



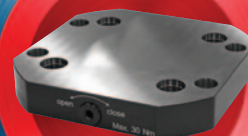
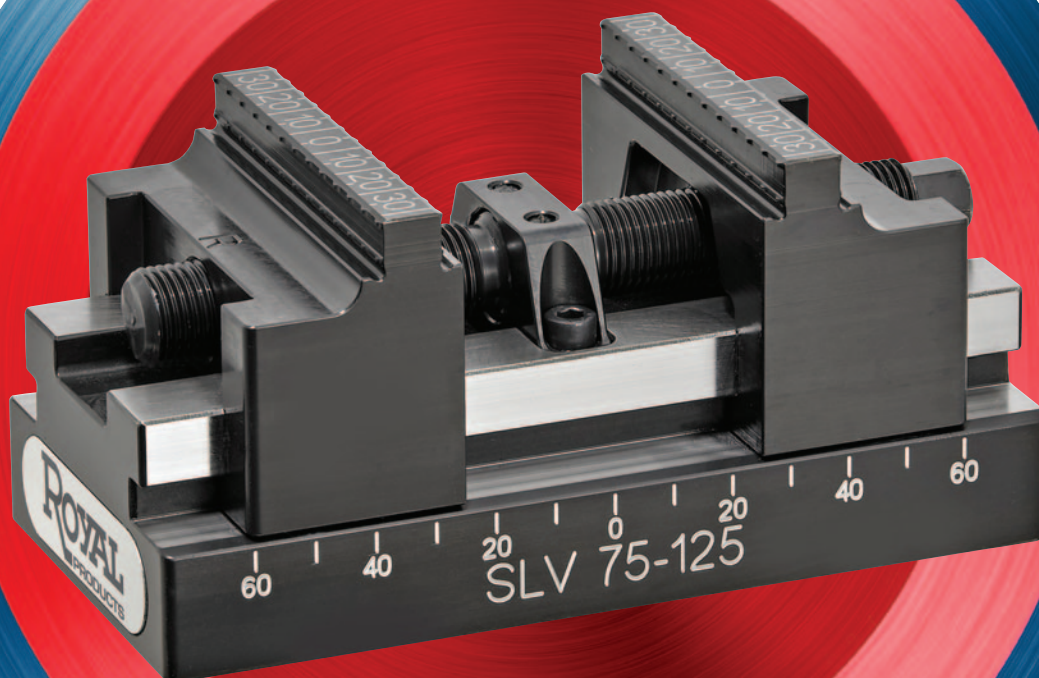
WORKHOLDING FOR MACHINING CENTERS

**SLV™ SELF CENTERING VISES –
JAW LIFT/FLEX ELIMINATED!**

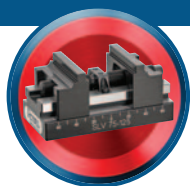
BROAD RANGE OF ZERO-POINT SYSTEMS:

- HEAVY DUTY Z-LOCK™
- 52 AND 96MM MANUAL RECEIVERS
- POWERED RECEIVER FOR AUTOMATED LOADING

NEW



ROYAL
PRODUCTS
Optimize everything.



ROYAL SLV™ SELF-CENTERING VISES

SLV → Sturdy Little Vise

Superior Design

Outstanding performance over other self-centering vises is achieved through a combination of several unique design elements:

- ✓ Extremely rigid one-piece jaw design is modeled after a CNC box way to minimize deflection through captive, multi-plane contact. Jaw lift is virtually non-existent.
- ✓ The massive drive spindle is elevated to apply the clamping force much closer to the workpiece compared to other vises.
- ✓ The hardened vise body is machined from a proprietary tool steel for maximum strength and rigidity.

Incredible Grip Force

The Royal SLV™ Self-Centering Vise has been optimized to deliver tremendous grip force and rigidity in a very compact package. This is one **Sturdy Little Vise!**

Never Needs Realignment

The central guide bushing is both pinned and bolted to the vise body to maintain perfect alignment and eliminate any need for readjustment.

Multiple Jaw Options

All Royal **Sturdy Little Vises** come equipped with a set of standard-grip jaws. Additional jaw models are available for more specialized applications.

