Raptor began with an innovative design: the original, patented dovetail fixture. Now we have products that will either work independently or together seamlessly:

**Start with a Self Centering Vise.**
Use the vise in two ways:
- Hold a workpiece for dovetail prep.
- Machine a complete part.

**Then utilize a patented Dovetail Fixture.**
- The combination of the dovetail and spring-loaded clamping system provides superior holding strength.
- The dovetail prep on the bottom of a workpiece means full access to five sides of a workpiece with little waste.

**Finish with a dovetailed Pinch Block.**
Use these in a variety of applications:
- Machine the sixth side of workpiece for dovetail removal.
- Secondary or final machining operations.

**Raptor Tip**
Save time! Raptor’s carbide dovetail cutters complete the dovetail prep, including the flat of the dovetail edge, in a single pass!

---

**THE BEST IN THE BUSINESS JUST BECAME EVEN STRONGER!**

TE-CO/RAPTOR Workholding have entered into a partnership with PIRANHA to bring Swiss engineered precision Self-Centering Vises and versatile high pressure anodized aluminum Coolant Lines that withstand up to 80 bar (1160 psi) of pressure to the United States!
DOVETAIL FIXTURES

MULTI-FIXTURES

DOVETAIL CUTTERS & REPLACEMENT ITEMS

ADAPTERS, RISERS, CONNECTORS & EXTENDERS

PINCH BLOCKS
VISES

RWP-502
100mm Self Center Vise

- All steel construction
- Automatically positions workpiece in center of vise. Centering tolerance is +/-0.013mm (0.0005") and repeatability is 0.001".
- Jaws adjust from either end of vise.
- Jaw clamping range is 0-2.500” as shown, and 2.500”-5.620” with jaws reversed.
- Jaw insert options available for a variety of holding applications: Dovetail, Serrated, Parallels, Soft Jaws, TalonGrip™ & Stops (all sold separately).
- Jaw accessory screws included (6) FHCS

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Base Width</th>
<th>Base Length</th>
<th>Bed Height</th>
<th>Jaw Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWP-502</td>
<td>14lbs / 6.35kg</td>
<td>3.94” / 100mm</td>
<td>6.49” / 165mm</td>
<td>1.96” / 50mm</td>
<td>Standard: 0-2.5” / 63.5mm</td>
</tr>
<tr>
<td>Jaws Reversed</td>
<td>5.62” / 142.8mm</td>
<td>Maximum Allowed Torque</td>
<td>30ft/lbs / 40.7Nm</td>
<td>Clamping Force @ Maximum Torque</td>
<td>4000lbs / 17792N</td>
</tr>
<tr>
<td>Centering Tolerance +/-</td>
<td>0.0005” / .013mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RWP-505
150mm Self Center Vise

- All steel construction
- Automatically positions workpiece in center of vise. Centering tolerance is +/-0.013mm (0.0005") and repeatability is 0.001”.
- Jaws adjust from either end of vise.
- Jaw clamping range is 0-3.870” as shown, and 4.75”-9.25” with jaws reversed.
- Jaw insert options available for a variety of holding applications: Dovetail, Serrated, Parallels, Soft Jaws, TalonGrip™ & Stops (all sold separately).
- Jaw accessory screws included (6) FHCS

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Base Width</th>
<th>Base Length</th>
<th>Bed Height</th>
<th>Jaw Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWP-505</td>
<td>50lbs / 22.7kg</td>
<td>5.91” / 150mm</td>
<td>9.84” / 250mm</td>
<td>2.95” / 75mm</td>
<td>Standard: 0-3.88” / 98.4mm</td>
</tr>
<tr>
<td>Jaws Reversed</td>
<td>9.25” / 234.95mm</td>
<td>Maximum Allowed Torque</td>
<td>75ft/lbs / 101Nm</td>
<td>Clamping Force @ Maximum Torque</td>
<td>6000lbs / 26689N</td>
</tr>
<tr>
<td>Centering Tolerance +/-</td>
<td>0.0005” / .013mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VISE JAW INSERTS
There are a variety of jaw inserts available to hold workpieces in place as illustrated below.

**RWP-1027**
Soft Jaw (Right)
- Vise Compatibility: RWP-502
- Material: 6061 Aluminum

**RWP-1027-ST**
Soft Jaw (Right)
- Vise Compatibility: RWP-502
- Material: 1018 Steel

**RWP-1028**
Soft Jaw (Left)
- Vise Compatibility: RWP-502
- Material: 6061 Aluminum

**RWP-1028-ST**
Soft Jaw (Left)
- Vise Compatibility: RWP-502
- Material: 1018 Steel

**RWP-1527**
Soft Jaw (Right)
- Vise Compatibility: RWP-505
- Material: 6061 Aluminum

**RWP-1527-ST**
Soft Jaw (Right)
- Vise Compatibility: RWP-505
- Material: 1018 Steel

**RWP-1528**
Soft Jaw (Left)
- Vise Compatibility: RWP-505
- Material: 6061 Aluminum

**RWP-1528-ST**
Soft Jaw (Left)
- Vise Compatibility: RWP-505
- Material: 1018 Steel

- Allows user to machine part specific profile in jaw for maximum clamping/location
- Good for secondary ops
- Dowel pins used for on/off repeatability

**RWP-1050**
Serrated 45° Dovetail
- Vise Compatibility: RWP-502

**RWP-1550**
Serrated 45° Dovetail
- Vise Compatibility: RWP-505

- Use as a dovetail clamp or serrated edge clamp
- Utilizes dovetail form for secure clamping and retention
- Dovetail width can be modified to fit different workpiece sizes
- Utilizes standard 45° dovetail form, dovetail can be cut with any standard 45° cutter
- Bite height" = .110"
- Use serrated edged to “penetrate soft material workpiece”
- Hardened and ground steel
- Sold individually (need 2 per vise)
### Vises

**RWP-1051**  
**Standard Parallel (1/8” Ledge)**
- 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 steel
- Sold individually (need 2 per vise)

**RWP-1551**  
**Standard Parallel (1/8” Ledge)**
- 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 steel
- Sold individually (need 2 per vise)

**RWP-1052**  
**Thin Parallel (1/16” Ledge)**
- Provides precise straight edge for clamping machined workpiece
- Good for light / medium duty machining
- Rail provides support while allowing more clearance on bottom of workpiece
- Hardened and ground steel
- Sold individually (need 2 per vise)

**RWP-1056**  
**Straight Edge 60° Dovetail**
- Utilizes dovetail for secure clamping and retention
- Dovetail width can be modified to fit various workpiece sizes
- Utilizes standard 60° dovetail form, dovetail can be cut with any standard 60° cutter
- Hardened and ground steel
- Sold individually (need 2 per vise)
- Recommended cutter: RWP-DC410C for material prep

**RWP-1556**  
**Straight Edge 60° Dovetail**
- Utilizes dovetail for secure clamping and retention
- Dovetail width can be modified to fit various workpiece sizes
- Utilizes standard 60° dovetail form, dovetail can be cut with any standard 60° cutter
- Hardened and ground steel
- Sold individually (need 2 per vise)

**RWP-33020**  
**Mitee-Bite End Stop**
- Locates workpiece for repeat positioning
- Fits both RWP-502 & RWP-505 vises

**RWP-33050**  
**Mitee-Bite TalonGrip™**
- Low profile clamping
- Use to secure soft material workpieces
- Position flexibility on insert slot of vise
- May be used in conjunction with end stop.
- Hardened steel
- Sold (2) per pack
- Fits both RWP-502 & RWP-505 vises
# VISE 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 table/pallets.

## RWP-209-V100
**Emergency Adapter**

The emergency adapter allows you to drill the specific mounting hole configurations necessary to connect to your machine’s rotary table/pallet. Once completed then connect adapter to table/pallet and mount the vise. When mounted together the overall height is 4.471”. If additional height is needed, then mount the RWP-242-V100 Riser Plate in between vise and adapter for total Z: 6.221”. RWP-PLUG-208 is available upon request (sold separately).

<table>
<thead>
<tr>
<th>Material</th>
<th>Aluminum Plain Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>1.50” / 38.1 mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>9.90” / 251.46 mm</td>
</tr>
<tr>
<td>Vise Compatibility</td>
<td>RWP-502</td>
</tr>
<tr>
<td>Boss/Hole</td>
<td>1.000” Diameter x .30” Receiving hole</td>
</tr>
<tr>
<td></td>
<td>Centering plug required. RWP-PLUG-208, sold separately and may need to be modified.</td>
</tr>
</tbody>
</table>

## RWP-222-V100
**Universal Adapter**

Mount directly to your machine pallet or rotary table using T-slots. When mounted together the overall height is 4.971”. If additional height is needed, then mount the RWP-242-V100 Riser Plate in between vise and adapter for total Z: 6.721”. RWP-PLUG-208 is available upon request (sold separately).

<table>
<thead>
<tr>
<th>Material</th>
<th>7075 Aluminum with Black Anodize Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>2.0” / 50.8mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>9.875” / 250.825mm</td>
</tr>
<tr>
<td>Vise Compatibility</td>
<td>RWP-502</td>
</tr>
<tr>
<td>Boss/Hole</td>
<td>1.000” Diameter x .30” Receiving hole</td>
</tr>
<tr>
<td></td>
<td>Centering plug required. RWP-PLUG-208, sold separately and may need to be modified.</td>
</tr>
</tbody>
</table>

## RWP-223-V100
**Universal Adapter**

Mount directly to your machine pallet or rotary table using T-slots. When mounted together the overall height is 4.971”. If additional height is needed, then mount the RWP-242-V100 Riser Plate in between vise and adapter for total Z: 6.721”. RWP-PLUG-208 is available upon request (sold separately).

<table>
<thead>
<tr>
<th>Material</th>
<th>7075 Aluminum with Black Anodize Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>2.0” / 50.8mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>11.90” / 302.26mm</td>
</tr>
<tr>
<td>Vise Compatibility</td>
<td>RWP-502 &amp; RWP-505</td>
</tr>
<tr>
<td>Boss/Hole</td>
<td>1.000” Diameter x .30” Receiving hole</td>
</tr>
<tr>
<td></td>
<td>Centering plug required. RWP-PLUG-208, sold separately and may need to be modified.</td>
</tr>
</tbody>
</table>
RWP-242-V100
Riser Plate

Mount directly to your machine pallet or rotary table. May also be used in a stacked application for higher Z, when mounted to either: RWP-209-V100, RWP-222-V100 or RWP-223-V100.

