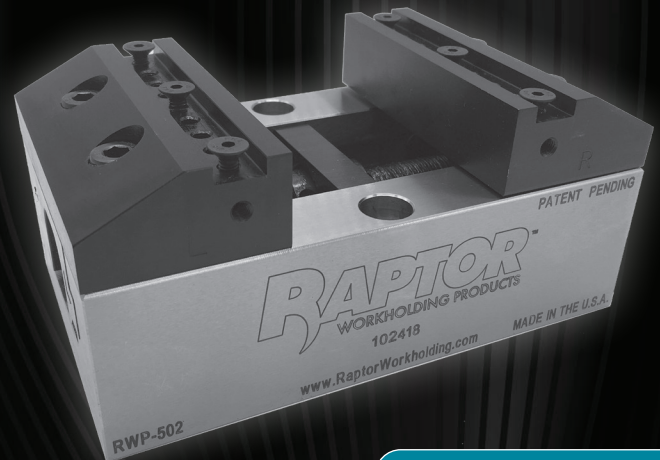


RAPTOR™

WORKHOLDING PRODUCTS

 **PIRANHA-COOLING LINE®**

 **PIRANHA-CLAMP®**



Vises

Zero-Point Plates

Pinch Blocks

Dovetail Fixtures

Dovetail Cutters

Multi-Fixtures

Adapters / Risers

Cooling Line

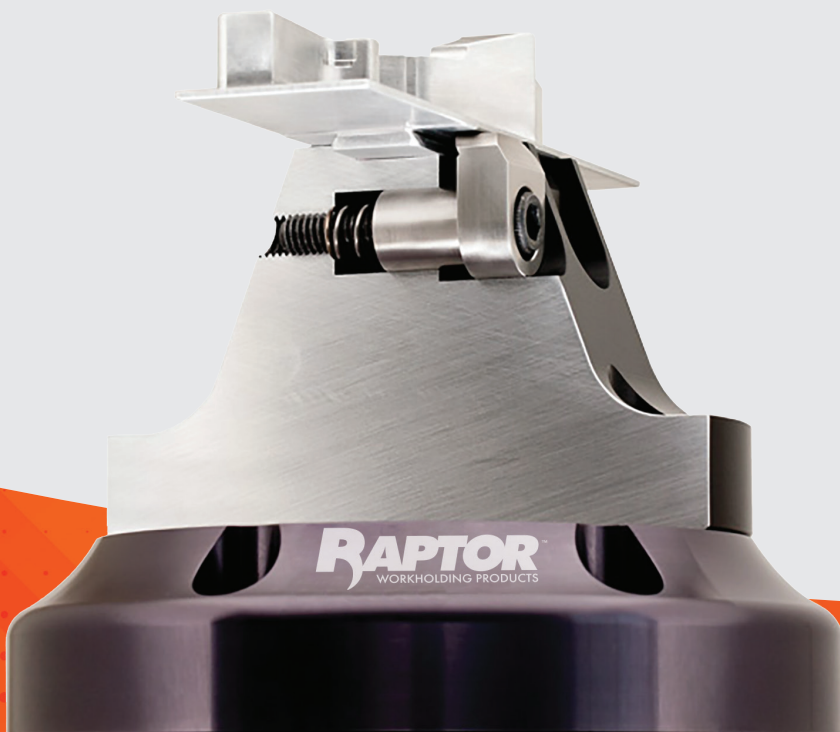
INTRODUCTION



Raptor was designed and is manufactured in the USA. Raptor offers a variety of adapters, risers, connectors and extenders built to attach directly to the most popular machines. Multiple fixtures can be mounted to tombstones, bridges, nests, carousels and base plates. Raptor fixtures provide rigid clamping while exposing all five faces of the workpiece. Most features can be completed in a single operation. Our unique Raptor dovetail spring-loaded clamps only require 1/8" of material to hold the workpiece, resulting in less waste, easier prep and no distortion. You can prepare all your parts with a single dovetail and utilize the same fixture for every part making your setup quick and easy. Raptor offers a variety of products that are Piranha zero-point adaptable.

SIMPLE, FAST & STRONG

The Raptor patented dovetail design locks the part in place for extreme clamping strength and rigidity.



A FULL ACCESS PASS

- 3, 4, & 5 axis milling & EDM
- Access to all 5 sides
- Simplify your application
- Eliminate operations
- Minimal clamping depth

MODULAR SYSTEM

- Eliminate changeover time by attaching a small fixture to a larger fixture
- Go from large parts to smaller parts quickly
- Turn your single fixture into a multi-fixture in a matter of seconds

INTRODUCTION



If you are looking for a self-centering vise with zero-point mounting, accurate jaw repeatability, unbeatable clamping force and a solution for chip and coolant evacuation, then the Piranha self-centering vise line is your perfect solution!

Piranha vises are 100% Swiss-designed and manufactured, made of hardened steel and have maximum operating torque of 150 foot-lbs. The open bed design allows chips and coolant to be efficiently evacuated, resulting in greater part finishes and machine uptime. The zero-point connection allows for rapid part change, resulting in less machine downtime. Piranha clamp also provides minimal material loss due to the 3mm clamping depth.

Piranha offers a variety of jaw options for the single and double station Gepard vises.



- Piranha offers two styles of vises:
- **The Snapper** – utilizing hardened serrated jaws, the Snapper vise is designed for first operation or raw casting machining with 8,000 lbs. of clamping force
- **The Gepard** – vise has machinable aluminum or steel jaws, as well as a variety of other jaw configurations to accommodate a multitude of applications
- Piranha vises come standard with zero-point mounting, which allows for quick part changes and 0.01mm (0.0004") repeatability
- The Piranha rail system enables the jaws to operate with the lowest jaw lift in the industry



INTRODUCTION



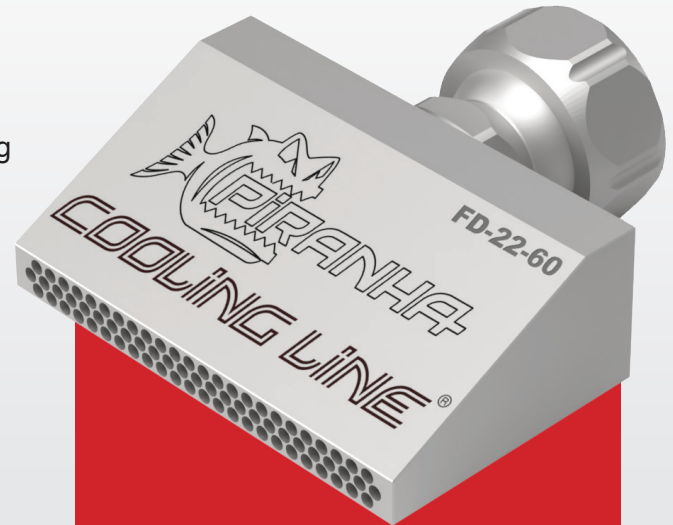
PIRANHA COOLING LINE®



**Swiss Designed
& Manufactured**

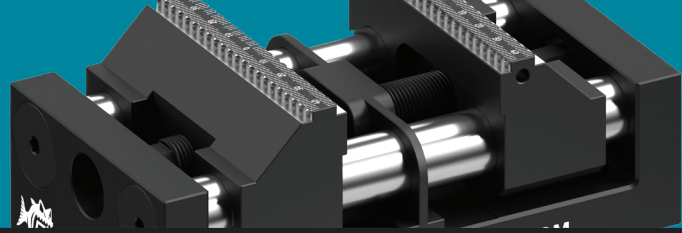
Are you experiencing chip build up in your lathes or excessive build up on your grinding wheels? Are you scrapping parts because your cooling line moved or even broke while machining? Are you trying to run lights out or extend your cutting tool life? The Piranha Cooling Line is the solution for you!

100% Swiss-designed and manufactured, the Piranha Cooling Line is a unique and versatile coolant line system made from high-strength and anodized aluminum. Piranha Cooling Line can withstand pressure of up to 1,150 PSI. The patented threaded connection design allows for ease of assembly and provides unmatched rigidity, which increases the pressure and volume of coolant, oil or air to the cut zone. Piranha Cooling Line is infinitely variable in flexibility so it can be adapted to any requirement. Piranha Cooling Line is versatile in use for cooling, blowing out or suction.



UNIQUE & VERSATILE

- Efficient chip evacuation
- More direct pressure in the “cut zone,” creating better tool life and part finishes
- Optimizes machine performance and saves the customer time and money
- The Piranha Cooling Line offers a variety of patented, multi-port nozzles which can easily be installed on lathes, grinders, machining centers, and transfer lines
- Rigidity allows for coolant to remain in the cut zone, ideal for lights out manufacturing



Vises | 7-24



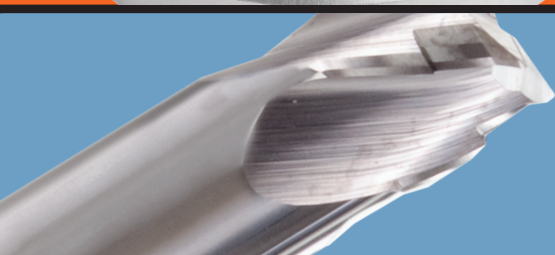
Zero-Point Plates | 25-27



Pinch Blocks | 28



Dovetail Fixtures | 29-47



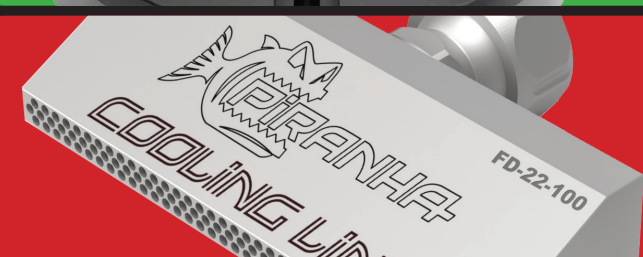
Dovetail Cutters | 48



Multi-Fixtures | 49-52



Adapters / Risers | 53-58



Cooling Line | 59-67

Engineering Changes

Specifications and engineering data are subject to change without notice.

Manufacturing Policy

Products supplied by Raptor are of high quality and adhere to manufacturing standards. Tolerances are uniformly held in accordance with catalog specifications. Raptor products are simple to use and support material is provided with each shipment to ensure that applications go smoothly. For additional support, contact Raptor Workholding Products.

Damaged, Short or Lost Items

UPS is the primary carrier if not specified by the customer. If a package and subsequent product is damaged / lost in transit, the customer should immediately place a claim with UPS. The customer should keep all damaged product and packaging for inspection by UPS and notify Raptor so merchandise can be replaced.

Returned Goods

Materials cannot be returned without authorization. Final credit will be determined as follows:

- Only catalog items suitable for resale may be returned.
- Specials and dovetail cutters cannot be returned.
- Customers need to obtain an RGA# by contacting a Raptor customer service representative and reference the RGA# on the returned goods.
- Invoice number and date must be furnished.
- Follow packing instructions, if applicable, for returning goods.
- Transportation charges must be prepaid.
- Credit value will be issued at invoiced price less a minimum 20% restocking charge.



Limited Warranty

Raptor products are protected with a 1-year warranty from the original date of invoice against defects in material or workmanship

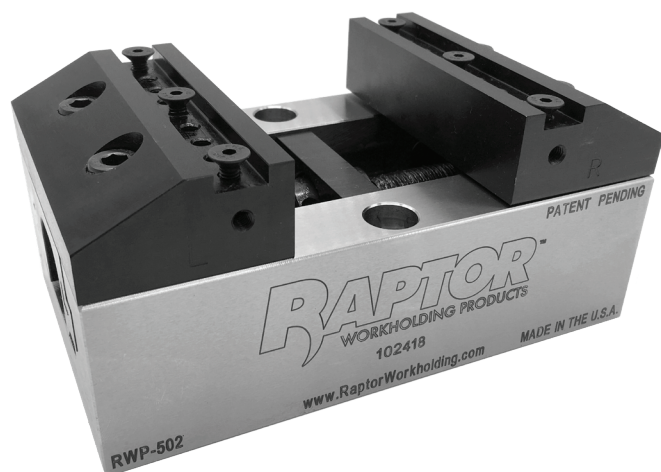
** Subject to the terms as described in the Limited Warranty Policy as stated at www.raptorworkholding.com*

Raptor Self-Centering Vises

- All steel construction
- Centering tolerance +/- 0.013mm (0.0005")
- Repeatability is 0.001"
- Jaws adjust from either end of vise
- Jaws can be reversed
- Aluminum and steel jaw options
- Multiple jaw insert options available

RWP-502

100mm wide self-centering vise



Vise weight: 14 lbs.

Vise width: 3.937" (100mm)

Vise length: 6.49"

Bed height: 1.96"

Standard jaw opening: 0-2.50"

Reversed jaw opening: 2.50"-5.62"

Maximum torque: 30-foot lbs.
(creates 4,000 lbs. force)

Centering tolerance: 0.0005"

Piranha zero-point adaptable: Yes
(order 4-piece kit #540277)

RWP-505

150mm wide self-centering vise



Vise weight: 50 lbs.