No More Cutting Dovetails

The Royal SLV™ securely grips workpieces at a depth of as little as 3mm (1/8"), reducing scrap and eliminating the need to cut dovetails or emboss the workpiece contact surface.

Precision Repeatability

0.0006" or better repeatability – guaranteed.

Great for 5-Axis

Mounting pyramids available for multi-vise setups – especially useful in five-axis applications.

Reduced Chip Buildup

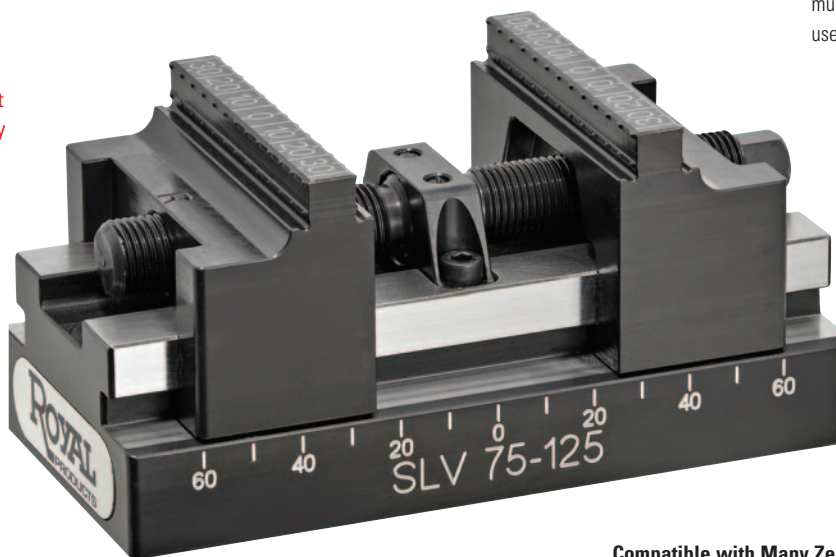
Shallow throat depth allows for easy and complete chip blow-off.

Same-Day Shipping

All vises, jaw sets, and pyramids are in stock for same-day shipping.

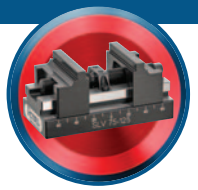
Compatible with Many Zero-Point Receivers

The Royal SLV™ is also configured to accept the mounting studs of many zero-point systems based on common 52 and 96mm bolt patterns (see compatibility chart).



**Never Let Your Workholding be the Limiting Factor in Your Machining Processes –
Try a Royal SLV™ on Your Toughest Application **RISK-FREE!****

ROYAL SLV™ SELF-CENTERING VISES



Extreme Clamping Force!

✓ **Jaw Lift
Eliminated!**

✓ **Jaw Flex
Eliminated!**

✓ **Cutting Dovetails
Eliminated!**

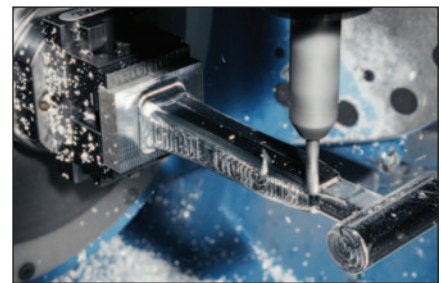
**How...?
A Smart, Rugged,
Common-Sense
Design!**



Elevated Drive Spindle
applies tremendous
clamping force because it
is positioned much closer
to the workpiece than
other vises.

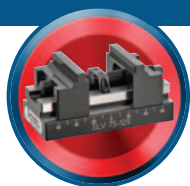
Extremely Rigid Box Way
construction virtually
eliminates jaw lift/flex.

Incredible 25X Part-Length to Gripping-Depth Ratio with No Part Prep!