- **Material**: 7075 Aluminum with Black Anodize Finish
- **Product Height**: 1.75” / 44.45mm
- **Product Diameter**: 8.45” / 214.63mm
- **Vise Compatibility**: RWP-502
- **Mounting Info**:
  - (4) ‘C’ Bores for ½-13 Or M12 SHCS on a 7.00” B.C.
  - **Boss/Hole**: 1.000” Diameter x .30” Receiving hole

Centering plug required. RWP-PLUG-208, sold separately and may need to be modified.

RWP-251-V100
Riser Plate

Adapts RWP-502 vise to a Haas UMC750/UMC750ss, Matsuura MX520 300mm and other machines.

- **Material**: 7075 Aluminum with Black Anodize Finish
- **Product Height**: 4.50” / 114.3mm
- **Product Diameter**: 11.40” / 289.6mm
- **Vise Compatibility**: RWP-502
- **Mounting Info**:
  - (8) ‘C’ Bores on a 9.92”/251.9mm for ½-13 Or M12 SHCS on a 7.00” B.C.
  - Will fit pallets with (4) or (6) T-slots
  - **Boss/Hole**: 1.968”/50mm x .75” Receiving hole

RWP-244-V100
2.25” Dovetail Connector Plate

This connector plate has been designed with a 2.25” dovetail base. Mounts directly to Raptor dovetail fixtures: RWP-006 or RWP-006SS. When mounting vise, dovetail connector plate, and dovetail fixture together, the total Z is 6.471”.


- **Material**: 7075 Aluminum with Black Anodize Finish
- **Product Dimensions**:
  - 6.5”L x 4.125” W x 1.0” H
  - 165.1mm x 104.775mm x 25.4mm
- **Vise Compatibility**: RWP-502
A FULL ACCESS PASS.

Speed up your manufacturing by machining five full sides of the workpiece in one set-up.

Raptor’s patented dovetail design quickly locks the part in place for extreme clamping strength and rigidity without wasting much material on the base.

A locating pin ensures your part is positioned accurately and, unlike other products, the spring-loaded clamp can be tightened with a simple T-handle wrench. Quick and easy.

Raptor gets out of your way so you can get the job done.

TESTED AND PROVEN.

Raptor was created by manufacturers for manufacturers.

We know that workholding can be difficult because we face the same challenges. That is why we continue to create innovative products. Raptor is a strong, flexible workholding solution that has been utilized for years by some of the world’s leading manufacturers. Raptor’s dovetail design has been tested by an independent laboratory for strength.

FASTER JOB SETUP.

With Raptor, you can run a wide variety of parts and eliminate the changeover time. There is no need to spend time removing and replacing custom fixtures in your machines. We simplified the process. Smaller Raptor fixtures can also be attached to larger ones, allowing you to switch to any size part as fast as you can turn a hand tool. We’ve made workholding easier for you.

RAPTOR IS ADAPTABLE.

Our workholding products can fit any machine and any situation. We have a variety of adapters, risers, and fixtures built to attach directly to the most popular CNC machines. Multiple Raptors can be mounted to tombstones, bridges, carousels, nests and base plates. Raptor creates new products based on our customers’ valuable feedback. If you need something special, let us know.
**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

Raptor’s 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.

---

**NOTES:**

1) FOR MAXIMUM RIGIDITY DATUM A NEEDS TO CONTACT TOP SURFACE OF FIXTURE.
2) TORQUE FIXTURE BOLTS TO 120-175 INCH POUNDS.

**SCALE:** 2:1

**DIMENSIONS ARE IN INCHES**

**ANGULAR**

0.5 TWO PLACE DECIMAL

0.01 THREE PLACE DECIMAL

0.005 FILLET RADII

0.020 BREAK CORNERS

ALL CONC WITHIN .005 T.I.R.

**SURFACE FINISH**

125

---

**CONTACT INFORMATION**

1-800-824-8333
**2.75” DOVETAIL FIXTURES**

**RWP-403SS-12**
Stainless Steel 2.75” Dovetail Fixture

- Max Workpiece Weight: 225 Pounds / 102.058 kg
- Max Workpiece Size: 10.0”L x 8.0”W x 10.0”H Steel
  254mm x 203.2mm x 254mm
- Fixture Material: 17-4 Stainless Steel
- Number of Clamps: 3 Clamps
- Clamp Replacement Kit: RWP-KIT-3001SQ (2) required
- Dovetail Height: 0.25” / 6.35mm
- Dovetail Width: 2.75” / 69.85mm
- Fixture Length: 11.50” / 292.1mm
- Fixture Width: 7.50” / 190.5mm
- Fixture Height: 3.875” / 98.425mm
- Contact us for cutter recommendation.

**2.25” DOVETAIL FIXTURES**

**RWP-006**
Aluminum 2.25” Dovetail Fixture

- Max Workpiece Weight: 80 Pounds / 36.287 kg
- Max Workpiece Size: 8.0”L x 10.0”W x 10.0”H
  254mm x 203.2mm x 254mm
- Fixture Material: 7075-T6511 Aluminum
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-303SQ
- Dovetail Height: 0.1875” / 4.7625mm
- Dovetail Width: 2.25” / 57.15mm
- Fixture Dimensions: 5.950”L x 3.957”W x 3.957”H
  151.13mm x 100.5078 mm x 63.5mm
- Bolt Circle Diameter: 3.800” Raptor Interface
- Recommended Cutter: RWP-DC410C

Raptor Interface=(4) C’Bores on a 3.800” B.C. for ½-13 or M12 SHCS with a 1.250” x .250 Boss.

**RWP-006SS**
Stainless Steel 2.25” Dovetail Fixture

- Max Workpiece Weight: 168 Pounds / 76.203 kg
- Max Workpiece Size: 12.0” / 304.8mm Cubed
- Fixture Material: 17-4 Stainless Steel
- Number of Clamps: 3 Clamps
- Clamp Replacement Kit: RWP-KIT-303SQ
- Dovetail Height: 0.1875” / 4.7625mm
- Dovetail Width: 2.25” / 57.15mm
- Fixture Dimensions: 5.950”L x 3.957”W x 3.957”H
  151.13mm x 100.5078 mm x 63.5mm
- Bolt Circle Diameter: 3.800” Raptor Interface
- Recommended Cutter: RWP-DC410C

Raptor Interface=(4) C’Bores on a 3.800” B.C. for ½-13 or M12 SHCS with a 1.250” x .250 Boss.
**1.5” DOVETAIL FIXTURES**

The following fixtures are for parts using a dovetail width of 1.5 inches. These dovetail fixtures are available in multiple configurations constructed of aluminum or stainless steel.

---

### RWP-001

**Aluminum 1.5” Dovetail Fixture**

- Max Workpiece Weight: 30 Pounds / 13.607 kg
- Max Workpiece Size: 6.75” / 171.45mm Cubed
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-301SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 1.5” / 38.1mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 3.0” / 76.2mm
- Bolt Circle Diameter: 3.800” Raptor Interface

---

### RWP-004

**Aluminum 1.5” Dovetail Fixture**

This fixture is designed to fit to the Mori Seiki MNV3000 and Matsuura 330X (Metric pallet). It can also be utilized in other machines when connected with an adapter or riser.

- Max Workpiece Weight: 30 Pounds / 13.607 kg
- Max Workpiece Size: 6.75” / 171.45mm Cubed
- Fixture Material: 7075-T6511 Aluminum
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-301SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 1.5” / 38.1mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 2.0” / 50.8mm
- Bolt Circle Diameter: 3.740” for ½-13 or M12 SHCS
- Boss/Hole: 1.18” Diameter x .250” Boss

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### RWP-013

**Aluminum 1.5” Dovetail Fixture**

- Max Workpiece Weight: 30 Pounds / 13.607 kg
- Max Workpiece Size: 6.75” / 171.45mm Cubed
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-301SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 1.5” / 38.1mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 2.0” / 50.8mm
- Bolt Circle Diameter: 3.800” Raptor Interface

---

### RWP-013SS

**Stainless Steel 1.5” Dovetail Fixture**

- Max Workpiece Weight: 30 Pounds / 13.607 kg
- Max Workpiece Size: 6.75” / 171.45mm Cubed
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-301SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 1.5” / 38.1mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 2.0” / 50.8mm
- Bolt Circle Diameter: 3.800” Raptor Interface

---

### RWP-001SS

**Stainless Steel 1.5” Dovetail Fixture**

- Max Workpiece Weight: 30 Pounds / 13.607 kg
- Max Workpiece Size: 6.75” / 171.45mm Cubed
- Number of Clamps: 2 Clamps
- Clamp Replacement Kit: RWP-KIT-301SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 1.5” / 38.1mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 3.0” / 76.2mm
- Bolt Circle Diameter: 3.800” Raptor Interface

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Dovetail Fixtures

RWP-001

Aluminum 1.5” Dovetail Fixture

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75” / 171.45mm Cubed
Number of Clamps: 2 Clamps
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 1.5” / 38.1mm
Fixture Diameter: 4.970” / 126.238mm
Fixture Height: 3.0” / 76.2mm
Bolt Circle Diameter: 3.800” Raptor Interface

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Dovetail Fixtures

RWP-004

Aluminum 1.5” Dovetail Fixture

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75” / 171.45mm Cubed
Fixture Material: 7075-T6511 Aluminum
Number of Clamps: 2 Clamps
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 1.5” / 38.1mm
Fixture Diameter: 4.970” / 126.238mm
Fixture Height: 2.0” / 50.8mm
Bolt Circle Diameter: 3.740” for ½-13 or M12 SHCS
Boss/Hole: 1.18” Diameter x .250” Boss

---

Dovetail Fixtures

RWP-013

Aluminum 1.5” Dovetail Fixture

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75” / 171.45mm Cubed
Number of Clamps: 2 Clamps
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 1.5” / 38.1mm
Fixture Diameter: 4.970” / 126.238mm
Fixture Height: 2.0” / 50.8mm
Bolt Circle Diameter: 3.800” Raptor Interface

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Dovetail Fixtures

RWP-013SS

Stainless Steel 1.5” Dovetail Fixture

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75” / 171.45mm Cubed
Number of Clamps: 2 Clamps
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 1.5” / 38.1mm
Fixture Diameter: 4.970” / 126.238mm
Fixture Height: 2.0” / 50.8mm
Bolt Circle Diameter: 3.800” Raptor Interface

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Dovetail Fixtures

RWP-001SS

Stainless Steel 1.5” Dovetail Fixture

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75” / 171.45mm Cubed
Number of Clamps: 2 Clamps
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 1.5” / 38.1mm
Fixture Diameter: 4.970” / 126.238mm
Fixture Height: 3.0” / 76.2mm
Bolt Circle Diameter: 3.800” Raptor Interface
**RWP-026**

*Aluminum 1.5" Dovetail Fixture: 4" Diameter Bolt Circle*

Made for tombstones 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 Raptors’ adapters or risers.