Vise width: 5.91" (150mm)

Vise length: 9.84"

Bed height: 2.95"

Standard jaw opening: 0-3.88"

Reversed jaw opening: 4.75"-9.25"

Maximum torque: 75-foot lbs.
(creates 6,000 lbs. force)

Centering tolerance: 0.0005"

Piranha zero-point adaptable: Yes
(order 4-piece kit #540277)

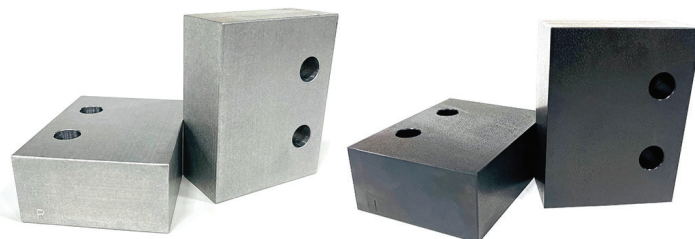
Raptor Vise Accessories

Jaws

- Machinable jaws allow user to machine part-specific profile in jaw for maximum clamping / location, allowing for lower height / more tool clearance
- Good for secondary ops
- Dowel pins used for on / off repeatability

RWP-502 Compatible

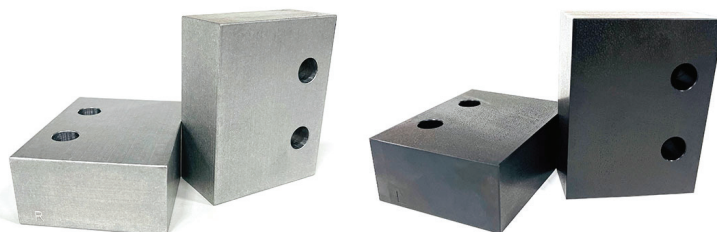
MATERIAL	LEFT JAW	RIGHT JAW
6061 ALUMINUM	RWP-1028	RWP-1027
1018 STEEL	RWP-1028-ST	RWP-1027-ST



Jaw Dimensions: 3.0" L X 3.89" W X 1.50" H

RWP-505 Compatible

MATERIAL	LEFT JAW	RIGHT JAW
6061 ALUMINUM	RWP-1528	RWP-1527
1018 STEEL	RWP-1528-ST	RWP-1527-ST

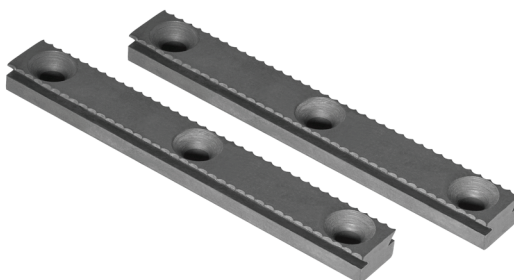


Jaw Dimensions: 4.50" L X 5.83" W X 2.00" H

Inserts

RWP-1050

Serrated Insert
RWP-502 compatible only



RWP-1550

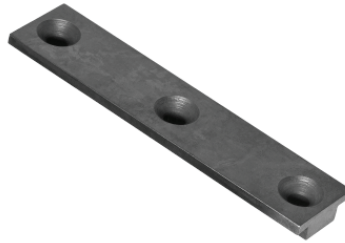
Serrated Insert
RWP-505 compatible only

- Designed for holding raw material with serrations
- Bite height: 0.110"
- Hardened and ground 4140 steel
- Inserts sold as a pair

RWP-1051

Standard Parallel – 0.125" ledge

RWP-502 compatible only



- Provides precise straight edge for clamping machined workpiece
- Good for light / medium duty machining
- Rail provides maximum support while allowing clearance on bottom of workpiece
- Hardened and ground 4140 steel
- **Inserts sold individually; two are needed**

RWP-1551

Standard Parallel – 0.125" ledge

RWP-505 compatible only

RWP-1052

Thin Parallel – 0.0625" ledge

RWP-502 compatible only



- Provides precise straight edge for clamping machined workpiece
- Lower profile for light duty machining
- Rail provides maximum support while allowing clearance on bottom of workpiece
- Hardened and ground 4140 steel
- **Inserts sold individually; two are needed**

RWP-1552

Thin Parallel - 0.0625" ledge

RWP-505 compatible only

RWP-1056

60° dovetail insert

RWP-502 compatible only



- Utilizes dovetail for secure clamping and retention
- Utilizes standard 60° dovetail
- Hardened and ground 4140 steel
- Recommended cutter: RWP-DC410C
- **Inserts sold individually; two are needed**

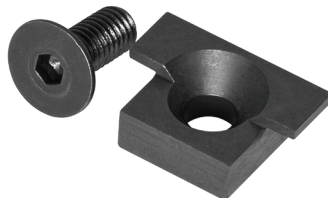
RWP-1556

60° dovetail insert

RWP-505 compatible only

RWP-33020

Mitee-Bite TalonGrip™ end stop



- Fits both RWP-502 & RWP-505 vises
- Locates workpiece for repeat positioning
- Stops sold individually

RWP-33050

Mitee-Bite TalonGrip™ (2) pack



- Fits both the RWP-502 & RWP-505 vises
- Low profile clamping
- Use to secure soft material workpieces
- Can be used in conjunction with end stops
- Hardened tool steel material

Adapters / Riser Plates

The following products were designed for the RWP-502 or RWP-505 vise. There are multiple options to choose from and will mount to most rotary tables and pallets.

RWP-209-V100

Emergency adapter

- Provided blank for user to add mounting of their choice
- Stackable with RWP-242-V100 to achieve 3.25" H
- This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum plain

Adapter height: 1.50"

Adapter diameter: 9.90"

Vise compatibility: RWP-502

Boss/hole: 1.000" dia. x
0.30" receiving hole

RWP-222-V100

Small universal adapter

- Slotted c'bores for 3/8 or M10 SHCS on a 5.50" - 8.5" B.C.
- Stackable with RWP-242-V100 to achieve 3.75" H
- This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum with
black anodize finish

Adapter height: 2.00"

Adapter diameter: 9.875"

Vise compatibility: RWP-502

Boss/hole: 1.000" dia.
x 0.30" receiving hole

RWP-223-V100

Large universal adapter

- Slotted c'bores for 1/2 or M12 SHCS on a 6.0" - 10.0" B.C.
- Stackable with RWP-242-V100 to achieve 3.75" H
- This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum with
black anodize finish

Adapter height: 2.00"

Adapter diameter: 11.90"

Vise compatibility: RWP-502 and RWP-505

Boss/hole: 1.000" dia.
x 0.30" receiving hole

RWP-242-V100

Vise riser plate

- C'bores for 1/2 or M12 SHCS on a 7.0" B.C.
- Can be stacked in an application for higher "Z" using RWP-222-V100, RWP-223-V100 or RWP-209-V100
- This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum with black anodize finish

Adapter height: 1.75"

Adapter diameter: 8.45"

Vise compatibility: RWP-502

Boss/hole: 1.000" dia.
x 0.30" receiving hole

RWP-244-V100

Vise adapter plate with 2.25" dovetail bottom

- Mounts directly to: RWP-006 or RWP-006SS
- RWP-006 and RWP-006SS mount to any riser that has Raptor interface



Adapter material: 7075 aluminum with black anodize finish

Adapter dimensions: 6.50" L x 4.125" W
x 1.00" H

Vise compatibility: RWP-502

RWP-251-V100

Vise riser

- C'bores for 1/2 or M12 SHCS on a 9.92" B.C.
- Mounts directly to: Haas UMC750, MC750SS, Matsuura MX520 300MM and many others



Adapter material: 7075 aluminum with black anodize finish

Adapter height: 4.50"

Adapter diameter: 11.40"

Vise compatibility: RWP-502

GEPARD VISES

- Designed for 1st or 2nd ops based on jaws used
- Versatile jaw selection: machinable, step: flat, serrated and hybrid style
- Achieve confident downward holding pressure with “Drop and Lock” jaw / carrier 45° interface

SNAPPER VISES

- Designed for 1st ops
- Lowest profile in the industry, allowing for more “Z-axis” access
- Grips with 2 rows of teeth at 8,000 lbs. of force on just 3mm of material
- Material loss is minimized and holding force is maximized when clamped

Piranha Gepard Vises

540444

Gepard 170 self-centering with aluminum jaws



Vise weight: 12.57 lbs.
Outside jaws weight: 1.32 lbs.
Vise width: 98mm
Vise length: 170mm
Vise height without jaws: 63mm
Overall height: 84mm with jaws
Maximum allowed torque: 73-foot lbs.
Hex size: 12mm
Centering tolerance: 0.01mm (0.0004")

540400

Gepard 300 self-centering with aluminum jaws



Vise weight: 31.52 lbs.
Outside jaws weight: 2.42 lbs.
Vise width: 131mm
Vise length: 300mm
Vise height without jaws: 74mm
Overall height: 105mm with jaws
Maximum allowed torque: 73-foot lbs.
Hex size: 16mm
Centering tolerance: 0.01mm (0.0004")

551079

Gepard 170 double station with aluminum jaws



Vise weight: 12.57 lbs.
Outside jaws weight: 1.32 lbs.
Center jaw weight: 0.661 lbs.
Vise width: 98mm
Vise length: 170mm
Vise height without jaws: 63mm
Center jaw length: 40mm
Outside jaw length: 50mm
Overall height: 94mm with jaws
Maximum allowed torque: 73-foot lbs.
Hex size: 12mm

Replacement Jaw Options:

551130

3-piece set

Short aluminum machinable jaws

Outer jaws: 50mm L x 98mm W x 31mm H (usable height)

Center jaw: 40mm L x 98mm W x 31mm H (usable height)

Weight: 1.30kg. (2.87 lbs.)

Clamping range: 0mm-75mm

551131

3-piece set

Medium aluminum machinable jaws

Outer jaws: 50mm L x 98mm W x 41mm H (usable height)

Center jaw: 40mm L x 98mm W x 41mm H (usable height)

Weight: 1.60kg. (3.52 lbs.)

Clamping range: 0mm-75mm

551132

3-piece set

Tall aluminum machinable jaws

Outer jaws: 50mm L x 98mm W x 51mm H (usable height)

Center jaw: 40mm L x 98mm W x 51mm H (usable height)

Weight: 1.90kg. (4.18 lbs.)

Clamping range: 0mm-75mm

551080

Gepard 300 double station with aluminum jaws



Vise weight: 31.52 lbs.
Outside jaws weight: 2.42 lbs.
Center jaw weight: 1.10 lbs.
Vise width: 131mm
Vise length: 300mm
Vise Height without jaws: 74mm
Center jaw length: 60mm
Outside jaw length: 60mm
Overall height: 105mm with jaws
Maximum allowed torque: 73-foot lbs.
Hex size: 16mm

Replacement Jaw Options:

551133

3-piece set

Short aluminum machinable jaws

Outer jaws: 60mm L x 131mm W x 41mm H (usable height)

Center jaw: 60mm L x 131mm W x 41mm H (usable height)

Weight: 2.40kg. (5.29 lbs.)

Clamping range: 0mm-132mm

551134

3-piece set

Medium aluminum machinable jaws

Outer jaws: 60mm L x 131mm W x 51mm H (usable height)

Center jaw: 60mm L x 131mm W x 51mm H (usable height)

Weight: 3.10kg. (6.83 lbs.)

Clamping range: 0mm-132mm

551135

3-piece set

Tall aluminum machinable jaws

Outer jaws: 60mm L x 131mm W x 61mm H (usable height)

Center jaw: 60mm L x 131mm W x 61mm H (usable height)

Weight: 3.90kg. (8.59 lbs.)

Clamping range: 0mm-132mm

Aluminum Machinable Jaws

GEPARD 170

540443

2-piece set

Jaw Dim: 50mm L x 98mm W x 31mm H
(usable height)

Weight: 0.80kg. (1.36 lbs.)

Clamping Range: 0mm-155mm



GEPARD 300

540424

2-piece set

Jaw Dim: 60mm L x 131mm W x 41mm H
(usable height)

Weight: 1.60kg. (3.52 lbs.)

Clamping Range: 0mm-268mm

551018

2-piece set

Jaw Dim: 50mm L x 98mm W x 41mm H
(usable height)

Weight: 1.00kg. (2.20 lbs.)

Clamping Range: 0mm-155mm



551020

2-piece set

Jaw Dim: 60mm L x 131mm W x 51mm H
(usable height)

Weight: 2.10kg. (4.62 lbs.)

Clamping Range: 0mm-268mm

551019

2-piece set

Jaw Dim: 50mm L x 98mm W x 51mm H
(usable height)

Weight: 1.20kg. (2.74 lbs.)

Clamping Range: 0mm-155mm



551021

2-piece set

Jaw Dim: 61mm L x 131mm W x 61mm H
(usable height)

Weight: 2.60kg. (5.7 lbs.)

Clamping Range: 0mm-268mm

Steel Machinable Jaws

GEPARD 170

551039

2-piece set

Jaw Dim: 50mm L x 98mm W x 31mm H
(usable height)

Weight: 1.85kg. (4.07 lbs.)

Clamping Range: 0mm-155mm



GEPARD 300

551045

2-piece set

Jaw Dim: 60mm L x 131mm W x 41mm H
(usable height)

Weight: 3.50kg. (7.71 lbs.)

Clamping Range: 0mm-268mm

551033

2-piece set

Jaw Dim: 50mm L x 98mm W x 41mm H
(usable height)

Weight: 2.60kg. (5.73 lbs.)

Clamping Range: 0mm-155mm



551046

2-piece set

Jaw Dim: 60mm L x 131mm W x 51mm H
(usable height)

Weight: 5.00kg. (11.02 lbs.)

Clamping Range: 0mm-268mm

551042

2-piece set

Jaw Dim: 50mm L x 98mm W x 51mm H
(usable height)

Weight: 3.40kg. (7.49 lbs.)

Clamping Range: 0mm-155mm



551047

2-piece set

Jaw Dim: 60mm L x 131mm W x 61mm H
(usable height)

Weight: 6.80kg. (14.99 lbs.)

Clamping Range: 0mm-268mm

Serrated Clamping Jaws

GEPARD 170

551009

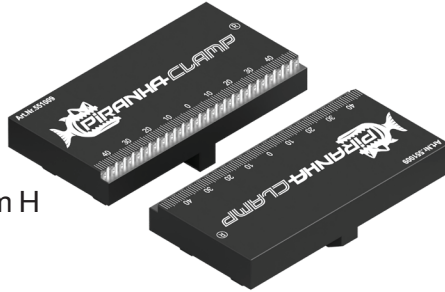
2-piece set

Short clamping jaws

Jaw Dim: 50mm L x 98mm W x 22mm H

Weight: 1.10kg. (2.42 lbs.)

Clamping Range: 7mm-61mm



GEPARD 300

551007

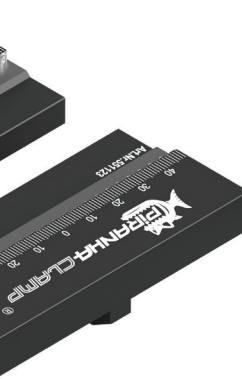
2-piece set

Short clamping jaws

Jaw Dim: 60mm L x 131mm W x 22mm H

Weight: 1.80kg. (3.96 lbs.)

