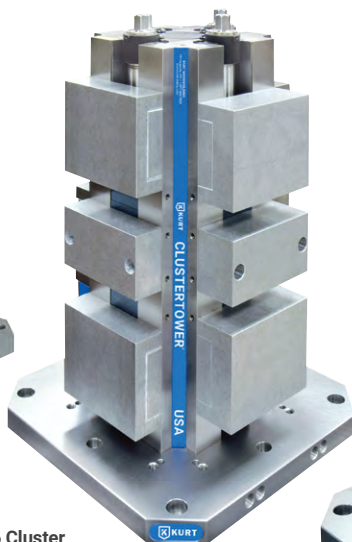
# HDL Clustertowers / Manual / Hydraulic



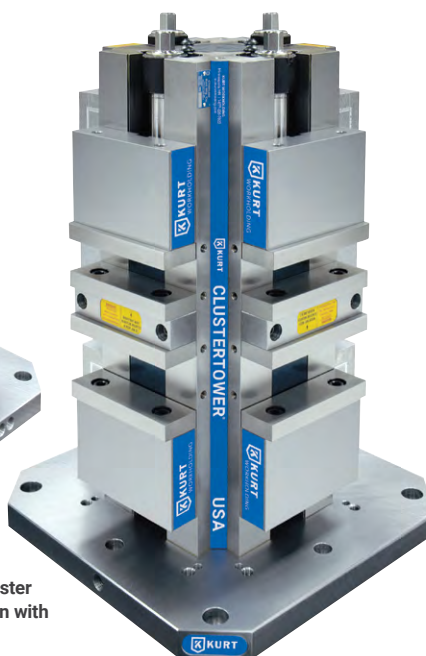
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CTHDL6 Cluster Tower shown with optional hydraulic clamping



CTHDL6 Cluster Tower shown with machinable soft jaws



CTHDL6 Cluster Tower shown with hard jaws



## MULTIPLE JAW OPTIONS

**HD CarvLock** and **HDL DoubleLock** vises and towers have multiple jaw options available including **steel hard jaws**, **fixture plates** to quickly convert towers to tombstones, and **machinable iron** and **aluminum soft jaws**. Aluminum jaws are available in several heights.

Simply find the tower or vise at [kurtworkholding.com](http://kurtworkholding.com) and select the jaw option that works best. If you can't find it, give us a call!

Manually or Hydraulically operated, eight station **HDL Cluster Towers** features a ductile iron integral vise tower and 4 sets of HDL style double-station jaws. Designed for use on mid-size and larger machining centers including horizontal and vertical machining centers with a fourth axis and indexable tables. This workholding system achieves workpiece immobility while damping cutter induced vibration.

Hydraulic models are easy to automate using a **Kurt KHP3 Hydraulic Pump** and other Kurt automation accessories (see page 4). Ask our team of custom engineered workholding professionals if you need help designing an automation setup.

- » Repeatable clamping to 0.0002"
- » 5,870 lb. clamping force at 60 ft lb. (4-inch models)
- » 7,460 lb. clamping force at 70 ft lb (6-inch models)
- » Ductile iron column ensures strength, rigidity and long term accuracy
- » Hard jaws, machinable aluminum jaws & ductile Iron jaws

### 4-Inch HDL Long Towers



### 6-Inch HDL Long Towers



## HDL DOUBLELOCK LONG CLUSTER TOWERS

| Part Number  | CTHDL43 / CTHDL44 / CTHDL45<br>CTHDL43 / CTHDL44 / CTHDL45                                                | CTHDL64 / CTHDL65 / CTHDL66 / CTHDL Hydraulic<br>CTHDL64 / CTHDL65 / CTHDL66 |
|--------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Tower Height | 18.9"                                                                                                     | 22.5" to 22.75"                                                              |
| Base Sizes   | 300 mm / 400 mm / 500 mm                                                                                  | 400 mm / 500 mm / 630 mm                                                     |
| Weight       | call for specific model weights and dimensions                                                            | call for specific model weights and dimensions                               |
| Vise Types   | standard / metric / hydraulic                                                                             | standard / metric /hydraulic                                                 |
| Jaw Width    | 4"                                                                                                        | 6"                                                                           |
| Jaw Options  | hard jaws / machinable aluminum jaws (two heights) / machinable ductile iron jaws / no jaws - see website |                                                                              |

