

## VacMagic VM100 Palletising System

### for quick fixture change

## Vacuum Clamping Systems



#### **Technical Notes**

Use as a quick fixture palletising system blank pallets available, see part no. 19710. W0325.

Mount to grid plate or T-slot table with clamps provided.

Operates from 70-100 psi shop air, no need

for vacuum pumps and coolant traps. Will accept the standard 19730.W0150 vacuum pallet, increasing your vacuum platform to over 360mm x 315mm. Remove 12mm pins for grinding/ machining thin material, use set screws to locate and aid in holding force.

#### Tips

Clamp in a vice to reduce setup time.

#### **Important Notes**

Set includes everything necessary to get your 19710 running within minutes of opening the box - excludes regulator.

Order No.	Description	$I_1$	h <sub>1</sub>	w <sub>1</sub>
19710.W0110	Gasket - Black per foot	-	-	-
19710.W0114	Gasket - White per foot	-	-	-
19710.W0300	Complete System - Base, 2 Pallets and Clamps	-	-	-
19710.W0325	Blank Pallet	318	25	150
19710.W0375	Base and Clamps	315	25	140





VacMagic Vacuum System

19710 - VM100



#### Applications

VACUUM CLAMPING SYSTEMS



More than just a vacuum system - a fully flexible clamping and fixturing solution.

Mount the base unit to the grid plate, T-slot table or in a vice.





Make your own vacuum fixtures for fully flexible fixturing.



Will accept the standard 19730.W0150 pallet, increasing your vacuum platform to over 360 x 315mm.



Sliding stop 12042 used to assist in low profile positioning on our vacuum system.





## VacMagic VM100 - 19710

maintenance and troubleshooting



ACUUM CLAMPING SYSTEMS

#### Maintenance

Very little maintenance is necessary to keep your system up and running. Using general housekeeping practices will ensure your system operates properly for years to come.

- Brass filters may require periodic cleaning to prevent clogging and airflow obstruction. Remove the filters, soak in a cleaning solvent, and apply compressed air from the rear of the filter. This should be done in a safe manner to avoid personal injury to yourself or others. Then, simply dry and re-install the filters.
- The Venturi generator may become obstructed with foreign objects or blocked up by coolant if the system has not been used for a while. Simply remove the supply valve and check/remove any small objects that may be interfering with the air supply. While the supply valve is removed, use a 0,9mm pin to clear any debris build-up that may have accumulated in the Venturi generator (see image below).
- The low vacuum indicator may also require periodic cleaning. Remove this and clean with light oil before re-installing.
- A visual inspection of all O-rings and white gasket material should be done on a regular basis: O-rings monthly, white gasket material weekly.



Supply valve removed exposing Venturi generator

#### Troubleshooting

This is a very simple operating system. Any problems can be easily rectified with the information contained in this manual or by contacting us directly.

- Check air pressure.
- □ Ensure gasket material is protruding above the fixture plate and continuous with no gaps.
- Clean brass filters.
- □ Check front of Venturi generator for obstructions.
- □ Ensure locating pins are fully seated (diamond and solid).
- **D** Through hole for vacuum pallets should be a minimum of 0.25 inch diameter.
- □ Check that all top plate mounting bolts are tight and below the surface of the plate.
- □ Check air lines for leaks.
- □ Check workpiece for flatness.
- □ Check exhaust air for restricted flow.



## Vacuum Clamping Systems

Vacmagic VM300 Vacuum System for vacuum and quick fixture change Real



#### **Technical Notes**

Can be used as a traditional vacuum system and for a rapid fixture change system. For vacuum application use the standard vacuum grid pallet or use with the blank pallets machined to suit custom parts. Alternatively, use as a quick fixture change system.

Pallets can be swapped in 30 seconds or

less. Load pallets while machining to maximise productivity. Easy to install and set up. Virtually maintenance free - reliable and easy to use. Flexible pallet design. No pumps - use standard shop air. Air supply requirements 70-100 psi. Low pressure safety switch, vacuum indicator, hardened locator pins all included.

#### Tips

Vacuum pallet 19730.W0150 is machined with cross slots to receive vacuum sealing gasket and machined with M 6 holes for fixing of stops such as sliding stop 12042. W0200.

Spare parts readily available, please see replacement parts page.

Order No.	Description	$I_1$	$h_1$	$w_1$	Weight kg
19730.W0101	Complete System Includes: Base Unit, 2 Blank Pallets, 1 Vacuum Pallet	-	-	-	25.5
19730.W0130	Blank Pallet	360	19	315	
19730.W0131	Blank Pallet (1" thick)	379	25	379	5.0
19730.W0150	Vacuum Pallet with M 6 Threaded Holes	360	16	315	14.5
19730.W0160	Large Vacuum Pallet	859	16	368	12.0
19730.W0175	Base (Receiver) - Includes Safety Switch, Required Hoses	323	35	330	25.8





## VacMagic Vacuum Palletising System

19730 - VM300



#### Applications





• Quick change

•

- Maximise productivity
- Easy installation
  - Precise repeatability
- Reliable and easy to use

VACUUM CLAMPING SYSTEMS

• No pump required



2

3

(1)

- Low profile base unit quickly mounts to machine table. Operates with standard 70 psi workshop air.
- Workpiece placed over rubber gasket and pushed down to create a vacuum. Now ready for machining.
- Two systems placed next to each other for holding larger pieces.





## Clamping & Height Setting

VacMagic Set VM300 - 19730

set contents



#### Contents

VACUUM CLAMPING SYSTEMS



regulator fitting (MB45050)

Inline filter (MB45015)

(14)







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### VacMagic VM300 - 19730

mounting the base unit



#### Quick and Easy to Use with Every Load

- 1) Identify the locating pins and secure with 4 mounting clamps.
- Baseplate is now ready for connection of air supply.



#### Option 1 - Preferred Method for Mounting the Base Unit

- Remove 6mm bolts (2 each), securing locating pins from the bottom side of the unit, and loosen top plate mounting bolts. Remove locating pins, mounting bolts and top plate.
- 2) Identify the base plate and secure using special mounting washers.
- Prior to installing top plate, ensure there are no foreign objects on either of the mating surfaces and all three O-rings are properly seated. Install top plate and loosely install mounting screws.
- 4) Insert locating pins and adjust diamond pin 90° to solid pin. Please be aware there is no practical method of installing the 6mm bolts used to secure the locating pins once the base is mounted. (A subplate with clearance holes may be used if necessary.)
- 5) Securely tighten all top plate mounting bolts.

Important Note: One loose top plate bolt may interfere with pallets precisely locating on rest pads, preventing 100% vacuum.

Option 2 may be necessary if mounting more than one unit side-by-side. Base alignment pins may be installed

to locate off T-slots or precise bores in sub-plate. Remove top plate and secure with provided mounting screws.

6) Base plate is now ready for connection of the air supply.





Option 2 - Mounting Using Internal Slots



## VacMagic VM100 - 19710

connection of air supply





The in-line filter is provided to help prevent blockages in the air supply.

In-line filter

Regulator fitting

- 1) Install regulator fitting to regulator. Connect 6mm blue tubing to front of base unit (supply valve) and regulator fitting. Mounting brackets are included to aid in routing lines.
- Secure tubing close to the base unit to prevent undue stress on supply valve. 2)
- 3) Place blank pallet on unit, turn on supply valve. Vacuum indicator retracts. (Refer to troubleshooting section if indicator is not fully recessed).

System is ready for use.

Perform steps 1-3 above for manual machines

- 4) Remove power from the machine.
- 5) Mount the low pressure trip switch (LPTS) at convenient location, usually to the rear of the machine.
- 6) Connect 4mm blue tubing to the front base unit and fitting on the LPTS.
- 7) Connect the LPTS in series with the selected cut-off circuit.
- 8) Restore power and check all the air connections for leaks.
- 9) Adjust the trip screw located on top of the LPTS between the two prongs; synchronise with the low vacuum indicator on the front of the base unit.



#### Low Pressure Trip Switch (LPTS) Important Note:

Method of synchronising the LPTS with the low vacuum indicator: With LPTS connected to the door switch interlock, slowly reduce the airflow with the supply valve until the low vacuum indicator starts to protrude. At this point, adjust the trip screw until the machine shuts down. Increase the airflow and the machine will resume function. This should be done several times to ensure the settings are optimised.

System is ready for use.

#### **Review Checklist Prior to Use**

- □ Base unit is identified and securely mounted to the machine table.
- Top plate bolts are tight.
- □ Check all air lines for leaks.
- Air supply is 70-100 psi.
- Low vacuum indicator is operating properly.
- □ LPTS is operating properly (if installed).



Clamping &

**Height Setting** 

Note: Air requirements should be between 70-100 psi with a minimum flow of 2 cfm. Pressure below 70 or above 100 psi will reduce maximum vacuum force.





### VacMagic VM300 - 19730

custom pallets and extra info.

## Clamping & Height Setting

#### **Custom Vacuum Pallets**

When using the blank pallet to design your custom pallets, we recommend a quick look at some examples sent in by customers. Feel free to submit photos of your application - we love to see what our customers can do with our products.

Machining dimension for the white gasket material: 0.142" wide x 0.138" deep, bottom of slot to be square.

One through hole is required for each vacuum chamber, minimum diameter 0,25 inch. We suggest an aggressive countersink on the bottom side of the pallet and the top should be in a slot, channel or pocket. Avoid through hole being directly over rest pads on base unit (see image on right).







Twin vacuum setup

Create custom vacuum pallets for specific applications

#### **Additional Information**

- The Venturi generator produces a vacuum of approximately 12-13 psi.
- Increasing friction between your workpiece and the vacuum pallet will provide additional resistance against lateral movement. Using an adhesive-backed "sandpaper" product on the vacuum plate or pins with sharp points protruding slightly above the surface will aid in difficult applications.
- When using more than one system for large applications, we recommend that you do not connect them to each other. Rather, keep each separate system running independently.
- Apply a small amount of silicone to secure the white gasket material in the slot. A very small gap is all that is required, so as not to interfere with compression characteristics.
- When using the VacMagic as a pallet changer or when a vice is mounted to a blank pallet, aggressive machining operations can be performed. In this configuration the vacuum being produced is approximately 1,500 lbs. What makes the unit so strong is the two 12 mm locating pins that would have to bend or snap to break the vacuum seal.
- The standard vacuum pallet has 140 holes (4mm) that can be used for locating pins or small edge clamps.



Mounting a vice on the blank pallet will eliminate the time it previously took to clock it in.



Fixture plate.



ov-vacmagic-vm300-W19730-A-T-custom-pallets-addition-rnh - Updated -25-10-2022

## VacMagic VM300 - 19730

### replacement parts



Part No.

MB45010

#### Replacement Parts for 19730 VacMagic VM300

For advice and ordering of these parts please contact our technical department.

Clamping & Height Setting

4300	In-line filter	MB45015
	Mounting bracket with 4mm & 6mm holes	MB45020
ordering of	Locating pins (1 tapered & 1 diamond)	MB45025
ase contact	Low vacuum indicator with spring	MB45030
epartment.	Spring for low vacuum indicator	MB45031
	Low pressure trip switch (LPTS)	MB45035
	Low pressure trip switch assembly (LPTS)	MB45040
	"VacMagic O-rings" (3/pk, 2 small & 1 large)	MB45045
	Supply valve	MB45050
	Special mounting washer	MB45055
	LPTS fitting (base unit)	MB45060
	LPTS fitting (block)	MB45065
	Bushings for custom pallets (2/pk)	MB45070
	Base alignment pins (2/pk)	MB45075
	4mm blue tubing (15 ft/pack)	MB45080
	6mm blue tubing (12 ft/pack)	MB45085
	6mm tubing QD fitting for regulator	MB45090
	Assorted hardware for location pins, alignment pins & LPTS block	MB45095
	VacMagic system including 1 vacuum pallet, 2 blank pallets & 4 mounting clamps	19730.W0101
	Vacuum gasket 0,170" dia. (5 ft/pack) - black	MB45110
	(for long machine cycles & aggressive coolants)	WID+0110
	Vacuum gasket 0,170" dia. custom lengths (by the ft) - black (for long machine cycles & aggressive coolants)	MB45111
	Vacuum gasket 0,125" dia. (5 ft/pack) - black (for long machine cycles & aggressive coolants)	MB45118
	Vacuum gasket 0,170" dia. (by the ft) - white (for small parts, water based coolants or dry running)	MB45114
	VacMagic blank pallet	19730.W0130
	VacMagic vacuum pallet	19730.W0150
	VacMagic base unit including 4 mtg clamps	19730.W0175
	Large mounting clamp	MB22815

Description

Brass filter

#### **Overall Dimensions for Units and Parts**

	Dimension	Imperial	Metric
Base Unit	Height	1.375"	35mm
	Width	12.75"	323mm
	Length	13.00"	330mm
Standard Pallet	Height	0.75"	19mm
	Width	14.20"	360mm
	Length	12.4"	315mm
Vacuum Pallet	Height	0.63"	16mm
	Width	14.20"	360mm
	Length	12.40"	315mm



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It is over 10 years since the VacMagic palletising system was a workholding solution award winner at the MACH exhibition, and its relevance in prototype and early production run manufacturing is still as strong today as its innovation was 10 years ago.
Vacuum palletisation will reduce your setup times and maximise your production runs!

VM300 - Simple and easy to use, has the ability to switch from pallet changer to vacuum chuck in seconds to reduce setup time.
 VM100 - Primarily designed for grinding non-ferrous material on a magnetic chuck, like its bigger brother (the VM300) it can be a pallet changer and a vacuum chuck.