Max Workpiece Weight: 30 Pounds / 13.607 kg
Max Workpiece Size: 6.75" / 171.45mm Cubed
Fixture Material: 7075-T6511 Aluminum
Number of Clamps: 2
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125" / 3.175mm
Dovetail Width: 1.5" / 38.1mm
Bolt Circle Diameter: 4.000"
Fixture Diameter: 4.970" / 126.238mm
Fixture Height: 3.0" / 76.2mm
Boss Hole: None

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**RWP-027**

*Aluminum 1.5" Dovetail Fixture*

This fixture is great for small rotary tables and lathes when used with a sub-plate. May also be used for the Yukiawa TNT100L when mounted to the RWP-241 adapter plate.

Max Workpiece Weight: 20 Pounds / 9.071 kg
Max Workpiece Size: 6.0" / 152.4mm Cubed
Fixture Material: 7075-T6511 Aluminum
Number of Clamps: 2
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125" / 3.175mm
Dovetail Width: 1.5" / 38.1mm
Bolt Circle Diameter: 2.362" / 60mm B.C. for 5/16 or M8 SHCS
Fixture Diameter: 3.0" / 76.2mm
Fixture Height: 2.0" / 50.8mm
Boss Hole: 1.000" Diameter x .30" Receiving hole

Centering plug required. RWP-PLUG-208, sold separately and may need to be modified.

---

**RWP-036SS**

*Stainless Steel 1.5" Dovetail Fixture*

Mount directly to the KME 135mm pallet used in the following KME products:

5 Axis Tombstones:
- KME-TS300-2.0 300mm
- KME-TS400-4.0 400mm
- KME-TS500-4.0 500mm

5 Axis Trunnions:
- KME-TR100
- KME-TR200
- KME-TR300

Fixture Material: 17-4 Stainless Steel
Number of Clamps: 2
Clamp Replacement Kit: RWP-KIT-301SQ
Dovetail Height: 0.125" / 3.175mm
Dovetail Width: 1.5" / 38.1mm
Fixture Diameter: 5.315" / 135.001 mm
Fixture Height: 2.0" / 50.8mm
Bolt Circle Diameter: 3.937"
**RWP-401-11**  
Aluminum 11” Rail with 1.5” Dovetail

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Max Workpiece Weight</td>
<td>140 Pounds / 63.502 kg</td>
</tr>
<tr>
<td>Max Workpiece Size</td>
<td>17.0”L x 7.0”W x 12.0”H / 431.8mm x 177.8mm x 304.8mm</td>
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<tr>
<td>Fixture Material</td>
<td>7075-T6511 Aluminum</td>
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<tr>
<td>Number of Clamps</td>
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</tr>
<tr>
<td>Clamp Replacement Kit</td>
<td>RWP-KIT-301SQ (3) required</td>
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<tr>
<td>Dovetail Height</td>
<td>0.125” / 3.175mm</td>
</tr>
<tr>
<td>Dovetail Width</td>
<td>1.5” / 38.1mm</td>
</tr>
<tr>
<td>Fixture Length</td>
<td>11.0” / 279.4mm</td>
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<tr>
<td>Fixture Width</td>
<td>4.40” / 111.76mm</td>
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<tr>
<td>Fixture Height</td>
<td>3.0” / 76.2mm</td>
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</table>
**0.75” DOVETAIL FIXTURES**

The following fixtures are for parts using a dovetail width of 0.75 inches. These dovetail fixtures are available in multiple configurations constructed of aluminum or stainless steel.

---

**RWP-002**

0.75” Dovetail Fixture

- Number of Clamps: 2
- Clamp Replacement Kit: RWP-KIT-302SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 0.75” / 19.05mm
- Fixture Diameter: 4.970” / 126.238mm
- Fixture Height: 3.0” / 76.2mm
- Bolt Circle Diameter: 3.800” Raptor Interface

Max Workpiece Weight: 18 Pounds / 8.164 kg
Max Workpiece Size: 5.75” / 146.05mm Cubed
Fixture Material: 7075-T6511 Aluminum

---

**RWP-003**

Aluminum 5C Collet Closer 0.75” Dovetail Fixture

- Max Workpiece Weight: 3 Pounds / 1.360 kg
- Max Workpiece Size: 3.0” / 76.2mm Cubed
- Fixture Material: 7075-T6511 Aluminum
- Number of Clamps: 1
- Clamp Replacement Kit: RWP-KIT-302SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 0.75” / 19.05mm
- Fixture Height: 1.50” / 38.1mm
- Fixture Inner Diameter: 1.125” / 28.575mm
- Fixture Outer Diameter: 2.230” / 56.642mm

---

**RWP-002SS**

0.75” Dovetail Fixture

- Max Workpiece Weight: 25 Pounds / 11.339 kg
- Max Workpiece Size: 6.375” / 161.925mm Cubed
- Fixture Material: 17-4 Stainless Steel

---

Raptor Interface=(4) C’Bores on a 3.800” B.C. for ½-13 or M12 SHCS with a 1.250” x .250 Boss
**RWP-007SS**

**Stainless Steel 0.75” Dovetail Fixture**

Connects directly to System 3R 54mm pallets:
MacroStd: 3R-651.7E-S / 3R-651.7E-XS and MacroHP: 3R-651.7E.P, reducing downtime by switching to an alternate pallet in seconds.

- Max Workpiece Weight: 7 Pounds / 3.175 kg
- Max Workpiece Size: 3.75” / 95.25mm Cubed
- Fixture Material: 17-4 Stainless Steel
- Number of Clamps: 1 Clamp
- Clamp Replacement Kit: RWP-KIT-302SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 0.75” / 19.05mm
- Fixture Dimensions: 2.070”L x 2.070”W x 2.125”H
  
  52.578mm x 52.578mm x 53.975mm

**RWP-011SS**

**Stainless Steel 0.75” Dovetail Fixture with 0.75” Dovetail Bottom**

Connects directly to compatible 0.75” dovetail fixtures allowing quick machining of smaller parts without removing the primary fixtures.

- Max Workpiece Weight: 7 Pounds / 3.175 kg
- Max Workpiece Size: 3.75” / 95.25mm Cubed
- Fixture Material: 17-4 Stainless Steel
- Number of Clamps: 1 Clamp
- Clamp Replacement Kit: RWP-KIT-302SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 0.75” / 19.05mm
- Fixture Dimensions: 2.070”L x 2.070”W x 2.001”H
  
  52.578mm x 52.578mm x 50.825mm

**RWP-012SS**

**Stainless Steel 0.75” Dovetail Fixture with 1.5” Dovetail Bottom**

Connects directly to compatible 1.5” dovetail fixtures allowing quick machining of smaller parts without removing the primary fixtures.

- Max Workpiece Weight: 7 Pounds / 3.175 kg
- Max Workpiece Size: 3.75” / 95.25mm Cubed
- Fixture Material: 17-4 Stainless Steel
- Number of Clamps: 1 Clamp
- Clamp Replacement Kit: RWP-KIT-302SQ
- Dovetail Height: 0.125” / 3.175mm
- Dovetail Width: 0.75” / 19.05mm
- Fixture Dimensions: 2.070”L x 2.070”W x 2.001”H
  
  52.578mm x 52.578mm x 50.825mm
**RWP-015**

**Aluminum 0.75” Dovetail Fixture**

This fixture is designed to connect directly to the Haas TR110 and TRT-100 machines. It can also be utilized in other machines when connected with an adapter riser.

- **Max Workpiece Weight**: 18 Pounds / 8.164 kg
- **Max Workpiece Size**: 5.75” / 146.05mm Cubed
- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 2 Clamps
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Diameter**: 4.330” / 109.982mm
- **Fixture Height**: 2.0” / 50.8mm
- **Bolt Circle Diameter**: 3.267” for (6) 5/16 or M8 SHCS
- **Boss/Hole**: .4992” Diameter x .19” Boss

**RWP-023**

**Aluminum 0.75” Dovetail Fixture: 4” diameter bolt circle**

Made for Tombstones 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 Raptors’ adapters or risers.

- **Max Workpiece Weight**: 18 Pounds / 8.164 kg
- **Max Workpiece Size**: 5.75” / 146.05mm Cubed
- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 2
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Diameter**: 4.970” / 126.238mm
- **Fixture Height**: 3.0” / 76.2mm
- **Bolt Circle Diameter**: 4.0”
- **Boss/Hole**: None

**RWP-024**

**Aluminum 0.75” Dovetail Fixture**

Designed for modular applications. Multiple RWP-024 fixtures can be placed in-line to hold long parts. Multi-fixure options: RWP-024-2XR, RWP-024-3XR, RWP-024-4XR & RWP-024-6XC

- **Max Workpiece Weight**: 12.5 Pounds / 5.669 kg
- **Max Workpiece Size**: 4.0” / 101.6mm Cubed
- **Number of Clamps**: 1
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Dimensions**: 2.0”L x 2.0”W x 1.5”H
  - 50.8mm x 50.8mm x 38.1mm
- **Fixture Material**: 7075-T6511 Aluminum

**RWP-024SS**

**Stainless Steel 0.75” Dovetail Fixture**

- **Max Workpiece Weight**: 12.5 Pounds / 5.669 kg
- **Max Workpiece Size**: 4.0” / 101.6mm Cubed
- **Number of Clamps**: 1
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Dimensions**: 2.0”L x 2.0”W x 1.5”H
  - 50.8mm x 50.8mm x 38.1mm
- **Fixture Material**: 17-4 Stainless Steel
- *EDM Screw Kits Available*
**RWP-025**

**Aluminum 6” Rail, with 0.75” Dovetail and 1.5” Dovetail Bottom**

Designed for quick-change applications machining long and skinny parts.