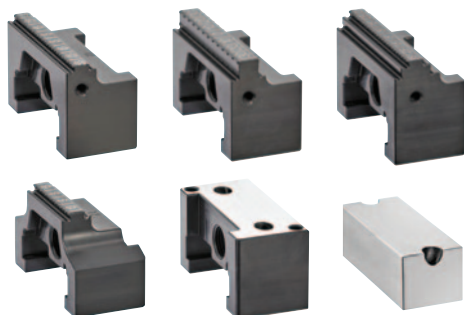
Check out the video at www.royalproducts.com

Are Your Current Vises Holding You Back? Try a Royal SLV™ on the Toughest Applications in Your Shop Completely **RISK-FREE – Order Today!**



ROYAL SLV™ SELF-CENTERING VISES

Extreme Clamping Force

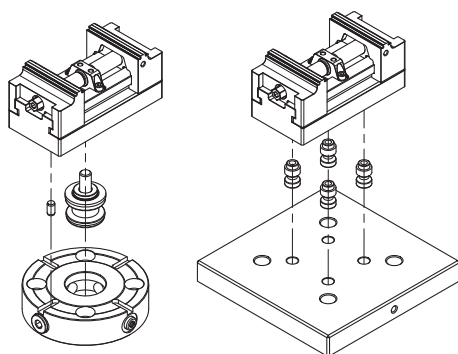


- ❑ All Royal SLV™ Vise includes a set of Standard-Grip Reversible Jaws.
- ❑ Additional off-the-shelf jaw models available:
 - Double-Grip – these jaws have a second row of serrations for extreme applications.
 - Combo – serrated on one side, smooth on the other, making them a great choice for both OP-10 and OP-20.
 - Slim-Grip – provide extra clearance for narrow parts.
 - Aluminum Top Jaws – easily machined for holding parts with non-parallel opposing surfaces.
- ❑ All Royal SLV™ jaw models **in stock for same-day shipping.**

Universal Zero-Point Receiver Compatibility

Royal SLV™ Vises are **compatible with many zero-point quick-change receivers** (even other brands).

- Heavy-Duty Z-Lock™ with single stud configuration
- 52mm four-stud configurations (Royal and others)
- 96mm four-stud configurations (Royal and others)



Zero-Point Mounting Compatibility

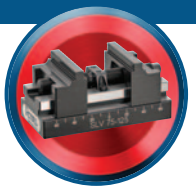
SLV™ VISE MODEL	ROYAL Z-LOCK™ (M12X1.75 STUD)	52 MM SQUARE PATTERN (M8X1.25 STUDS)	96 MM SQUARE PATTERN (M10X1.5 STUDS)
SLV 54-70	X	X	X
SLV 75-125	✓	✓	X
SLV 75-150	✓	✓	X
SLV 125-180	✓	✓	✓
SLV 125-230	✓	✓	✓

Multi-Vise Pyramids Optimize 5-Axis Production

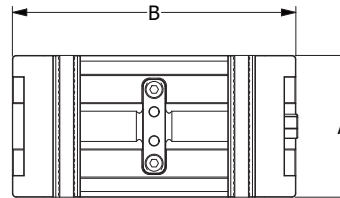
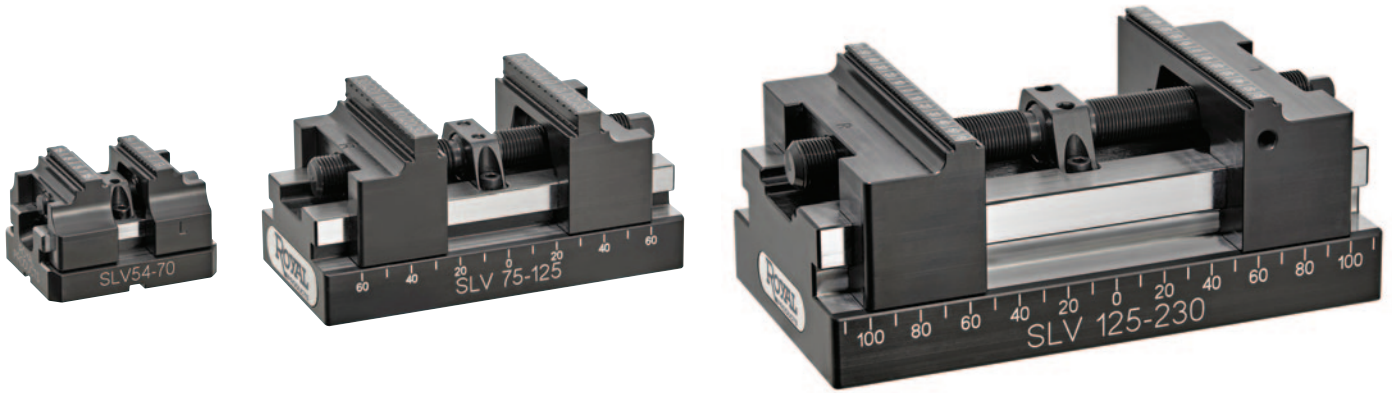