Multi-Power Vac - Possibly the most multi-functional vacuum workholding system currently available. Multi-Power Vac System

Compatible with CNC machines; vacuum clamping is cost-effective, increases productivity and minimises the potential of any clamping damage to the workpiece.

The VacMagic system enables high volume production runs at the same feeds and speeds as traditional pallet systems, with less setup time which reduces spindle downtime.

The low profile base unit of the VacMagic can be used either as a vacuum pallet or a standard pallet set up as a fixture plate for increased productivity. Alternatively, a standard vice can be mounted directly onto the VacMagic base for easy loading and unloading, eliminating the need to index the vice on each use – providing quick change over from prototype to production volumes.

Multi-Power Vac has a 400mm x 350mm grid plate base, tapped with M6 threads and a finely textured surface, which increases holding force through friction. The Multi-Power Vac therefore offers greater flexibility for multiple workholding solutions.

The vacuum system is ideally suited to anything that is difficult to hold, such as oddly-shaped objects, parts too thin for traditional workholding, or brittle and/or soft materials like graphite. It is an ideal alternative to a magnetic chuck for non-magnetic materials such as wood or plastic.

What Materials Can My Vacuum System Work With?

Why Choose a

Vacuum System?





For a demonstration of our VacMagic and Multi-Power Vac Palletising and Clamping System. Please call us on **0333 207 4497** or email **sales@wixroyd.com** We look forward to helping you maximise your productivity. What Can We Do For You? VACUUM CLAMPING SYSTEMS



0333 207 4497

## Vacuum Clamping Systems

## **Multi-Power Vacuum Clamping**





VACUUM CLAMPING SYSTEM

#### **Technical Notes**

Easy to install and set up vacuum workholding system.

We recommend use of a coolant trap (optional) when using an external vacuum source.

#### Tips

1. Receiver base 19740.W0200 is 406 x 355mm, with grid plate design to allow multiple workholding solutions. Textured surface generates additional holding force through friction.

2. Machined with cross slots to form grids

of 23,6mm square, at 26,9mm spacing. Each grid machined with M6 x 0,8 holes for fixing of stops such as sliding stop 12042. W0200.

3. Cross slots (3,6mm wide x 3,5mm deep) accept sealing gasket around each grid. Flexible receiver base design with 4 vacuum ports allowing holding of 1 to 4 small parts, or 1 large part (vacuum ports can be plugged).

4. Six oversized steel washers machined below bottom surface of receiver means it can be used for grinding operation on a

magnetic chuck.

5. Twelve recessed pockets on side of receiver base allow multiple bases to be linked together to make a single large vacuum table.

6. 12mm diameter locating pins on underside of receiver base at 270mm, centre line for easy location.

7. Can be powered with shop air (70-100 psi), or vacuum generator.

9. Eight location ports for vacuum source connection.

Order No.	Description	$I_1$	$h_1$	$w_1$	Weight kg
19740.W0000	Complete System Includes: Multi Vac Pallet, Vac Generator, Coolant Trap and Fittings.	406	31.7	355	15.0
19740.W0050	Coolant Trap with Hose and Fittings	-	-	-	1.5
19740.W0100	Vacuum Generator with Regulator, Filter and Push Fit Connections	-	-	-	1.0
19740.W0200	Multi Vac Plate Only. With Mounting Fittings and Tubing.	406	31.7	355	16.5
19740.W0250	Sacrificial Top Plate with Mounting Screws (406 x 355mm).	-	-	-	4.0





## Multi-Power Vacuum Clamping Plate

applications









- A custom "sacrificial plate" was made to cover the multi-power vacuum clamping plate for machining of thin and delicate parts.
- Sacrificial plate is easily secured to multipower vacuum clamping plate via four flat head screws.
- To maximise the flexibility of the machining process, four multi-power vacuum clamping plates have been connected together and are run from one standalone vacuum pump. Here three very different components are being held; one long workpiece even stretches across two vacuum units.





- Multi-power vacuum clamping plates are suitable for large and small components. In this application six units have been connected together to achieve a very large clamping area of approximately 1200 x 700mm.
- To hold delicate components, a custom pallet has been designed; vacuum ports were accessed through the pallet with a grid pattern to suit the component. Grid is sealed using supplied vacuum gasket to create vacuum seal.
- Workpieces are aligned to the vacuum seal and loaded. Air supply is applied and workpieces are clamped ready for machining.

#### Why use the Multi-Power Vacuum plate?

- Cost-effective, versatile clamping that can be used for many applications.
- Quick setup and very easy to use.
- Minimises the likelihood of damage to the workpiece caused by other workholding methods.

- Compatible with CNC machines.
- Four suction ports allow multi-part clamping or a large surface area.
- Pre-drilled & threaded M6 holes for extra clamps or stops.

#### Application 1

#### **Application 2**



VACUUM CLAMPING SYSTEMS

## Multi-Power Vacuum Clamping Plate

Clamping & Height Setting

overview





For a unique, universal clamping solution, look no further that Wixroyd's 19740 Multi-Power vacuum clamping plate. Equipped with several innovative features to meet your vacuum workholding needs.

Installation Overview		
Summary	<ul> <li>Can be powered with our vacuum generator ( supply (70 psi).</li> </ul>	19740.W0100) or can be run from machine shop air
	• Base dimensions are 406mm x 355mm.	
	<ul> <li>4 Vacuum ports allow up to four small parts or plugged).</li> </ul>	or one large part to be held securely (ports can be
	<ul> <li>M6 tapped threads integrated in the grid plat agressive machining conditions.</li> </ul>	te for versatile workholding solutions and / or more
	• Multiple pallets can operate from a single va	cuum generator.
Preferred Mounting Method	Simply mount the pallet using two mounting cla be connected.	amps. The pallet is now ready for the air supply to
Optional	• Place pallet on magnetic chuck.	
Mounting Methods	<ul> <li>Use locating pins &amp; liners to precisely locate</li> <li>For larger workholding solutions, link pallets</li> </ul>	pallet onto sub-plate and secure with mounting clamps s connecting using the supplied washers.
Connection of Air Supply	The in-line filter is provided to remove contamir (80-95 psi best). Common air connection fitting	nants from the air supply. Adjust the gas regulator s are provided.
Review Checklist	<ul> <li>Base unit is mounted to machine table.</li> </ul>	• Air lines are connected and sealed.
Prior to Use	• Air supply pressure is 70-100 psi.	• Low vacuum indicator is operating properly.
Maintenance	Very little maintenance is necessary to keep you practices will ensure your system operates prop	ir system up and running. Using general housekeeping erly for years to come.
Troubleshooting		

## This is a very simple operating system. Any problems can be easily rectified with the information contained in this manual or by contacting us directly.

- Check air pressure.
- Ensure gasket material is protruding above fixture plate and that there are no gaps between the gasket and the plate.
- Clean brass filters.
- Check Venturi generator inlet for obstructions.
- Ensure that the through hole for the vacuum pallet is a minimum of 1/4 inch in diameter and is chamfered.
- Check air lines for leak.
- Check workpiece for flatness.
- Ensure the exhaust air line is not blocked.







## **Raised Pillar Clamp**





#### Material

Body: steel, blackened. Clamping jaw: brass.

**Technical Notes** 

Used to raise workpiece 80mm above

machine table to improve clearance of milling/drilling head. Can accommodate component thickness from 8 to 40mm. Clamps quickly actuated via bolt (27 A/F).

#### Tips

Ideally suited to flat work pieces of regular thickness.

Order No.	For T-slot	h <sub>1</sub> min.	h <sub>2</sub> ±0.1	h <sub>3</sub> min.	$d_1$	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	A/F	Weight
12490.W0080	14	116	80	8	40	50	32	M12	M16	27	1270









T-Slot Base Plate rectangular





#### Material

High tensile tool steel.

Order No.	$I_1 \times W_1$	w <sub>2</sub> ±0.2	Ι <sub>2</sub> ±0.2	l <sub>3</sub>	I <sub>4</sub>	ا <sub>5</sub> ±0,013	$d_1$	Number of T-slots	Weight kg
19580.W0300	420x230	100	150	70	240	150	12	3x6	38
19580.W0400	490x300	100	200	70	310	200	12	4x7	57
19580.W0500	630x370	100	200	70	350	200	12	5x9	92





## **T- Slot Base Plate**

square

## Base Plates & Clamping





## 19582

#### Material

High tensile tool steel.

Order No.	$w_1 \times l_1$	w <sub>2</sub> ±0.2	w <sub>3</sub>	ا <sub>2</sub> ±0.2	I <sub>3</sub>	$I_4$	$I_5$	h <sub>1</sub> ±0.013	$d_1$	d <sub>2</sub> tol. h6	Number of T-slots	Weight kg
19582.W0700	400x400	100	60	100	50	65	175	150	12	20	5x5	61
19582.W0800	500x500	200	40	200	60	70	310	200	12	20	7x7	95
19582.W0900	630x630	200	35	200	70	70	340	200	16	25	9x9	152





T- Slot Base Plate rectangular





#### Material

High tensile tool steel.

Order No.	$w_1 \times l_1$	w <sub>2</sub> ±0.2	w <sub>3</sub> ±0.02	Ι <sub>2</sub> ±0.2	ا ±0.02	I <sub>4</sub>	$I_5$	I <sub>6</sub>	h <sub>1</sub> ±0.013	$d_1$	d <sub>2</sub>	Number of T-slots	Weight kg
19584.W0300	400x500	100	60	200	40	50	70	310	150	12	20	5x7	77
19584.W0500	500x630	200	40	200	35	60	70	340	200	12	20	7x9	120





## Welded Clamping Angle semi-finished

## **Base Plates &** Clamping



#### Material

Steel, welded.

Order No.	$I_1$	$w_1$	h <sub>1</sub>	t <sub>1</sub>	Weight kg
19540.W0020	400	250	450	32	76
19540.W0040	500	330	550	32	125
19540.W0060	630	370	650	32	180





Clamping Cubes cast iron - semi-finished





#### Material Cast iron (GG).

Order No.  $\mathsf{w}_1 \ge \mathsf{l}_1$ w<sub>2</sub> ±0.2 w<sub>3</sub> ±0.2 Ι<sub>2</sub> +1  $\mathsf{d}_1$ No. of holes n For screw Weight  $h_1$  $h_2$ Ι<sub>4</sub> ±0.2 l<sub>5</sub> ±0,013 Ι<sub>3</sub> ±0.2 kg 231 19560.W0210 400x400 150 408 358 150 150 12 4 134 --M12 19560.W0410 500x500 331 200 200 12 M12 265 -200 565 510 -6 200 19560.W0610 630x630 200 300 700 640 451 300 200 16 8 M16 427





## **Clamping Cubes** welded - semi-finished

## Base Plates & Clamping



#### Material

Steel, welded.

**Tips** Lower cost alternative to cast version no. 19560.

#### **Technical Notes**

Special designs upon request.

Order No.	$w_1 \ge l_1$	w <sub>2</sub> ±0.2	w <sub>3</sub> ±0.2	$h_1$	h <sub>2</sub>	<sub>2</sub> +1	ا <sub>ع</sub> ±0.2	Ι <sub>4</sub> ±0.2	ا <sub>5</sub> ±0,013	$d_1$	No. of holes	For screw	Weight kg
19570.W0220	400x400	150	-	500	450	231	-	150	150	12	4	M12	134
19570.W0240	500x500	200	-	650	595	331	-	200	200	12	4	M12	265
19570.W0260	630x630	200	300	800	740	451	200	300	200	16	8	M16	427





### **Cast Iron Tombstones** semi-finished





Material Cast iron (GG30).

#### **Technical Notes**

19510 is the less expensive welded version.

Order No.	$w_1 \times l_1$	w <sub>2</sub> ±0.2	I <sub>2</sub>	Ι <sub>3</sub> ±0.2	Ι <sub>4</sub> ±0.2	ا ±0.2	$d_1$	$h_1$	h <sub>2</sub>	s <sub>1</sub> +1	No. of holes n	For screw	Weight kg
19500.W0002	400x400	150	-	-	150	150	12	475	400	81	4	M12	150
19500.W0003	400x400	150	500	-	150	150	12	475	400	81	4	M12	173
19500.W0004	500x500	200	-	-	200	200	12	595	500	101	6	M12	284
19500.W0005	500x500	200	630	-	200	200	12	595	500	101	6	M12	334
19500.W0006	630x630	200	-	-	200	200	16	725	630	131	6	M16	470
19500.W0007	800x800	300	-	100	300	300	16	910	800	151	8	M16	745





## **Welded Tombstones**

semi-finished

## **Base Plates &** Clamping



#### Material

Steel, welded.

Tips Lower cost alternative to cast version.

#### **Technical Notes**

Special designs upon request.

Order No.	$w_1 \times l_1$	w <sub>2</sub> ±0.2	w <sub>3</sub> ±0.013	l <sub>2</sub>	$d_1$	$h_1$	h <sub>2</sub>	s <sub>1</sub> +1	For screw	Weight kg
19510.W0120	400x400	150	150	400	12	475	425	121	M12	148
19510.W0140	500x500	200	200	500	12	600	545	151	M12	274
19510.W0160	630x630	200	200	630	16	725	660	181	M16	395



**BASE PLATES & CLAMPING ANGLES** 





**Cast Iron Tombstones** fully machined





#### Material

Castiron (GG30).