Connects to compatible 1.5” dovetail fixtures.

- **Max Workpiece Weight**: 12.5 Pounds / 5.669 kg
- **Max Workpiece Size**: 8.0”L x 4.0”W x 4.0”H
  - 203.2mm x 101.6mm x 101.6mm
- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 3
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Dimensions**: 6.0”L x 2.0”W x 1.5”H
  - 152.4mm x 50.8mm x 38.1mm

**RWP-030SS**

**Stainless Steel 0.75” Dovetail Fixture**

- **Max Workpiece Weight**: 40 Pounds / 18.143 kg
- **Max Workpiece Size**: 7.5” / 190.5 Cubed
- **Fixture Material**: 17-4 Stainless Steel
- **Number of Clamps**: 3
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Diameter**: 4.970” / 126.238mm
- **Fixture Height**: 3.0” / 76.2mm
- **Bolt Circle Diameter**: 3.800” Raptor Interface

**RWP-034SS**

**Stainless Steel 0.75” Dovetail Fixture**

This fixture is designed to connect directly to the Makino A51NX-5XU. It can also be utilized in other machines when connected with an adapter or riser.

- **Max Workpiece Weight**: 40 Pounds / 18.143 kg
- **Max Workpiece Size**: 7.5” / 190.5 Cubed
- **Fixture Material**: 17-4 Stainless Steel
- **Number of Clamps**: 3
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Bolt Circle Diameter**: 3.0”
- **Fixture Dimensions**: 5.0”L x 3.90”W x 2.0”H
  - 127mm x 99.06mm x 50.8mm
- **Boss/Hole**: 2.180” Diameter x .07” Boss
**RWP-038SS**

**Stainless Steel 0.75" Dovetail Fixture**

This fixture is designed to connect directly to either the HAAS TRT100 Compact Dual Axis Rotary Table or TR110 for milling applications. It can also be utilized in other machines when connected with an adapter or riser.

- **Max Workpiece Weight**: TRT100: 4 Lbs / TR100: 12 Lbs
- **Max Workpiece Size**: 5" / 127 Cubed
- **Fixture Material**: 17-4 Stainless Steel
- **Number of Clamps**: 2
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125" / 3.175mm
- **Dovetail Width**: 0.75" / 19.05mm
- **Bolt Circle Diameter**: 3.267"
- **Fixture Diameter**: 4.330" / 109.982mm
- **Fixture Height**: 1.3" / 33.02mm
- **Boss/Hole**: .4992" Diameter x .19" Boss

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**RWP-405**

**Aluminum 8" Rail with 0.75" Dovetail**

- **Max Workpiece Weight**: 65 Pounds / 29.483 kg
- **Max Workpiece Size**: 4.0"L x 14.0"W x 4.0"H Steel
  / 101.6mm x 355.6mm x 101.6mm
- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 4
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125" / 3.175mm
- **Dovetail Width**: 0.75" / 19.05mm
- **Fixture Dimensions**: 8.0"L x 3.8"W x 3.0"H
  203.20mm x 96.52mm x 76.2mm
0.50” DOVETAIL FIXTURES

The following fixtures are for parts using a dovetail width of 0.50 inches. These dovetail fixtures are available in multiple configurations constructed of aluminum or stainless steel.

**RWP-017SS**

Stainless Steel 0.50” Dovetail Fixture

Connects directly to System 3R 54mm pallets:
MacroStd: 3R-651.7E-S / 3R-651.7E-XS and MacroHP: 3R-651.7E.P,
reducing downtime by switching to an alternate pallet in seconds.

- **Max Workpiece Weight**: 6 Pounds / 2.721 kg
- **Max Workpiece Size**: 3.25” / 82.55 mm Cubed
- **Fixture Material**: 17-4 Stainless Steel
- **Number of Clamps**: 1 Clamp
- **Clamp Replacement Kit**: RWP-KIT-306SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.50” / 12.7mm
- **Fixture Dimensions**: 2.070”L x 2.070”W x 2.125”H
  52.578mm x 52.578mm x 53.975mm

**RWP-018**

Aluminum 0.50” Dovetail Fixture

- **Number of Clamps**: 2 Clamps
- **Clamp Replacement Kit**: RWP-KIT-306SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.50” / 12.7mm
- **Fixture Diameter**: 4.970” / 126.238mm
- **Fixture Height**: 3.0” / 76.2mm
- **Bolt Circle Diameter**: 3.800” for (4) ½-13 or M12 SHCS
  
- **Bolt Circle Diameter**: 1.00” Diameter x .30 Receiving hole

**RWP-018SS**

Stainless Steel 0.50” Dovetail Fixture

- **Max Workpiece Weight**: 12 Pounds / 5.443 kg
- **Max Workpiece Size**: 5.0” / 127mm Cube
- **Fixture Material**: 17-4 Stainless Steel
- **Raptor’s plug**: RWP-PLUG-208SS, sold separately

**RWP-022SS**

Stainless Steel 0.50” Dovetail Fixture with 1.5” Dovetail Bottom

Connects to a RWP-001(SS), RWP-004, RWP-013(SS) or RWP-026.

- **Max Workpiece Weight**: 6 Pounds / 2.721 kg
- **Max Workpiece Size**: 3.25” / 82.55 mm Cubed
- **Fixture Material**: 17-4 Stainless Steel
- **Number of Clamps**: 1 Clamp
- **Clamp Replacement Kit**: RWP-KIT-306SQ (2) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.50” / 12.7mm
- **Fixture Dimensions**: 2.070”L x 2.070”W x 2.0”H
  52.578mm x 52.578mm x 50.8mm

Raptor Interface=(4) C’Bores on a 3.800” B.C.
for ½-13 or M12 SHCS with a 1.250” x .250 Boss
**0.375” DOVETAIL FIXTURES**

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<thead>
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<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Clamp Replacement Kit</th>
<th>Dovetail Height</th>
<th>Dovetail Width</th>
<th>Fixture Height</th>
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<tbody>
<tr>
<td>RWP-019SS</td>
<td>Stainless Steel 0.375” Dovetail Fixture</td>
<td>17-4 Stainless Steel</td>
<td>RWP-KIT-305SQ</td>
<td>0.125” / 3.175mm</td>
<td>0.375” / 9.525mm</td>
<td>1.25” / 31.75mm</td>
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<tr>
<td>RWP-042SS</td>
<td>Stainless Steel 0.375” Dovetail Fixture</td>
<td>17-4 Stainless Steel</td>
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</tbody>
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Max Workpiece Weight: 2 Pounds / 0.907 kg
Max Workpiece Size: 2.5” / 63.5mm Cubed
Number of Clamps: 1 Clamp
Fixture Length: 2.5” / 63.5mm

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Clamp Replacement Kit</th>
<th>Dovetail Height</th>
<th>Dovetail Width</th>
<th>Fixture Height</th>
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</thead>
<tbody>
<tr>
<td>RWP-013SS</td>
<td>Stainless Steel 0.75” Adapter for RWP-019SS only</td>
<td>17-4 Stainless Steel</td>
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<tr>
<td>RWP-014SS</td>
<td>Stainless Steel 1.5” Adapter for RWP-019SS only</td>
<td>17-4 Stainless Steel</td>
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</table>

Material: 17-4 Stainless Steel
Height: 0.5” / 12.7mm
Adapter Length: 2.5” / 63.5mm

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Clamp Replacement Kit</th>
<th>Dovetail Height</th>
<th>Dovetail Width</th>
<th>Fixture Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWP-0213SS</td>
<td>Stainless Steel 0.75” Adapter for RWP-019SS only</td>
<td>17-4 Stainless Steel</td>
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<td>RWP-0214SS</td>
<td>Stainless Steel 1.5” Adapter for RWP-019SS only</td>
<td>17-4 Stainless Steel</td>
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</table>

Material: 17-4 Stainless Steel
Height: 0.5” / 12.7mm
Adapter Length: 2.5” / 63.5mm

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Clamp Replacement Kit</th>
<th>Dovetail Height</th>
<th>Dovetail Width</th>
<th>Fixture Height</th>
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</thead>
<tbody>
<tr>
<td>RWP-0248SS</td>
<td>Stainless Steel 0.75” Adapter for RWP-042SS only</td>
<td>17-4 Stainless Steel</td>
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<tr>
<td>RWP-0249SS</td>
<td>Stainless Steel 1.5” Adapter for RWP-042SS only</td>
<td>17-4 Stainless Steel</td>
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</table>

Material: 17-4 Stainless Steel
Height: 0.5” / 12.7mm
Adapter Length: 3.75” / 95.25mm
**RWP-031SS**
Stainless Steel 0.281" Width x 0.0781" Height Dovetail Fixture with .75" Dovetail Bottom

Compatible fixtures: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-024 and RWP-030SS.

Max Workpiece Weight: 0.284 Pounds / 0.128 kg
Max Workpiece Size: 1.25" / 31.75mm Cubed
Fixture Material: 17-4 Stainless Steel
Number of Clamps: 1 Clamp
Clamp Replacement Kit: RWP-KIT-307SQ
Dovetail Height: 0.0781" / 19.8374mm
Dovetail Width: 0.281" / 7.137mm
Fixture Height: 1.438" / 36.5252mm
Recommended Cutter: RWP-DC409C

This fixture replaces the discontinued RWP-010SS.