- ❑ With Royal Multi-Vise Pyramids, you can take advantage of 5-axis flexibility and **increase throughput by machining several parts in a single setup.**
- ❑ Available for SLV™ 54 and 75 vises.
- ❑ Each pyramid includes three vises equipped with standard jaws. **Note** – model 66051 can accept three additional vises (sold separately) providing a total of six workholding stations.
- ❑ Manufactured from aircraft-grade aluminum to accommodate 5-axis weight restrictions.
- ❑ All pyramids include removable lifting ring for installation ease.
- ❑ Larger models (75-125) is **offered in two geometries to accommodate 5-axis tilt angle capabilities.**

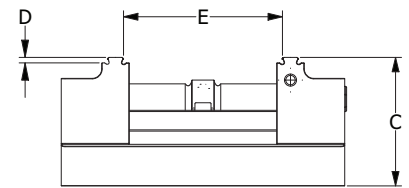
ROYAL SLV™ SELF-CENTERING VISES



Vise Models For All Applications



Top View



Side View

Royal SLV™ Self-Centering Vises

SLV™ VISE MODEL	A BODY/JAW WIDTH	B BODY LENGTH	C HEIGHT WITH STANDARD JAWS	D CLAMPING DEPTH WITH STANDARD JAWS	E MIN/MAX CLAMPING RANGE	MAX TIGHTENING TORQUE (ft.-lbs.)	MAX CLAMPING FORCE (lbs.)	WEIGHT WITH STANDARD JAWS (lbs.)	PART NUMBER	PRICE**
SLV 54-70	2.13/1.57*	2.76	1.77	0.11	0.24-1.85	29	2,250	2	66000	\$1,220
SLV 75-125	2.95	4.92	2.68	0.11	0.24-4.01	52	3,600	8	66002	1,470
SLV 75-150	2.95	5.91	2.68	0.11	0.24-5.00	52	3,600	9	66004	1,520
SLV 125-180	4.92	7.09	3.62	0.11	0.24-6.06	73	5,850	26	66008	2,725
SLV 125-230	4.92	9.06	3.62	0.11	0.24-8.03	73	5,850	31	66010	2,925

*For the model 54, please note that the jaw width is narrower than the body.

** Price includes one set of standard jaws and wrenches.

Additional dimensional information available at royalproducts.com

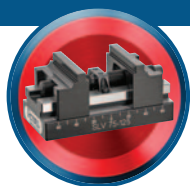


66051

Royal SLV™ Multi-Vise Pyramids

FOR VISE MODEL	ANGLE	PYRAMID DIAMETER	COMBINED WEIGHT OF PYRAMID AND THREE VISES (lbs.)	PART NUMBER	PRICE*
SLV 54-70	125°	8.4	20	66051	\$9,525
SLV 75-125	110°	14.2	44	66052	8,270
SLV 75-125	123.5°	13.7	42	66053	8,270

* Includes pyramid and three vises with standard jaws.