Order No.	$w_1 \times I_1$	w <sub>2</sub>	I <sub>2</sub>	Ι <sub>3</sub> ±0.2	I <sub>4</sub>	۱ <sub>5</sub>	$d_1$	Weight kg
19520.W0240	400x400	150	400	150	100	100	12	147
19520.W0340	400x400	150	500	150	200	100	12	168
19520.W0440	500x500	200	500	200	200	200	12	295
19520.W0540	500x500	200	630	200	200	200	12	326
19520.W0640	630x630	200	630	200	200	200	16	385
Order No.	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub> ±0.01	h <sub>4</sub> ±0.013	\$1 ±0.02	Number of	holes n	For screw
19520.W0240	475	400	275	150	80	4		M12
19520.W0340	475	400	275	150	80	4		M12
19520.W0440	595	500	345	200	100	6		M12
19520.W0540	595	500	345	200	100	6		M12
19520.W0640	725	630	410	200	130	6		M16





## **Compact Wedge Clamps**

## MultiyClamping **Systems**



#### Material

Jaw: alloy steel, black oxide finish, hardness HRC33-39. Washer: alloy steel, black oxide finish. 0-ring: fluoro rubber.

#### **Technical Notes**

Compact design for clamping of multiple workpieces. Wedge construction results in powerful clamping and holding of two workpieces with equal clamping force.

Provides both downward and side clamping force.

Order No.	Туре	l <sub>1</sub> min.	I <sub>1</sub> max.	h <sub>1</sub> min.	h <sub>1</sub> max.	h <sub>2</sub>	h <sub>3</sub>	$w_1$	w <sub>2</sub>	w <sub>3</sub>	$d_1$	A/F	Clamping force kN max.	Tightening force Nm max.	Weight g
12454.W0010	Countersunk	12,0	14,0	6,2	7,2	0,3	9,5	12,0	10	3,3	M 5x15	3	2,0	4,3	8
12454.W0012	Countersunk	15,0	17,0	7,5	8,5	0,2	9,3	14,8	12	4,0	M 6x16	4	3,5	7,3	13
12454.W0016	Countersunk	18,5	21,5	9,9	11,4	0,4	11,3	18,4	16	5,3	M 8x20	5	5,0	18,0	27
12454.W0110	Cap Head	12,0	14,0	6,2	7,2	6,2	9,6	12,0	10	3,3	M 5x15	4	3,0	5,4	9
12454.W0112	Cap Head	15,0	17,0	7,5	8,5	7,3	10,2	14,8	12	4,0	M 6x16	5	4,5	9,1	17
12454.W0116	Cap Head	18,5	21,5	9,9	11,4	9,8	14,9	18,4	16	5,3	M 8x20	6	9,0	22,0	30





MULTI-CLAMPING SYSTEMS



## Multi-Clamping Systems

Variable Hexagon Clamps low height





#### Material

Body: steel, hardened and blackened. Screw: steel, eccentric, heat treated (10,9) and blackened.

#### **Technical Notes**

Hexagon clamps actuated by means of an

eccentric screw (provided). Available with either smooth or ribbed faces.

#### Tips

Max. clamping section is 25mm. Each of the clamp's faces increases the distance from the centre line by 1mm, thus workpieces of varying sizes can be held using just one clamp and is actuated by a simple rotation of the clamp face. Reorder screw 12112.W0512.

Order No.	Finish	h <sub>1</sub>	$I_1$	Clamp stroke	Clamping force kN max.	Weight g
12040.W0002	Clamp, smooth	22	12 - 17	2	18	100
12040.W0004	Clamp, smooth	22	18 - 23	2	18	132
12040.W0006	Clamp, smooth	22	24 - 29	2	18	204
12040.W0008	Clamp, smooth	22	30 - 35	2	18	299
12040.W0012	Clamp, ribbed	22	12 - 17	2	18	77
12040.W0014	Clamp, ribbed	22	18 - 23	2	18	132
12040.W0016	Clamp, ribbed	22	24 - 29	2	18	204
12040.W0018	Clamp, ribbed	22	30 - 35	2	18	299





## Spring-Loc and Sliding Stop





#### Material

Stainless steel.

#### **Technical Notes**

Spring-loc clamp, extremely low profile

Order No.	Description	$I_1$	I <sub>2</sub>	I <sub>3</sub>	$w_1$	w <sub>2</sub>	Qty/pack	Stroke s <sub>1</sub>	Weight g
12042.W0100	Spring-Loc Clamp	76.2	63.5	-	-	-	2	1.83	113.0
12042.W0200	Sliding Stop	76.2	598	38.1	25.4	66	4	1.83	82.0

clamp capable of approx. 10lbs of pres-

sure. A quick and flexible approach to holding parts during engraving or vision

systems.





## Multi-Clamping Systems

**Mitee-Grip Tape** for holding small and thin components





#### Material

A heat activated, wax-based compound embedded in precision paper. Coated on a nylon mesh or in a stick form.

#### **Technical Notes**

Maintains parallelism on precision parts. Very useful for thin parts, micro-machining, optical and quartz components as well as jewellery related items.

#### Tips

Approx. clamping force is 40 PSI.

#### **Important Notes**

1. Place the Mitee-Grip sheet on the subplate leaving a 6mm border on all sides. Melt the wax stick onto the wax subplate.

2. In some cases the part should be lightly clamped to prevent movement. Over thin workpieces, use a top plate for even pressure.

Heat parts to between +85°C and +90°C.
 Heating from the bottom is best.
 Use air or water to cool, being careful to

prevent water going between subplate and workpiece whilst hot.

5. The part is now ready to machine. Use a coolant to keep it cool. To remove the part, re-heat to between +80°C and +90°C.

Order No.	Description	Size
10784.W0230	Compound	1 Stick
10784.W0235	Compound	3 Sticks
10784.W0240	Paper Roll	305x1524
10784.W0245	Paper Roll	305x7620
10784.W0250	Mesh Roll	254x1524
10784.W0252	Mesh Roll	254x7620
10784.W0250 10784.W0252	Mesh Roll Mesh Roll	254x1524 254x7620





## 8 Station Vice - ReLock 8

converts a double to single station vice





#### Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

#### **Technical Notes**

Vice jaws not included, order separately. See part no. 19790.

Jaw capacity dependent upon selection of either machinable or hard jaws. See tech-

nical pages. Replacement parts available.

#### Tips

Supplied with actuation handle, hex key and wrench.

Base plate designed to adapt to wide range of machine tables.

8-station vice columns can be located on a

pallet using edge location with shims or spacers (not supplied).

#### **Important Notes**

Not compatible with 19768 compact 8-vice column.

All dimensions are in inches unless stated \*.

Order No.	Vice size	Clamp pressure Ib max.	Base type	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	$w_1$	w <sub>2</sub> ±0.001	w <sub>3</sub>	Weight Ib
19762.W0040	4"	6000	Inch	17.90	16.75	1.15	10.75	7	4	150
19762.W0041	4"	6000	Metric	17.90	16.75	1.15	400*	7	4	150
19762.W0060	6"	12000	Inch	22.65	21.25	1.40	14.00	9	6	280
19762.W0061	6"	12000	Metric	22.65	21.25	1.40	400*	9	6	280
19762.W0080	8"	16000	Inch	31.10	29.50	1.60	18.00	12	8	750



## Vice Clamping

## 8 Station Vice - ReLock 8 with machinable soft jaws



19764



#### Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max. Machinable jaws: aluminium.

#### **Technical Notes**

Replacement parts available.

#### Tips

Supplied with actuation handle, hex key and wrench.

Base plate designed to adapt to wide range of machine tables.

8-station vice columns can be located on a

pallet using edge location with shims or spacers (not supplied).

#### Important Notes

All dimensions are in inches unless stated \*.

Order No.	Vice size	Set contents	Clamp pres sure Ib max.	Base type	Jaw capa- city	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	$w_1$	w <sub>2</sub> ±0.0 01	w <sub>3</sub>	Weig ht Ib
19764.W0040	4"	Vice - 1 x 19762.W0040, Machinable jaws - 4 x 19790.W0401	6000	Inch	4,125 to 15,00 0	17.9 0	16.7 5	1.15	10.7 5	4	7	160
19764.W0041	4"	Vice - 1 x 19762.W0041, Machinable jaws - 4 x 19790.W0401	6000	Metri c	4,125 to 15,00 0	17.9 0	16.7 5	1.15	400*	4	7	160
19764.W0060	6"	Vice - 1 x 19762.W0060, Machinable jaws - 4 x 19790.W0601	1200 0	Inch	5,125 to 19,50 0	22.6 5	21.2 5	1.40	14.0 0	6	9	292
19764.W0061	6"	Vice - 1 x 19762.W0061, Machinable jaws - 4 x 19790.W0601	1200 0	Metri c	5,125 to 19,50 0	22.6 5	21.2 5	1.40	400*	6	9	292
19764.W0080	8"	Vice - 1 x 19762.W0080, Machinable jaws - 4 x 19762.W0801	1600 0	Inch	7,625 to 27,50 0	31.1 0	29.5 0	1.60	18.0 0	8	12	764





## 8 Station Vice - ReLock 8

with hard jaws

# Vice Clamping



#### Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max. Carrier jaws: aluminium. Hard jaws: steel.

#### **Technical Notes**

Replacement parts available.

#### Tips

Supplied with actuation handle, hex key and wrench. Base plate designed to adapt to wide range of machine tables. 8-station vice columns can be located on a pallet using edge location with shims or spacers (not supplied).

#### **Important Notes**

All dimensions are in inches unless stated \*.

Order No.	Vice size	Set contents	I <sub>1</sub>	Clamp pressure Ib max.	Base type	Jaw capacity	I <sub>2</sub>	l <sub>3</sub>	$w_1$	w <sub>2</sub>	w <sub>3</sub> ±0.001	Weight Ib
19766.W0040	4"	Vice - 1 x 19762.W0040, Carrier jaws - 4 x 19796.W0403,1 Hard jaws - 4 x 19892.W0401	7,90	6000	Imperial	4,125 to 15,000	16,75	1,15	10,75	4	7	170
19766.W0041	4"	Vice - 1 x 19762.W0041, Carrier jaws - 4 x 19796.W0403,1 Hard jaws - 4 x 19892.W0401	7,90	6000	Metric	4,125 to 15,000	16,75	1,15	400*	4	7	170
19766.W0060	6"	Vice - 1 x 19762.W0060, Carrier jaws - 4 x 19796.W0603,2 Hard jaws - 4 x 19892.W0601	2,65	12000	Imperial	5,125 to 19,500	21,25	1,40	14,00	6	9	305
19766.W0061	6"	Vice - 1 x 19762.W0061, Carrier jaws - 4 x 19796.W0603,2 Hard jaws - 4 x 19892.W0601	2,65	12000	Metric	5,125 to 19,500	21,25	1,40	400*	6	9	305
19766.W0080	8"	Vice - 1 x 19762.W0080, Carrier jaws - 4 x 19796.W0803,3 Hard jaws - 4 x 19892.W0801	1,10	16000	Imperial	7,625 to 27,500	29,50	1,60	18,00	8	12	780





## 8 Station Vice Compact - ReLock 8





#### Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max. Machinable jaws: aluminium. Carrier jaws: aluminium. Hard jaws: steel. either machinable or hard jaws, see technical pages.

Designed for machining centres with small working envelopes. Through mounting holes are included to mount directly to a pallet without the need for a base plate. and wrench and mounting kit. Adaptor plate 19770 can be used to attach this compact vice column to a pallet or indexer.

**Important Notes** All dimensions are in inches.

#### **Technical Notes**

Jaw capacity dependent upon selection of

Tips

Supplied with actuation handle, hex key

Order No.	Vice size	Set contents	Clamp pressure Ib max	Jaw capacity	Recommended foot Ib	h <sub>1</sub>	w <sub>1</sub> ±0.001	w <sub>2</sub>
19768.W0010	4"	Vice - 1 x 19768.W0010. No jaws.	6000	-	45-50	13.9	7	4
19768.W0020	4"	Vice - 1 x 19768.W0010, Machinable jaws - 4 x 19790.W0401.	6000	2,700 to 12,150	45-50	13.9	7	4
19768.W0030	4"	Vice - 1 x 19768.W0010, Carrier jaws - 4 x 19796.W0403, Hard jaws - 4 x 19792.W0401.	6000	1,575 to 13,150	45-50	13.9	7	4





## **ReLock 2 and 8-Station Capacities**



The compact design of the ReLock vice allows you to mount the vices very closely to each other without interference. The SnapLock line of jaws allows you to literally "snap" jaws and accessories on and off the vice without the use of bolts or pins.



#### **ReLock 2 and 8-Station Capacities**

Jaw type/configuration		Maximum workpiece		
Machinable jaws	4"	6"	8"	capacities for selected vice configuration. All dimensions in inches.
	4,125	5,125	7,625	Workpiece
	6,875	9,060	12,812	Vice jaws
	9,500	11,625	17,125	All dimensions in inches
	12,250	15,562	22,312	
	15,000	19,500	27,500	
Carrier and hard jaws	4"	6"	8"	_
	3,000	4,000	6,000	
	7,375	9,500	13,250	
	7,250	9,500	14,000	
	11,625	15,000	21,250	
	16,00	20,500	28,500	







The ReLock Vice System combines high manufactured tolerances with unequalled versatility in providing two-station and 8-station production vices.

ReLock CNC Vices, available with machinable soft jaws, hard jaws, master jaws and parallels, or fixture plates, allow the machinist a variety of configurations with the same vice. Bodies are manufactured from 80,000 psi ductile cast iron, and guide parts are flame hardened and ground to accuracies of  $\pm 0,0005$ ".

