RAPTOR
WORKHOLDING PRODUCTS

2015 FALL CATALOG

NEVER BUILD ANOTHER FIXTURE.





CONTACT US AT
1-818-841-1785
RAPTORWORKHOLDING.COM







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 created these 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.

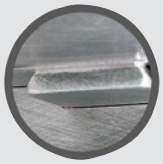
RAPTOR IS ADAPTABLE.

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.





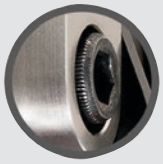
1 - SIMPLE DOVETAIL

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.





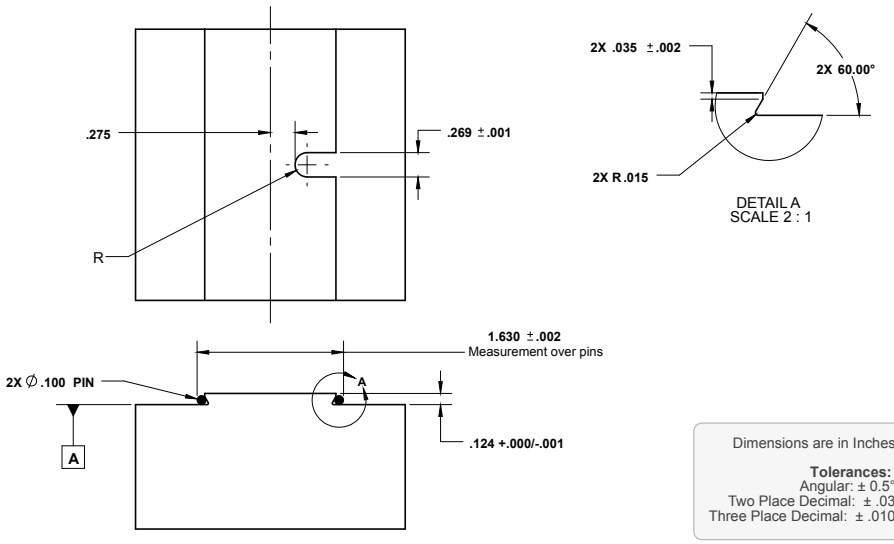




5 - FITS ANY MACHINE

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

1.5" Dovetail Preparation Specifications

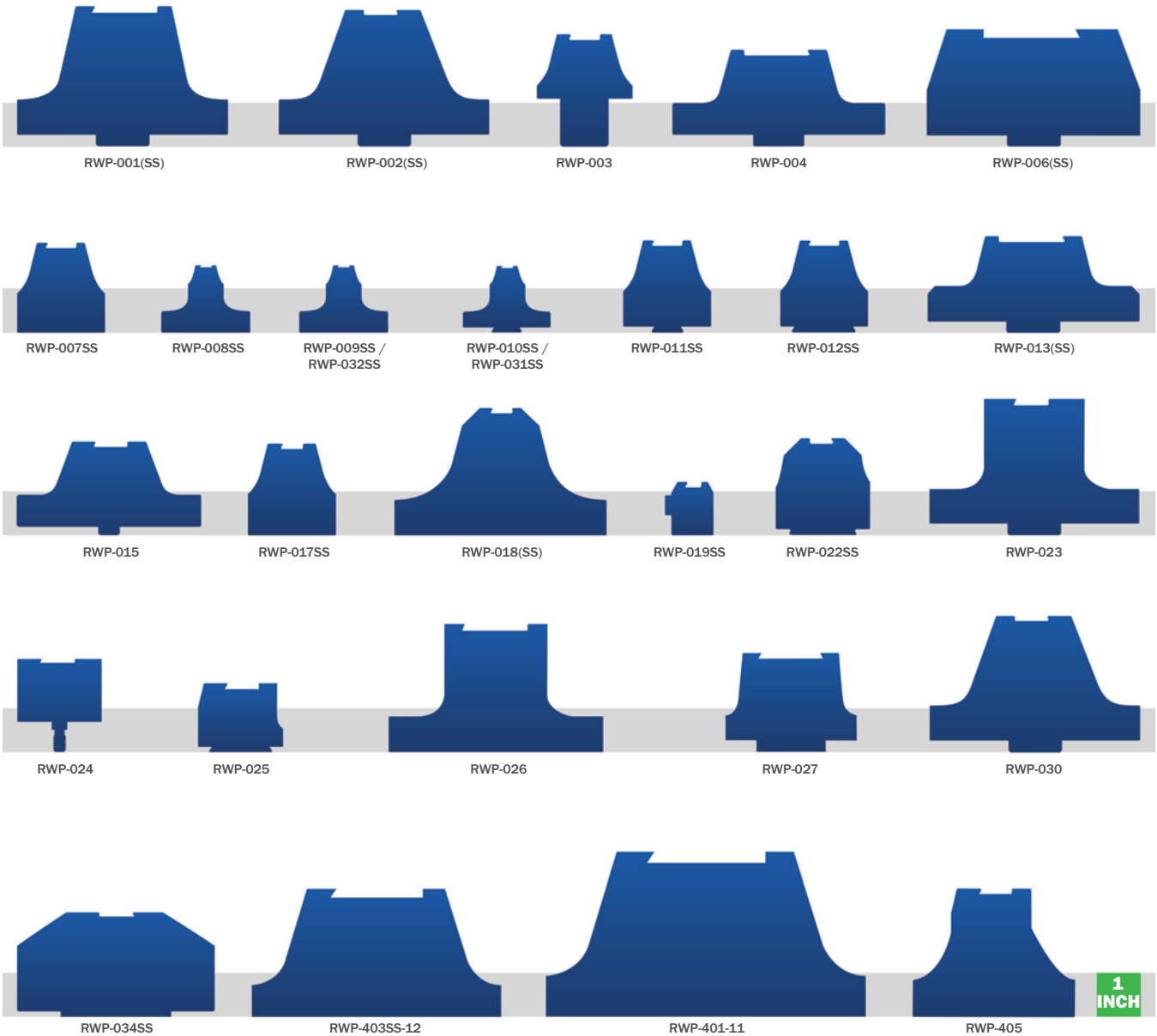