Clamping Range: 7mm-153mm



551123

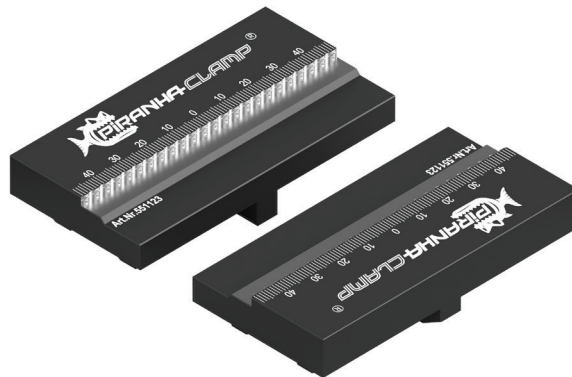
2-piece set (Gepard 170 only)

Medium clamping jaws

Jaw Dim: 50mm L x 98mm W x 22mm H

Weight: 1.00kg. (2.20 lbs.)

Clamping Range: 44mm-98mm



551008

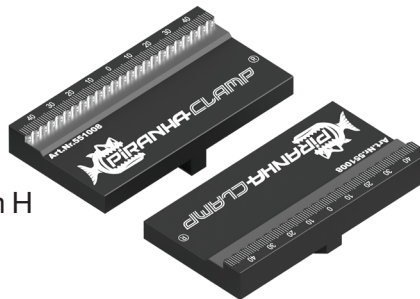
2-piece set

Long clamping jaws

Jaw Dim: 50mm L x 98mm W x 22mm H

Weight: 0.90kg. (1.98 lbs.)

Clamping Range: 81mm-135mm



551006

2-piece set

Long clamping jaws

Jaw Dim: 60mm L x 131mm W x 22mm H

Weight: 1.50kg. (3.30 lbs.)

Clamping Range: 101mm-247mm

551058

2-piece set

High-short clamping jaws

Jaw Dim: 60mm L x 131mm W x 50mm H

Weight: 4.20kg. (9.25 lbs.)

Clamping Range: 7mm-153mm



551056

2-piece set

High-short clamping jaws

Jaw Dim: 50mm L x 98mm W x 40mm H

Weight: 2.00kg. (4.40 lbs.)

Clamping Range: 7mm-61mm

Hybrid Serrated / Flat Clamping Jaws

GEPARD 170

551063

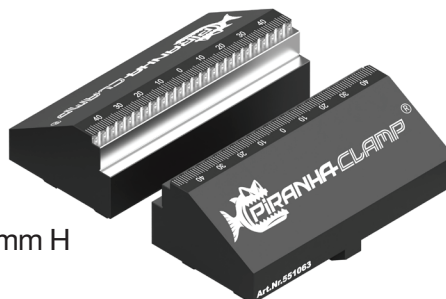
2-piece set

High-short

Jaw Dim: 50mm L x 98mm W x 40mm H

Weight: 2.00kg. (4.40 lbs.)

Clamping Range: Bottom - 10mm-65mm
Top - 17mm-70mm (serrated)



GEPARD 300

551057

2-piece set

High-short

Jaw Dim: 60mm L x 131mm W x 50mm H

Weight: 4.15kg. (9.14 lbs.)

Clamping Range: Bottom - 11mm-157mm
Top - 17mm-164mm (serrated)

551102

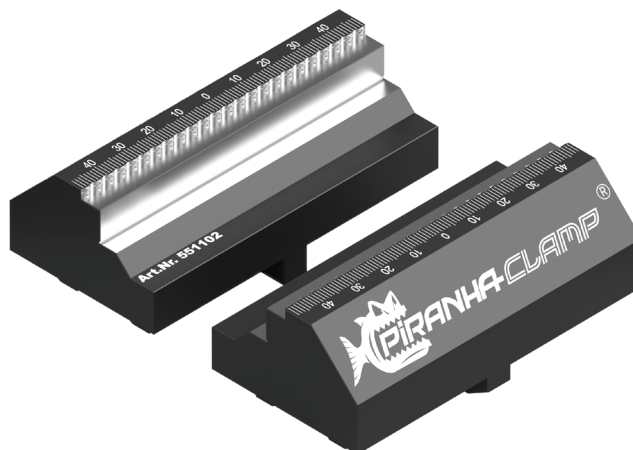
2-piece set (Gepard 170 only)

High-medium

Jaw Dim: 50mm L x 98mm W x 40mm H

Weight: 1.80kg. (3.96 lbs.)

Clamping Range: Bottom - 37mm-91mm
Top - 49mm-102mm (serrated)



551032

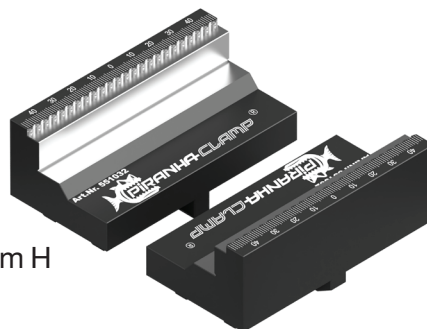
2-piece set

High-long

Jaw Dim: 50mm L x 98mm W x 40mm H

Weight: 1.60kg. (3.52 lbs.)

Clamping Range: Bottom - 70mm-124mm
Top - 81mm-134mm (serrated)



551038

2-piece set

High-long

Jaw Dim: 60mm L x 131mm W x 50mm H

Weight: 3.40kg. (7.49 lbs.)

Clamping Range: Bottom - 101-247mm
Top - 95mm-241mm (serrated)

Low-Profile Flat Clamping Jaws

GEPARD 170

551005

2-piece set

Short low-profile flat

Jaw Dim: 50mm L x 98mm W x 25mm H

Weight: 1.30kg. (2.86 lbs.)

Clamping Range: 16mm-70mm



GEPARD 300

551003

2-piece set

Short low-profile flat

Jaw Dim: 60mm L x 131mm W x 25mm H

Weight: 2.15kg. (4.73 lbs.)

Clamping Range: 17mm-163mm

551124

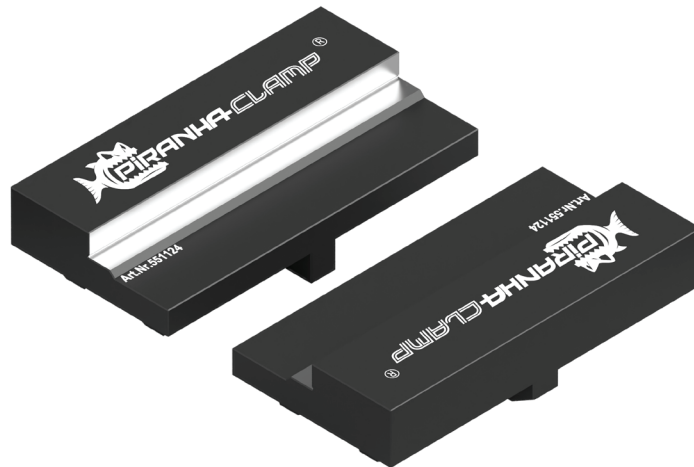
2-piece set (Gepard 170 only)

Medium low-profile flat

Jaw Dim: 50mm L x 98mm W x 25mm H

Weight: 1.10kg. (2.42 lbs.)

Clamping Range: 50mm-105mm



551004

2-piece set

Long low-profile flat

Jaw Dim: 50mm L x 98mm W x 25mm H

Weight: 0.85kg. (1.87 lbs.)

Clamping Range: 81mm-135mm



551002

2-piece set

Long low-profile flat

Jaw Dim: 60mm L x 131mm W x 25mm H

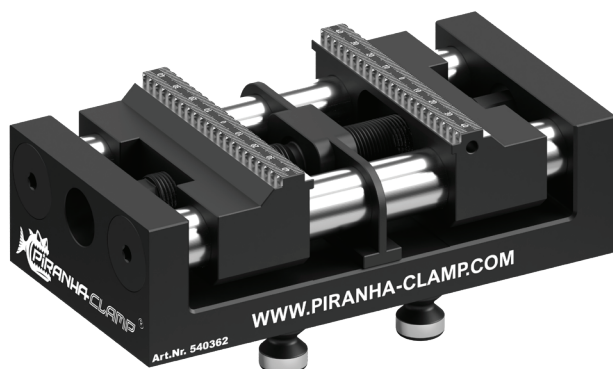
Weight: 1.30kg. (2.86 lbs.)

Clamping Range: 101mm-247mm

Piranha Snapper Vises

540362

Snapper 170 self-centering



Vise weight: 9.92 lbs.

Vise width: 90mm

Vise length: 170mm

Bed height: 52mm

Overall height: 55mm

Clamping range: (standard 5-75mm)
(reversed jaws 53-118mm)

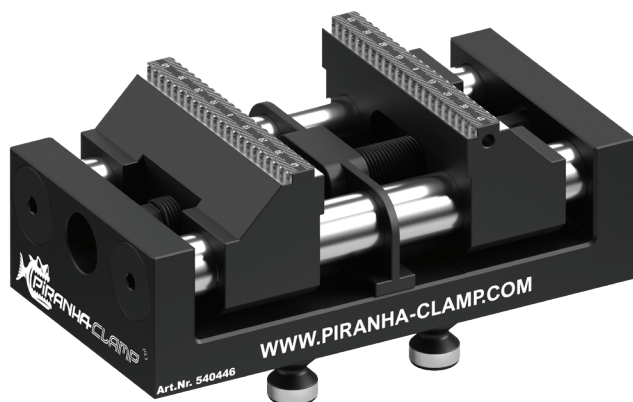
Max allowed torque: 147-foot lbs.

Hex size: 12mm

Centering tolerance: 0.01mm (0.0004")

540446

Snapper 170 self-centering with 10mm taller height jaws



Vise weight: 10.14 lbs.

Vise width: 90mm

Vise length: 170mm

Bed height: 62mm

Overall height: 65mm

Clamping range: (standard 5-75mm)
(reversed jaws 53-118mm)

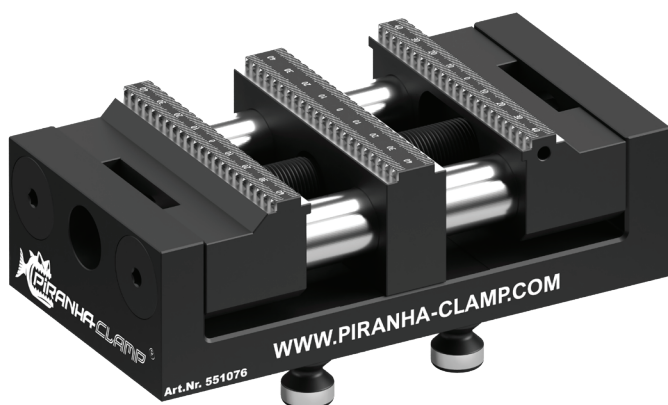
Max allowed torque: 147-foot lbs.

Hex size: 12mm

Centering tolerance: 0.01mm (0.0004")

551076

Snapper 170 double station



Vise weight: 11.02 lbs.

Vise width: 90mm

Vise length: 170mm

Bed height: 52mm

Overall height: 55mm

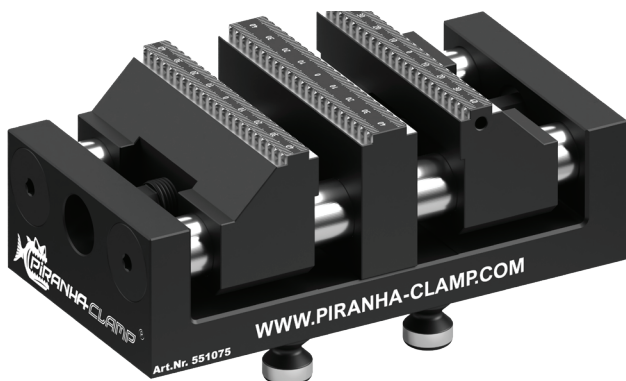
Clamping range: (standard 6-30mm)
(reversed jaws 26-52mm)

Max allowed torque: 147-foot lbs.

Hex size: 12mm

551075

Snapper 170 double station with 10mm taller height jaws



Vise weight: 11.24 lbs.

Vise width: 90mm

Vise length: 170mm

Bed height: 62mm

Overall height: 65mm

Clamping range: (standard 6-30mm)
(reversed jaws 26-52mm)

Max allowed torque: 147-foot lbs.

Hex size: 12mm

540401

Snapper 300 self-centering



Vise weight: 25.35 lbs.

Vise width: 120mm

Vise length: 300mm

Bed height: 63mm

Overall height: 66mm

Clamping range: (standard 5-191mm)
(reversed jaws 53-238mm)

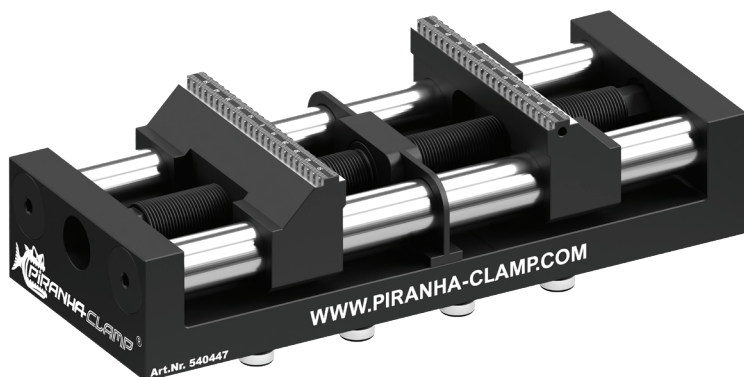
Max allowed torque: 147-foot lbs.

Hex size: 16mm

Centering tolerance: 0.01mm (0.0004")

540447

Snapper 300 self-centering with 10mm taller height jaws



Vise weight: 25.57 lbs.