ROYAL SLV™ SELF-CENTERING VISES

Royal SLV™ Jaw Sets

Royal SLV™ Standard-Grip Jaw Set

Included with Each Vise



FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 54	1.57	0.11	66020	\$637
SLV 75	2.95	0.11	66022	744
SLV 125	4.92	0.11	66024	1,295

Royal SLV™ Double-Grip Jaw Set

Increased Clamping Depth and a Second Row of Serrations for Very Aggressive Machining



FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 75	2.95	0.35	66026	\$912
SLV 125	4.92	0.35	66028	1,595

Royal SLV™ Combo Jaw Set

Both Serrated and Smooth Gripping Surfaces for Roughing and Finishing



FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 75	2.95	0.11/0.31	66034	\$895
SLV 125	4.92	0.11/0.42	66036	1,420

Royal SLV™ Slim-Grip Jaw Set

Extra Clearance for Narrow Workpieces



FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 75	1.73	0.11	66038	\$808

Royal SLV™ Base Jaw Set

Use with Machinable Top Jaws



FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 75	2.95	N/A	66040	\$780
SLV 125	4.92	N/A	66042	1,365

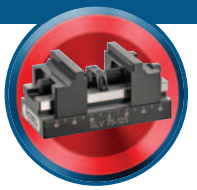
Royal SLV™ Machinable Aluminum Top Jaw Set

Use with Base Jaws



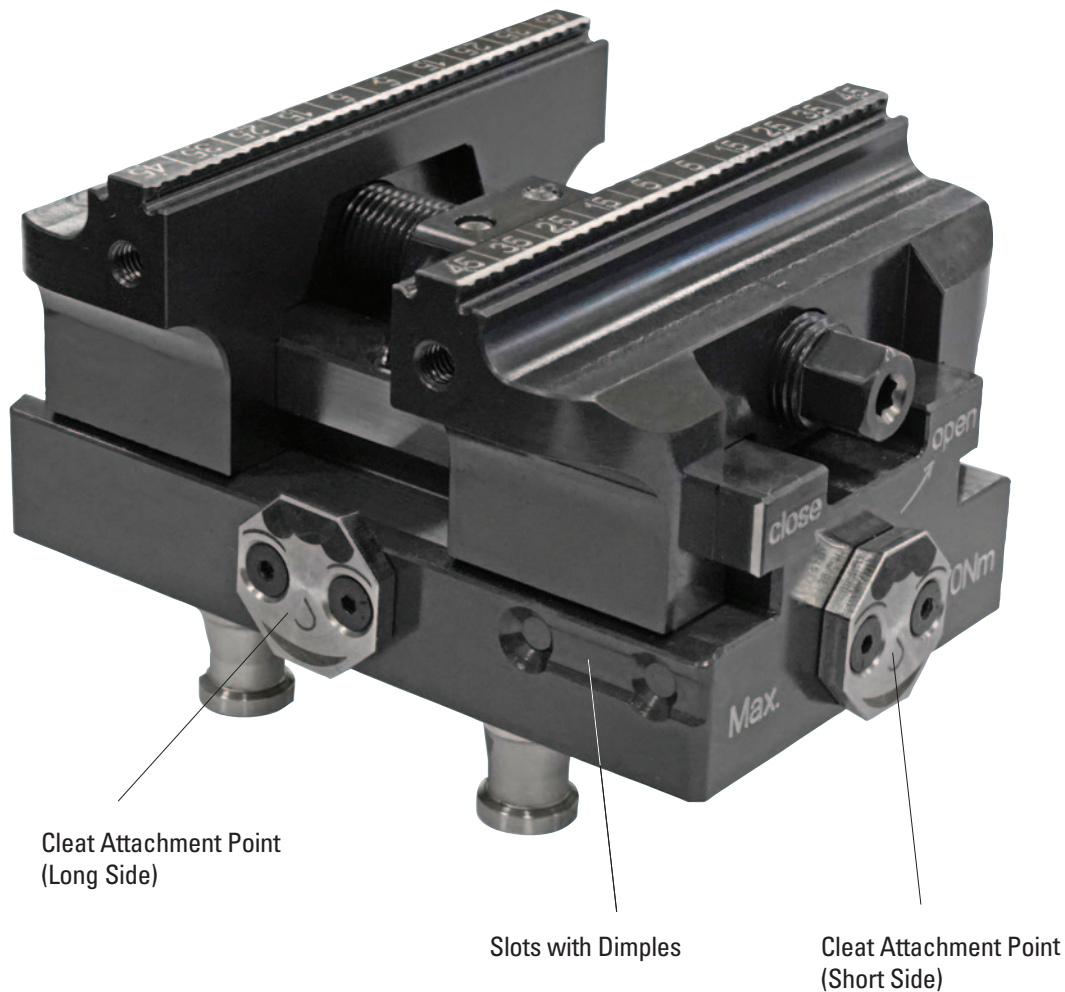
FITS VISE MODEL	CLAMPING WIDTH	CLAMPING DEPTH	PART NUMBER	PRICE/SET
SLV 75	2.95	0.9	66044	\$196
SLV 125	4.92	1.0	66046	281