Manual and hydraulic two-station and 8-station vices are available in widths of 4", 6" and 8".

Advantages

VICE CLAMPING

- Reduced setup times when used with out SnapLock system, jaws can be changed or indexed in a matter of seconds.
- Extremely versatile: comprehensive array of jaws and accessories for vertical or horizontal machining.
- Accurate and durable: designed and precision manufactured from high grade materials.



19752 Double Station Vice.



19754 Double Station Vice with soft jaws.



19756 Double Station Vice with hard jaws.



19764 8-Station Vice with soft jaws.



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### **ReLock Modular Workholding**





#### **Optimised Table Space**

Compact modular design allows a multitude of mounting configurations. Vices can be mounted close together without hindering the removal or attachment of jaws. The ReLock 8-station (shown) is ideal for horizontal machining centres, as well as for use with rotary indexers on vertical machining centres.



#### Locating and Mounting

Locating and mounting options are simple and accurate. The bottom surface of the system has four precision dowel pin holes for locating and four drilled and counterbored holes drilled through from the top surface for rugged mounting. Side clamp slots are also incorporated.



#### **ReLock Chip Shields**

ReLock's unique three piece telescopic chip shield wraps completely around the SnapLock knuckles, keeping swarf from getting into the vice's clamping mechanism. Shields can be quickly and easily removed for maintenance purposes.



#### Single Station Conversion

Used in conjunction with SnapLock carrier jaws, the conversion plate allows the ReLock system to be converted from a double to a single station vice – ideal for larger workpieces.



#### **Centre Jaw Location**

The ReLock's centre jaw locating studs allow quick jaw mounting and indexing to accuracies of  $\pm 0.0005$ ". Foolproof pin eliminates the possibility of the jaws being accidentally mounted in reverse.



**SnapLock Knuckle** Exclusive SnapLock knuckle allows SnapLock soft jaws and SoftLock carrier to be attached and removed in seconds.





#### Auto Offset Mechanism

Exclusive automatic offset mechanism allows non- simultaneous workpiece clamping and unclamping to one of the three optional offset settings: 4" and 6": 0.030", 0.125", or 0.250"; 8": 0.125", 0.250", or 0.375". The offset setting is the distance the rear jaw backs away from the workpiece before the front jaw begins to back away from the workpiece.

#### **Features and Benefits**



## **ReLock Vice Parts List**

ReLock 2



Spares available on request. Please contact our sales office.



## 19762 - 19766 **Clamping & Height Setting**

## **ReLock Vice Parts List**

ReLock 8



Spares available on request. Please contact our sales office.



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# Foundation

The ReLock vice is the foundation for a fully flexible vice system, with a multitude of interchangeable jaws, parallels or mill angles to suit your application.

Base vice - ReLock 2 or ReLock 8.

- SnapLock<sup>®</sup> Carrier Jaws accepts both AccuSnap<sup>®</sup> and QuickChange<sup>™</sup> Jaw systems.
- AccuSnap or QuickChange Parallels and Mill Angles select the approach best suited to your application.



# 1 SnapLock Carrier Jaws

SnapLock carrier jaws allow mounting of AccuSnap and QuickChange master jaws by using an industry standard bolt size and pattern. Carrier jaws snap on and off the SnapLock knuckles in seconds.

# 2 3 AccuSnap and QuickChange Master Jaws

AccuSnap QuickChange master jaws easily mount to the SnapLock carrier jaws by using an industry bolt size and pattern. AccuSnap master jaws patented locking receptacle accepts all AccuSnap accessories.

# (4) (5) AccuSnap and QuickChange Parallels

AccuSnap and QuickChange parallels are designed for a range of set up variations when you need to position a workpiece between hardened jaws. AccuSnap parallels snap in and out of the AccuSnap master jaws in seconds. QuickChange parallels slide into position via a dovetail slot and gib.

### Also available:

### **Machinable Fixture Jaws**

AccuSnap and QuickChange machinable fixture jaws can be customised quickly to fixture a wide range of workpieces. The jaws snap or slide in and out of the master jaws in seconds. Available in either aluminium or hardened steel.



# SnapLock Reversible Machinable Fixture Jaws

SnapLock reversible machinable fixture jaws are the most versatile method of fixturing on the ReLock System. Customising options are endless. Jaws can be machined on two faces for additional set up. Manufactured from high quality aluminium.

### **Fixture Plate**

Ideal for a wide variety of fixturing applications, such as holding many small parts or parts with difficult clamping or locating requirements. Fixture plates can be attached or removed in seconds and are offered in two widths. Manufactured from high quality aluminium.

### Modular Workstops

AccuSnap modular workstops quickly mount to parallels in many different positions. As many as three stops can be mounted to a single parallel to accommodate multi-piece set-ups.

### Universal Workstop

The universal workstop easily mounts to the side of the ReLock in numerous positions. Optional extension is available for larger workpieces.

### Workstop Presetting Gauge

The AccuSnap workstop presetting gauge, in combination with a standard micrometer, allows you to precisely preset your modular workstop positions in relation to the X, Y, and Z machine datums.

### Single Station Conversion Plate

The single station conversion plate quickly converts the ReLock from double station to single station vice for larger workpieces.

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VICE CLAMPINO

# **Relock**<sup>®</sup> Vices

setup and operating instructions



# **Initial Cleaning**

After unpacking your vice and checking the contents, wipe all surfaces with a clean rag or cloth to remove any debris or rust inhibitor that is present. This will ensure that the vice will operate at its maximum efficiency.

### **Operating Instructions**

Behind the rear knuckle (opposite the handle end) you will find two hex screws. One is to adjust the automatic offset mechanism (discussed later) and the other is to adjust the brake mechanism for the vice (see drawing A).

### **Tighten Brake Mechanism**

Simply tighten the brake screw in a clockwise rotation until it is snug. DO NOT OVERTIGHTEN. Failure to set brake properly will:

- not allow vice to open and close properly and/or
- will not allow the automatic offset mechanism to operate correctly.



Break assembly

**Drawing A** 

Do not fully close vice without jaws properly mounted on vice knuckles.

The ReLock vice should only be fully closed when:

a three piece SnapLock Machine Jaw Set is on vice

a SnapLock Carrier Jaw Set and AccuSnap or QuickChange Master Jaw configuration is on vice

Failure to do this could result in damage to the centre chip shield.

### **Automatic Offset Mechanism**

Behind the rear knuckle (opposite the handle end) you will find two hex screws. One is to adjust the automatic offset mechanism and the other is to adjust the brake mechanism for the vice (see drawing A on previous page). The automatic offset mechanism allows the user to set the distance that one jaw will break (i.e. open) before the next jaw breaks. The offset can be set to three distances: .030, .125, .250. The automatic part of the mechanism allows the user to change workpiece sizes without any further adjustment to the offset mechanism. For example: You set your offset to .250 and you are setting up a job that the workpiece is a 3" square then you switch to the next job where the workpiece is 4" square, the offset mechanism will automatically break the back jaw .250 for both workpieces. Similarly, you can change the offset for both jobs simply by turning the adjustment screw to the desired distance. This feature is especially useful in a horizontal machining centre application. This will prevent both workpieces from falling out of your fixture at the same time and allows you to set the distance.

# **Jaw Opening & Closing**

When closing the vice, the front jaw (handle end) will open first. Once contact is made to the workpiece, the back jaw will move. When contact is made by the back jaw both jaws will tighten together to your desired pressure. DO NOT OVER-TORQUE VICES. Over-torqueing will cause damage to the vice and could cause harm to the operator.

Recommended clamping pressures:

4": 0-6,000 lbs. 6": 0-12,000 lbs.8": 0-16,000 lbs.



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# Relock<sup>®</sup> Vices

# setup and operating instructions



# **Mounting Information**

# 2-station Vices

This vice has two, standard mounting options:

- 1. The bottom of the vice has four (4) locating holes and four (4) cap screw holes for mounting. The cap screw holes can be accessed through the top of the vice. When SnapLock Jaws are mounted on the vice the cap screw holes are completely covered preventing any coolant, fluid or chips from entering the holes. This option will allow you to mount vices very close to each other without interference.
- 2. The other option is to utilise the slots on either side of the vice in conjunction with toe or strap clamps.

### 8-station Vices

All standard baseplates come with a 50mm centre bushing and edge locating. Please refer to catalogue for specific mounting specifications.

# **Maintenance and Cleaning**

Like any piece of quality equipment, the ReLock vice will need to periodic cleaning and maintenance to prevent lock-up and ensure maximum efficiency. The entire side segment of the vice can be easily removed and replaced.

- 1. Remove all jaws and accessories from the vice.
- 2. Remove the two retaining screws on one of the ends (or top only of 8-Station Vice).
- 3. Loosen the brake mechanism to allow the segment to slide freely. Do not remove screw.
- 4. Use the SnapLock pry wrench to lift and slide the centre chip shield locking wings onto bed of vice.
- 5. Slide the entire segment out of the vice way.
- 6. Be sure to set the chip shields aside until needed for re-assembly.
- 7. Place segment on table or flat surface.
- 8. Use the vice handle to separate the two sections of the slide segment making sure that the segment does not turn with the lead screw.
- 9. Remove rubber seal from the lead screw and inspect for damage.
- 10. Completely clean all surfaces and holes from all coolant, fluids and chips.
- 11. Grease both the external and internal threads of the lead screw.
- 12. Remove the two screws from the handle end of the front segment and remove plate.
- 13. Push the lead screw through the front segment to expose thrust washers.
- 14. Grease all thrust washers, push front segment back onto lead screw and replace plate with screws.
- 15. Remove the screw from the top of each knuckle and grease the SnapLock plunger assembly.
- 16. Re-assemble plunger assembly.
- 17. Clean entire vice body especially the centre way before re-assembling vice.
- 18. Place seal back onto the lead screw making sure to push it past the threads.
- 19. Assemble two slide segment units back together by again preventing the segments from turning while screwing the lead screw back into the rear segment.
- 20. Once external threads are not visible, place the seal back into the slot provided by using a small screwdriver or tool. Make sure that the seal is properly installed. Failure to do this can result in damage to the vices' internal mechanisms.
- 21. Place the outside chip shields onto the proper knuckles. Shields are notched to fit only one end. Failure to do this will allow coolant and chips into the lead screw area and cause binding.
- 22. Slide rear segment into the vice.

ov-W19752-A-T-W19772-A-T-relock-vices-b-rnh-Updated - 20-10-2022

- 23. Place the centre chip shield into the slot prying the wings onto the bed of the vice.
- 24. Slide the rest of the segment in to position making sure that the outside chip shields slide under the centre chip shield.
- 25. Replace retaining screws in vice.

## This maintenance procedure should be done periodically. The frequency of this procedure depends on how much you use your vice.

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8-Station Vice Baseplate Mounting Information



# Universal Baseplate for 6" ReLock 8-Station Vice



# 400mm Baseplate for 6" ReLock 8-Station Vice





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# Universal Baseplate for 6" ReLock 8-Station Vice



# 400mm Baseplate for 6" ReLock 8-Station Vice









8-Station Vice Baseplate Mounting Information



# Universal Baseplate for 8" ReLock 8-Station Vice









# **ReLock 8-Station Vice System**

19762 - 19768 Clamping & Height Setting

The ReLock 8-Station's compact and lightweight unibody design is perfect for horizontal machining centres. The unibody is manufactured from 80,000 psi ductile cast iron and the guide parts are flame hardened and precision ground to accuracies of  $\pm 0,0005$ ". It's also ideal for use with rotary indexers on vertical machining centre applications.



# **Single Station Conversion Plate**



# Step 1

Crank bottom jaw toward centre of vice. Mount single station conversion plate 19769 to the back carrier jaw as shown.



Crank bottom jaw down until the single station

conversion plate touches baseplate. Mount the

single station conversion plate to the baseplate.

Easy mounting instructions for the Single Station Conversion Plate **19769** on a ReLock 8-Station vice.

ov-W19762-A-T-W19768-A-T-relock-8-station-vice-system-rnh - Updated - 26-10-2022



# 0333 207 4497

Adapter Plate - ReLock 8 8 station vice pallet or indexer mounting





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

### **Technical Notes**

Adapter plate simplifies attachment of 8-

column vice to pallet or indexer.

# **Important Notes** All dimensions are in inches.

Order No.	Vice size	Ι <sub>1</sub>	h <sub>1</sub>	w <sub>1</sub>
19770.W0004	4"	9	9	0.75
19770.W0006	6"	12	12	1.00





# Support Bracket - ReLock 8 for 8 station vice





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

## **Technical Notes**

Support plate, modify base to your

Order No.	I <sub>1</sub>	h <sub>1</sub>	I <sub>2</sub>	w <sub>1</sub>	w <sub>2</sub>
19771.W0001	10	12	9.5	2	1.5

required height.

**Important Notes** 

All dimensions are in inches.



VICE CLAMPING

Alignment Nose - ReLock 8

for 8 station vice





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

Vice Clamping

# **Technical Notes**

Works in conjunction with support bracket

19771 and adapter plate 19770 for lasting precision to 0,001" total indicator reading (T.I.R.).

# Important Notes

All dimensions are in inches.

Order No.	For vice size	$I_1$	d <sub>1</sub> +0.0000 -0.0002	d <sub>2</sub>	d <sub>3</sub>	$I_2$	I <sub>3</sub>	w <sub>1</sub> +0.000 -0.005	w <sub>2</sub>
19772.W0004	4 "	3.000	2.750	19.672	5/16-18	2.750	0.469	2.875	2.207
19772.W0006	6 "	3.125	3.375	19.672	3/8-16	2.875	0.593	3.500	2.726
19772.W0008	8 "	3.250	5.125	19.672	1/2-13	3.000	0.718	5.250	4.187





# 6" Single Station Parlec Vice







19750

# Material

Ductile iron.