Vise width: 120mm

Vise length: 300mm

Bed height: 73mm

Overall height: 76mm

Clamping range: (standard 5-191mm)
(reversed jaws 53-238mm)

Max allowed torque: 147-foot lbs.

Hex size: 16mm

Centering tolerance: 0.01mm (0.0004")

551078

Snapper 300 double station



Vise weight: 26.46 lbs.

Vise width: 120mm

Vise length: 300mm

Bed height: 63mm

Overall height: 66mm

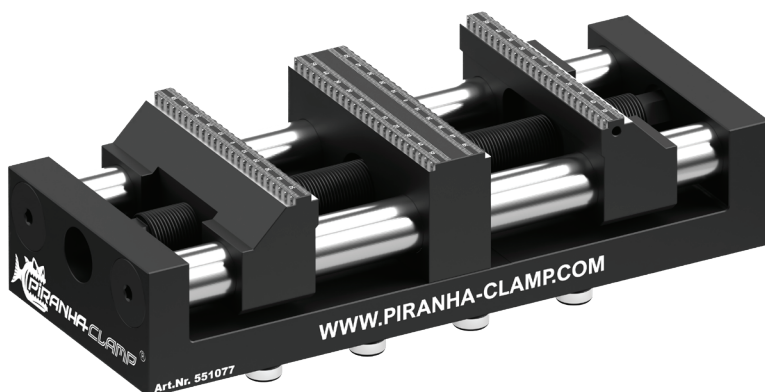
Clamping range: (standard 5-82mm)
(reversed jaws 27-105mm)

Max allowed torque: 147-foot lbs.

Hex size: 16mm

551077

Snapper 300 double station with 10mm taller height jaws



Vise weight: 26.67 lbs.

Vise width: 120mm

Vise length: 300mm

Bed height: 73mm

Overall height: 76mm

Clamping range: (standard 5-82mm)
(reversed jaws 27-105mm)

Max allowed torque: 147-foot lbs.

Hex size: 16mm

551112

PV 75 self-centering vise



Vise weight: 3.52 lbs.

Base width: 56mm

Base length: 75mm

Base height: 38mm

Overall height: 55mm

Clamping range: (serrated 0-31mm)
(plain 5-35mm)
(serrated with reversed jaws 19-49mm)
(plain with reversed jaws 25-55mm)

Max allowed torque: 24-foot lbs.

Hex size: 8mm

Centering tolerance: 0.01mm (0.0004")

Pyramids

551111

Flange mount self-centering vise direct mount to pyramid 551119

Fits pyramid: 551119

Vise weight: 4.00 lbs.

Vise width: 120mm

Vise length: 75mm

Base height: 38mm

Overall height: 55mm with jaws

Clamping range: (see 551112)

Max allowed torque: 24-foot lbs.

Hex size: 8mm



551119

Pyramid fixture body

- Multiple clamping on 5-axis machines
- Mounting for (3) 551111 vises only
- Diameter 177.8mm x 108.6mm tall
- Pyramid faces are at 45°
- Weight = 5.4kg. (11.9 lbs.)
- Zero-point mounting included (on bottom)
- Vises not included, sold separately



551116

Pyramid fixture body

- Mounting for (3) vises (see below)
- 250mm x 160mm tall
- Pyramid faces are at 65°
- Weight = 9.7kg. (21.4 lbs.)
- Zero-point mounting included (on bottom)
- Vises not included, sold separately



Vise options available to mount to 551116, 551141 & 551142

540444-PY

Gepard 170, includes aluminum clamping jaws

551079-PY

Gepard 170 double station, includes aluminum double station jaw set

540362-PY

Snapper 170 self-centering vise

540446-PY

Snapper 170 with 10mm taller height jaws

551076-PY

Snapper 170 double station

551075-PY

Snapper 170 double station with 10mm taller height jaws



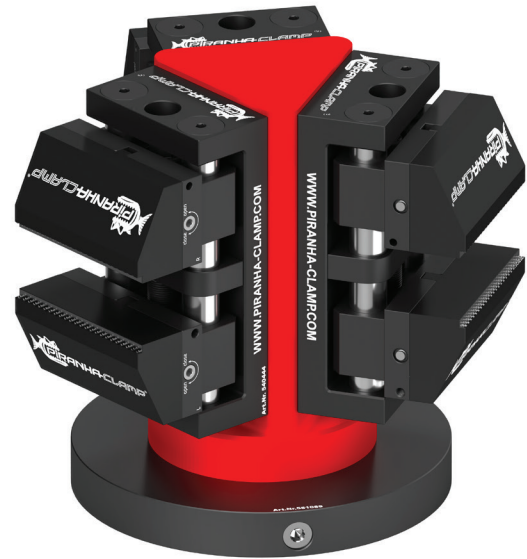
Tombstones

For multiple clamping on 4-axis, 5-axis, and horizontal machining centers

551141

Tombstone body with mounting for (3) Vises

- See page 22 for vise options
- Tombstone faces are evenly spaced at 120°
- Base = dia. 120mm, OAH = 210mm
- Zero-point mounting included (on bottom)
- Vises not included, sold separately



551142

Tombstone body with mounting for (4) vises

- See page 22 for vise options
- Tombstone faces are evenly spaced at 90°
- Base = dia. 150mm, OAH = 210mm, Faces = 90mm wide
- Zero-point mounting included (on bottom)
- Vises not included, sold separately



Piranha Clamp Accessories

540277

Zero-point studs (4) pack
Weight = 0.40kg. (0.88 lbs.)



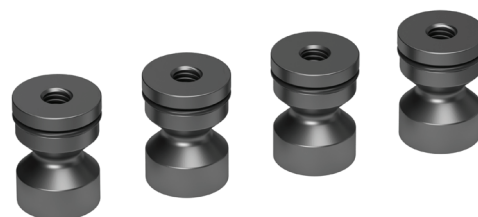
551025

Aluminum hole plugs non-flush (4) pack
Must be used when not utilizing all zero-point holes
Weight = 0.20kg. (0.44 lbs.)



551140

Steel flush hole plug (4) pack
Must be used when not utilizing all zero-point holes
Weight = 0.40kg. (0.88 lbs.)



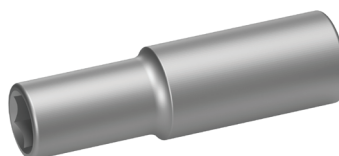
501000

8mm socket key for PV 75 vises
Weight = 0.01kg. (0.22 lbs.)



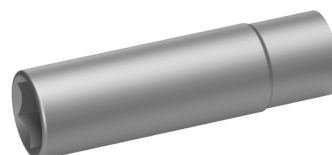
501001

12mm socket key for 170 vises
Weight = 0.01kg. (0.22 lbs.)



501002

16mm socket key for 300 vises
Weight = 0.01kg. (0.22 lbs.)



ZERO-POINT PLATES

Piranha zero-point plates are comprised of precision bores and a clamp that is acutated with a simple turn of a wrench. All zero-point plates are steel material with a black oxide finish. Piranha zero-point plates allow for precise, repeatable set-ups. Zero-point plates accept both Piranha and Raptor self-centering vises, as well as many Raptor dovetail fixtures by clamping on the precision locating studs.

540415

- Zero-point clamping plate 120mm L x 120mm W x 26mm H
- Fits on a 40mm grid pattern
- Mounting holes spread on a 80mm x 80mm spacing
- Weight = 2.40kg. (5.29 lbs.)



551024

- Double zero-point clamping plate 230mm L x 120mm W x 26mm H
- Fits on a 40mm grid pattern
- Mounting holes spread on a 200mm x 80mm spacing
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Weight = 4.30kg. (9.47 lbs.)



551022

- Zero-point clamping plate 125mm L x 125mm W x 26mm H
- Fits on a 50mm grid pattern
- Mounting holes spread on a 100mm x 100mm spacing
- Weight = 2.65kg. (5.84 lbs.)



551023

- Double zero-point clamping plate 250mm L x 100mm W x 26mm H
- Fits on a 50mm grid pattern
- Mounting holes spread on a 100mm x 100mm x 50mm spacing
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Weight = 4.00kg. (8.8 lbs.)



ZERO-POINT PLATES

551093

- Double zero-point clamping plate blank 250mm L x 120mm W x 26mm H
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Plates are provided with blank mounting (customer must add)
- Weight = 4.40kg. (9.70 lbs.)



540283

- Zero-point butterfly clamping plate 201mm L x 201mm W x 26mm H
- Weight = 2.50kg. (5.51 lbs.)
- See website for mounting information



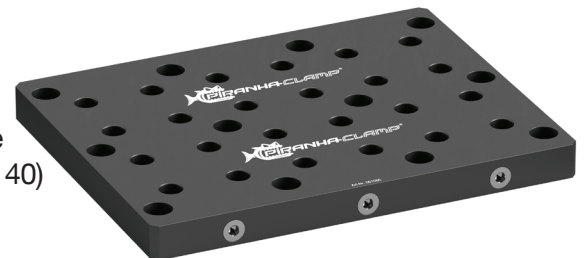
551068

- Triple zero-point clamping plate 350mm L x 100mm W x 26mm H
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Weight = 5.20kg. (11.45 lbs.)
- See website for mounting information



551085

- Zero-point clamping plate 6-fold 220mm L x 250mm W x 26mm H
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Weight = 12.00kg. (26.45 lbs.)
- See website for mounting information



551158

- Adapts Raptor risers to zero-point products
- 126mm dia. x 26mm H
- Has a 31.75mm (1.25") boss on the bottom
- Weight = 2.3kg. (5 lbs.)



551086

- Zero-point clamping plate blank
- 120mm dia. x 26mm H
- Plates are provided with blank mounting (customer must add)
- Weight = 2.31kg. (9.0 lbs.)



551088

- Zero-point clamping plate blank
- 180mm dia. X 26mm H
- Plates are provided with blank mounting (customer must add)
- Weight = 5.2kg. (11.4 lbs.)

551087

- Zero-point clamping plate blank
- 160mm dia. x 26mm H
- Plates are provided with blank mounting (customer must add)
- Weight = 4.1kg. (9.0 lbs.)

551089

- Zero-point clamping plate blank
- 200mm dia. x 26mm H
- Plates are provided with blank mounting (customer must add)
- Weight = 6.4kg. (14.1 lbs.)

551090

- Double zero-point clamping plate blank
- 280mm dia. x 26mm H
- When zero-point holes are not used, a plug must be added to ensure proper function of the mechanism (see part numbers 551025 or 551140)
- Plates are provided with blank mounting (customer must add)
- Weight = 16.6kg. (27.7 lbs.)



PINCH BLOCKS

Raptor pinch blocks connect directly to a Raptor dovetail fixture. They are designed for a quick solution for secondary or final operations with reoccurring machining or for removing a dovetail from the sixth side of a finished part. A shim and screw are included with each pinch block.

RWP-702

7075 aluminum pinch block with 1.50" dovetail bottom

Product dimensions: 2.35" L x 2.95" W x 1.82" H

Fixture compatibility: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027



RWP-703

7075 aluminum pinch block with 1.50" dovetail bottom

Product dimensions: 5.00" L x 2.95" W x 1.82" H

Fixture compatibility: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027



RWP-704

7075 aluminum pinch block with 0.75" dovetail bottom

Product dimensions: 2.35" L x 2.95" W x 1.82" H

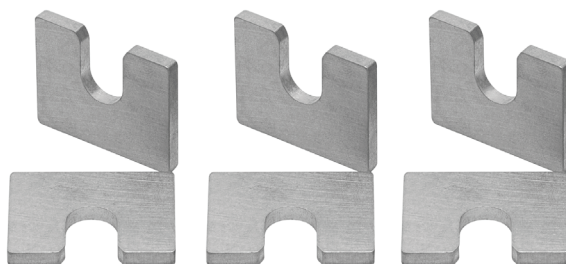
Fixture compatibility: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-038SS & RWP-027



RWP-700-SHIM

The RWP-700-SHIM are used with the pinch blocks to prevent them from closing completely when machining part profile

These are sold in packs of six units.



DOVETAIL FIXTURES

RAPTOR IS SIMPLE.

Simply load your workpiece onto the fixture and hand-tighten the spring-loaded clamp. Unloading is just as easy.



1 - SIMPLE DOVETAIL

A simple workpiece prep creates a dovetail that locks into the Raptor spring-loaded clamp.



2 - SPRING-LOADED CLAMP

The Raptor spring-loaded clamp strongly holds the part and makes releasing easy.



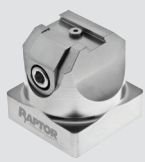
3 - HAND TIGHTENED

Use a T-wrench to hand-tighten the clamp and you're done. It's quick, simple and strong.



4 - STRONG BY DESIGN

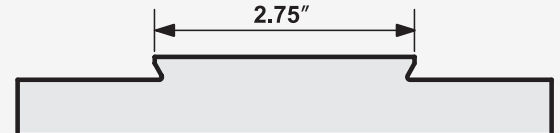
Solid, super-strong stainless-steel or lightweight aluminum ensures that Raptor will hold up to repeated use.



5 - FITS ANY MACHINE

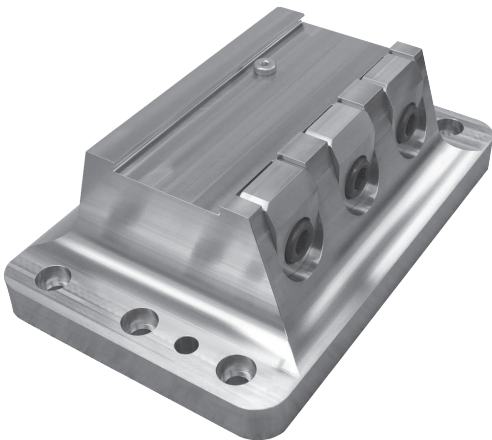
We have adapters, risers and versions of Raptor to fit any machine you can think of. Yes, even that one.