## Kurt Standard & Caged Tombstones

### ToolBlox / Modular ToolBlox



LEARN MORE

**Kurt 2-Face and 4-Face ToolBlox Solid Tombstones** are ideal for mounting vises and subplates. Subplates can be bolted and doweled for quick, easy setups or changeovers. All vises or collet chucks may be mounted directly on the tombstone faces. Kurt Solid tombstones are made of Class-35 cast iron and precision machined to 0.001" for flatness and 0.003" for face perpendicular to base. 12 sizes are available with bases ranging from 400 mm to 630 mm.

**2-Face  
ToolBlox**



**4-Face  
ToolBlox**



**2-Face  
Modular  
ToolBlox**



**4-Face  
Modular  
ToolBlox**

**PRO TIP**

Stock models not working?  
Kurt's Custom Team can build  
a tombstone perfect for your  
unique application. Call today!

Kurt Workholding's **2-Face** and **4-Face Caged Tombstones** are an excellent solution for high-density, versatile workholding on horizontal CNC machining centers. Our caged tombstones are over 30% lighter than most comparably sized tombstones with aluminum sub-plates, and are uniquely designed to reduce setup time. Kurt quick-change receiver bases can be mounted on subplates for easy vise swaps

Caged tombstones are a lower-cost alternative to dedicated fixtures. The bolt holes and dowel pattern on each face enable the fast and easy installation/removal of subplates, quick-change workholding and other workholding components, such as manual or hydraulic vises and swing clamp setups.



A 4-face caged tombstone with new Kurt quick-change receiver bases. A DX6 or PFW 5-axis vises are easily mounted on the same tombstone.

**2-Face Caged Tombstones**

**4-Face Caged Tombstones**

**2-Face ToolBlox**

**4-Face ToolBlox**

### KURT TOMBSTONES STANDARD / CAGED



| Part Number  | TC2C40616 / TC2C50820 | TC4C40808 / TC4C51010 | Multiple #s (3 sizes)                                | Multiple #s (9 sizes)    |
|--------------|-----------------------|-----------------------|------------------------------------------------------|--------------------------|
| Tower Height | 25" / 28"             | 25" / 28"             | 26" / 34" / 38"                                      | 26" to 38"               |
| Base Sizes   | 400 mm / 500 mm       | 400 mm / 500 mm       | 400 mm / 500 mm / 630 mm                             | 400 mm / 500 mm / 630 mm |
| Face Width   | 400 mm / 500 mm       | 6" / 8"               | 400 mm / 500 mm / 630 mm                             | 6" to 18"                |
| Weight       | 325 lb / 545 lb       | 245 lb / 361 lb       | call or check website for specific tombstone weights |                          |
| Material     | Class 30 gray iron    |                       |                                                      |                          |

## MoveLock Modular System / Manual / Hydraulic

The MoveLock Modular System is a two-piece, high-precision vise that features modular jaws that bolt to a 2" x 2" grid system, T-slot sub-bases with a 2" pitch, standard sub-plates and machine tables or a Kurt SeraLock system.

Designed to hold a range of part sizes and work in high-density setups, the MoveLock is the first vise of its type to integrate Kurt's AngLock design to prevent jaw lift during clamping.

The MoveLock System can be operated manually or automated using the hydraulic movable jaw. MoveLock systems can be set up in single or double station configurations and can be mounted side by side on high density fixturing. (Below)



LEARN MORE



- » Movable and stationary jaws sold separately.
- » Manual or hydraulic actuation.
- » Light weight with 3.5" jaw width.
- » Features a 5/16" stroke.
- » Clamps large workpieces - jaw opening limited only by the work envelope.
- » Mounts on a 2" x 2" grid system, T-slot sub-bases with a 2" pitch, standard sub-plates and machine tables and SeraLock system.
- » Special jaw plates and workstops are available. Contact the factory for pricing and availability.