For maximum rigidity, datum -A- needs to contact top surface of fixture.

Torque bolts to 120-175 inch pounds

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.



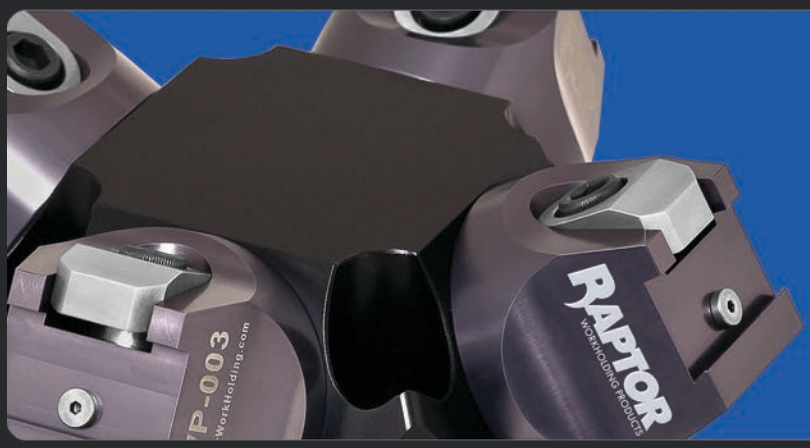


Similar-sized fixtures omitted for clarity.

818-841-1785



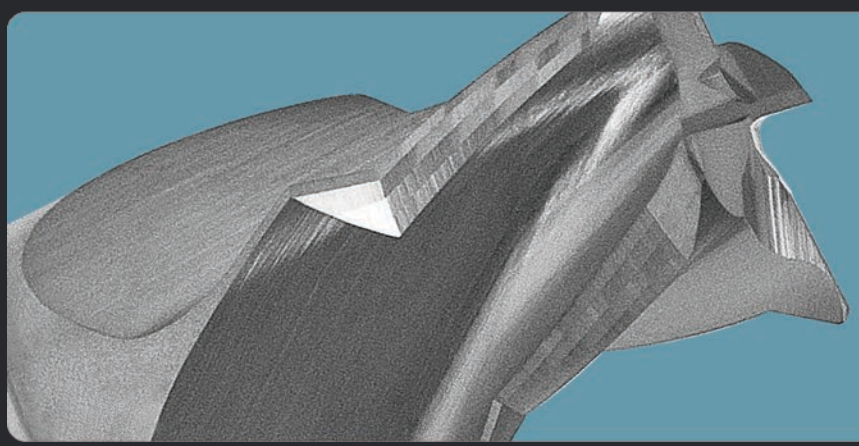
DOVETAIL FIXTURES



MULTI-FIXTURES



ADAPTERS, RISERS, CONNECTORS & EXTENDERS



CUTTERS & PARTS

2.75” DOVETAIL FIXTURE

RWP-403SS-12

Stainless Steel 2.75” Dovetail Fixture

$5,750.00



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 Part Number	RWP-CL3001SQ
Dovetail Height	0.25” / 6.35mm
Dovetail Width	2.75” / 69.85mm
Fixture Height	3.875” / 98.425mm