ROYAL SLV™ SELF-CENTERING AUTOMATION VISES



NEW

- Royal brings unprecedented part clamping to robotic load/unload applications with the new **SLV™ Automation Vise**.
- Same great design features as our standard SLV™ Self Centering Vises, but with the following additional automation elements:
 - Ability to mount a gripping cleat on either the short or long side of the vise body – **provides flexibility and increases staging density** for multi-vise automation systems.
 - Slots with dimples provide an alternative fixed datum for robot/cobot gripper engagement.
 - Body is 77mm wide and uses standard 75mm jaws for robot gripper clearance (**Note** – custom “wide-grip” jaws shown).



Coming Soon – Visit royalproducts.com for Updates



ROYAL SLV™ KEY-OPERATED 52 AND 96MM ZERO-POINT RECEIVERS

NEW



- Royal SLV™ Key-Operated Zero-Point Receivers provide an accurate, rigid, quick-change interface for our broad range of SLV™ Self-Centering Vises.
- Royal SLV™ Receivers are **100% steel construction**, hardened and ground for repeatability and durability.
- Easily mounted to vertical machining center tables, 4 and 5-axis rotary tables, tombstones, etc.
- Available in both 52mm and 96mm stud patterns for broad market compatibility (**Note** – must use Royal SLV™ studs with these receivers).
- Proprietary locking mechanism prevents loosening during machining for operator **safety, tighter part tolerances, and better surface finishes.**
- All receivers and studs in-stock for same-day shipping.

Royal SLV™ Key-Operated Zero-Point Receivers

DESCRIPTION	WIDTH (in.)	LENGTH (in.)	HEIGHT (in.)	STUD PATTERN	PART NUMBER	PRICE*
SLV™ 52mm Key-Operated Receiver for Single Vise	4.02	4.02	1.06	52mm	66062	\$1,095
SLV™ 96mm Key-Operated Receiver for Single Vise	6.50	6.50	1.06	96mm	66066	1,495

*Order studs separately.

Studs for Royal SLV™ Receivers



DESCRIPTION	THREAD SIZE	PART NUMBER	PRICE
Studs (set of 4) for 52mm SLV™ Receivers	M8	66060	\$129
Studs (set of 4) for 96mm SLV™ Receivers	M10	66061	149

All Receivers and Studs In-Stock for Same-Day Shipping

ROYAL SLV™ ZERO-POINT AUTOMATION RECEIVER



NEW



- ❑ Royal's new SLV™ Zero-Point Automation Receiver is the perfect complement to the SLV™ Automation Vise.
- ❑ Designed for robot/cobot loading to **maximize unmanned production on your CNC machining centers.**
- ❑ Easily adaptable to 3, 4, and 5-axis applications.
- ❑ Spring-close/air-open design – no hydraulics needed.
- ❑ Pneumatic “PLUS” feature directs air to the clamp side of the piston and provides 5X additional clamping force for superior performance during aggressive chip removal.
- ❑ Receiver height is **optimized for 5-axis machining**, making risers unnecessary for most applications.
- ❑ Can be used with any workholding device that incorporates a standard 52mm stud pattern.



An Unbeatable Production Combination!

The Royal SLV™ Automation Receiver paired with the Royal SLV™ Automation Vise!