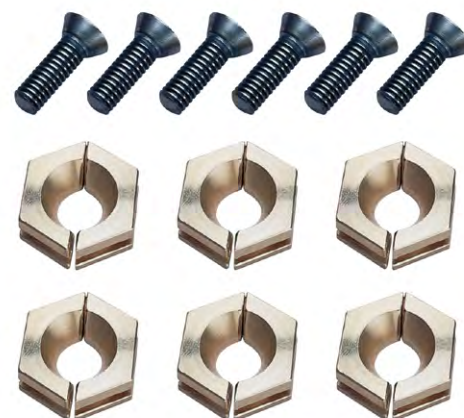
## MiniLock Modular System

The MiniLock Modular System is a cam-action modular clamping system with integrated AngLock design. A quarter turn of the screw, splits the clamp jaw—applying force both laterally and down—precisely clamping the part and preventing part lift at the same time.

- » Sold in packs of six
- » Clamp two parts using stationary blocks or pins
- » Single, double, or combined holding setups
- » Suitable for dedicated fixtures and palletizing small parts for machine-table receivers



- » Locating blocks, workstops, and MiniLocks allow multiple similar parts or part families on a pallet
- » Jaw: Ampco 18 aluminum bronze
- » Screw: Alloy steel, English only
- » Can machine steps to raise parts above the pallet or table
- » Low profile—machine top surfaces without re-clamping



### MOVELOCK & MINILOCK MODULAR WORKHOLDING SYSTEMS



MoveLock Modular System

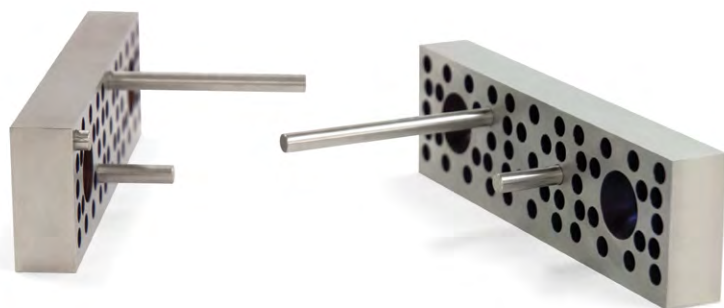


MiniLock Modular System



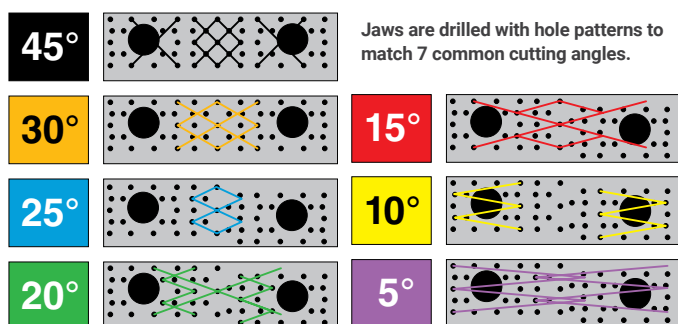
| Part Number      | MLS351                                                                                                                         | ML35           | MLH35             | MT4 / MT5 / MT6 / MT8<br>MTM4 / MTM5 / MTM6 / MTM8                 |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------|--------------------------------------------------------------------|
| Clamping Type    | Stationary Manual                                                                                                              | Manual Movable | Hydraulic Movable | Manual                                                             |
| Jaw Width        | 3.5 in                                                                                                                         | 3.5 in         | 3.5 in            | n/a                                                                |
| Mounting Options | Mounts on a 2" x 2" grid system, T-slot sub-bases with a 2" pitch, standard sub-plates and machine tables and SeraLock system. |                |                   | Mount on fixture plates with multiple configurations. See website. |





## 3-In-One System Jaw Plates

The 3-In-One System is designed for quick setups on common angle cuts. Preset patterns in jaws for 7 popular angles, including: 5°, 10°, 15°, 20°, 25°, 30°, and 45°. Jaw plates are available in 6-inch (**KSJ6**) and 8-inch (**KSJ8**) widths.