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**RWP-032SS**
Stainless Steel 0.281" Width x 0.0781" Height Dovetail Fixture

Connects to your machine using the 4 mounting holes.

Max Workpiece Weight: 0.284 Pounds / 0.128 kg
Max Workpiece Size: 1.25" / 31.75mm Cubed
Fixture Material: 17-4 Stainless Steel
Number of Clamps: 1 Clamp
Clamp Replacement Kit: RWP-KIT-307SQ
Dovetail Height: 0.0781" / 19.8374mm
Dovetail Width: 0.281" / 7.137mm
Fixture Height: 1.563" / 39.700mm
Recommended Cutter: RWP-DC409C

This fixture replaces the discontinued RWP-009SS.
MODULAR FIXTURE COMPATABILITY

The parts you machine come in different shapes and sizes, so we designed Raptor products with this in mind, to be versatile. To machine larger parts use a standard dovetail fixture. For smaller parts, mount a smaller dovetail fixture on top of a standard, as shown.

It’s that easy. Spend time making parts, not figuring out how to hold them.

### 0.75” MODULE CONFIGURATIONS

<table>
<thead>
<tr>
<th>RWP-011SS / RWP-010SS</th>
<th>RWP-011SS</th>
<th>RWP-019SS + RWP-213SS</th>
</tr>
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<tbody>
<tr>
<td>RWP-002(SS) or RWP-030SS</td>
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<tr>
<td>RWP-015</td>
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<td>RWP-023</td>
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<tr>
<td>RWP-024</td>
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### 1.50” MODULAR CONFIGURATIONS

<table>
<thead>
<tr>
<th>RWP-012SS</th>
<th>RWP-022SS</th>
<th>RWP-019SS + RWP-214SS</th>
<th>RWP-025</th>
<th>RWP-019-4X45T</th>
<th>RWP-019-4X90T</th>
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<tbody>
<tr>
<td>RWP-001(SS)</td>
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<td>RWP-004</td>
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<td>RWP-013(SS)</td>
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<td>RWP-026</td>
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<td>RWP-027</td>
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</table>
RAPTOR IS FAST.

Raptor multi-fixtures provide a platform to attach multiple Raptor dovetail fixtures. Now you can manufacture longer parts or program your 5-axis to machine multiple parts in one load.

Some Raptor multi-fixtures can attach to the top of other Raptor fixtures or adapters for quick and easy change-out. Load up the next multi-fixture with your workpieces while the other one is cycling. Changeover time is reduced and the productivity of your machine is drastically increased.

RWP-003-4X
Aluminum 0.75" Dovetail Fixture - The Pyramid system holds 4 RWP-003 on a single base

This Raptor Pyramid utilizes four included RWP-003 0.75" dovetail fixtures. This is designed specifically for five-axis machining applications and allows you to hold four workpieces on a single base.

The RWP-003-4X Raptor Pyramid will mount to any of our standard adapters and risers.

Max Workpiece Weight: 3 Pounds / 1.360 kg Each
Max Workpiece Size: 3.0” / 76.2mm Cubed Each
Fixture Material: 7075-T6511 Aluminum
Number of Clamps: 4 Clamps
Clamp Replacement Kit: RWP-KIT-302SQ (2) required
Dovetail Height: 0.125” / 3.175mm
Dovetail Width: 0.75” / 19.05mm
Each Fixture Height: 1.50” / 38.1mm
Total Product Height: 3.25” / 82.55mm
Bolt Circle Diameter: 3.800” / 96.52mm Raptor Interface
Boss / Plug: 1.250” Dia. x 0.25” / 31.75mm x 6.35mm
**RWP-019-4X45T**

Stainless Steel 0.375” Dovetail Fixture - The pyramid system holds 4 RWP-019SS on a single base

This Raptor Pyramid utilizes four included RWP-019SS 0.375” dovetail fixtures mounted at a 45 degree angle. This Raptor Pyramid has a 1.5” dovetail bottom and attaches to the top of other Raptor fixtures for quick and easy change-out. Load up the next pyramid with your workpieces while the other one is cycling. Changeover time is reduced and the productivity of your machine is drastically increased.

The RWP-019-4X45T Raptor mini tombstone will mount the any fixture with a 1.5” dovetail.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Max Workpiece Weight</td>
<td>2 Pounds / 0.907 kg Each</td>
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<tr>
<td>Max Workpiece Size</td>
<td>2.50” / 63.5mm Cubed Each</td>
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<tr>
<td>Fixture Material</td>
<td>17-4 Stainless Steel Fixtures</td>
</tr>
<tr>
<td>Number of Clamps</td>
<td>4 Clamps</td>
</tr>
<tr>
<td>Clamp Replacement Kit</td>
<td>RWP-KIT-305SQ (2) required</td>
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<tr>
<td>Dovetail Height</td>
<td>0.125” / 3.175mm</td>
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<tr>
<td>Dovetail Width</td>
<td>0.375” / 9.525mm</td>
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<tr>
<td>Each Fixture Height</td>
<td>1.25” / 31.75mm</td>
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<tr>
<td>Total Product Height</td>
<td>2.69” / 68.326mm</td>
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</tbody>
</table>

**RWP-019-4X90T**

Stainless Steel 0.375” Dovetail Fixture - The Mini Tombstone system holds 4 RWP-019SS on a single base

This Raptor Mini Tombstone utilizes four included RWP-019SS 0.375” dovetail fixtures mounted at a 90 degree angle. This Raptor Mini Tombstone has a 1.5” dovetail bottom and attaches to the top of other Raptor fixtures for quick and easy change-out. Load up the next Mini Tombstone with your workpieces while the other one is cycling. Changeover time is reduced and the productivity of your machine is drastically increased.

The RWP-019-4X90T Raptor mini tombstone will mount the any fixture with a 1.5” dovetail.

<table>
<thead>
<tr>
<th>Specification</th>
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<tbody>
<tr>
<td>Max Workpiece Weight</td>
<td>2 Pounds / 0.907 kg Each</td>
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<tr>
<td>Max Workpiece Size</td>
<td>2.50” / 63.5mm Cubed Each</td>
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<tr>
<td>Number of Clamps</td>
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<td>Clamp Replacement Kit</td>
<td>RWP-KIT-305SQ (2) required</td>
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<tr>
<td>Dovetail Height</td>
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<tr>
<td>Dovetail Width</td>
<td>0.375” / 9.525mm</td>
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<tr>
<td>Each Fixture Height</td>
<td>1.25” / 31.75mm</td>
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<tr>
<td>Total Product Height</td>
<td>3.13” / 79.502mm</td>
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**Multi-Fixtures**

**RWP-024-2XR**

*Aluminum 0.75” Dovetail Fixture - In-Line bridge system holds 2 RWP-024 on a single base*

The RWP-024-2XR is a 0.75” dovetail bridge system for milling applications. This product is designed for modular applications: utilizing two RWP-024 0.75” fixtures in-line to hold longer parts.

- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 2 Clamps
- **Clamp Replacement Kit**: RWP-KIT-302SQ
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.75” / 19.05mm
- **Fixture Height**: 2.875” / 73.025mm
- **Base Length**: 7.0” / 177.8mm
- **Max Workpiece Weight**: 16 Pounds / 7.257 kg
- **Max Workpiece Size**: 8.5”L x 4.0”W x 4.0”H
- **1 Workpiece (Total)**: 215.9mm x 101.6mm x 101.6mm

**RWP-042-4X90T**

*Stainless Steel 0.375” Dovetail Fixture - The Mini Tombstone system holds 4 RWP-042SS on a single base*

This Raptor Mini Tombstone utilizes four included RWP-042SS 0.375” dovetail fixtures mounted at a 90 degree angle. This Raptor Mini Tombstone has a 1.5” dovetail bottom and attaches to the top of other Raptor fixtures for quick and easy change-out. Load up the next Mini Tombstone with your workpieces while the other one is cycling. Changeover time is reduced and the productivity of your machine is drastically increased.

The RWP-042-4X90T Raptor mini tombstone will mount any fixture with a 1.5” dovetail.

- ** Fixture Material**: 17-4 Stainless Steel Fixtures
- **Aluminum Base**
- **Number of Clamps**: 4 Clamps
- **Clamp Replacement Kit**: RWP-KIT-305SQ (4) required
- **Dovetail Height**: 0.125” / 3.175mm
- **Dovetail Width**: 0.375” / 9.525mm
- **Each Fixture Height**: 1.25” / 31.75mm
- **Total Product Height**: 4.38” / 111.252mm
- **Max Workpiece Weight**: 7 Pounds / 3.47 kg Each
- **Max Workpiece Size**: 4.0” L x 2.50” W x 2.50” H
- **4.0” / 101.6mm Cubed**

**1-800-824-8333**
**RWP-024-3XR**

Aluminum 0.75" Dovetail Fixture - In-Line bridge system holds 3 RWP-024 on a single base

The RWP-024-3XR is a 0.75" dovetail bridge system for milling applications. This product is designed for modular applications: utilizing three RWP-024 0.75" fixtures in-line to hold longer parts.

- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 3 Clamps
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125" / 3.175mm
- **Dovetail Width**: 0.75" / 19.05mm
- **Fixture Height**: 2.875" / 73.025mm
- **Base Length**: 10.0" / 254mm

**1 Workpiece (Total)**
- **Max Workpiece Weight**: 24 Pounds / 10.886 kg
- **Max Workpiece Size**: 12.5"L x 4.0"W x 4.0"H
  - 317.5mm x 101.6mm x 101.6mm

**3 Workpieces (Each)**
- **Max Workpiece Weight**: 8 Pounds / 3.628 kg
- **Max Workpiece Size**: 4.0" / 101.6mm Cubed

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**RWP-024-4XR**

Aluminum 0.75" Dovetail Fixture - In-Line bridge system holds 4 RWP-024 on a single base

The RWP-024-4XR is a 0.75" dovetail bridge system for milling applications. This product is designed for modular applications: utilizing four RWP-024 0.75" fixtures in-line to hold longer parts.