2.75" Dovetail Fixtures



RWP-403SS-12

17-4 stainless steel 2.75" dovetail fixture



Workpiece size min: 7.50" L x 4.15" W x 0.50" H

Workpiece size max: 14.00" L x 13.00" W x 12.00" H
(618 lb. max)

Dovetail width: 2.75"

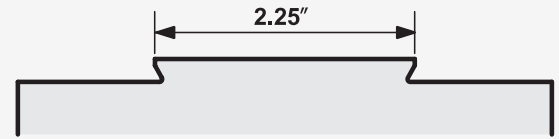
Dovetail height: 0.250"

Fixture dimensions: 11.50" L x 7.50" W x 3.875" H

Clamp replacement kit: RWP-KIT-3001SQ (2 per set)

Contact us for cutter recommendations

2.25" Dovetail Fixtures



RWP-006

7075 aluminum 2.25" dovetail fixture



Workpiece size min: 5.95" L x 3.96" W x 0.50" H

Workpiece size max: 8.0" L x 10.0" W x 10.0" H
(80 lb. max)

Dovetail width: 2.25"

Dovetail height: 0.1875"

Fixture dimensions: 5.950" L x 3.957" W x 2.500" H

Bolt circle diameter: 3.80" (Raptor interface)

Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)

Recommended cutter: RWP-DC410C

Clamp replacement kit: RWP-KIT-303SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-006-METRIC for metric table / pallet

RWP-006SS

17-4 stainless steel 2.25" dovetail fixture



Workpiece size min: 5.95" L x 3.96" W x 0.50" H

Workpiece size max: 12.00" cube (168 lb. max)

Dovetail width: 2.25"

Dovetail height: 0.1875"

Fixture dimensions: 5.950" L x 3.957" W x 2.500" H

Bolt circle diameter: 3.80" (Raptor interface)

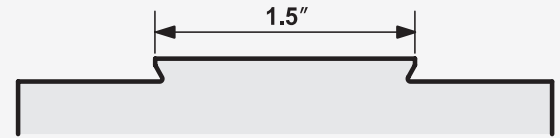
Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)

Recommended cutter: RWP-DC410C

Clamp replacement kit: RWP-KIT-303SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-006SS-METRIC for metric table / pallet

1.5" Dovetail Fixtures



RWP-001

7075 aluminum 1.5" dovetail fixture



Workpiece size min:	2.35" L x 2.35" W x 0.50" H
Workpiece size max:	6.75" cube (30 lb. max)
Dovetail width:	1.5"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	3.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-301SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-001-METRIC for metric table / pallet

RWP-001SS

17-4 stainless steel 1.5" dovetail fixture



Workpiece size min:	2.35" L x 2.35" W x 0.50" H
Workpiece size max:	6.75" cube (30 lb. max)
Dovetail width:	1.5"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	3.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-301SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-001SS-METRIC for metric table / pallet

DOVETAIL FIXTURES

RWP-013

7075 aluminum 1.5" dovetail fixture



Workpiece size min:	2.35" L x 2.35" W x 0.50" H
Workpiece size max:	6.75" cube (30 lb. max)
Dovetail width:	1.5"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	2.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-301SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-013-METRIC for metric table / pallet

RWP-013SS

17-4 stainless steel 1.5" dovetail fixture



Workpiece size min:	2.35" L x 2.35" W x 0.50" H
Workpiece size max:	6.75" cube (30 lb. max)
Dovetail width:	1.5"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	2.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-301SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-013SS-METRIC for metric table / pallet

RWP-026

7075 aluminum 1.5" dovetail fixture

This fixture is made for tombstones or grid plates with a 2.0" X 2.0" hole pattern or a 4.0" bolt circle – without a boss or plug. This dovetail fixture is used for milling and turning applications. This fixture will not mount to Raptor risers or adapters.



Workpiece size min:	2.35" L x 2.35" W x 0.50" H
Workpiece size max:	6.75" cube (30 lb. max)
Dovetail width:	1.5"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	3.0"
Bolt circle diameter:	4.0"
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-301SQ (2 per set)

RWP-027

7075 aluminum 1.5" dovetail fixture

This fixture is great for small rotary tables and lathes when used with a custom subplate. It may also be used on the Yukiawa TNT100L when mounted to the RWP-241 adapter plate (sold separately). This fixture will not mount to Raptor risers or adapter.



Workpiece size min: 2.35" L x 2.35" W x 0.50" H

Workpiece size max: 6.00" cube (20 lb. max)

Dovetail width: 1.5"

Dovetail height: 0.125"

Fixture diameter: 3.0"

Fixture height: 2.0"

Bolt circle diameter: 2.362" for 5/16 or M8 SHCS

Boss/hole: 1.00" dia. x 0.30" receiving hole

Centering plug included: 1.00" dia. & 40mm dia.

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-301SQ (2 per set)

RWP-401-11

7075 aluminum 11.00" long rail 1.5" dovetail fixture

This fixture is designed for longer workpieces. This fixture will not mount to Raptor risers or adapters.



Workpiece size min: 11.00" L x 2.63" W x 0.50" H

Workpiece size max: 17.0" L x 7.0" W x 12.0" H
(140 lb. max)

Dovetail width: 1.5"

Dovetail height: 0.125"

Fixture length: 11.0"

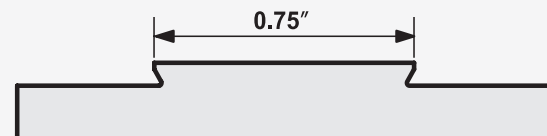
Fixture width: 4.40"

Fixture height: 3.0"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-301SQ (2 per set)

0.75" Dovetail Fixtures



RWP-002

7075 aluminum 0.75" dovetail fixture



Workpiece size min: 2.00" L x 1.75" W x 0.50" H
Workpiece size max: 5.75" cube (18 lb. max)
Dovetail width: 0.75"
Dovetail height: 0.125"
Fixture diameter: 4.97"
Fixture height: 3.0"
Bolt circle diameter: 3.80" (Raptor interface)
Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)
Recommended cutter: RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-302SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-002-METRIC for metric table / pallet

RWP-002SS

17-4 stainless steel 0.75" dovetail fixture



Workpiece size min: 2.00" L x 1.75" W x 0.50" H
Workpiece size max: 6.375" cube (25 lb. max)
Dovetail width: 0.75"
Dovetail height: 0.125"
Fixture diameter: 4.97"
Fixture height: 3.0"
Bolt circle diameter: 3.80" (Raptor interface)
Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)
Recommended cutter: RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-302SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-002SS-METRIC for metric table / pallet

DOVETAIL FIXTURES

RWP-003

7075 aluminum 5C collet 0.75" dovetail fixture

The RWP-003 can be mounted in any 5C collet closer for milling applications. It offers superior clamping strength and part access.



Workpiece size min:	1.30" L x 1.30" W x 0.50" H
Workpiece size max:	3.0" cube (3 lb. max)
Dovetail width:	0.75"
Dovetail height:	0.125"
Fixture height:	1.50" from shoulder
Fixture diameter:	2.23"
Fixture shank diameter:	1.125"
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

RWP-007SS

17-4 stainless steel 0.75" dovetail fixture

The RWP-007SS is designed to connect directly to System 3R 54mm pallets: MacroStd: 3R-651.7E-S / 3R-651.7E-XS & MacroHP: 3R-651.7E.P. The 3R pallet reduces downtime by allowing the machine operator to load workpieces on an alternate pallet in seconds.



Workpiece size min:	1.30" L x 1.30" W x 0.50" H
Workpiece size max:	3.75" cube (7 lb. max)
Dovetail width:	0.75"
Dovetail height:	0.125"
Fixture dimensions:	2.070" L x 2.070" W x 2.125" H
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

See website for mounting information

RWP-011SS

17-4 stainless steel 0.75" dovetail fixture with 0.75" dovetail bottom

This fixture connects directly to the following 0.75" dovetail fixtures: RWP-002, RWP-002SS, RWP-015, & RWP-023. This allows one to quickly machine smaller size parts without taking primary fixtures off the machine.



Workpiece size min:	1.30" L x 1.30" W x 0.50" H
Workpiece size max:	3.75" cube (7 lb. max)
Dovetail width:	0.75"
Dovetail height:	0.125"
Fixture dimensions:	2.070" L x 2.070" W x 2.000" H
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

DOVETAIL FIXTURES

RWP-012SS

17-4 stainless steel 0.75" dovetail fixture with 1.50" dovetail bottom

This fixture connects directly to the following 1.50" dovetail fixtures: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027



Workpiece size min: 1.30" L x 1.30" W x 0.50" H
Workpiece size max: 3.75" cube (7 lb. max)
Dovetail width: 0.75"
Dovetail height: 0.125"
Fixture dimensions: 2.350" L x 2.350" W x 2.000" H
Recommended cutter: RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-302SQ (2 per set)

RWP-015

7075 aluminum 0.75" dovetail fixture

This fixture is designed to connect directly to the HAAS TRT100 & HAAS TR110 machines. Please refer to Haas indexer recommendation for platter weight restrictions.



Workpiece size min: 2.00" L x 1.75" W x 0.50" H
Workpiece size max: 5.75" cube (18 lb. max)
Dovetail width: 0.75"
Dovetail height: 0.125"
Fixture diameter: 4.33"
Fixture height: 2.0"
Bolt circle diameter: 3.267" for (6) 5/16 or M8 SHCS
Recommended cutter: RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-302SQ (2 per set)

RWP-023

7075 aluminum 0.75" dovetail fixture - grid pattern mounting

This fixture is made for tombstones or grid plates with a 2.0" X 2.0" hole pattern or 4.0" bolt circle – without a boss or plug. This fixture will not mount to Raptor risers or adapters.



Workpiece size min: 2.00" L x 1.75" W x 0.50" H
Workpiece size max: 5.75" cube (18 lb. max)
Dovetail width: 0.75"
Dovetail height: 0.125"
Fixture diameter: 4.97"
Fixture height: 3.0"
Bolt circle diameter: 4.00"
Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)
Recommended cutter: RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-302SQ (2 per set)

DOVETAIL FIXTURES

RWP-024

7075 aluminum 0.75" dovetail fixture

This fixture is designed for modular applications. Multiple RWP-024 fixtures can be placed in-line to hold long parts, referred to as a bridge system. Multi-fixture options: RWP-024-2XR, RWP-024-3XR, RWP-024-4XR & RWP-024-6XC



Workpiece size min: 2.00" L x 2.00" W x 0.50" H

Workpiece size max: 4.00" cube (12.5 lb. max)

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture dimensions: 2.0" L x 2.0" W x 1.50" H

Fixture height: 3.0"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

RWP-024SS

17-4 stainless steel 0.75" dovetail fixture

This fixture is designed for modular applications. Multiple RWP-024SS fixtures can be placed in-line to hold long parts, referred to as a bridge system. Multi-fixture options: RWP-024SS-2XR, RWP-024SS-3XR, RWP-024SS-4XR & RWP-024SS-6XC



Workpiece size min: 2.00" L x 2.00" W x 0.50" H

Workpiece size max: 4.00" cube (12.5 lb. max)

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture dimensions: 2.0" L x 2.0" W x 1.50" H

Fixture height: 3.0"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

** EDM Kits available at an additional cost.*

RWP-025

7075 aluminum 0.75" mini rail dovetail fixture with 1.5" dovetail bottom

This fixture is designed for quick-change applications that require machining long and skinny parts. This connects to the following 1.5" dovetail fixtures: RWP-001, RWP-001SS, RWP-013 & RWP-013SS, RWP-026 & RWP-027.



Workpiece size min: 6.00" L x 1.75" W x 0.50" H

Workpiece size max: 8.00" L x 4.00" W x 4.00" H
(12.5 lb. max)

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture dimensions: 6.00" L x 2.00" W x 1.5" H

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

RWP-030SS

17-4 stainless steel 0.75" dovetail fixture

This fixture is utilized for milling applications. With three clamps, RWP-030SS provides the ability to machine long workpieces.



Workpiece size min:	5.00" L x 1.75" W x 0.50" H
Workpiece size max:	7.50" cube (40 lb. max)
Dovetail width:	0.75"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture height:	3.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-030SS-METRIC for metric table / pallet

RWP-034SS

17-4 stainless steel 0.75" dovetail fixture

This fixture is designed to connect directly to the Makino A51NX-5XU for milling applications. The product design, with three clamps, provides the ability to machine a long, skinny workpiece. The RWP-034SS product does not fit Raptor risers.

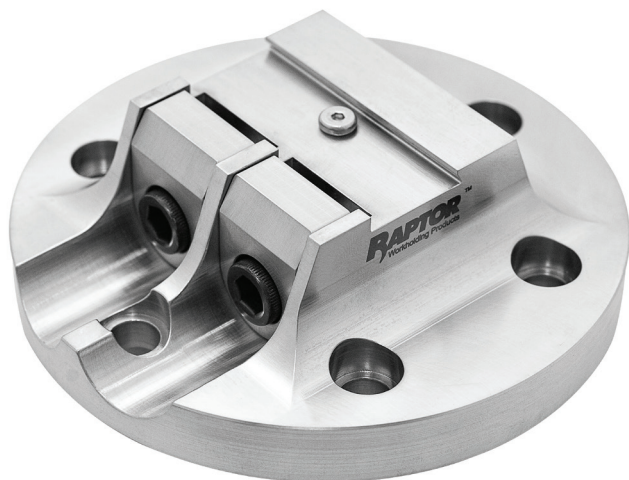


Workpiece size min:	5.00" L x 1.75" W x 0.50" H
Workpiece size max:	7.50" cube (40 lb. max)
Dovetail width:	0.75"
Dovetail height:	0.125"
Fixture diameter:	4.97"
Fixture dimensions:	5.0" L x 3.90" W x 2.0" H
Bolt circle diameter:	3.0"
Boss/hole:	2.18" dia. x 0.07" boss
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

RWP-038SS

17-4 stainless steel 0.75" dovetail fixture

This fixture is designed to connect directly to the HAAS TRT100 & HAAS TR110 for milling applications.