## Magnetic Jaw Plates

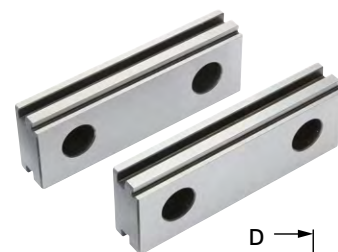
Powerful rare earth magnets hold parallels securely in place—leaving hands free to hold and clamp workpieces—facilitating fast and accurate set-ups.

(**D60-315-SAMAG** & **D60-7-SAMAG**)

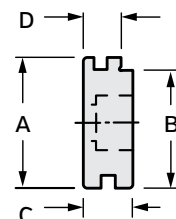


LEARN MORE

## GrooveLock Reversible Stepped Jaw Plate



Jaw plates feature a GrooveLock top with step cut into the face of the jaw. Flip jaw to hide stepped profile. Plates are available for 4-inch and 6-inch Kurt vises. (**D40-316** & **D60-316**)



## Kurt 6-inch & 8-inch Parallel Keepers

Kurt offers a 6-inch (**KPS-6000**) and 8-inch (**KPS-8000**) Parallel Keepers to hold parallels hands-free and securely against the vise jaws.



## 8" Parallel Sets available in 6-Piece & 9-Piece Sets

Kurt parallels are available in 6- or 9-pair sets. Parallel sets are hardened RC 52-58 steel ground to a parallelism within 0.0002 in. (**8PS6** & **8PS9**)



## 6PJS Magnetic Jaw Plate and Parallel Set

Includes two 6-inch jaw plates with rare earth magnets embedded to hold ground steel parallels. Kurt GrooveLock Workstops included.



## Fixture Keys

Kurt fixture keys are sized according to vise keyway slot and machine table T-slot. Kurt offers a range of standard fixture keys to match any Kurt vise to any machine table.



## Sine Keys

Many new Kurt Vise models use sine keys for machine table location, including: T-slot tables, 2" x 2", 40 mm x 40 mm and 50 mm x 50 mm grid plates. Kurt offers a range of sine keys to fit most machine applications.

## Workstops



### 2MWS Magnetic Workstop

Ideal for single- and multiple-station vises and high density workholding setups. Rare earth magnet attaches solidly to the side of the vise for fast, accurate part positioning.



### 6AWS Workstop

For use on all Kurt high-density vises and vises with a 5/16-18 tapped hole in the base or side of the jaw. Has a 2" adjustment and features a 3" stop pin for fast and easy set ups.



### 360PWS Workstop

Works above jaws when closely gang mounting vises leaving no space for a workstop. Bolts to cap screw holes on the backs of jaws. Available in 6" and 8" models.



WSRL46  
(Standard)

WSRL46  
(Extended)

### GrooveLock Workstop

GrooveLock Workstops mount to GrooveLock jaws. WSRL46 comes standard on DX4 and DX6 models. Also available in an extended model for use on 4" and 6" GrooveLock Jaws.



LEARN MORE

## Handles & Swivel Bases



### Speed Handle

The Speed Handle (**D60SH**) with a 3/4 internal hex fits Kurt 6-inch vises. Experience rapid part loading/unloading with plenty of machine clearance. Steel construction.



### Torque Handle

Torque Handle (**TH6**) provides repeatable clamping with 4 torque positions. 3/4" internal hex. Precise feel with an audible "click". Torque settings for 6, 8, 10 and 20 ft. lb.



### Vise Handles

Original equipment handles are solid cast iron for strength and durability and are plated for rust protection. The handle portion is one-piece with a cast ergonomic ball on the end.



### Swivel Base

Kurt Swivel Bases provide precise 360° vise positioning in 1° increments. Four sizes are available to fit different Kurt vises. Quickly attach vises to the swivel base with two T-bolts.

## Replacement Part, Repair Kits & Tools

Kurt carries a full range of replacement parts for newer and older vise models along with repair kits that include seals, bearings, o-rings and other wearable parts needed for a vise overhaul.