- **Fixture Material**: 7075-T6511 Aluminum
- **Number of Clamps**: 4 Clamps
- **Clamp Replacement Kit**: RWP-KIT-302SQ (2) required
- **Dovetail Height**: 0.125" / 3.175mm
- **Dovetail Width**: 0.75" / 19.05mm
- **Fixture Height**: 2.875" / 73.025mm
- **Base Length**: 13.0" / 330.2mm

**1 Workpiece (Total)**
- **Max Workpiece Weight**: 32 Pounds / 14.514 kg
- **Max Workpiece Size**: 16.5"L x 4.0"W x 4.0"H
  - 419.1mm x 101.6mm x 101.6mm

**4 Workpieces (Each)**
- **Max Workpiece Weight**: 8 Pounds / 3.628 kg
- **Max Workpiece Size**: 4.0" / 101.6mm Cubed
RWP-024-6XC
Aluminum 0.75" Dovetail Fixture - 6 Fixture Carousel

The RWP-024-6XC is a 0.75" dovetail carousel for milling applications. This product is designed for modular applications: utilizing 6 RWP-024 fixtures on a carousel base to machine multiple items in 1 operation. This carousel base mounts to either RWP-006 or RWP-006SS

- Max Workpiece Weight: 8 Pounds / 3.628 kg
- Max Workpiece Size: 4.0" / 101.6mm Cubed
- Fixture Material: 7075-T6511 Aluminum
- Number of Clamps: 1
- Clamp Replacement Kit: RWP-KIT-302SQ (3) required
- Dovetail Height: 0.125" / 3.175mm
- Dovetail Width: 0.75" / 19.05mm
- Fixture Height: 1.5" / 38.1mm

NEED DOVETAIL CUTTERS?
We have a solution for that too. Raptor dovetail cutters machine the flat on the dovetail edge of your workpiece in one pass. This prevents a sharp edge on the dovetail from pressing into the corner of the fixture. Our dovetail cutters are available in a variety of dovetail heights and diameters depending on your need.

RWP-DC403U
3 Flute Uncoated 0.75" Dia.
0.125" High Dovetail Cutter
Works well with aluminum or softer materials. Works well with 1.50, .750, .500 & .375 dovetail sizes.

RWP-DC404C
4 Flute Coated 0.75" Dia.
0.125" High Dovetail Cutter
Designed for prolonged life & for harder materials. Works well with 1.50, .750, .500 & .375 dovetail sizes.

RWP-DC407C
4 Flute Coated 0.35" Dia.
0.125" High Dovetail Cutter
Designed for prolonged life & for harder materials. Works well with 1.50, .750, .500 & .375 dovetail sizes.

RWP-DC408C
4 Flute Coated 0.45" Dia.
0.125" High Dovetail Cutter
Designed for prolonged life & for harder materials. Works well with 1.50, .750, .500 & .375 dovetail sizes.

RWP-DC409C
4 Flute Coated 0.248" Dia.
0.0469" High Dovetail Cutter
Designed for prolonged life & for harder materials.
Works well with .281 X .046 dovetail size (old style).

RWP-DC405C
4 Flute Coated 0.248" Dia.
0.0781" High Dovetail Cutter
Designed for prolonged life & for harder materials.
Works well with .281 X .0781 dovetail (current style).

RWP-DC410C
4 Flute Coated 0.75" Dia.
0.750" Shank, 0.138" High Dovetail Cutter
Designed for prolonged life & for harder materials.
Works well with 2.25" dovetail size.

See website for Speeds & Feed Rates for Raptor Dovetail Cutters.
REPLACEMENT PARTS

**RWP-KIT-301SQ**
Replacement Clamp Kit
Fits 1.500” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-302SQ**
Replacement Clamp Kit
Fits .750” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-303SQ**
Replacement Clamp Kit
Fits 2.250” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-304SQ**
Replacement Clamp Kit
Fits .281” X .0461 Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-305SQ**
Replacement Clamp Kit
Fits .375” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-306SQ**
Replacement Clamp Kit
Fits .500” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-307SQ**
Replacement Clamp Kit
Fits .281” X .0781 Dovetail size.
(2) Clamp assemblies per kit.

**RWP-KIT-3001SQ**
Replacement Clamp Kit
Fits 2.75” Dovetail size.
(2) Clamp assemblies per kit.

**RWP-PLUG-208**
Blank 2.500” Diameter allows customer to modify to fit specific application.
Precision 1.000” Diameter fits in the bottom of fixtures/risers that have a Raptor interface.

**RWP-8-32**
8/32 x 1/4 Replacement Locating Pins
These replacement locating pins are for all Raptor Fixtures except the RWP-019SS and RWP-042SS.
Five replacement pins per pack.
These are for fixtures that were manufactured before 2017.

**RWP-8-32CLS**
8/32 x 1/4 Replacement Locating Pins
These replacement locating pins are for all Raptor Fixtures except the RWP-019SS and RWP-042SS.
These are for fixtures that were manufactured 2017 or after.
Five replacement pins per pack.

**RWP-8-32MO**
8/32 x 8/32 x .165 Replacement Locating Pins
These replacement locating pins are for the RWP-019SS and RWP-042SS only.
Five replacement pins per pack.
RAPTOR IS FLEXIBLE.

The parts you make come in different sizes and so does Raptor. Our Micro-Raptors work great for small parts while our Raptor Rails, Raptor Nests and Raptor Tombstone solutions can hold multiple parts or workpieces as heavy as 150 pounds.
**RAPTOR IS ADAPTABLE.**

Our workholding products can fit any machine and any situation. We have a variety of adapters, risers, and fixtures built to attach directly to the most popular CNC machines. Multiple Raptors can be mounted to tombstones, multi-fixtures and base plates.

Raptor creates new products based on our customers’ valuable feedback. If you need something special, let us know.

---

**RWP-202**

Adapter

Enables compatible fixtures to be mounted on the Haas TR210, HRT210 & HRC210

- **Material**: 7075-T6511 Aluminum
- **Product Height**: 2.0” / 50.8mm
- **Product Diameter**: 8.20” / 208.28mm
- **Bolt Circle Diameter**: 6.50” / 165.1mm
- **Connection Bolts**: (6) 1/2” SHCS
- **Boss / Hole**: 2.000” Dia x .375” Boss
- **Mounts**: All Fixtures with Raptor interface
RWP-203
Adapter
Enables compatible fixtures to be mounted on the following Haas machines: TR160, TR160-2, TR200Y, HRT160 & TRT160.

- Material: 7075-T6511 Aluminum
- Product Height: 1.5” / 38.1mm
- Product Diameter: 6.30” / 160.02mm
- Bolt Circle Diameter: 5.40” / 137.16mm
- Connection Bolts: (6) 3/8” SHCS T-NUTS
- Boss / Hole: 1.499” Dia x 0.313” Boss
- Mounts: All Fixtures with Raptor interface

RWP-206
Riser for Mori Seiki NMV3000
While supplies last. Replaced by Universal Riser RWP-262.
For metric pallet see Universal Riser RWP-262.
Enables compatible fixtures to be mounted on the Mori Seiki NMV3000.

- Material: 7075-T6511 Aluminum
- Product Height: 3.5” / 88.9mm
- Product Diameter: 8.98” / 228.092mm
- Bolt Circle Diameter: 175mm (RWP-205) / 7.0” (RWP-206)
- Connection Bolts: (4) M12 SHCS (RWP-205) / (4) 1/2” SHCS (RWP-206)
- Boss / Hole: 1.180” Dia x 0.250 Boss
- Connects to: Mori Seiki NMV3000
- Mounts: All Fixtures with Raptor interface

RWP-262
Medium Universal Riser
Enables compatible fixtures to be mounted to multiple machines.

- Material: 7075-T6511 Aluminum
- Product Height: 3.5” / 88.9mm
- Product Diameter: 8.98” / 228.092mm
- Bolt Circle Diameter: 6.000 to 7.030 range
- Connection Bolts: 1/8-13 or M12 SHCS
- Boss / Hole: 1.000” Dia x 0.30” Receiving hole
- Connects to: Mori Seiki NMV5000, DMU50/50eco, NMV3000 Metric/English & multiple other machines
- Mounts: All Fixtures with Raptor interface

*Raptor’s plug RWP-PLUG-208, sold separately, may need to be modified.
**RWP-208**

Emergency Adapter

Emergency adapter plate enables any compatible fixtures to be mounted on the pallet of your machine. You simply add the mounting holes.

- **Material**: 6061 Aluminum
- **Product Height**: 1.5” / 38.1mm
- **Product Diameter**: 7.950” / 201.93mm
- **Boss / Hole**: 1.000” Dia x 0.30” Receiving hole
- **Connects to**: Any Machine
- **Mounts**: All Fixtures with Raptor interface

*Raptor’s plug RWP-PLUG-208, sold separately, may need to be modified.*

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**RWP-209**

Emergency Adapter

Emergency adapter plate enables any compatible fixtures to be mounted on the pallet of your machine. You simply add the mounting holes.

- **Material**: 6061 Aluminum
- **Product Height**: 1.5” / 38.1mm
- **Product Diameter**: 9.055” / 229.997mm
- **Boss / Hole**: 1.000” Dia x 0.30” Receiving hole
- **Connects to**: Any Machine
- **Mounts**: All Fixtures with Raptor interface

*Raptor’s plug RWP-PLUG-208, sold separately, may need to be modified.*

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**RWP-239**

Small Machine Adapter

Small adapter allows RWP-024 and RWP-024SS (.75” Dovetail), RWP-019SS and RWP-042SS (.375” Dovetail) to be adapted to the following machines: Haas TRT70 & TRT100, Nikken 100FA & 130FA, Yukiwa TNT100L, Sankyo RT80 & RT100 and others.

- **Material**: 6061 Aluminum with Blue Anodize Finish
- **Product Height**: .75” / 19mm
- **Product Diameter**: 3.940 / 100mm
- **Boss / Hole**: .3755” Dia x .38” Receiving hole
- **Includes**: Centering plug .375” Dia. with 2.50” Blank machinable diameter and a 3/8” x .75 LG dowel pin
There are many CNC machines and rotary table sizes. That’s why we offer universal adapters. Our universal adapters are 2 inches tall and are available in 9 inch and 11 inch diameters. Both universal adapters have multiple mounting slots so they are guaranteed to fit your machine.