# **Technical Notes**

Up to 8200 lbs of clamping force. Base height matched to size 2,875"  $(73,025mm) \pm 0,0005$ ". Repeatability within 0,001". Hardened vice base and jaw plates. Outside rail edges of the body are machined.

Sealed bearing system reduces clamping pressure and increases bearing life. Stationary jaw has machined keyway for alignment of the vice and includes alignment rail for quick setups. Footprint and distance from keyway to stationary jaw same as major competitor.

# Tips

All dimensions are in inches.

Order No.	Туре		Style	Clamping pres	ssure h <sub>1</sub>	$I_1$	$w_1$	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	Weight Ib
19750.W0006	Single Station	n M	achinable Jaws	max. 8200	4.625	19.376	6	1.5	1.5	0.96	1.53	81
Order No.	I <sub>2</sub>	۱ <sub>3</sub>	I <sub>4</sub>	l <sub>5</sub> l <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>	l <sub>9</sub>	w <sub>2</sub>	w <sub>3</sub>		w <sub>4</sub>	w <sub>5</sub>
19750.W0006	17.206	5.7	9 4.	.85 2.04	2.17	0.73	0.7	8.77	8.29	9 3	3.875	3.87





8" Single Station Parlec Vice machinable jaws



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# Material

VICE CLAMPING

Ductile iron. Powder coated paint resists flaking and peeling. 80000 psi ductile iron body with increased nickel content for improved corrosion resistance.

### **Technical Notes**

Hardened vice base and jaw plates. Sealed

and lubricated needle roller thrust bearing for maximum life and minimum torque. Up to 12000lbs. (53379N) of clamping force. Repeatability within 0,001" (0,025mm). Outside rails of body are machined within 0,0005" (0,013mm) square to jaw. Bed height matched to size 3.310" ±0,0005" (84,07mm ±0,013mm). Footprint and distance from the keyway to stationary jaw meets industry standard.

Important Notes All dimensions are in inches.

Order No.	Ту	pe	Sty	e	Clampin	g pressure lb	h <sub>1</sub>	$I_1$	$w_1$	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	Weight Ib
19751.W0008	Single	Station	Machinat	ole Jaws	12	000	5.51	24.47	8	2.2	1.565	1.22	1.655	175
Order No.	h <sub>6</sub>	I <sub>2</sub>	I <sub>3</sub>	l <sub>4</sub> max.	$I_5$	I <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>		l <sub>9</sub>	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>	w <sub>5</sub>
19751.W0008	3.31	21.61	8.34	11	5.75	3.681	2.66	0.875	1.	075	11.5	11	4.94	4.75





# **Double Station Vice**

ReLock 2

# Vice Clamping



# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

# **Technical Notes**

Vice jaws not included, order separately - see part no. 19790.

Jaw capacity dependent upon selection of either machinable or hard jaws, see technical pages. Replacement parts available. and wrench.

**Important Notes** All dimensions are in inches.

Tips	
-	

Supplied with actuation handle, hex key

Order No.	Vice size	Clamping pressure Ib max.	h <sub>1</sub> ±0.0005	I <sub>1</sub>	w <sub>1</sub> +0.000 - 0.002	h <sub>2</sub>	h <sub>3</sub>	$d_1$	d <sub>2</sub>	d <sub>3</sub>	I <sub>2</sub>	l <sub>3</sub> ±0.001	w <sub>2</sub> ±0.001	w <sub>3</sub>	w <sub>4</sub>	Weight Ib
19752.W0004	4"	6000	2,50	16,0	4	0,375	0,50	0,501	0,56	5/16-18	9	10	3	3	0,190	33
19752.W0006	6"	12000	3,25	20,5	6	0,562	0,75	0,501	0,63	3/8-16	12	10	5	4	0,250	68
19752.W0008	8"	16000	4,00	28,5	8	0,625	0,75	0,751	0,90	1/2-13	16	14	6	6	0,312	110



# **Double Station Vice** ReLock 2 - with machinable soft jaws





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max. Machinable jaws: aluminium.

## **Technical Notes**

Replacement parts available.

# Tips

Supplied with actuation handle, hex key and wrench.

# **Important Notes**

All dimensions are in inches.

Order No.	Vice size		Set contents					Jaw capacity	h <sub>1</sub>	I <sub>1</sub>	w <sub>1</sub> +0.000 - 0.002	h <sub>2</sub> ±0.0 005	Weig ht Ib
19754.W0004	4"	Vice -	/ice - 1 x 19752.W0004, Machinable jaws - 1 x19790. W0401					4,125 to 15,000	4"	16.0	4	2.50	40
19754.W0006	6"	Vice -	1 x 19752	2.W0006, N W0	lachinable jaws 601	s - 1 x 19790.	12000	5,125 to 19,500	6"	20.5	6	3.25	86
19754.W0008	8"	Vice -	1 x 19752	2.W0008, N WC	lachinable jaws 801	s - 1 x 19790.	16000	7,625 to 27,500	8"	28.5	8	4.00	149
Order No.	h <sub>3</sub>	3	h <sub>4</sub>	$d_1$	d <sub>2</sub> ±0.0005	d <sub>3</sub>	I <sub>2</sub>	ا ±0.001	w	2	w <sub>3</sub>	w	4
19754.W0004	0.37	75	0.50	0.56	0.501	0.3125	9	10	З	;	3	0.1	90
19754.W0006	0.56	52	0.75	0.63	0.501	0.3125	12	10	5	5	4	0.2	50
19754.W0008	0.62	25	0.75	0.90	0.751	0.3125	16	14	6	5	6	0.3	12





# **Double Station Vice**

ReLock 2 - with hard jaws





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max. Carrier jaws: aluminium. Hard jaws: steel.

# **Technical Notes**

Tips

Replacement parts available.

Supplied with actuation handle, hex key

and wrench.

**Important Notes** All dimensions are in inches.

Order No.	Vice size		Set contents		Clamping pressur Ib max.	re	Jaw capacity	h <sub>1</sub> ±0.0005	I <sub>1</sub>	w₁ ⊦0.000 -0.002
19756.W0004	4"	- Vice Carrier jav Hard jaw	1 x 19752.W vs - 1 x 1979 vs - 1 x 1989	/0004, 96.W0403, 2.W0401	6000		3,00 to 16,00	2.50	16.0	4
19756.W0006	6"	Vice - Carrier jav Hard jaw	1 x 19752.W vs - 1 x 1979 vs - 1 x 1989	/0006, 96.W0603, 2.W0601	12000		4,00 to 20,50	3.25	20.5	6
19756.W0008	8"	Vice - Carrier jav Hard jaw	1 x 19752.W vs - 1 x 1979 vs - 1 x 1989	/0008, 96.W0803, 2.W0801	16000	(	6,00 to 28,50	4.00	28.5	8
Order No.	h <sub>2</sub>	h <sub>3</sub>	$d_1$	d <sub>2</sub>	d <sub>3</sub>	۱ <sub>2</sub>	ا <sub>ع</sub> ±0.001	I <sub>4</sub>	w <sub>2</sub> ±0.03	w <sub>3</sub>
19756.W0004	0.375	0.50	0.501	0.56	5/16-18	9	10	0.190	3	3
19756.W0006	0.562	0.75	0.501	0.63	3/8-16	12	10	0.250	5	4
19756.W0008	0.652	0.75	0.751	0.90	1/2-13	16	14	0.312	6	6





**Conversion Plate** ReLock 2 - converts a double to single station vice





# **Technical Notes**

For use on 8-station vice. Converts a double station vice to a single station in conjunction with SnapLock carrier jaws.

# **Important Notes**

Not compatible with 19768 compact 8-vice column. All dimensions are in inches.

Order No.	Vice size	h <sub>1</sub>	I <sub>1</sub>	W <sub>1</sub>
19759.W0004	4"	4.163	4	0.72
19759.W0006	6"	5.538	6	0.72
19759.W0008	8"	7.093	8	0.97





# **Conversion Plate - ReLock 8**

double to single station vice





# Material

Body: 80000 PSI ductile cast iron. Sideways flame hardened to 40 HRc max.

# Important Notes

All dimensions are in inches.

Order No.	h <sub>1</sub>	Ι <sub>1</sub>	$w_1$
19769.W0004	1.35	5.50	0.72
19769.W0006	2.00	8.00	0.72
19769.W0008	2.50	10.25	0.97



**Vice Parallels - AccuSnap** for use with with AccuSnap master jaws 19810





Body: 80000 psi ductile cast iron.

# **Technical Notes**

Use in conjunction with AccuSnap master

jaws 19810. Parallels snan ir

Parallels snap into position quickly and easily. Can be used with AccuSnap modular workstops (except sizes 19812.W0401, W0402, W0601, W0602 and W0801).

**Important Notes** All dimensions are in inches.

Order No.	Vice size	$I_1$	h <sub>1</sub>	w <sub>1</sub>
			±0.0005	
19812.W0401	4"	3.98	0.500	0.118
19812.W0402	4"	3.98	0.625	0.118
19812.W0403	4"	3.98	0.750	0.118
19812.W0404	4"	3.98	0.875	0.118
19812.W0405	4"	3.98	1.000	0.118
19812.W0406	4"	3.98	1.125	0.118
19812.W0407	4"	3.98	1.250	0.118
19812.W0408	4"	3.98	1.312	0.118
19812.W0601	6"	5.98	0.750	0.118
19812.W0602	6"	5.98	1.000	0.118
19812.W0603	6"	5.98	1.125	0.118
19812.W0604	6"	5.98	1.250	0.118
19812.W0605	6"	5.98	1.375	0.118
19812.W0606	6"	5.98	1.500	0.118
19812.W0607	6"	5.98	1.625	0.118
19812.W0608	6"	5.98	1.750	0.118
19812.W0609	6"	5.98	1.812	0.118
19812.W0801	8"	7.98	1.000	0.118
19812.W0802	8"	7.98	1.250	0.118
19812.W0803	8"	7.98	1.375	0.118
19812.W0804	8"	7.98	1.500	0.118
19812.W0805	8"	7.98	1.625	0.118
19812.W0806	8"	7.98	1.750	0.118
19812.W0807	8"	7.98	1.875	0.118
19812.W0808	8"	7.98	2.000	0.118
19812.W0809	8"	7.98	2.125	0.118
19812.W0810	8"	7.98	2.250	0.118



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# Vice Parallel Sets - AccuSnap

for use with AccuSnap master jaws 19810





# Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

Use in conjunction with AccuSnap master

jaws. Parallels snap into position quickly and easily.

Can be used with AccuSnap modular workstops.

Holder racks available see part no. 19838.

**Important Notes** All dimensions are in inches.

Order No.	Vice size	Туре	Set contents: 1 pair each x dim. $h_1$ ±0.0005	$I_1$	$w_1$
19814.W0040	4"	Basic	0,500 0,750 1,000 1,250 1,312	3.98	0.118
19814.W0060	6"	Basic	0,750 1,000 1,250 1,500 1,750	5.98	0.118
19814.W0080	8"	Basic	1,000 1,250 1,500 1,750 2,000 2,250	7.98	0.118
19814.W0140	4"	Advanced	0,500 0,625 0,750 0,875 1,000 1,125 1,250 1,312	3.98	0.118
19814.W0160	6"	Advanced	0,750 1,000 1,125 1,250 1,375 1,500 1,625 1,750 1,812	5.98	0.118
19814.W0180	8"	Advanced	1,000 1,250 1,375 1,500 1,625 1,750 1,875 2,000 2,125 2,250	7.98	0.118



**Vice Mill Angles - AccuSnap** for use with AccuSnap master jaws 19810





Body: 80000 psi ductile cast iron.

# **Technical Notes**

Use in conjunction with AccuSnap master

jaws.

# Important Notes

All dimensions are in inches.

Order No.	Vice size	Туре	$I_1$	h <sub>1</sub>	$w_1$	α
19816.W0040	4"	Individual	4	1.240	0.118	20
19816.W0041	4"	Individual	4	1.240	0.118	25
19816.W0042	4"	Individual	4	1.240	0.118	30
19816.W0043	4"	Individual	4	1.240	0.118	35
19816.W0044	4"	Individual	4	1.240	0.118	40
19816.W0045	4"	Individual	4	1.240	0.118	45
19816.W0060	6"	Individual	6	1.174	0.118	20
19816.W0061	6"	Individual	6	1.174	0.118	25
19816.W0062	6"	Individual	6	1.174	0.118	30
19816.W0063	6"	Individual	6	1.174	0.118	35
19816.W0064	6"	Individual	6	1.174	0.118	40
19816.W0065	6"	Individual	6	1.174	0.118	45
19816.W0080	8"	Individual	8	2.230	0.118	20
19816.W0081	8"	Individual	8	2.230	0.118	25
19816.W0082	8"	Individual	8	2.230	0.118	30
19816.W0083	8"	Individual	8	2.230	0.118	35
19816.W0084	8"	Individual	8	2.230	0.118	40
19816.W0085	8"	Individual	8	2.230	0.118	45
19816.W0140	4"	Matched Set	4	1.240	0.118	20
19816.W0141	4"	Matched Set	4	1.240	0.118	25
19816.W0142	4"	Matched Set	4	1.240	0.118	30
19816.W0143	4"	Matched Set	4	1.240	0.118	35
19816.W0144	4"	Matched Set	4	1.240	0.118	40
19816.W0145	4"	Matched Set	4	1.240	0.118	45
19816.W0160	6"	Matched Set	6	1.174	0.118	20
19816.W0161	6"	Matched Set	6	1.174	0.118	25
19816.W0162	6"	Matched Set	6	1.174	0.118	30
19816.W0163	6"	Matched Set	6	1.174	0.118	35
19816.W0164	6"	Matched Set	6	1.174	0.118	40
19816.W0165	6"	Matched Set	6	1.174	0.118	45
19816.W0180	8"	Matched Set	8	2.230	0.118	20
19816.W0181	8"	Matched Set	8	2.230	0.118	25
19816.W0182	8"	Matched Set	8	2.230	0.118	30
19816.W0183	8"	Matched Set	8	2.230	0.118	35



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# **Vice Mill Angles - AccuSnap** for use with AccuSnap master jaws 19810



Order No.	Vice size	Туре	$I_1$	h <sub>1</sub>	$w_1$	α
19816.W0184	8"	Matched Set	8	2.230	0.118	40
19816.W0185	8"	Matched Set	8	2.230	0.118	45



Vice Mill Angle Sets - AccuSnap

for use with AccuSnap master jaws 19810





# Material

Body: 80000 psi ductile cast iron.