Workpiece size min: 2.00" L x 1.75" W x 0.50" H

Workpiece size max: 5.00" cube (TRT-100 4 lb. max)
(TR-100 12 lb. max)

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture diameter: 4.33"

Fixture height: 1.30"

Bolt circle diameter: 3.267" for (6) 5/16 or M8 SHCS

Boss/hole: 0.4992" dia. x 0.19" boss

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

RWP-405

7075 aluminum 8.00" long rail 0.75" dovetail fixture

This fixture is designed for longer workpieces. This fixture will not mount to Raptor risers or adapters.



Workpiece size min: 8.00" L x 1.75" W x 0.50" H

Workpiece size max: 14.0" L x 4.00" W x 4.00" H
(65 lb. max)

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture length: 8.0"

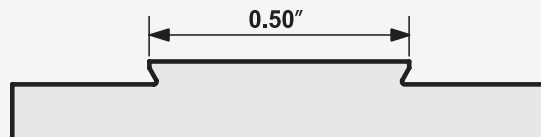
Fixture width: 3.80"

Fixture height: 3.0"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

0.50" Dovetail Fixtures



RWP-017SS

17-4 stainless steel 0.50" dovetail fixture

The RWP-017SS is designed to connect directly to System 3R 54mm pallets: MacroStd: 3R-651.7E-S / 3R-651.7E-XS & MacroHP: 3R-651.7E.P. The 3R pallet reduces downtime by allowing the machine operator to load workpieces on an alternate pallet in seconds.



Workpiece size min: 1.30" L x 1.30" W x 0.50" H

Workpiece size max: 3.25" cube (6 lb. max)

Dovetail width: 0.50"

Dovetail height: 0.125"

Fixture dimensions: 2.070" L x 2.070" W x 2.125" H

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-306SQ (2 per set)

See website for mounting information

RWP-018

7075 aluminum 0.50" dovetail fixture



Workpiece size min: 2.50" L x 0.95" W x 0.50" H

Workpiece size max: 4.75" cube (10 lb. max)

Dovetail width: 0.50"

Dovetail height: 0.125"

Fixture diameter: 4.97"

Fixture height: 3.0"

Bolt circle diameter: 3.80" (Raptor interface)

Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-306SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-018-METRIC for a metric table / pallet

RWP-018SS

17-4 stainless steel 0.50" dovetail fixture



Workpiece size min: 2.50" L x 0.95" W x 0.50" H
Workpiece size max: 5.00" cube (12 lb. max)
Dovetail width: 0.50"
Dovetail height: 0.125"
Fixture diameter: 4.97"
Fixture height: 3.0"
Bolt circle diameter: 3.80" (Raptor interface)
Piranha zero-point adaptable: Yes (order 4-piece kit # 540277)
Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-306SQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-018SS-METRIC for metric table / pallet

RWP-022SS

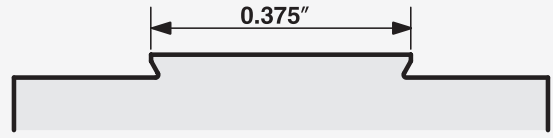
17-4 stainless steel 0.50" dovetail fixture with 1.50" dovetail bottom

This fixture connects directly to the following 1.50" dovetail fixtures: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027.



Workpiece size min: 1.30" L x 1.00" W x 0.50" H
Workpiece size max: 3.25" cube (6 lb. max)
Dovetail width: 0.50"
Dovetail height: 0.125"
Fixture dimensions: 2.35" L x 2.35" W x 2.00" H
Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-306SQ (2 per set)

0.375" Dovetail Fixtures



RWP-019SS

17-4 stainless steel 0.375" dovetail fixture

This fixture is designed for small part production & modular applications. Multiple RWP-019SS fixtures can be placed in-line to hold long parts, referred to as a bridge application. Multi-fixture options:

RWP-019-4X45T & RWP-019-4X90T



Workpiece size min: 1.25" L x 0.75" W x 0.50" H

Workpiece size max: 2.50" cube (2 lb. max)

Dovetail width: 0.375"

Dovetail height: 0.125"

Fixture dimensions: 2.5" L x 1.00" W x 1.25" H

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-305SQ (2 per set)

See website for mounting information

RWP-042SS

17-4 stainless steel 0.375" dovetail fixture

This fixture is designed for small part production & modular applications. Multiple RWP-042SS fixtures can be placed in-line to hold long parts, referred to as a bridge application. Multi-fixture options: RWP-042-4X90T



Workpiece size min: 2.50" L x 0.75" W x 0.50" H

Workpiece size max: 4.00" L x 2.50" W x 2.50" H
(7 lb. max)

Dovetail width: 0.375"

Dovetail height: 0.125"

Fixture dimensions: 3.75" L x 1.00" W x 1.25" H

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-305SQ (2 per set)

See website for mounting information

RWP-213SS

17-4 stainless steel 0.75" dovetail adapter for RWP-019SS

This adapter connects the RWP-019SS to any of the following 0.75" dovetail fixtures: RWP-002(SS), RWP-015, RWP-023, RWP-024(SS) & RWP-038SS.

Adapter height: 0.50"

Adapter length: 2.50"



RWP-214SS

17-4 stainless steel 1.50" dovetail adapter for RWP-019SS

This adapter connects the RWP-019SS to any of the following 1.50" dovetail fixtures: RWP-001(SS), RWP-013(SS), RWP-026 & RWP-027.

Adapter height: 0.50"
Adapter length: 2.50"



RWP-248SS

17-4 stainless steel 0.75" dovetail adapter for RWP-042SS

This adapter connects the RWP-042SS to any of the following 0.75" dovetail fixtures: RWP-002(SS), RWP-015, RWP-023, RWP-024(SS) & RWP-038SS.

Adapter height: 0.50"
Adapter length: 3.75"



RWP-249SS

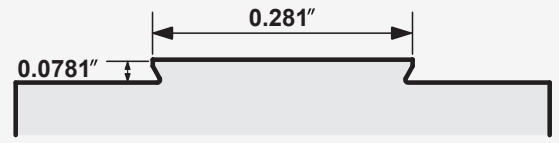
17-4 stainless steel 1.50" dovetail adapter for RWP-042SS

This adapter connects the RWP-042SS to any of the following 1.50" dovetail fixtures: RWP-001(SS), RWP-013(SS), RWP-026 & RWP-027.

Adapter height: 0.50"
Adapter length: 3.75"



0.281" x 0.0781" Dovetail Fixtures



RWP-031SS

17-4 stainless steel 0.281" W x 0.0781" H dovetail fixture with 0.75" dovetail bottom

This fixture has the smallest dovetail and is designed for micro-machining. This connects directly to the following 0.75" dovetail fixtures: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-024 & RWP-024SS.



Workpiece size min:	0.478" L x 0.478" W x 0.250" H
Workpiece size max:	1.25" cube (0.55 lb. max)
Dovetail width:	0.281"
Dovetail height:	0.078"
Fixture dimensions:	2.070" L x 2.070" W x 1.438" H
Recommended cutter:	RWP-DC409C
Clamp replacement kit:	RWP-KIT-307SQ (2 per set)

RWP-032SS

17-4 stainless steel 0.281" W x 0.0781" H dovetail fixture

This fixture has the smallest dovetail and is designed for micro-machining. This fixture is designed to connect to the machine using four mounting holes.



Workpiece size min:	0.478" L x 0.478" W x 0.250" H
Workpiece size max:	1.25" cube (0.55 lb. max)
Dovetail width:	0.281"
Dovetail height:	0.078"
Fixture dimensions:	2.070" L x 2.070" W x 1.563" H
Recommended cutter:	RWP-DC409C
Clamp replacement kit:	RWP-KIT-307SQ (2 per set)

See website for mounting information

Picatinny Rail Fixtures

The Raptor line of Picatinny fixtures provide a variety of options for machining Picatinny rails. Each rail has the DOD specific Picatinny dovetail that comes in 3.5" or 6" lengths. The Picatinny rail clamps to the fixture using the Raptor uniquely designed fixture clamps. Picatinny fixtures are available in three base mounting configurations: Raptor interface, direct mount, or a 0.75" dovetail base.

RWP-PIC3SS

Stainless steel Picatinny rail fixture



Workpiece size min:	5.00" L x 0.50" H
Workpiece size max:	9.00" L x 4.00" W x 4.00" H (40 lb. max)
Fixture diameter:	4.97"
Fixture height:	3.0"
Bolt circle diameter:	3.80" (Raptor interface)
Piranha zero-point adaptable:	Yes (order 4-piece kit # 540277)
Clamp replacement kit:	RWP-KIT-PICSQ (2 per set)

Direct mount to a Matsuura MAM72-35V English table / pallet or RWP-PIC3SS-METRIC for metric table / pallet

RWP-PIC6-DM

Picatinny rail fixture 6.00" long direct mount

This fixture mounts and locates with (2) socket head shoulder screws.



Workpiece size min:	6.00" L x 0.50" H
Workpiece size max:	9.00" L x 4.00" W x 4.00" H (40 lb. max)
Body material:	4140 PHT Steel
Fixture length:	6.00"
Fixture width:	2.00"
Fixture height:	1.625"
Clamp replacement kit:	RWP-KIT-PICSQ (2 per set)

See website for mounting information

RWP-PIC6-DT

Picatinny rail fixture 6.00" long dovetail mount

This fixture mounts on the following 0.75" dovetail fixtures: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-030SS & RWP-034SS.



Workpiece size min: 6.00" L x 0.50" H

Workpiece size max: 9.00" L x 4.00" W x 4.00" H
(40 lb. max)

Body material: 4140 PHT steel

Fixture length: 6.00"

Fixture width: 2.00"

Fixture height: 1.625"

Clamp replacement kit: RWP-KIT-PICSQ (2 per set)

RWP-PIC9-DM

Picatinny rail fixture 3.50" long direct mount

This fixture mounts and locates with (2) socket head shoulder screws.



Workpiece size min: 3.50" L x 0.50" H

Workpiece size max: 6.50" L x 4.00" W x 4.00" H
(40 lb. max)

Body material: 4140 PHT steel

Fixture length: 3.50"

Fixture width: 2.00"

Fixture height: 1.625"

Clamp replacement kit: RWP-KIT-PICSQ (2 per set)

See website for mounting information

Dovetail Fixture Accessories

Replacement Clamp Kits

- (2) clamp assemblies per kit
- Fixture clamps are made from 17-4 stainless steel
- Kit includes grease



RWP-KIT-301SQ

1.500" dovetail

RWP-KIT-302SQ

0.750" dovetail

RWP-KIT-303SQ

2.250" dovetail

RWP-KIT-304SQ

0.281" x 0.0461" dovetail
(fits obsolete RWP-008, RWP-009 & RWP-010)

RWP-KIT-305SQ

0.375" dovetail

RWP-KIT-306SQ

0.500" dovetail

RWP-KIT-307SQ

0.281" x 0.0781" dovetail
(fits RWP-031SS & RWP-032SS)

RWP-KIT-3001SQ

2.750" dovetail

RWP-KIT-PICSQ

Picatinny rails

Replacement Location Pins

- Five replacement pins per pack

RWP-8-32

8/32 x 1/4 replacement locating pins

- Replacement locating pins for all Raptor fixtures manufactured before 2017 except the RWP-019SS, RWP-031SS, RWP-032SS & RWP-042SS



RWP-8-32CLS

8/32 x 1/4 replacement locating pins

- Replacement locating pins for all Raptor fixtures manufactured 2017 or after except the RWP-019SS & RWP-042SS



RWP-8-32MO

8/32 x 8/32 x 0.165" replacement locating pins

- Replacement locating pins for only the RWP-019SS & RWP-042SS



DOVETAIL CUTTERS

Raptor dovetail cutters machine the flat on the dovetail edge on a workpiece in one pass, preventing a sharp edge on the dovetail from pressing into the corner of the fixture. Available in various heights and diameters, Raptor has a dovetail cutter to address multiple needs.

RWP-DC403U

60° Dovetail cutter - 0.750" shank (3 flute-uncoated)

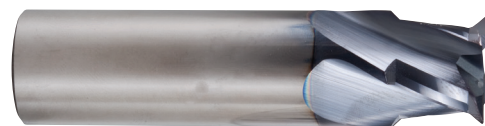
For use with our 1.50", 0.75", 0.50" & 0.375" wide dovetail sizes



RWP-DC404C

60° Dovetail cutter - 0.750" shank (4 flute-coated)

For use with our 1.50", 0.75", 0.50" & 0.375" wide dovetail sizes



RWP-DC405C

60° Dovetail cutter - 0.248" shank (4 flute-coated)

For use with our 0.281" wide x 0.0469" high (old style) dovetail size



RWP-DC407C

60° Dovetail cutter - 0.350" shank (4 flute-coated)

For use with our 1.50", 0.75", 0.50" & 0.375" wide dovetail sizes



RWP-DC408C

60° Dovetail cutter - 0.450" shank (4 flute-coated)

For use with our 1.50", 0.75", 0.50" & 0.375" wide dovetail sizes



RWP-DC409C

60° Dovetail cutter - 0.248" shank (4 flute-coated)

For use with our 0.281" wide x 0.0781" dovetail size



RWP-DC410C

60° Dovetail cutter - 0.75" shank (4 flute-coated)

For use with our 2.25" wide x 0.187" high dovetail size



MULTI-FIXTURES

Raptor multi-fixtures provide a foundation to attach more than one Raptor dovetail fixture, which allows machinists to manufacture longer part runs or program for multiple parts in one setup. Providing a method to hold parts at different angles and in different dovetail sizes, multi-fixtures reduce changeover time and allow for increased productivity.

RWP-003-4X

The pyramid body utilizes (4) RWP-003 dovetail fixtures. This fixture is designed specifically for five-axis machining applications and allows you to hold (4) workpieces at the same time. This fixture mounts to Raptor risers with Raptor interface mounting.