Combine the universal adapters with extenders available in either 1 inch or 2 inch sizes to provide additional height without unnecessary bulk. Please refer to charts for options.

**RWP-222**
Universal Adapter 9.875” Diameter, 2” Height

Has multiple slots to allow for use on multiple machine pallets or rotary tables. This universal adapter is modular in design with many options.

<table>
<thead>
<tr>
<th>Material</th>
<th>7075 Aluminum with Black Anodized Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>2.0” / 50.8mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>9.875” / 250.825mm</td>
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<tr>
<td>Bolt Circle Diameter</td>
<td>T-Slots for 3/8” or M10 SHCS on 5.50”-8.50”/139.7mm-215.9mm B.C.</td>
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<tr>
<td>Connection Bolts</td>
<td>(4) 1/2”-13 UNC-2B</td>
</tr>
<tr>
<td>Boss / Hole</td>
<td>1.00” Dia x 0.30” Receiving Hole</td>
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<tr>
<td>Connects to</td>
<td>RWP-206, RWP-601, RWP-602</td>
</tr>
<tr>
<td>Mounts</td>
<td>All Fixtures with Raptor interface</td>
</tr>
</tbody>
</table>

*Centering plug required. Raptor’s plug RWP-PLUG-208, sold separately, may need to be modified.

**RWP-222 Universal Adapter Configuration Options**

<table>
<thead>
<tr>
<th>RWP-001(SS)</th>
<th>RWP-002(SS) / RWP-030SS</th>
<th>RWP-006(SS)</th>
<th>RWP-013(SS)</th>
<th>RWP-018(SS)</th>
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</thead>
<tbody>
<tr>
<td><strong>RWP-222</strong> direct mount with fixture only</td>
<td>RWP-222</td>
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**RWP-222 direct mount with fixture and RWP-601 one inch extender**

<table>
<thead>
<tr>
<th>RWP-601</th>
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**RWP-222 mount with fixture and RWP-602 two inch extender**

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<tr>
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**RWP-222 mount with fixture and RWP-206 riser**

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1-800-824-8333
**RWP-223**

**Universal Adapter 11.95” Diameter, 2” Height**

Has multiple slots to allow for use on multiple machine pallets or rotary tables. This universal adapter is modular in design with many options.

<table>
<thead>
<tr>
<th>Material</th>
<th>7075 Aluminum with Black Anodized Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>2.0” / 50.8mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>11.950” / 303.53mm</td>
</tr>
<tr>
<td>Bolt Circle Diameter</td>
<td>T-Slots for ½” or M12 SHCS on</td>
</tr>
<tr>
<td></td>
<td>6.00”-10.00”/152.4mm-254mm B.C.</td>
</tr>
<tr>
<td>Connection Bolts</td>
<td>(4) 1/2”-13 UNC-2B</td>
</tr>
<tr>
<td>Boss / Plug</td>
<td>1.250” Dia x 0.30” Receiving Hole</td>
</tr>
<tr>
<td>Connects to</td>
<td>RWP-224, RWP-601, RWP-602</td>
</tr>
<tr>
<td>Mounts</td>
<td>All Fixtures with Raptor interface</td>
</tr>
</tbody>
</table>

*Centering plug required. Raptor’s plug RWP-PLUG-208, sold separately, may need to be modified.*

### RWP-223 Universal Adapter Configuration Options

<table>
<thead>
<tr>
<th>RWP-001(SS)</th>
<th>RWP-002(SS) / RWP-030SS</th>
<th>RWP-006(SS)</th>
<th>RWP-013(SS)</th>
<th>RWP-018(SS)</th>
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<tr>
<td><strong>RWP-223</strong> direct mount with fixture only</td>
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<td>RWP-223</td>
<td>RWP-223</td>
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<table>
<thead>
<tr>
<th>RWP-223 direct mount with fixture and RWP-601 one inch extender</th>
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<tr>
<td>RWP-223</td>
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<table>
<thead>
<tr>
<th>RWP-223 mount with fixture and RWP-602 two inch extender</th>
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</thead>
<tbody>
<tr>
<td>RWP-223</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RWP-223 mount with fixture and RWP-224 riser</th>
</tr>
</thead>
</table>

RaptorWorkholding.com
RWP-224
Riser

This riser can be used in a modular configuration when combined with the Universal Adapter: RWP-223.

- **Material**: 7075 Aluminum
- **Product Height**: 6.0” / 152.4mm
- **Product Diameter**: 11.950” / 303.53mm
- **Bolt Circle Diameter**: 10.150” / 257.81mm
- **Connection Bolts**: (4) 1/2“-13 SHCS
- **Boss / Hole**: 1.000” Dia. X .300” Receiving Hole
- **Connects to**: Any Machine, RWP-223
- **Mounts**: All Fixtures with Raptor interface

*Centering Plug required, RWP-PLUG-208, sold separately, may need to be modified.

RWP-228
Riser

While supplies last. Replaced by Universal Riser RWP-262.

Enables compatible fixtures to be mounted on the pallet of the DMG Mori DMU50/50eco machine.

- **Material**: 7075 Aluminum
- **Product Height**: 3.494” / 88.7476mm
- **Product Diameter**: 8.96” / 227.584mm
- **Bolt Circle Diameter**: 7.015” / 178.181mm
- **Connection Bolts**: (4) M12 SHCS
- **Boss / Hole**: 1.180” Dia x .250” Boss
- **Connects to**: DMG Mori DMU50/50eco
- **Mounts**: All Fixtures with Raptor interface

RWP-234
Riser

Enables compatible fixtures to be mounted on the Haas UMC-750 / UMC-750SS or Matsuurasa MX-520 300MM.

- **Material**: 7075-T6511 Aluminum
- **Product Height**: 4.50” / 114.3 mm
- **Product Diameter**: 11.40” / 289.56
- **Bolt Circle Diameter**: 9.92” / 251.968 mm
- **Connection Bolts**: (4) M12 SHCS
- **Boss / Hole**: 1.970” Dia. x .750” Receiving Hole
- **Connects to**: Haas UMC-750 / UMC-750SS or Matsuurasa MX-520 500MM
- **Mounts**: All Fixtures with Raptor interface
RWP-237
Nest Riser
The RWP-237 is an aluminum Nest riser, designed for the Haas UMC-750 / UMC-750SS or Matsuursa MX-520 300MM.

<table>
<thead>
<tr>
<th>Material</th>
<th>7075-T6511 Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>6.550” / 166.37mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>14.75” / 374.65mm</td>
</tr>
<tr>
<td>Bolt Circle Diameter</td>
<td>13.20” / 335.28mm</td>
</tr>
<tr>
<td>Connection Bolts</td>
<td>(8) 1/2” SHCS</td>
</tr>
<tr>
<td>Boss / Hole</td>
<td>1.970” Dia x .750” Receiving Hole</td>
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<tr>
<td>Connects to</td>
<td>Haas UMC-750 / UMC-750SS or Matsuursa MX-520 500MM</td>
</tr>
<tr>
<td>Mounts</td>
<td>All Fixtures with Raptor interface</td>
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</table>

RWP-238-8
Adapter 8 Thread
Aluminum Adapter to connect RWP-003 5C Rotary Indexer Spindle Nose 8TPI.

<table>
<thead>
<tr>
<th>Material</th>
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<tbody>
<tr>
<td>Machine Type</td>
<td>5C Rotary Indexer</td>
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<tr>
<td>Connects to</td>
<td>RWP-003</td>
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</table>

RWP-238-10
Adapter 10 Thread
Aluminum Adapter to connect RWP-003 5C Rotary Indexer Spindle Nose 10TPI.

<table>
<thead>
<tr>
<th>Material</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Machine Type</td>
<td>5C Rotary Indexer</td>
</tr>
<tr>
<td>Connects to</td>
<td>RWP-003</td>
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</tbody>
</table>

RWP-241
Adapter
This adapter has the mounting interface for the RWP-027, 1.5” dovetail fixture, and is designed for the Yukiwa TNT100L.

<table>
<thead>
<tr>
<th>Material</th>
<th>7075-T6511 Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Height</td>
<td>0.75” / 166.37mm</td>
</tr>
<tr>
<td>Product Diameter</td>
<td>3.938” / 374.65mm</td>
</tr>
<tr>
<td>Bolt Circle Diameter</td>
<td>2.677” / 68mm</td>
</tr>
<tr>
<td>Connection Bolts</td>
<td>(4) M8 SHCS</td>
</tr>
<tr>
<td>Boss / Hole</td>
<td>1.968” Dia x 0.230”</td>
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<tr>
<td>Machine Type</td>
<td>Yukiwa TNT100L</td>
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<tr>
<td>Fixture Compatibility</td>
<td>RWP-027</td>
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</tbody>
</table>

RWP-601
Aluminum Extender 1” Height
The 1” Extender is to add height when used with either Universal Adapter: RWP-222 or RWP-223 in lieu of using a riser.

| Material         | 7075 Aluminum |
| Connects to      | RWP-222, RWP-223 |
| Boss / Plug      | 1.25” Dia x 0.25 |
|                  | 31.75mm Dia x 6.35mm |
| Mounts           | All Fixtures with Raptor interface |

RWP-602
Aluminum Extender 2” Height
The 2” Extender is to add height when used with either Universal Adapter: RWP-222 or RWP-223 in lieu of using a riser.

| Material         | 7075 Aluminum |
| Connects to      | RWP-222, RWP-223 |
| Boss / Plug      | 1.25” Dia x 0.25 |
|                  | 31.75mm Dia x 6.35mm |
| Mounts           | All Fixtures with Raptor interface |
PINCH BLOCKS

The Pinch Block connects directly to a Raptor dovetail fixture and is designed to offer a quick solution for secondary or final operations. Allows for quick dovetail removal and part completion. Convenient size and shape. Simply tighten with T-Handle wrench. Available in three sizes.

RWP-702
Aluminum Pinch Block

Utilizes a single 3/8-16 Socket Head Cap Screw to actuate it.