# Important Notes

All dimensions are in inches.

# **Technical Notes**

For use with our AccuSnap master jaws.

Order No.	For vice size	$I_1$	h <sub>1</sub>	$w_1$	Set contents 1 each of a°
19818.W0040	4"	4	1.24	0.118	20° 25° 30° 35° 40° 45°
19818.W0060	6"	6	1.74	0.118	20° 25° 30° 35° 40° 45°
19818.W0080	8"	8	2.23	0.118	20° 25° 30° 35° 40° 45°





# Machinable Vice Jaws - AccuSnap

for use with AccuSnap master jaws 19810





# Material

Aluminium or steel.

# **Technical Notes**

For use with our AccuSnap master jaws.

Jaws snap in position quickly and easily.

All dimensions are in inches.

# Important Notes

Sold individually. For a pair please order quantity of 2.

Order No.	For vice size	Material		h <sub>1</sub>	w <sub>1</sub>
19820.W0040	4"	Aluminium	3.98	1.5	0.690
19820.W0041	4"	Aluminium	3.98	1.5	1.255
19820.W0060	6"	Aluminium	5.98	2.0	0.750
19820.W0061	6"	Aluminium	5.98	2.0	1.500
19820.W0080	8"	Aluminium	7.98	2.5	1.250
19820.W0081	8"	Aluminium	7.98	2.5	2.500
19820.W0140	4"	Steel	3.98	1.5	0.690
19820.W0141	4"	Steel	3.98	1.5	1.255
19820.W0160	6"	Steel	5.98	2.0	0.750
19820.W0161	6"	Steel	5.98	2.0	1.500
19820.W0180	8"	Steel	7.98	2.5	1.250
19820.W0181	8"	Steel	7.98	2.5	2.500



**Workstops For Vice - AccuSnap** for use with AccuSnap parallel sets 19812 & 19814





# Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

Ideal for off-line setup. Provides accurate workpiece location and repeatability.

For use with our AccuSnap parallel sets (please order separately).

# **Important Notes**

Install using locating dowel pin into one of three stop locations on face of parallel

(not supplied). Secure workstop by tightening screw.

Allum	iensioi	is are	in in	cnes.	

		_				
Order No.	For vice size	lype	I <sub>1</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>
19830.W0040	4"	Right Hand	1.75	0.469	0.493	0.28
19830.W0041	4"	Right Hand	2.50	0.469	0.493	0.28
19830.W0042	4"	Right Hand	1.75	0.969	0.493	0.28
19830.W0043	4"	Right Hand	2.50	0.969	0.493	0.28
19830.W0060	6"	Right Hand	2.68	0.657	0.493	0.47
19830.W0061	6"	Right Hand	3.68	0.657	0.493	0.47
19830.W0062	6"	Right Hand	2.68	1.157	0.493	0.47
19830.W0063	6"	Right Hand	3.68	1.157	0.493	0.47
19830.W0080	8"	Right Hand	3.50	0.626	0.618	0.44
19830.W0081	8"	Right Hand	5.00	0.626	0.618	0.44
19830.W0082	8"	Right Hand	3.50	1.126	0.618	0.44
19830.W0083	8"	Right Hand	5.00	1.126	0.618	0.44
19830.W0140	4"	Left Hand	1.75	0.469	0.493	0.28
19830.W0141	4"	Left Hand	2.50	0.469	0.493	0.28
19830.W0142	4"	Left Hand	1.75	0.969	0.493	0.28
19830.W0143	4"	Left Hand	2.50	0.969	0.493	0.28
19830.W0160	6"	Left Hand	2.68	0.657	0.493	0.47
19830.W0161	6"	Left Hand	3.68	0.657	0.493	0.47
19830.W0162	6"	Left Hand	2.68	1.157	0.493	0.47
19830.W0163	6"	Left Hand	3.68	1.157	0.493	0.47
19830.W0180	8"	Left Hand	3.50	0.626	0.618	0.44
19830.W0181	8"	Left Hand	5.00	0.626	0.618	0.44
19830.W0182	8"	Left Hand	3.50	1.126	0.618	0.44
19830.W0183	8"	Left Hand	5.00	1.126	0.618	0.44





# **Spacers - AccuSnap** for use with AccuSnap workstop 19830





# Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

For use with AccuSnap workstop no. 19830,

spaces enables workstop to be offset from parallel face. For use with our AccuSnap workstop and parallel sets (please order separately).

# Important Notes

All dimensions are in inches.

Order No.	For vice size	$w_1$
19832.W0040	4"	0.375
19832.W0060	6"	0.375
19832.W0080	8"	0.500



# 19810 - 19838 Clamping & Height Setting

# AccuSnap Jaws and Parallels

for use on SnapLock Jaw System for ReLock Vices

- Fast, accurate and versatile.
- Reduces setup time drastically.
- ±0,0002" repeatability.
- Adaptable to most vice systems.



# Step 1:

Before mounting AccuSnap master jaws, thoroughly inspect, clean and remove any burrs or chips from the mounting surface.

Simply attach the AccuSnap master jaws to the carrier jaw system using the industry standard bolt system.



# Step 2:

Snap in the parallels or soft jaws that you require for your set-up and begin machining. Two lock screws are provided for extra holding assurance, but are not necessary to hold parallels in place. Do not overtighten lock screws.



# Step 3:

When finished with your job, unlock parallels (if needed) and turn the kick out screw to eject the jaw or parallel.

You are ready to repeat the process for your next job.





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SnapLock<sup>®</sup>, AccuSnap<sup>®</sup>, QuickChange<sup>™</sup>

interchangeable jaws, parallels and mill angles



# **ReLock Accessories**



**SnapLock Machinable Fixture Jaws** 

Jaws can be attached, reversed, removed or indexed in a matter of seconds. The jaws are extremely versatile, allowing endless customising possibilities. Jaws are manufactured from steel and high quality aluminium.



**SnapLock Carrier Jaws** 

Carrier jaws allow mounting of AccuSnap and QuickChange master jaws or standard bolt-on jaws using an industry standard bolt pattern.



QuickChange Vice System

QuickChange jaws slide into position via a dovetail slot, as shown. The system includes master jaws, parallels, V-blocks, mill angles and machinable soft jaws. Adaptable to most vice systems.



AccuSnap Vice Jaw System

The AccuSnap vice jaw system (pictured), shows master jaws and parallels being used for workpiece set-up. The AccuSnap system allows setup change-over in seconds with extreme accuracy.



AccuSnap Machinable Fixture Jaws Ideal for many workholding options of smaller workpieces. Jaws are offered in two thicknesses, from either aluminium or pre-hardened steel.



AccuSnap Workstops

Easily mount to AccuSnap parallels in a variety of configurations. Provides extreme workpiece location accuracy and repeatability. Can be used in conjunction with the AccuSnap presetting gauge to accurately reference your X, Y and Z machine datums. Both the AccuSnap and QuickChange vice jaw systems can be used in conjunction with most vice systems.





# How to use the SnapLock Jaw System





# The SnapLock system's allows simple, quick changeovers between machinable and carrier jaws.

### SnapLock Machinable Fixture Jaws

- Can be attached, reversed, removed or indexed in a matter of seconds.
- Extremely versatile, allowing endless customisation possibilities.
- Manufactured from high quality aluminium.

# **SnapLock Carrier Jaws**

 Allows mounting of AccuSnap and QuickChange master jaws or standard bolt-on jaws using an industry standard bolt size and pattern.

# Operation



### Step 1

Align the SnapLock outer jaw over the appropriate ReLock vice knuckle



# Step 2

Place the front edge of the jaw over the knuckle and press firmly down to "snap" into place



# Step 4

For jaw removal, simply unbolt the centre jaw and slip pry wrench in slots of outside jaws as shown; pull back or sideways on the handle to release





wixroyd.com



# Machinable Vice Jaws - SnapLock

for ReLock vices





# Material

**Technical Notes** 

Aluminium. Some sizes are available in steel (1018 or 4140), please call for details.

Jaws are reversible for additional work-

# piece setup.

Tips

For jaw capacity when used with vice, see technical pages.

# Important Notes

All dimensions are in inches.

Only for use with our ReLock Vice system.

Order No.	For vice size	Contents	Туре	$I_1$	$I_2$	$w_1$	w <sub>2</sub>	w <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>
19790.W0401	4"	2 x Outer, 1 x Centre	Std.	4.250	2.250	3.94	2.060	2.5	1.50	1.06
19790.W0402	4"	1 x Centre	Std.	-	-	3.94	-	2.5	1.50	-
19790.W0403	4"	1 x Outer	Std.	4.250	2.250	3.94	2.060	-	1.50	1.06
19790.W0411	4"	2 x Outer, 1 x Centre	Tall	4.250	2.250	3.94	2.060	2.5	2.75	1.06
19790.W0412	4"	1 x Centre	Tall	-	-	3.94	-	2.5	2.75	-
19790.W0413	4"	1 x Outer	Tall	4.250	2.250	3.94	2.060	-	2.75	1.06
19790.W0421	4"	2 x Outer, 1 x Centre	Wide	4.250	-	5.94	-	2.5	1.50	-
19790.W0422	4"	1 x Centre	Wide	-	-	5.94	-	2.5	1.50	-
19790.W0423	4"	1 x Outer	Wide	4.250	2.250	5.94	2.060	-	1.50	1.06
19790.W0601	6"	2 x Outer, 1 x Centre	Std.	5.812	3.063	5.94	2.810	3.5	2.00	1.28
19790.W0602	6"	1 x Centre	Std.	-	-	5.94	-	3.5	2.00	-
19790.W0603	6"	1 x Outer	Std.	5.812	3.063	5.94	2.810	-	2.00	1.28
19790.W0611	6"	2 x Outer, 1 x Centre	Tall	5.812	3.063	5.94	2.810	3.5	3.25	1.28
19790.W0612	6"	1 x Centre	Tall	-	-	5.94	-	3.5	3.25	-
19790.W0613	6"	1 x Outer	Tall	5.812	3.063	5.94	2.810	-	3.25	1.28
19790.W0621	6"	2 x Outer, 1 x Centre	Wide	5.812	3.063	7.94	2.810	3.5	2.00	1.28
19790.W0622	6"	1 x Centre	Wide	-	-	7.94	-	3.5	2.00	-
19790.W0623	6"	1 x Outer	Wide	5.812	3.063	7.94	2.810	-	2.00	1.28
19790.W0801	8"	2 x Outer, 1 x Centre	Std.	7.500	3.125	7.94	2.625	4.5	2.50	1.50
19790.W0802	8"	1 x Centre	Std.	-	-	7.94	-	4.5	2.50	-
19790.W0803	8"	1 x Outer	Std.	7.500	3.125	7.94	2.625	-	2.50	1.50
19790.W0811	8"	2 x Outer, 1 x Centre	Tall	7.500	3.125	7.94	2.625	4.5	3.75	1.50
19790.W0812	8"	1 x Centre	Tall	-	-	7.94	-	4.5	3.75	-
19790.W0813	8"	1 x Outer	Tall	7.500	3.125	7.94	2.625	-	3.75	1.50
19790.W0821	8"	2 x Outer, 1 x Centre	Wide	7.500	3.125	9.94	2.625	4.5	2.50	1.50
19790.W0822	8"	1 x Centre	Wide	-	-	9.94	-	4.5	2.50	-
19790.W0823	8"	1 x Outer	Wide	7.500	3.125	9.94	2.625	-	2.50	1.50





# Machinable Vice Jaws - SnapLock

for ReLock single station vices





# Material

Aluminium. Some sizes are available in steel (1018 or 4140), please call for details.

### **Technical Notes**

For use with single station conversion

plate no. 19759 to convert 2 station ReLock vice into a single station vice. For jaw capacity when used with vice, see technical pages.

Only for use with our ReLock Vice system.