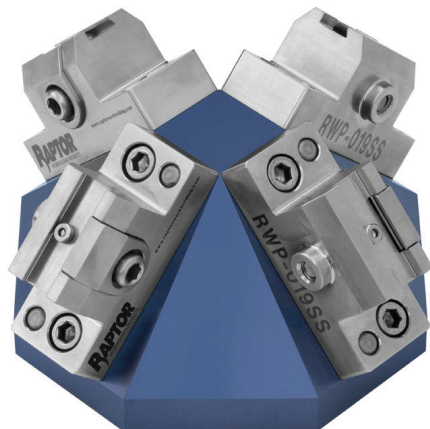


Workpiece size min:	1.30" L x 1.30" W x 0.50" H
Workpiece size max:	3.0" cube (3 lb. max @ each fixture)
Fixture swing diameter:	7.135" (without workpieces)
Fixture height:	3.327" (without workpieces)
Fixture body diameter:	4.970"
Bolt circle diameter:	3.800" (Raptor interface)
Boss:	1.250" dia. x 0.25" boss
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-302SQ (2 per set)

RWP-019-4X45T

0.375" dovetail 45° multi-fixture with a 1.50" dovetail bottom

This pyramid body utilizes (4) RWP-019SS dovetail fixtures. The fixture mounts to the following 1.50" dovetail fixtures: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027. The dovetail bottom allows for quick and easy change-out.

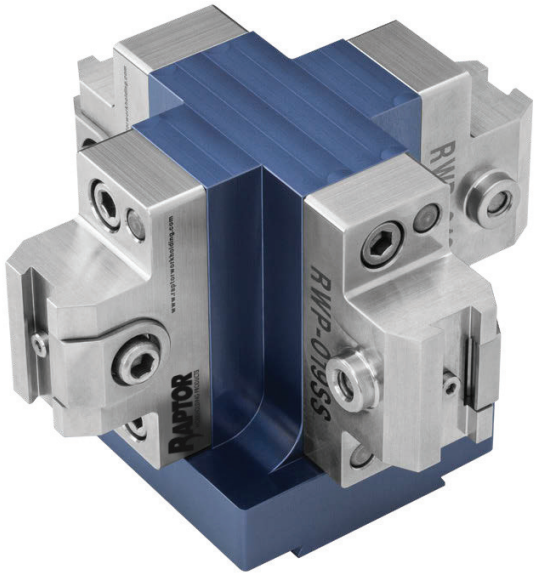


Workpiece size min:	1.25" L x 0.750" W x 0.50" H
Workpiece size max:	2.50" cube (2 lb. max @ each fixture)
Fixture swing diameter:	5.431" (without workpieces)
Fixture height:	2.692" (without workpieces)
Recommended cutter:	RWP-DC403U, RWP-DC404C, RWP-DC407C or RWP-DC408C
Clamp replacement kit:	RWP-KIT-305SQ (2 per set)

RWP-019-4X90T

0.375" dovetail 90° multi-fixture with a 1.50" dovetail bottom

This tombstone body includes (4) RWP-042SS dovetail fixtures. This fixture mounts to the following 1.50" dovetail fixtures: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027. The dovetail bottom allows for quick and easy change-out which reduces changeover time and drastically increases the productivity of your machine.



Workpiece size min: 1.25" L x 0.750" W x 0.50" H
Workpiece size max: 2.50" cube (2 lb. max @ each fixture)
Fixture swing diameter: 4.554" (without workpieces)
Fixture height: 3.126" (without workpieces)
Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-305SQ (2 per set)

RWP-042-4X90T

0.375" dovetail 90° multi-fixture with a 1.50" dovetail bottom

This tombstone body includes (4) RWP-042SS dovetail fixtures. This fixture mounts to the following 1.50" dovetail fixtures: RWP-001, RWP-001SS, RWP-013, RWP-013SS, RWP-026 & RWP-027. The dovetail bottom allows for quick and easy change-out which reduces changeover time and drastically increases the productivity of your machine.



Workpiece size min: 2.50" L x 0.75" W x 0.50" H
Workpiece size max: 4.00" L x 2.50" W x 2.50" H cube
(7 lb. max @ each fixture)
Fixture swing diameter: 4.554" (without workpieces)
Fixture height: 4.375" (without workpieces)
Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C
Clamp replacement kit: RWP-KIT-305SQ (2 per set)

RWP-024-2XR

Aluminum 0.75" dovetail multi-fixture: In line bridge system which includes (2) RWP-024 on a single base



Workpiece size min: 5.00" L x 2.00" W x 0.50" H
Workpiece size max: 8.50" L x 4.00" W x 4.00" H
(16 lb. max)

Fixture height: 2.875"

Dovetail height: 0.125"

Dovetail width: 0.75"

Base length: 7.00"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT302SQ (2 per set)

The bridge system is sold complete as shown.
Base unit can be purchased separately.

RWP-024-3XR

Aluminum 0.75" dovetail multi-fixture: In line bridge system which includes (3) RWP-024 on a single base



Workpiece size min: 8.00" L x 2.00" W x 0.50" H
Workpiece size max: 12.5" L x 4.00" W x 4.00" H
(24 lb. max)

Fixture height: 2.875"

Dovetail height: 0.125"

Dovetail width: 0.75"

Base length: 10.00"

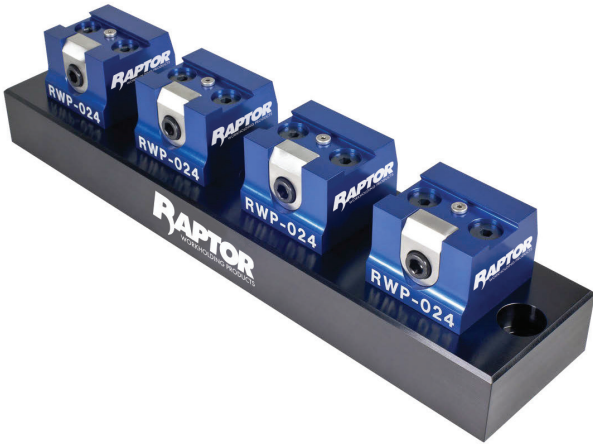
Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT302SQ (2 per set)

The bridge system is sold complete as shown.
Base unit can be purchased separately.

RWP-024-4XR

Aluminum 0.75" dovetail multi-fixture: In line bridge system which includes (4) RWP-024 on a single base



Workpiece size min: 11.00" L x 2.00" W x 0.50" H

Workpiece size max: 16.50" L x 4.00" W x 4.00" H
(32 lb. max)

Fixture height: 2.875"

Dovetail height: 0.125"

Dovetail width: 0.75"

Base length: 13.00"

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT302SQ (2 per set)

The bridge system is sold complete as shown.
Base unit can be purchased separately.

RWP-024-6XC

7075 aluminum 0.75" dovetail multi-fixture with 2.25" dovetail bottom

This product is designed for modular applications: includes (6) RWP-024 fixtures on a carousel base to machine multiple items in one operation. This carousel base mounts to either RWP-006 or RWP-006SS.



Workpiece size min: 2.00" L x 2.00" W x 0.50" H

Workpiece size max: 4.00" cube (12.5 lb. max)

Fixture height: 2.310"

Dovetail width: 0.75"

Dovetail height: 0.125"

Fixture swing diameter: 10.552" (without workpieces)

Recommended cutter: RWP-DC403U, RWP-DC404C,
RWP-DC407C or RWP-DC408C

Clamp replacement kit: RWP-KIT-302SQ (2 per set)

ADAPTERS / RISERS

Raptor provides a variety of adapters and risers to fit on many different CNC machine models. Adapters and risers are designed to accept multiple dovetail fixtures, allowing for many easy machining options when tooling up your CNC.

RWP-202

Adapter

This enables compatible fixtures to be mounted on the Haas TR-210, HRT210 & HRC210.



Adapter material: 7075 aluminum
Adapter height: 2.00"
Adapter diameter: 8.20"
Bolt circle diameter: 6.50" for (6) 1/2 SHCS
Boss/hole: 2.000" dia. x 0.375" boss
Mounts: All fixtures with a Raptor interface

RWP-203

Adapter

This enables compatible fixtures to be mounted on the Haas TR-160, TR160-2, TR200Y, HRT160 & HRC160.



Adapter material: 7075 aluminum
Adapter height: 1.50"
Adapter diameter: 6.30"
Slotted bolt circle diameters: 5.400" to 5.512" for (6) 3/8-16 SHCS
Boss/hole: 1.500" dia. x 0.313" boss
Mounts: All fixtures with a Raptor interface
Included items: (6) 3/8-16 x 1.00" long SHCS,
(6) 41406T TE-CO t-nuts

RWP-262

Medium universal riser

This enables compatible fixtures to be mounted on the pallet of the following machines: Mori Seiki NMV5000, DMU50 / 50eco, NMV3000 metric / english & multiple other machines.



Riser material: 7075 aluminum
Riser height: 3.50"
Riser diameter: 8.98"
Bolt circle diameter: 6.00" to 7.03" slotted
c 'bores for M12 or 1/2 SHCS
Boss/hole: 1.00" dia. x 0.30" receiving hole
Available plugs: RWP-810 (1.250" dia.), RWP-811
(30mm dia.) & RWP-PLUG-208
(2.50" machinable dia.)

RWP-208

Small emergency adapter

This enables compatible fixtures to be mounted on the pallet of your machine. You simply add the mounting holes.



Adapter material: 6061 aluminum
Adapter height: 1.50"
Adapter diameter: 7.95"
Boss/hole: 1.00" dia. x 0.30" receiving hole
Available plugs: RWP-810 (1.25" dia.), RWP-811 (30mm dia.) & RWP-PLUG-208 (2.50" machinable dia.)

Includes Raptor interface mounting on top

RWP-PLUG-208

6061 Aluminum machinable plug – 2.50" diameter

This blank 2.50" diameter allows customer to modify to fit a specific application. The slip fit 1.00" diameter fits in the bottom of fixtures / risers that have a 1.00" diameter receiving hole.



RWP-PLUG-208SS

17-4 Stainless steel machinable plug – 2.50" diameter

This blank 2.50" diameter allows customer to modify to fit a specific application. The slip fit 1.00" diameter fits in the bottom of fixtures / risers that have a 1.00" diameter receiving hole.

RWP-209

Large emergency adapter

This enables compatible fixtures to be mounted on the pallet of your machine. You simply add the mounting holes.



Adapter material: 6061 aluminum
Adapter height: 1.500"
Adapter diameter: 9.055"
Boss/hole: 1.00" dia. x 0.30" receiving hole
Available plugs: RWP-810 (1.25" dia.), RWP-811 (30mm dia.) & RWP-PLUG-208 (2.50" machinable dia.)

Includes Raptor interface mounting on top

RWP-222

Small universal adapter

This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum

Adapter height: 2.00"

Adapter diameter: 9.875"

Bolt circle diameter: 5.50" to 8.50" for M10 or 3/8 SHCS

Boss/hole: 1.00" dia. x 0.30" receiving hole

Available plugs: RWP-810 (1.25" dia.), RWP-811 (30mm dia.) & RWP-PLUG-208 (2.50" machinable dia.)

Mounts: All fixtures with a Raptor interface

RWP-223

Large universal adapter

This mounts directly to your machine table / pallet using slotted c'bores. The Raptor RWP-PLUG-208 (machinable 2.5" dia. plug) is available for locating this adapter to your machine table and is sold separately.



Adapter material: 7075 aluminum

Adapter height: 2.00"

Adapter diameter: 11.95"

Bolt circle diameter: 6.00" to 10.00" for M12 or 1/2 SHCS

Boss/hole: 1.00" dia. x 0.30" receiving hole

Available plugs: RWP-810 (1.25" dia.), RWP-811 (30mm dia.) & RWP-PLUG-208 (2.50" machinable dia.)

Mounts: All fixtures with a Raptor interface

RWP-224

Riser

This riser can be used in a modular configuration when used with the universal adapter part number RWP-223.



Riser material: 7075 aluminum

Riser height: 6.00"

Riser diameter: 11.95"

Bolt circle diameter: 10.15" for M12 or 1/2 SHCS

Boss/hole: 1.00" dia. x 0.30" receiving hole

Available plugs: RWP-810 (1.25" dia.), RWP-811 (30mm dia.) & RWP-PLUG-208 (2.50" machinable dia.)

Mounts: All fixtures with a Raptor interface

RWP-234

Riser

This enables compatible fixtures to be mounted on the following: Haas UMC-750M UMC-750SS or Matsuura MX-520 300mm.



Riser material: 7075 aluminum
Riser height: 4.5"
Riser diameter: 11.40"
Bolt circle diameter: 9.92" for M12 or 1/2 SHCS
Boss/hole: 1.97" (50mm) dia. x 0.75" receiving hole
Mounts: All fixtures with a Raptor interface

RWP-237

Multi-fixture nest riser (45° faces)

Designed to fit the following machines: Haas UMC-750/UMC-750SS or Matsuura MX-520 500mm.



Riser material: 7075 aluminum
Riser height: 6.55"
Riser diameter: 14.75"
Bolt circle diameter: 13.20" for M12 or 1/2 SHCS
Boss/hole: 1.97" dia. x 0.75" receiving hole
Mounts: All fixtures with a Raptor interface

RWP-272

Multi-fixture nest riser (30° faces)

Designed to fit machines with the following spacings: 100mm, 80mm & 63mm.



Riser material: 7075 aluminum
Riser height: 4.50"
Riser diameter: 15.75"
Bolt circle diameter: 12.665" and 9.921" for M12 or 1/2 SHCS
Mounts: All fixtures with a Raptor interface

RWP-238-8

5C indexer adapter



Adapter material: 7075 aluminum

Mounts: RWP-003

Spindle nose TPI: 8

RWP-238-10

5C indexer adapter

Adapter material: 7075 aluminum

Mounts: RWP-003

Spindle nose TPI: 10

RWP-239

Small machine adapter

This small machine adapter fits on the following Machines: Haas TRT70 & TRT100, Nikken 100FA & 130FA, Yukiwa TNT100L, Sankyo RT80 & RT100 & others. The adapter allows you to mount the following fixtures on top: RWP-024, RWP-024SS, RWP-019SS & RWP-042SS.