- Material: 7075-T6511 Aluminum
- Product Dimensions: 2.350” L x 2.950” W x 1.820” H
- Dovetail Width: 1.50” / 38.1mm
- Fixture Compatibility: RWP-001(SS), RWP-004, RWP-013(SS), RWP-026, RWP-027, RWP-036SS

*Screw and shim are included

RWP-703
Aluminum Pinch Block

Utilizes two 3/8-16 Socket Head Cap Screws to actuate it.

- Material: 7075-T6511 Aluminum
- Product Dimensions: 5” L x 2.950” W x 1.820” H
- Dovetail Width: 1.50” / 38.1mm
- Fixture Compatibility: RWP-001(SS), RWP-004, RWP-013(SS), RWP-026, RWP-027, RWP-036SS

*Screw and shim are included

RWP-704
Aluminum Pinch Block

Utilizes a single 3/8-16 Socket Head Cap Screw to actuate it.

- Material: 7075-T6511 Aluminum
- Product Dimensions: 2.350” L x 2.950” W x 1.820” H
- Dovetail Width: 0.75” / 38.1mm
- Fixture Compatibility: RWP-002(SS), RWP-015, RWP-023, RWP-030SS, RWP-034SS, RWP-038SS, RWP-405

*Screw and shim are included
The benefits of Raptors’ workholding products are widespread!

Our customers have reported that by utilizing Raptor products in their facilities, there have been numerous benefits:

- Saving time and money by becoming more efficient.
- Ultimately increasing overall company health by:
  - Decreasing production time while increasing yield of finished goods
  - Opening up production schedules to accommodate more orders.
  - Improving employee performance by streamlining application processes, while increasing their enthusiasm and morale,
  - Growing their customer base due to greater production capacity, improving pricing and even increasing on-time delivery.

As we always say:
“Spend time making parts not figuring out how to hold them – Raptor is your solution!”

Policies & Warranty

Engineering Changes
Specification and engineering data are subject to change without notice.

Manufacturing Policy
Products supplied by Raptor are high quality and adhere to manufacturing standards. Tolerances are uniformly held in accordance with catalog specifications. Our products are simple to use and we provide support material with each shipment to ensure that your applications go smoothly. We are happy to provide you with additional support, just contact us.

Damaged, Short or Lost Items
UPS is our primary carrier. If your package and subsequent product is damaged/lost in transit, immediately place a claim with your UPS office. Keep all damaged product and packaging for inspection by UPS. Notify Raptor so we can help replace the merchandise.

Returned Goods
Materials cannot be returned without authorization. Final credit will be determined as follows:
- Only catalog items suitable for resale may 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. Specials cannot be returned.

Warranty
Raptor Products are protected with a 1 year limited warranty for parts*

* Subject to the terms as described in our Limited Warranty Policy.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Stock</th>
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<td>RWP-234</td>
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<td>RWP-237</td>
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<td>RWP-238-10</td>
<td>Adapter 10 Thread</td>
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<td>RWP-238-8</td>
<td>Adapter 8 Thread</td>
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<td>RWP-239</td>
<td>Small Machine Adapter</td>
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<td>RWP-241</td>
<td>Adapter</td>
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<td>Riser Plate</td>
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<td>RWP-405</td>
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<td>RWP-502</td>
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<td>RWP-505</td>
<td>150mm Self Center Vise</td>
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<td>RWP-602</td>
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<td>RWP-702</td>
<td>Aluminum Pinch Block</td>
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<td>RWP-8-32</td>
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<td>RWP-DC404C</td>
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<td>RWP-DC405C</td>
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<td>RWP-DC407C</td>
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<tr>
<td>RWP-KIT-308SQ</td>
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- **Vises**
- **Cutters & Parts**
- **Dovetail Fixtures**
- **Adapters & Risers**
- **Multi-Fixtures**
- **Pinch Blocks**
Fits on all standard tool holders

Flexible and available in both (½ and ¼ inch)

Withstands pressures up to 80 bar

Versatile use (cooling and high pressure chip removal)

Cost-Effective

Long lifespan thanks to anodized coating

Light Weight

New Design

100% Swiss Engineered and Manufactured

TE-CO has entered into a partnership to bring Swiss engineering and 100% Swiss made high pressure coolant lines to the United States.

The patented PIRANHA COOLING LINE solves all cooling problems on chip-removing processing
### Threaded Connector

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>GA-1/8&quot;</td>
<td>Threaded Connector 1/8&quot;</td>
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<tr>
<td>GA-1/8&quot; NPT</td>
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<td>GA-1/4&quot;</td>
<td>Threaded Connector 1/4&quot;</td>
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<tr>
<td>GA-M8</td>
<td>Threaded Connector M8</td>
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<tr>
<td>GA-M8-L</td>
<td>Threaded Connector M8 Long</td>
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<td>GA-M10</td>
<td>Threaded Connector M10</td>
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<td>GA-M10x1</td>
<td>Threaded Connector M10x1</td>
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<td>GA-M12x1</td>
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### Spacer

<table>
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<tr>
<th>Type</th>
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<tbody>
<tr>
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<td>Spacer 28mm</td>
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<td>D-12.5/43</td>
<td>Spacer 43mm</td>
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<td>D-12.5/70</td>
<td>Spacer 70mm</td>
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</table>
NOZZLE

RD-12.5-1.5
Round Nozzle Ø1.5mm

SDL-12.5/90°
Special Nozzle Ø1.8mm / 90° Long

RD-12.5-3.5
Round Nozzle Ø3.5mm

SDK-12.5/60°
Special Nozzle Ø1.8mm / 60° Short

RD-12.5-4.5
Round Nozzle Ø4.5mm

SDL-12.5/60°
Special Nozzle Ø1.8mm / 60° Long

RD-12.5-5.5
Round Nozzle Ø5.5mm

FD-12.5-20
Flat Nozzle 20mm

RD-12.5-7/1.5
Round Nozzle Multi-Hole

DISTRIBUTOR

SDK-12.5/90°
Special Nozzle Ø1.8mm / 90° Short

L-12.5
90° Elbow

Quatro-12.5
Quatro Distribution Block

T-12.5
T-Distributor

Y-12.5
Y-Distributor

H-12.5
Ball Valve 1/4”
ACCESSORIES

M-SW16
Nut SW16

D-SW16
Cap SW16

Ring 12.5
O-Ring 1/4"

S-11/16
Hexagon Wrench

CUSTOMIZED PRODUCTS

Can be produced by request
### Set
**PCL-1/4 SET 1**

Cooling Line Starter Kit

<table>
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<tr>
<th>Piranha Cooling Line Starter Kit Content:</th>
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<tbody>
<tr>
<td>3 Spacer 28.0mm</td>
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<tr>
<td>3 Spacer 43.0mm</td>
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<tr>
<td>3 Spacer 70.0mm</td>
</tr>
<tr>
<td>1 Threaded Connector 1/4&quot;</td>
</tr>
<tr>
<td>1 Threaded Connector 1/4&quot; NPT</td>
</tr>
<tr>
<td>1 Threaded Connector 1/8&quot; NPT</td>
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<tr>
<td>1 Threaded Connector M10x1</td>
</tr>
<tr>
<td>1 Threaded Connector M12x1</td>
</tr>
<tr>
<td>1 Round Nozzle Ø3.5mm</td>
</tr>
<tr>
<td>1 Round Nozzle Ø4.5mm</td>
</tr>
<tr>
<td>1 Round Nozzle Ø5.5mm</td>
</tr>
<tr>
<td>1 Special Nozzle Ø1.8/60° Short</td>
</tr>
<tr>
<td>1 Special Nozzle Ø1.8/60° Long</td>
</tr>
<tr>
<td>1 Special Nozzle Ø1.8/90° Short</td>
</tr>
<tr>
<td>1 Special Nozzle Ø1.8/90° Long</td>
</tr>
<tr>
<td>5 Nuts SW 16x7mm</td>
</tr>
<tr>
<td>1 90° Elbow</td>
</tr>
<tr>
<td>1 Y-Distributor</td>
</tr>
<tr>
<td>2 Hexagon Wrench SW11/SW16</td>
</tr>
<tr>
<td>L x W x H 210 x 150 x 40mm</td>
</tr>
<tr>
<td>THREADS CONNECTOR</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>GA-22-3/8&quot; NPT</td>
</tr>
<tr>
<td>Threaded Connector 3/8&quot; NPT</td>
</tr>
<tr>
<td>GA-22-3/8&quot;</td>
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<tr>
<td>Threaded Connector 3/8&quot;</td>
</tr>
<tr>
<td>GA-22-1/2&quot; NPT</td>
</tr>
<tr>
<td>Threaded Connector 1/2&quot; NPT</td>
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<tr>
<td>GA-22-1/2&quot;</td>
</tr>
<tr>
<td>Threaded Connector 1/2&quot;</td>
</tr>
<tr>
<td>SPACER</td>
</tr>
<tr>
<td>D-22-46</td>
</tr>
<tr>
<td>Spacer 46.5mm</td>
</tr>
<tr>
<td>D-22-63</td>
</tr>
<tr>
<td>Spacer 63.5mm</td>
</tr>
<tr>
<td>D-22-80</td>
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<tr>
<td>Spacer 80mm</td>
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<tr>
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</tbody>
</table>
**DISTRIBUTOR**

- **L-1/2”**
  90° Elbow

- **T-1/2”**
  T-Distributor

- **Y-1/2”**
  Y-Distributor

- **Y-1/2”- 1/4”**
  Y-Distributor

- **H-22**
  Ball Valve 1/2”

**ACCESSORIES**

- **M-SW27**
  Nut SW27

- **D-SW27**
  Cap SW27

- **Ring 22**
  O-Ring 1/2”

- **S-21/27**
  Hexagon Wrench

**FLAT NOZZLE**

- **FD-22-30**
  Flat Nozzle 30

- **FD-22-40**
  Flat Nozzle 40

- **FD-22-50**
  Flat Nozzle 50

- **FD-22-60**
  Flat Nozzle 60

- **FD-22-80**
  Flat Nozzle 80

- **FD-22-100**
  Flat Nozzle 100