Explore our selection of vise manuals, replacement parts, tools and accessories at [kurtworkholding.com](http://kurtworkholding.com). Scan the QR code on the right side of the page to find a local Authorized Service Center.

Find your local workholding service center by scanning the QR Code at right



Vise Repair Kits



Nut & Screw Assemblies



Vise Nuts



Spanner Wrench



Vise Jaws



Vise Hex Extension

## Power Drawbars


[LEARN MORE](#)


**Automatic Drawbar**



Available for most manual & CNC mills with standard R-8 collets or 30 or 40 taper tool holders. Automate your present "Knee-Type" milling machines by installing a Kurt PowerLock Drawbar. PowerLock Drawbars reduce tool change time and allow more cutting time in the cycle.

Using a Kurt PowerLock Drawbar cuts tool changing time to one-fourth the time required for manual tool changes using wrenches. An added benefit is consistent torque on the drawbar rod. When you multiply the time savings for every tool change on all of your mills, it can really add up.

### PowerLock Drawbars are available for these popular mills:

|                 |              |
|-----------------|--------------|
| Acer            | Lagun        |
| Acramill        | Mighty       |
| Alliant         | Millport     |
| Bridgeport      | Royal        |
| Chevalier       | Seiki        |
| Clausing/Kondia | Sharp        |
| Comet           | Shizouka     |
| DoAll           | South Bend   |
| Ex-Cell-O       | Southwestern |
| Hurco           | Supermax     |
| Jet             | Tri-Onics    |
| Kent            | Webb         |
| Kondia          | Willis       |

**For manufacturers not listed, contact Kurt.**

**Note:** Machines with Erickson Quick Change Spindles converted to Kurt Power Drawbars will have sharp threads and drive keys exposed near the spindle nose. We recommend the installation of a 194-00-SA Erickson Spindle Nose Guard.

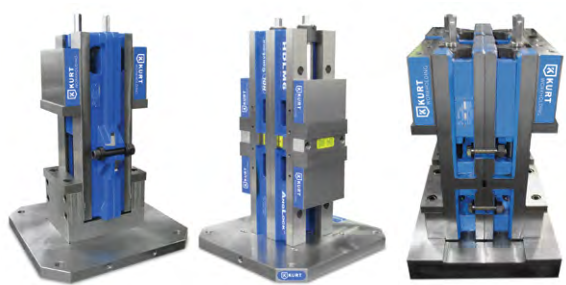
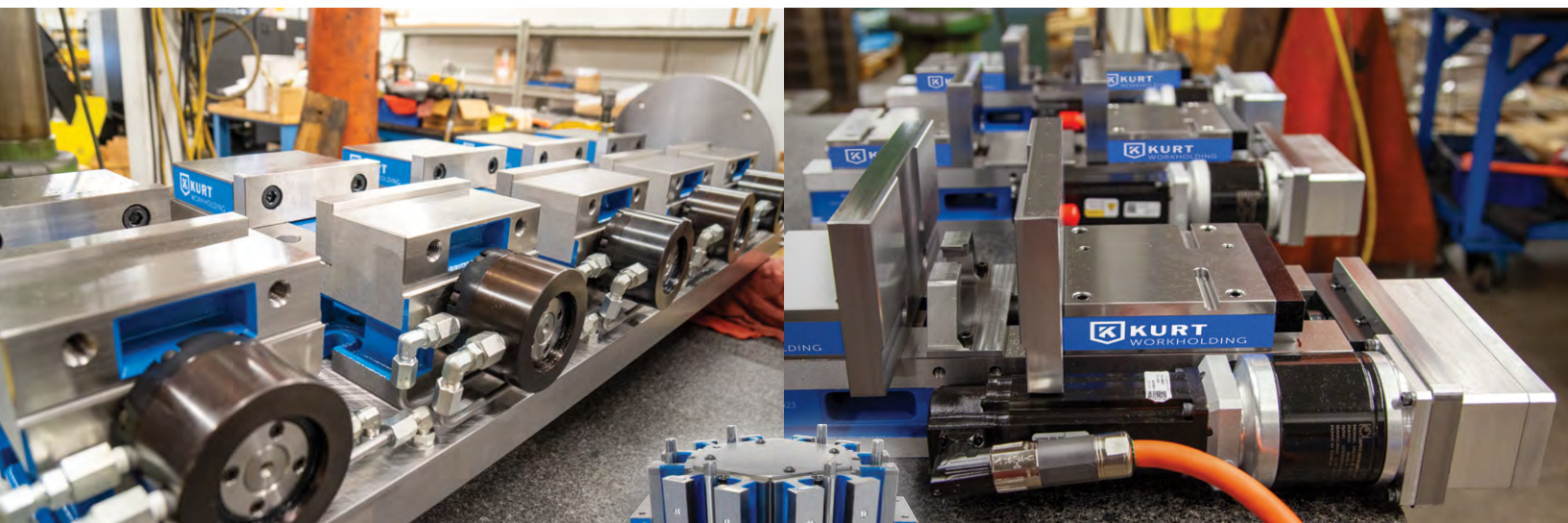
### KEY FEATURES