Tips

## **Important Notes** All dimensions are in inches.

For vice size Contents Order No.  $h_2$ Type  $I_1$  $I_2$  $h_1$  $d_1$  $W_1$  $W_2$  $W_3$  $w_4$ 19792.W0040 4" 1 x Outer Std. 4.250 2.250 3.94 2.060 2.500 0.687 1.50 1.06 3/8-16x0,63 4" 19792.W0041 1 x Outer Tall 4.250 2.250 3.94 2.060 2.500 0.687 2.75 1.06 3/8-16x0,63 1/2-13x0,75 19792.W0060 6" 1 x Outer Std. 5.812 3.063 5.94 2.810 3.875 0.937 2.00 1.28 6" 19792.W0061 1 x Outer 5.812 3.063 5.94 2.810 3.875 0.937 3.25 1.28 1/2-13x0,75 Tall 19792.W0080 8" 1 x Outer Std. 7.500 3.125 7.94 2.625 4.750 1.218 2.00 1.50 5/8-11x1,30 8" 7.94 7.500 2.625 4.750 1.50 19792.W0081 1 x Outer 3.125 3.75 5/8-11x1,30 Tall 1.218





# Machinable Vice Jaws - SnapLock

for ReLock vices - full coverage





# Material

Aluminium.

# **Technical Notes**

Jaws are reversible for additional workpiece setup. For jaw capacity when used with vice, see technical pages.

## **Important Notes** All dimensions are in inches.

### Tips

Only for use with our ReLock Vice system.

Order No.	For vice size	Contents	Туре	$I_1$	l <sub>2</sub>	$w_1$	w <sub>2</sub>	w <sub>3</sub>	$h_1$	h <sub>2</sub>
19794.W0041	4"	Outer Jaw - 2 x 19790.W0403, Centre Jaw - 1 x 19794.W0042	Std.	4.250	2.250	3.94	2.060	6.500	1.50	1.06
19794.W0042	4"	1 x Centre Jaw	Std.	4.250	2.250	3.94	2.060	6.500	1.50	1.06
19794.W0043	4"	Outer Jaw - 2 x 19790.W0413, Centre Jaw - 1 x 19794.W0044	Tall	4.250	2.250	3.94	2.060	6.500	2.75	1.06
19794.W0044	4"	1 x Centre Jaw	Tall	4.250	2.250	3.94	2.060	6.500	2.75	1.06
19794.W0045	4"	Outer Jaw - 2 x 19790.W0423, Centre Jaw - 1 x 19794.W0046	Wide	4.250	2.250	5.94	2.060	6.500	1.50	1.06
19794.W0046	4"	1 x Centre Jaw	Wide	4.250	2.250	5.94	2.060	6.500	1.50	1.06
19794.W0061	6"	Outer Jaw - 2 x 19790.W0603, Centre Jaw - 1 x 19794.W0062	Std.	5.812	3.063	5.94	2.810	7.875	2.00	1.28
19794.W0062	6"	1 x Centre Jaw	Std.	5.812	3.063	5.94	2.810	7.875	2.00	1.28
19794.W0063	6"	Outer Jaw - 2 x 19790.W0613, Centre Jaw - 1 x 19794.W0064	Tall	5.812	3.063	5.94	2.810	7.875	3.25	1.28
19794.W0064	6"	1 x Centre Jaw	Tall	5.812	3.063	5.94	2.810	7.875	3.25	1.28
19794.W0065	6"	Outer Jaw - 2 x 19790.W0623, Centre Jaw - 1 x 19794.W0066	Wide	5.812	3.063	7.94	2.810	7.875	2.00	1.28
19794.W0066	6"	1 x Centre Jaw	Wide	5.812	3.063	7.94	2.810	7.875	2.00	1.28
19794.W0081	8"	Outer jaw - 2 x 19790.W0803, Centre jaw - 1 x 19794.W0082	Std.	7.500	3.125	7.94	2.625	11.500	2.50	1.50
19794.W0082	8"	1 x Centre Jaw	Std.	7.500	3.125	7.94	2.625	11.500	2.50	1.50
19794.W0083	8"	Outer Jaw - 2 x 19790.W0813, Centre Jaw - 1 x 19794.W0084	Tall	7.500	3.125	7.94	2.625	11.500	3.75	1.50
19794.W0084	8"	1 x Centre Jaw	Tall	7.500	3.125	7.94	2.625	11.500	3.75	1.50
19794.W0085	8"	Outer Jaw - 2 x 19790.W0823, Centre Jaw - 1 x 19794.W0086	Wide	7.500	3.125	9.94	2.625	11.500	2.50	1.50
19794.W0086	8"	1 x Centre Jaw	Wide	7.500	3.125	9.94	2.625	11.500	2.50	1.50



**Carrier Jaws - SnapLock** ReLock vices with AccuSnap & QuickChange master





# Material

Outside jaws: aluminium. Centre jaws: steel.

**Technical Notes** Carrier jaws can be used in conjunction with AccuSnap and QuickChange master jaws.

Outside jaws can be used in conjunction with single station conversion plates.

# Tips

Only for use with our ReLock Vice system.

# Important Notes All dimensions are in inches.

Order No.	Vice size	Contents	Material	$I_1$	I <sub>2</sub>	$w_1$	w <sub>2</sub>	w <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	d <sub>1</sub>
19796.W0401	4"	2 x Outer, 1 x Centre	Aluminium	3.94	2.500	3.812	0.687	1.25	1.12	1.35	3/8-16
19796.W0403	4"	2 x Outer	Aluminium	3.94	2.500	3.812	0.687	-	1.12	-	3/8-16
19796.W0601	6"	2 x Outer, 1 x Centre	Aluminium	5.94	3.875	4.750	0.937	1.50	1.52	1.85	1/2-13
19796.W0603	6"	2 x Outer	Aluminium	5.94	3.875	4.750	0.937	-	1.52	-	1/2-13
19796.W0801	8"	2 x Outer, 1 x Centre	Aluminium	7.94	4.750	6.125	1.218	1.98	2.12	2.3	5/8-11
19796.W0803	8"	2 x Outer	Aluminium	7.94	4.750	6.125	1.218	-	2.12	-	5/8-11
19796.W1401	4"	2 x Outer, 1 x Centre	Steel	3.94	2.500	3.812	0.687	1.25	1.12	1.35	3/8-16
19796.W1402	4"	1 x Centre	Steel	3.94	2.500	-	0.687	1.25	1.12	1.35	3/8-16
19796.W1403	4"	2 x Outer	Steel	3.94	2.500	3.812	0.687	-	1.12	-	3/8-16
19796.W1601	6"	2 x Outer, 1 x Centre	Steel	5.94	3.875	4.750	0.937	1.50	1.52	1.85	1/2-13
19796.W1602	6"	1 x Centre	Steel	5.94	3.875	-	0.937	1.50	-	1.85	1/2-13
19796.W1603	6"	2 x Outer	Steel	5.94	3.875	4.750	0.937	-	1.52	-	1/2-13
19796.W1801	8"	2 x Outer, 1 x Centre	Steel	7.94	4.750	6.125	1.218	1.98	2.12	2.35	5/8-11
19796.W1802	8"	1 x Centre	Steel	7.94	4.750	-	1.218	1.98	-	2.35	5/8-11
19796.W1803	8"	2 x Outer	Steel	7.94	4.750	6.125	1.218	-	2.12	-	5/8-11





# Fixture Plate - SnapLock

for ReLock vices





# Material

Aluminium.

# **Technical Notes**

Ideal for holding many small parts or work-

pieces with difficult clamping of locating points.

# **Important Notes** All dimensions are in inches.

# Tips

Only for use with our ReLock Vice system.

Order No.	Vice size	I <sub>1</sub>	w <sub>1</sub>	h <sub>1</sub>
19798.W0040	4"	16.0	1.5	4
19798.W0041	4"	16.0	1.5	6
19798.W0060	6"	20.5	2.0	6
19798.W0061	6"	20.5	2.0	8
19798.W0080	8"	28.5	2.5	8
19798.W0081	8"	28.5	2.5	10







**Master Jaws - AccuSnap** for use on SnapLock carrier jaws 19796





# Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

Adaptable to most vice jaw systems. When

used with ReLock vice, mount AccuSnap master jaws to SnapLock carrier jaws to fit all AccuSnap jaw components. Install AccuSnap master jaws to SnapLock carrier jaws on vice for squareness.

**Important Notes** All dimensions are in inches.

Order No.	Vice size	Contents	ا ±0.001	I <sub>2</sub>	w <sub>1</sub> ±0.0005	w <sub>2</sub> ±0.0005	w <sub>3</sub>	h <sub>1</sub> ±0.001
19810.W0401	4"	2 x Outer, 1 x Centre	3.98	2.500	0.560	-	0.687	1.35
19810.W0403	4"	2 x Outer	3.98	2.500	0.560	-	0.687	1.35
19810.W0402	4"	1 x Centre	3.98	2.500	-	1.25	0.687	1.35
19810.W0601	6"	2 x Outer, 1 x Centre	5.98	3.875	0.750	-	0.937	1.85
19810.W0603	6"	2 x Outer	5.98	3.875	0.750	-	0.937	1.85
19810.W0602	6"	1 x Centre	5.98	3.875	-	1.50	0.937	1.85
19810.W0801	8"	2 x Outer, 1 x Centre	7.98	4.750	1.125	-	1.218	2.35
19810.W0802	8"	2 x Outer	7.98	4.750	1.125	-	1.218	2.35
19810.W0803	8"	1 x Centre	7.98	4.750	-	2.00	1.218	2.35





Master Jaws - QuickChange









# 19850

### Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

These master jaws enable our ReLock vice snap lock carrier jaws to accept all

QuickChange jaw components, providing complete flexibility. Install QuickChange master jaws to SnapLock carrier jaws on vice for squareness. Prior to installation of master jaws remove any burrs, chips or dirt from vice mounting surface.

**Important Notes** All dimensions are in inches.

Order No.	For vice size	$I_1$	I <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	w <sub>1</sub>	d <sub>1</sub>
19850.W0040	4"	4.06	2.500	1.235	0.687	0.560	3/8-16 S.H.C.S.
19850.W0060	6"	6.12	3.875	1.735	0.937	0.735	1/2-13 S.H.C.S.
19850.W0080	8"	8.12	4.750	2.230	1.128	1.105	5/8-11 S.H.C.S.



**Vice Parallels - QuickChange** for use with QuickChange master jaws 19850





# Material

Body: 80000 psi ductile cast iron.

# **Technical Notes**

Designed for use with QuickChange master

jaws no. 19850.

## Important Notes Supplied as a pair. All dimensions are in inches.

Order No.	For vice size	$I_1$	h <sub>1</sub>	$w_1$
	• "		±0.0005	
19852.W0041	4"	3.98	0.500	0.118
19852.W0042	4"	3.98	0.625	0.118
19852.W0043	4"	3.98	0.750	0.118
19852.W0044	4"	3.98	0.875	0.118
19852.W0045	4"	3.98	1.000	0.118
19852.W0046	4"	3.98	1.062	0.118
19852.W0047	4"	3.98	1.125	0.118
19852.W0048	4"	3.98	1.190	0.118
19852.W0061	6"	5.98	0.750	0.118
19852.W0062	6"	5.98	0.875	0.118
19852.W0063	6"	5.98	1.000	0.118
19852.W0064	6"	5.98	1.125	0.118
19852.W0065	6"	5.98	1.250	0.118
19852.W0066	6"	5.98	1.375	0.118
19852.W0067	6"	5.98	1.500	0.118
19852.W0068	6"	5.98	1.625	0.118
19852.W0069	6"	5.98	1.690	0.118
19852.W0081	8"	7.98	1.000	0.118
19852.W0082	8"	7.98	1.250	0.118
19852.W0083	8"	7.98	1.375	0.118
19852.W0084	8"	7.98	1.500	0.118
19852.W0085	8"	7.98	1.625	0.118
19852.W0086	8"	7.98	1.750	0.118
19852.W0087	8"	7.98	1.875	0.118
19852.W0088	8"	7.98	2.000	0.118
19852.W0089	8"	7.98	2.125	0.118




# Vice Parallel Sets - QuickChange

for use with QuickChange master jaws 19850





#### Material

Body: 80000 psi ductile cast iron.

#### **Technical Notes**

Designed for use with QuickChange master

Order No. For vice size Туре Set contents 1 pair per size h<sub>1</sub>  $I_1$  $w_1$ ±0.0005 19854.W0040 4" Basic 3.98 0.118 0,500 0,750 1,000 1,125 1,190 19854.W0060 6" 0,750 1,000 1,250 1,500 1,625 5.98 0.118 Basic 19854.W0080 8" Basic 7.98 0.118 1,000 1,250 1,500 1,750 2,000 19854.W0140 4" 3.98 0.118 0,500 0,625 0,750 0,875 1,000 1,125 1,062 1,190 Advanced 19854.W0160 6" Advanced 5.98 0.118 0,750 0,875 1,000 1,125 1,250 1,375 1,500 1,625 1,690 19854.W0180 8" Advanced 7.98 0.118 1,000 1,250 1,375 1,500 1,625 1,750 1,875 2,000 2,125

jaws no. 19850.

**Important Notes** 

All dimensions are in inches.



# Vice Clamping

**Vice Mill Angles - QuickChange** for use with QuickChange master jaws 19850



All dimensions are in inches.



#### Material

Body: 80000 psi ductile cast iron.

#### **Technical Notes**

For use with QuickChange master jaw

19850.

#### **Important Notes**

Sold individually, for a pair please order quantity of 2.