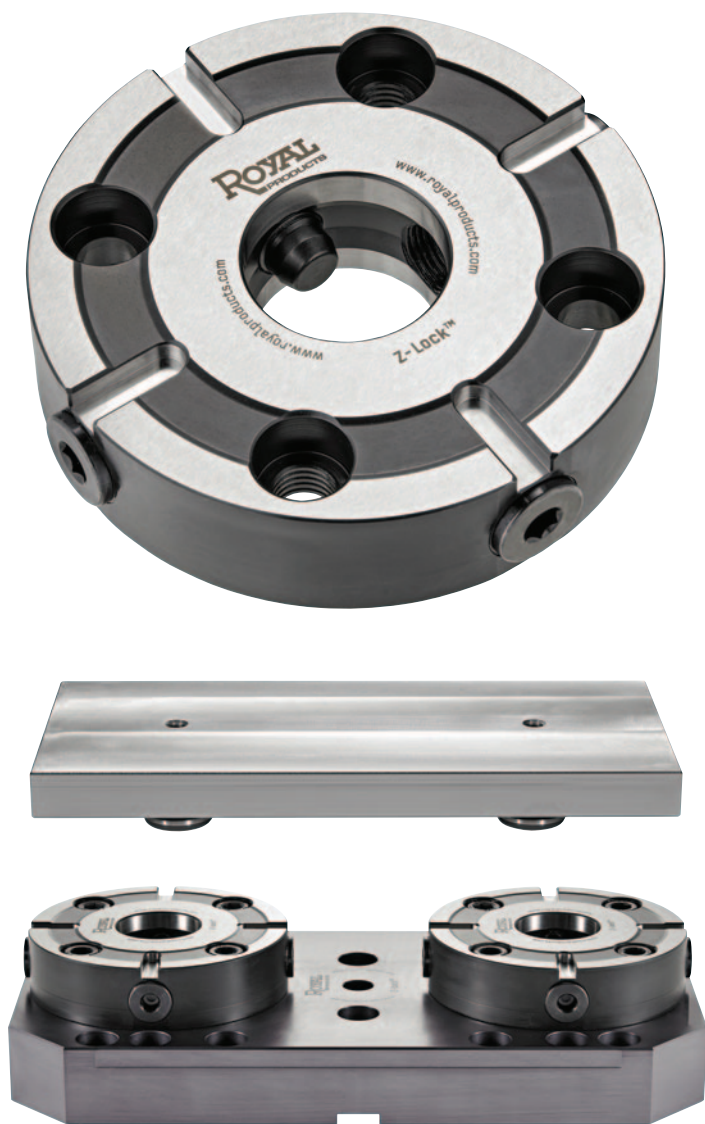
Coming Soon – Visit royalproducts.com for Updates



ROYAL Z-LOCK™ QUICK-CHANGE WORKHOLDING SYSTEM

Quick-Change Workholding For All Machining Centers

- ✓ Precision Receiver Mounts to Your Machining Center Table or Five-Axis Rotary Table
- ✓ Mount Workpieces to Top Plates Offline, Keeping Your Spindles in the Cut for Maximum Production
- ✓ Greatly Reduces Setup Times - Top Plates Interchange in Seconds with Precision Repeatability
- ✓ The Royal Z-Lock™ Keeps Your Machining Centers Making Parts – and Profits!



Simple Manual Actuation

A few turns of a hex key and it's locked – no risk of the top plate loosening from vibration, spring wear, or air/hydraulic failure. The Royal Z-Lock™ is also a breeze to implement – no external air or hydraulic lines to install so you'll be running parts more efficiently in no time!

Precision Repeatability

X-axis – 0.0001"

Y-axis – 0.0001"

Z-axis – 0.00005"

Extremely Powerful Clamping Force

Easily achieves up to 11,240 lbs. (50kN) of clamping force. The hardened locking screw contains a large, sturdy engagement surface for failsafe operation.

Massive Locating Surface

Up to 50% greater surface area for superior stability and vibration damping.

No "Machinist's Touch" Required When Changing Top Plates

All stud models have been optimized to eliminate binding, making top plate changeovers a breeze.

ROYAL Z-LOCK™ QUICK-CHANGE WORKHOLDING SYSTEM



How it Works:

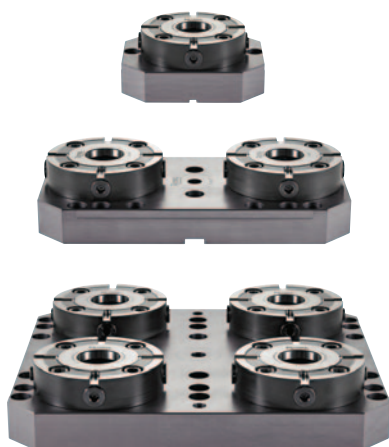
The heavy-duty clamping screw of the Royal Z-Lock™ rigidly and precisely engages the matching tapered groove in the stud, providing secure, consistent clamping force. Simple – yet powerful and reliable!