- » Easy installation - operator can install with no special tools (instructions provided)
- » Reduces operator fatigue - improves productivity and safety
- » Eliminates drawbar tapping to free tool in collet - reduces operator abuse
- » Convenient control - eliminates operator stretching to reach the drawbar
- » Ensures uniform collet tightening - prevents under tightening and tool slip or over tightening and drawbar breakage
- » Operates on shop air supply - filter/lubricator, regulator and gauge included with most units. Provides clean oiled air to ensure long life
- » Safety interlock on automatic models prevents accidental engagement
- » Used with present tooling - operates R-8, #30 & #40 taper tool holders. Additional special tool holders not needed
- » Machine your own Drawbar Kits. Available for R-8 collets, #30 or #40 taper tool holders

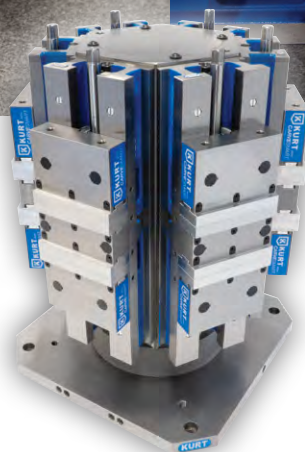


## Your Expert Partners for Custom Engineered Fixtures, Vises, Towers, Workholding Automation Solutions

Manual /  
Hydraulic /  
Pneumatic /  
Servo /



All Kurt vises can be customized to a back-to-back setup on a tower base.



Custom Large capacity towers and tombstones.



Custom rotary table designs are one of our many custom-workholding specialties.

When you want the best workholding solution for your specific needs, let Kurt Custom-Engineered Workholding (CEW) build it for you. For over 50 years, Kurt has been the industry leader in custom, high-performing horizontal, vertical, or multi-axis CNC machine fixture solutions. Designed to easily integrate into new or existing automated cells and machining centers, dream it and we can build it.

### KURT QUALITY

- » Kurt Tuff hose, pumps and hydraulic systems used on all hydraulic integrations
- » Only top-quality components are used for CEW projects

### ADDITIONAL CAPABILITIES

- » Can create full custom solutions from ideas to products or modify and integrate existing Kurt products into a hybrid workholding solution
- » Capacity for large projects and reduced lead times
- » New Mazak HCN6800-NEO dedicated to CEW jobs
- » Precision CNC machining—holding tight tolerances

### SOLUTIONS

- » Servo workholding
- » Hydraulic workholding
- » Pneumatic workholding
- » Trunnions
- » Towers
- » Horizontal and Vertical
- » Multiple-station setups
- » High-density workholding
- » Rotary tables
- » Back-to-back vise mounts

- » Full end-to-end engineering support
- » Decades of expertise in custom workholding
- » Manufacturing industry-standard products
- » Robotics integration



**kurtworkholding.com**



**KURT MANUFACTURING  
IS 100% EMPLOYEE OWNED**

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