Order No.	For vice size	$I_1$	h <sub>1</sub>	$w_1$	α
19856.W0040	4"	4	1.24	0.118	20
19856.W0041	4"	4	1.24	0.118	25
19856.W0042	4"	4	1.24	0.118	30
19856.W0043	4"	4	1.24	0.118	35
19856.W0044	4"	4	1.24	0.118	40
19856.W0045	4"	4	1.24	0.118	45
19856.W0060	6"	6	1.74	0.118	20
19856.W0061	6"	6	1.74	0.118	25
19856.W0062	6"	6	1.74	0.118	30
19856.W0063	6"	6	1.74	0.118	35
19856.W0064	6"	6	1.74	0.118	40
19856.W0065	6"	6	1.74	0.118	45
19856.W0080	8"	8	2.23	0.118	20
19856.W0081	8"	8	2.23	0.118	25
19856.W0082	8"	8	2.23	0.118	30
19856.W0083	8"	8	2.23	0.118	35
19856.W0084	8"	8	2.23	0.118	40
19856.W0085	8"	8	2.23	0.118	45





Vice Mill Angle Sets - QuickChange for use with QuickChange master jaws 19850





#### Material

Body: 80000 psi ductile cast iron.

#### **Technical Notes**

For use with QuickChange master jaw

Order No.	For vice size	$I_1$	$h_1$	$w_1$	Set contents 1 pair each of a°
19858.W0040	4"	4	1.24	0.118	20° 25° 30° 35° 40° 45°
19858.W0060	6"	6	1.74	0.118	20° 25° 30° 35° 40° 45°
19858.W0080	8"	8	2.23	0.118	20° 25° 30° 35° 40° 45°

19850.

**Important Notes** 

All dimensions are in inches.





# Machinable Vice Jaws - QuickChange





All dimensions are in inches.



Aluminium or steel.

#### **Technical Notes**

For use with QuickChange master jaw

19850.

#### **Important Notes**

Sold as individually, for a pair please order quantity of 2.

Order No.	For vice size	Material	$I_1$	h <sub>1</sub>	w <sub>1</sub>
19862.W0040	4"	Aluminium	4	1.5	0.69
19862.W0041	4"	Aluminium	4	1.5	1.38
19862.W0060	6"	Aluminium	6	2.0	0.75
19862.W0061	6"	Aluminium	6	2.0	1.50
19862.W0080	8"	Aluminium	8	2.5	1.25
19862.W0081	8"	Aluminium	8	2.5	2.50
19862.W0140	4"	Steel	4	1.5	0.69
19862.W0141	4"	Steel	4	1.5	1.38
19862.W0160	6"	Steel	6	2.0	0.75
19862.W0161	6"	Steel	6	2.0	1.50
19862.W0180	8"	Steel	8	2.5	1.25
19862.W0181	8"	Steel	8	2.5	2.50





## Soft Vice Jaws - Universal

bolt-on





#### Material Aluminium.

**Important Notes** All dimensions are in inches.

#### **Technical Notes**

For use with most industry standard vices.

Order No.	For vice size	$I_1$	I <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	$w_1$
19890.W0040	4"	5	2.500	1.5	0.687	1.00
19890.W0060	6"	7	3.875	2.0	0.937	1.25
19890.W0080	8"	9	4.750	2.5	1.128	2.00



# Vice Clamping

Hard Vice Jaws - Universal





Material

Steel.

#### **Technical Notes**

Centre jaw only for use with ReLock vice

system. Outside jaws fit most standard vice bolt hold patterns. Install these hard jaws on SnapLock carrier jaws on vice for squareness.

#### Important Notes All dimensions are in inches.

All uninensions are in miches

Order No.	For vice size	$I_1$	I <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	$w_1$	w <sub>2</sub>	Set contents
19892.W0401	4"	3.98	2.500	1.35	0.687	0.560	1.25	2 x Outer, 1 x Centre
19892.W0402	4"	3.98	-	1.35	-	-	1.25	1 x Centre
19892.W0403	4"	3.98	2.500	1.35	0.687	0.560	-	2 x Outer
19892.W0601	6"	5.98	3.875	1.85	0.937	0.750	1.50	2 x Outer, 1 x Centre
19892.W0602	6"	5.98	-	1.85	-	-	1.50	1 x Centre
19892.W0603	6"	5.98	3.875	1.85	0.937	0.750	-	2 x Outer
19892.W0801	8"	7.98	4.750	2.35	1.218	1.125	1.98	2 x Outer, 1 x Centre
19892.W0802	8"	7.98	-	2.35	-	-	1.98	1 x Centre
19892.W0803	8"	7.98	4.750	2.35	1.218	1.125	-	2 x Outer





## Workstop For Vices - Universal





### Material

Steel.

#### **Technical Notes**

Multiple extension pieces can be used to create longer offset.

#### Important Notes

\***Design change was made to the 19752.W... vice:** 3/8-16 tapped hole was modified to a 5/16-18 tapped hole. Check your vice to verify the size you need before ordering. All dimensions are in inches.

Order No.	For vice size	Туре	Extension length	Thread size $d_1$
19894.W0401	4"	Workstop	-	5/16-18
19894.W0402	4"	Extension	4	5/16-18
19894.W0601	6"	Workstop	-	5/16-18*
19894.W0602	6"	Extension	6	5/16-18*
19894.W0611	6"	Workstop	-	3/8-16*
19894.W0612	6"	Extension	6	3/8-16*
19894.W0801	8"	Workstop	-	1/2-13
19894.W0802	8"	Extension	8	1/2-13



## **Talongrip Clamps**





#### Material

Steel, hardened (HRc 52-54).

Vice Clamping

#### **Technical Notes**

Typically used in conjunction with pitbull

(part no. 12301) or Dynaforce (part no. 12010) clamps. Allows aggressive clamping on as little as 1,5mm of material.

#### Tips

A further option includes an adaptor to suit 100mm and 150mm vices - see part no. 12035.

Order No.	$d_1$	Grip height h <sub>2</sub>	$h_1$	h <sub>3</sub>	$I_1$	$w_1$	A/F	Qty/pack	Weight
12034.W0050	M 5	1,5 to 1,9	6.4	6.0	12.7	19.1	3	2	12
12034.W0075	M 5	1,5 to 3,0	7.9	8.1	19.1	19.1	3	2	22
12034.W0100	M 5	1,5 to 3,0	7.9	8.1	25.4	19.1	3	2	30
12034.W0150	M 8	1,5 to 5,6	12.7	6.0	25.4	25.4	5	1	37









### Vice Jaw Set for Talongrip Clamps





#### Material

Steel, heat-treated.

#### **Technical Notes**

The vice jaws for the Talongrip clamps increase the functionality of your 100 and 150mm vices (4" or 6"). This is a simple bolt-on system that allows you to perform aggressive machining operations whilst clamping on as little as 1,5mm.

Ideal for small batch sizes or when building a fixture is not economical.

#### Tips

Supplied with one jawstop (either part no.

12035.W0220 or .W0230 - see table) and for individual Talongrips (either part no. 12034.W0050 or .W0075).

#### **Important Notes**

Set includes a pair of vice jaws, four talongrip clamps and one stop (part no.12035. W0220).

Order No.	For vice size	Туре	Jaw type	Vice jaw	Vice jaw	Stop	Talongrip clamps	Weight g
12035.W0010	4"	Vice jaw set	With holes	2 Off	1 pc 12035	.W0220	4 pc 12034.W0050	1370
12035.W0015	4"/6"	Vice jaw set	With holes	2 Off	1 pc 12035	.W0220	4 pc 12034.W0050	2290
12035.W0020	6"	Vice jaw set	With holes	2 Off	1 pc 12035	.W0220	4 pc 12034.W0050	3220
12035.W0025	6"/8"	Vice jaw set	With holes	2 Off	1 pc 12035	.W0230	4 pc 12034.W0075	5570
12035.W0110	-	Vice jaw set	W/o holes	2 Off	1 pc 12035	.W0220	4 pc 12034.W0050	1490
12035.W0115	-	Vice jaw set	W/o holes	2 Off	1 pc 12035	.W0220	4 pc 12034.W0050	2570
12035.W0120	-	Vice jaw set	W/o holes	2 Off	1 pc 12035	.W0230	4 pc 12034.W0050	3420
12035.W0220	-	Jaw stop small	-	-	-		-	6
12035.W0230	-	Jaw stop large	-	-	-		-	10
Order No.	d <sub>1</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	$I_1$	l <sub>2</sub>	I <sub>3</sub>	$w_1$
12035.W0010	-	37.6	-	17.5	100	-	63.5	25.4
12035.W0015	-	43.9	23.9	17.5	150	98.6	63.5	25.4
12035.W0020	-	43.9	-	23.9	200	-	98.6	25.4
12035.W0025	-	62.2	30.9	23.9	200	120.7	98.3	31.8
12035.W0110	-	37.6	-	-	100	-	-	25.4
12035.W0115	-	43.9	-	-	150	-	-	25.4
12035.W0120	-	43.9	-	-	200	-	-	25.4
12035.W0220	M 5	6.4	5.0	-	19	-	-	12.7
12035.W0230	M 5	7.9	5.7	-	19	-	-	12.7



## Versagrip Clamps





#### Material

Steel, hardnened (HRc 52-54).

Vice Clamping

#### **Technical Notes**

The hardened grip has penetrating teeth designed to bite into the workpiece

preventing lateral and its horizontal movement.

These grips will even hold flame cut parts and parts with negative drafts.

#### Tips

A further option includes an adaptor to suit 100mm and 150mm vices - see part no. 12037.

Order No.	h <sub>1</sub>	h <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	Grip height h <sub>1</sub>	A/F	Qty/pack	Weight
12036.W0175	9.5	5.9	19.1	M5	1,5 to 3,0	4	2	18







## Versagrip Gripper

heavy duty





#### **Technical Notes**

Designed for those aggressive operations on harder materials while providing the versatility to hold just about any shape. Standard gripping height (.200") or elevated workpiece for cutter clearance around jaws by resting part on the original Versagrip gripper or custom made pucks in the Versa pockets. Rotatable, flat, serrated top face for additional holding force in horizontal pockets in jaws or hard stops.

#### Tips

Max. vice torque per pair of grips - 6" vice: 35-40 Lb/Fts (47,5-54,2 Nm.).

Order No.	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	$I_1$	Qty/pack	Weight
12036.W0570	11.94	6.73	5.21	19,00-19,05	16.61	8.31	M 5	6.05	2	18



# Vice Clamping

### Vice Jaw Set for Versagrip Clamps





#### Material

Steel, hardened (52-54 HRc).

#### **Technical Notes**

The Versagrip jaws increase the functionality of your 100 and 150mm vices. This is a simple bolt-on system that allows you to perform aggressive machining operations whilst clamping on as little as 1,5mm for irregular shaped parts.

Ideal for small batch sizes or when building a fixture is not economical.

#### Tips

Has penetrating teeth designed to bite into your workpiece to prevent lateral and hori-

zontal movement. They will hold flame cut parts, castings and even parts with negative draft.

#### **Important Notes**

Set includes a pair of vice jaws, and four Versagrip clamps, part no. 12036.W0175.

Order No.	For vice size	Туре	Jaw type	Vice jaw	Versagrip clamps	$d_1$	d <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	$I_1$	$w_1$	Number of holes	Weight g
12037.W0015	4"/6"	Vice jaw set	With holes	2 off	4 pc 12036. W0175	98,55	63,5	47,75	23,87	17,47	150	25,4	7	2460
12037.W0020	6"	Vice jaw set	With holes	2 off	4 pc 12036. W0175	98,55		47,75	23,87		200	25,4	9	3470
12037.W0115		Vice jaw set	W/o holes	2 off	4 pc 12036. W0175			47,75			150	25,4	7	2780
12037.W0120		Vice jaw set	W/o holes	2 off	4 pc 12036. W0175			47,75			200	25,4	9	3640





Holder Racks For Parallels - AccuSnap for use with AccuSnap parallels & angles





Material Steel.

#### **Technical Notes**

Provides convenient storage of parallel sets.

Order No.	For vice size	Suitable for parallel kits
19838.W0040	4"	19814.W0140
19838.W0041	4"	19814.W0040
19838.W0060	6"	19814.W0160
19838.W0061	6"	19814.W0060



Vice Clamps





VICE CLAMPING

Vice Clamping



#### Material

Steel (1018), case hardened, black oxide finish.

#### **Technical Notes**

Used to secure vice to fixture of machine

table. Fits into side groove on side of clamp - suitable for most industry standard vices.

#### **Important Notes**

All dimensions are in inches.

Order No.	For thread $d_1$	For vice size	$h_1$	h <sub>2</sub>	h <sub>3</sub>	$I_1$	I <sub>2</sub>	l <sub>3</sub>	I <sub>4</sub>	۱ <sub>5</sub>	$w_1$	w <sub>2</sub>
19896.W0040	3/8	4"	0.25	0.50	0.13	1.50	0.63	0.13	0.19	0.25	1.25	0.625
19896.W0041	1/2	4"	0.25	0.50	0.13	1.50	0.63	0.13	0.19	0.25	1.25	0.625
19896.W0060	3/8	6"	0.50	0.75	0.19	2.12	0.85	0.13	0.25	0.25	1.25	0.625
19896.W0061	1/2	6"	0.50	0.75	0.19	2.12	0.85	0.13	0.25	0.25	1.25	0.625
19896.W0062	3/8	6"	0.50	0.75	0.19	2.12	0.85	0.13	0.25	0.25	1.25	0.625





## **Chip Shield Covers** for double and eight station vices



VICE CLAMPING

outer cover centre cover outer cover	19899

#### **Technical Notes**

Fits double station and eight station vices. Shield covers protects vice screw and

mechanism from swarf and other debris.

#### **Important Notes** All dimensions are in inches.

Order No.	For vice size	Set contents
19899.W0040	4"	2 x Outer, 1 x Centre
19899.W0060	6"	2 x Outer, 1 x Centre
19899.W0080	8"	2 x Outer, 1 x Centre