Royal Z-Lock™



Easy to Understand, Easy to Use, Easy to Order!



Receiver with Baseplate

- Available from stock in single, dual, and quad configurations.
- Baseplates include multiple bolt-patterns to accommodate most common machining center T-slot spacing.
- Single receivers may be ordered without baseplates for tombstone and angle plate applications.



Top Plates

- Made of machinable aluminum to accommodate vises, collet fixtures, Mitee-Bite® clamps, etc. – the possibilities are limitless.
- All top plates are precision ground and include the appropriate studs pre-mounted and ready to go.
- 1" thick to accommodate milled locating pockets up to 1/4" deep.



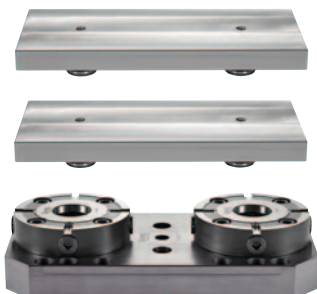
Studs

- Three stud types for single, dual, and quad setups.
- Hardened and ground to handle thousands of changeovers.
- Studs are included with all top plates and are also available separately for customers who wish to use their own top plates, fixtures, or even screw them into the workpiece.

*Mitee-Bite is a registered trademark of Mitee-Bite Corporation.



ROYAL Z-LOCK™ QUICK-CHANGE WORKHOLDING SYSTEM



Not Sure What to Order? Here's a Popular Setup:

- ✓ 1 pc. Royal Z-Lock™ Dual **Part Number 65002**
(Includes two receivers mounted to baseplate)
 - ✓ 2 pcs. Z-Lock™ Top Plate Dual **Part Number 65022**
(One plate gets loaded offline while the other is working inside your machining center)
- Note:** Studs included with all top plates – no need to order separately.

Royal Z-Lock™ Zero-Point Workholding Systems

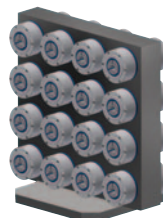
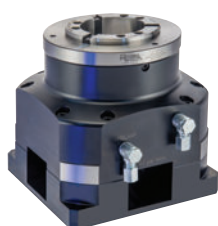
DESCRIPTION	PART NUMBER	PRICE
Z-Lock™ Single (one receiver mounted to baseplate)	65001	\$1,705
Z-Lock™ Dual (two receivers mounted to baseplate)	65002	2,935
Z-Lock™ Quad (four receivers mounted to baseplate)	65004	5,645
Z-Lock™ Top Plate Single (includes one positioning stud and two keys)	65021	554
Z-Lock™ Top Plate Dual (includes one positioning stud and one orienting stud)	65022	878
Z-Lock™ Top Plate Quad (includes one positioning stud, one orienting stud, and two clamping studs)	65024	1,695
Z-Lock™ Receiver Only (no baseplate)	65000	903

Note – due to the wide variety of T-slot configurations, baseplate mounting bolts and T-nuts are not included.

Royal Z-Lock™ Accessories and Parts

DESCRIPTION	PART NUMBER	PRICE
Positioning Stud	65030	\$160
Orienting Stud	65031	160
Clamping Stud	65032	160
Receiver Bore Cover (protects receiver bore from chips when Z-Lock™ is not in use)	65033	112
Base Plate Reducer Bushing M12-M10 (for machines with narrow T-slots)	65035	24
Anti-Rotation Keys (included with Single Top Plate, not needed for Dual or Quad)	65034	43
Replacement Locking Screw	65036	66

Additional Machining Center Workholding Solutions from Royal



- ✓ Power-Block™ Collet Fixtures
- ✓ I.D. Workholding Fixtures
- ✓ Custom Collet Profiles
- ✓ Custom Multi-Unit Systems