Adapter material: 7075 aluminum

Adapter height: 0.750"

Adapter diameter: 3.937"

Boss/hole: 0.375" dia. x 0.38" receiving hole

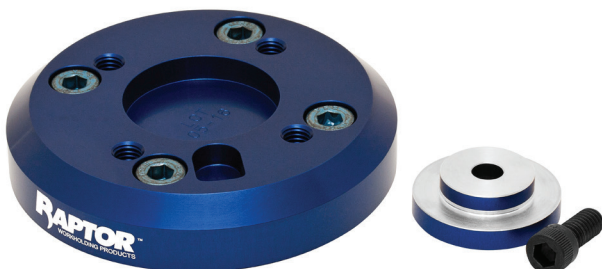
Comes with: 3/8 dowel pin, 2.50" machinable plug, retaining screw

Mounts: RWP-024, RWP-024SS, RWP-019SS & RWP-042SS

RWP-241

Adapter

This adapter has the mounting interface for the RWP-027 (1.5" dovetail fixture) and is designed to mount directly to the Yukiwa TNT100L.



Adapter material: 7075 aluminum

Adapter height: 0.75"

Adapter diameter: 3.94"

Bolt circle diameter: 2.677" for (4) M8 or 5/16 SHCS

Boss/hole: 1.968" dia. x 0.23" plug

RWP-601

Extender – 1.00" height

The 1" extender is to add height when used with Raptor interface fixtures and risers.



Extender material: 7075 aluminum

Extender diameter: 4.95"

Connects to: All risers with a Raptor interface

Mounts: All fixtures with a Raptor interface

Boss/plug: 1.25" dia. x 0.25" boss

RWP-602

Extender – 2.00" Height

The 2" extender is to add height when used with Raptor interface fixtures and risers.



Extender material: 7075 aluminum

Extender diameter: 4.95"

Connects to: All risers with a Raptor interface

Mounts: All fixtures with a Raptor interface

Boss/plug: 1.25" dia. x 0.25" boss

RWP-810

6061 Aluminum plug adapter

This plug has a 1.25" slip fit locating diameter for centering purposes.

The slip fit 1.00" diameter fits in the bottom of fixtures / risers that have a 1.00" diameter receiving hole.

RWP-811

6061 Aluminum plug adapter

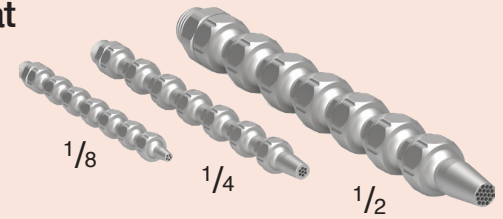
This plug has a 30mm slip fit locating diameter for centering purposes.

The slip fit 1.00" diameter fits in the bottom of fixtures / risers that have a 1.00" diameter receiving hole.



COOLING LINE

The Piranha Cooling Line is a unique and versatile system that withstands higher pressures up to 1,150 PSI with a variety of connectors and nozzles. The system, made of high-strength, anodized aluminum, allows coolant, oil and air to be directed exactly where it is needed, leading to improved tool life, increased machine uptime and better part finish.

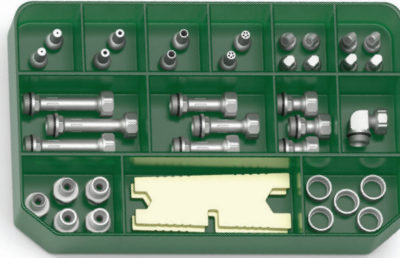


1/8 INCH

- Through-hole dia. 3.4mm
- Clamping torque 1.5 - 2.2 ft. lbs.

Starter Kit:

PCL-1/8-SET-1



Threaded Connectors:

GA-9.5-1/8

G (BSPP)



GA-9.5-1/8-NPT

(NPT)



GA-9.5-1/8-R

R (BSPT)



GA-9.5-1/4-R

1/4" R (BSPT)



GA-9.5-M8X1

M8 x 1.00



GA-9.5-M8

M8 x 1.25



GA-9.5-M10X1

M10 x 1.00



Ball Connectors:

KA-10-20

10mm ball x 20mm long
(includes clamping ring)



KA-12-20

12mm ball x 20mm long
(includes clamping ring)



Spacers:

D-9.5/20

20mm length



D-9.5/32

32.5mm length



D-9.5/45

45mm length



1/8 INCH

- Through-hole dia. 3.4mm
- Clamping torque 1.5 - 2.2 ft. lbs.

Accessories:

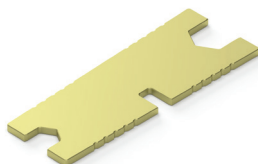
RING-9.5

O-Ring 9.5mm



S-9/13

Hex wrench



M-SW13

Nut with 9.5mm ball socket AF13



Elbow:

L-1/8

90° elbow



Nozzles:

RD-9.5-1

9.5mm ball with 1mm hole
x 18mm long



SDK-9.5/60°

Short 60° 9.5mm ball with (7)
1.0mm holes x 14mm long



RD-9.5-2

9.5mm ball with 2mm hole
x 18mm long



SDK-9.5/90°

Short 90° 9.5mm ball with (7)
1.0mm holes x 14mm long



RD-9.5-3.4

9.5mm ball with 3.4mm hole
x 18mm long



SDL-9.5/60°

Long 60° 9.5mm ball with (7)
1.0mm holes x 20mm long



RD-9.5-5/1.0

9.5mm ball with (5) 1.0mm holes
x 18mm long



SDL-9.5/90°

Long 90° 9.5mm ball with (7)
1.0mm holes x 20mm long

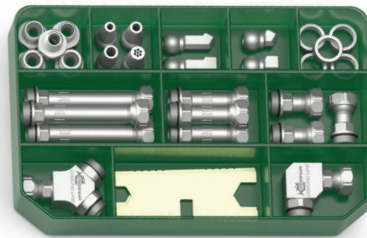


1/4 INCH

- Through-hole dia. 5.5mm
- Clamping torque 1.8 - 2.2 ft. lbs.

Starter Kit:

PCL-1/4-SET-1



Threaded Connectors:

GA-1/8

1/8" G (BSPP)



GA-3/8-1/4

3/8" G (BSPP)



GA-1/8-NPT

1/8" (NPT)



GA-3/8-R-1/4

3/8" R (BSPT)



GA-R-1/8

1/8 R (BSPT)



GA-M8

M8 x 1.25



GA-R1/8-L

1/8" R (BSPT)



GA-M8-L

M8 x 1.25



GA-1/4

1/4" G (BSPP)



GA-M10X1

M10 x 1.0



GA-1/4-NPT

1/4" NPT



GA-M10

M10 x 1.5



GA-R-1/4

1/4 R (BSPT)



GA-M12X1

M12 x 1.0



GA-R1/4-L

1/4" R (BSPT)



GA-R

14mm dia. blank



1/4 INCH

- Through-hole dia. 5.5mm
- Clamping torque 1.8 - 2.2 ft. lbs.

Ball Connectors:

KA-12-28

12mm ball x 28mm long with ring



KA-14-28

14mm ball x 28mm long with ring



KA-15-28

15mm ball x 28mm long with ring



D-12.5/28

28mm length



D-12.5/43

43mm length



D-12.5/70

70mm length



Nozzles:

CR-12.5-8

Coolant halo assembly
(8) nozzles



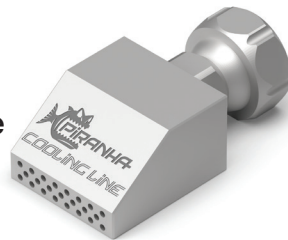
RD-12.5-1.5

12.5mm ball with (1)
1.5mm hole



FD-12.5/20

20mm wide flat multi-hole



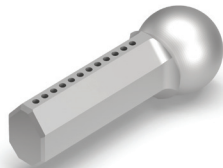
RD-12.5-3.5

12.5mm ball with (1)
3.5mm hole



LDK-12.5-12X1

Short diagonal 12.5mm ball
with (12) 1mm holes



RD-12.5-4.5

12.5mm ball with (1)
4.5mm hole



LDL-12.5-18X1

Long diagonal 12.5mm ball
with (18) 1.0mm holes



RD-12.5-5.5

12.5mm ball with (1)
5.5mm hole



1/4 INCH

- Through-hole dia. 5.5mm
- Clamping torque 1.8 - 2.2 ft. lbs.

RD-12.5-4/1.5

Multi-hole 12.5mm ball
with (4) 1.5mm holes



SDK-1460

Short 60° with 14mm ball



RD-12.5-3/2

Multi-hole 12.5mm ball
with (3) 2mm holes



SDK-1560

Short 60° with 15mm ball



RD-12.5-7/1.5

Multi-hole 12.5mm ball
with (7) 1.5mm holes



SDL-12.5/60°

Long 60° with 12.5mm ball



RDK-14715

Multi-port with 14mm ball



SDL-12.5/90°

Long 90° with 12.5mm ball



RDK-15715

Multi-port with 15mm ball



SDL-1260

Long 60° with 12mm ball



SDK-12.5/60°

Short 60° 12.5mm ball



SDL-1460

Short 60° with 14mm ball



SDK-12.5/90°

Short 90° with 12.5mm ball



SDL-1560

Long 60° with 15mm ball



SDK-1260

Short 60° with 14mm ball



1/4 INCH

- Through-hole dia. 5.5mm
- Clamping torque 1.8 - 2.2 ft. lbs.

Accessories:

D-SW16

Cap AF13



M-SW16

Nut with 12.5mm ball socket AF16



R-12

Clamping ring for 12mm ball



R-14

Clamping ring for 14mm ball



R-15

Clamping ring for 15mm ball



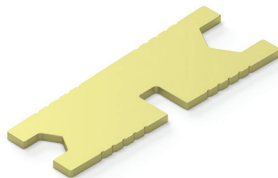
RING-12.5

O-ring 1/4"



S-11/16

Hex wrench



Elbows:

H-12.5

Ball valve



L-12.5

90° elbow



T-12.5

T-distributor



QUATRO-12.5

Quarto distribution block



Y-12.5

Y-distributor

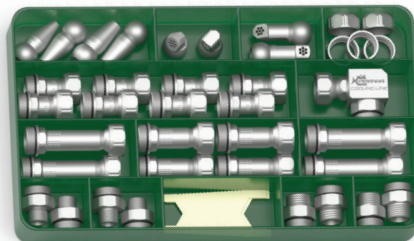


1/2 INCH

- Through-hole dia. 12.0mm
- Clamping torque 3.7 - 5.5 ft. lbs.

Starter Kit:

PCL-1/2-SET-1



Threaded Connectors:

GA-22-3/8

3/8" G (BSPP)



GA-22-1/2-NPT

1/2" NPT



GA-22-3/8-NPT

3/8" NPT



GA-22-1/2-R

1/2" G (BSPT)



GA-22-R-3/8

3/8" R (BSPT)



GA-3/4-1/2

3/4" G (BSPP)



GA-22-1/2

1/2" G (BSPP)



GA-22-R

Blank 24mm dia.



Spacers:

D-22-38

38mm long



D-22-46

46mm long



D-22-63

63mm long



D-22-80

80mm long



Accessories:

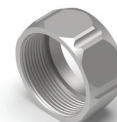
D-SW27

Cap SW27



M-SW27

Nut-SW27



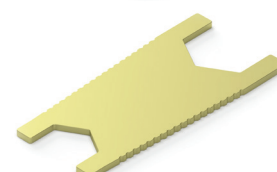
RING-22

O-Ring 1/2



S-21/27

Hex wrench



1/2 INCH

- Through-hole dia. 12.0mm
- Clamping torque 3.7 - 5.5 ft. lbs.

Nozzles:

FD-22-30

30mm wide flat multi-hole



RD-22-12-19.2

22mm ball with (19) 2mm holes



FD-22-40

40mm wide flat multi-hole



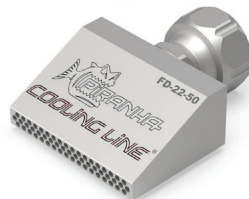
RD-22-6

22mm ball with 6mm hole



FD-22-50

50mm wide flat multi-hole



RD-22-8

22mm ball with 8mm hole



FD-22-60

60mm wide flat multi-hole



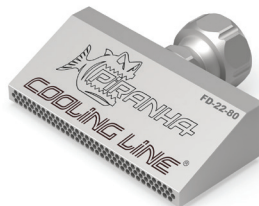
RD-22-10

22mm ball with 10mm hole



FD-22-80

80mm wide flat multi-hole



SDK-22/60°

Short 60° multi-hole



FD-22-100

100mm wide flat multi-hole



SDK-22/90°

Short 90° multi-hole



LDK-22-16X2

Short 22mm ball with (16) 2mm holes



SDL-22/60°

Long 60° multi-hole



LDL-22-24X2

Long 22mm ball with (24) 2mm holes



SDL-22/90°

Long 90° multi-hole



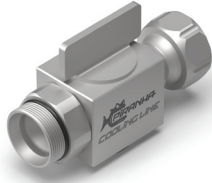
1/2 INCH

- Through-hole dia. 12.0mm
- Clamping torque 3.7 - 5.5 ft. lbs.

Elbows:

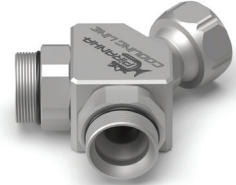
H-22

Ball valve - 1/2



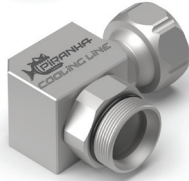
Y-1/2

Y-distributor



L-1/2

90°



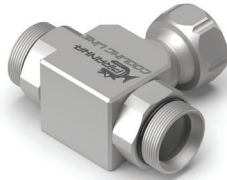
Y-1/2-1/4

Y-distributor 1/2 to 1/4



T-1/2

T-distributor



Lathe Balls

- Made of brass
- Maximum pressure = 500psi (33 bar)
- Maximum operating temperature = 300°F
- Connects directly to lathe turret

BB11018

12mm ball with M5 x 0.8 hole plug

BB11031

14mm ball with M6 x 1.0 hole plug

BB11043

15mm ball with M6 x 1.0 hole plug



RAPTOR™

WORKHOLDING PRODUCTS



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Patent No. US8,672,310 B2
Patent No. US9,126,299 B2
Patent No. US10,384,331

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