2.25” DOVETAIL FIXTURES

RWP-006

Aluminum 2.25” Dovetail Fixture

$1,050.00



Max Workpiece Weight	80 Pounds / 36.287 kg
Max Workpiece Size	10.0”L x 8.0”W x 10.0”H 254mm x 203.2mm x 254mm
Fixture Material	7075-T6511 Aluminum

RWP-006SS

Aluminum 2.25” Dovetail Fixture

$2,100.00

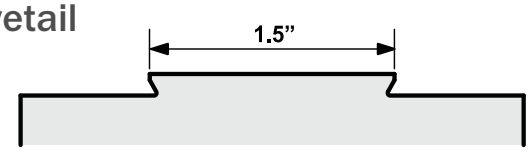


Max Workpiece Weight	168 Pounds / 76.203 kg
Max Workpiece Size	12.0” / 304.8mm Cubed
Fixture Material	17-4 Stainless Steel

Number of Clamps	2 Clamps
Clamp Part Number	RWP-CL303SQ
Dovetail Height	0.1875” / 4.7625mm
Dovetail Width	2.25” / 57.15mm
Fixture Height	2.50” / 63.5mm

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

$675.00



Max Workpiece Weight	30 Pounds / 13.607 kg
Max Workpiece Size	6.75” / 171.45mm Cubed
Number of Clamps	2 Clamps
Clamp Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	3.0” / 76.2mm

Fixture Material 7075-T6511 Aluminum

RWP-001SS

Stainless Steel 1.5” Dovetail Fixture

$1,250.00



Fixture Material 17-4 Stainless Steel

RWP-004

Aluminum 1.5” Dovetail Fixture

$575.00

This fixture is designed to connect directly to the Mori Seiki MNV3000. 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 Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	2.0” / 50.8mm



RWP-013

Aluminum 1.5” Dovetail Fixture

$675.00



Max Workpiece Weight	30 Pounds /13.607 kg
Max Workpiece Size	6.75” / 171.45mm Cubed
Number of Clamps	2 Clamps
Clamp Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	2.0” / 50.8mm

Fixture Material 7075-T6511 Aluminum

RWP-013SS

Stainless Steel 1.5” Dovetail Fixture

$1,250.00



Fixture Material 17-4 Stainless Steel

RWP-026

Aluminum 1.5” Dovetail Fixture Base with 4 Holes and 4” Diameter Bolt Circle

$675.00

Made for tombstones with a 2.0” x 2.0” hole pattern or 4.0 bolt circle - without a boss or plug.

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 Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	3.0” / 76.2mm



RWP-027

Aluminum 1.5” Dovetail Fixture

$625.00

This fixture is designed to connect directly to the Yukiwa TNT-130L. It can also be utilized in other machines when connected with an adapter or riser.

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 Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	2.0” / 50.8mm



RWP-036SS

Stainless Steel 1.5” Dovetail Fixture

$1,250.00

Fixture Material	17-4 Stainless Steel
Number of Clamps	2
Clamp Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	2.0” / 50.8mm

This product is designed to mount directly with the KME 135mm pallet used in the following KME products:

5 Axis Tombstones:	5 Axis Trunnions:
KME-TS300-2.0 300mm	KME-TR100
KME-TS400-4.0 400mm	KME-TR200
KME-TS500-4.0 500mm	KME-TR300



RWP-401-11

Aluminum 1.5” Rail Dovetail Fixture

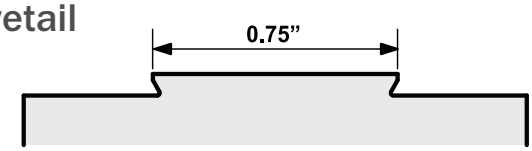
$2,500.00

Max Workpiece Weight	140 Pounds / 63.502 kg
Max Workpiece Size	17.0”L x 7.0”W x 12.0”H / 431.8mm x 177.8mm x 304.8mm
Fixture Material	7075-T6511 Aluminum
Number of Clamps	6
Clamp Part Number	RWP-CL301SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	1.5” / 38.1mm
Fixture Height	3.0” / 76.2mm



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

Aluminum 0.75” Dovetail Fixture

$675.00



Number of Clamps	2 Clamps
Clamp Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	3.0” / 76.2mm

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

RWP-002SS

Stainless Steel 0.75” Dovetail Fixture

$1,250.00



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

RWP-003

Aluminum 5C Collet Closer 0.75” Dovetail Fixture

$400.00

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
Clamp Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	1.50” / 38.1mm



RWP-007SS

Stainless Steel 0.75” Dovetail Fixture

$800.00

Connects directly to a 54mm System 3R pallet 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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.125” / 53.975mm



RWP-011SS

Stainless Steel 0.75” Dovetail Fixture with 0.75” Dovetail Bottom

$800.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.001” / 50.825mm



RWP-012SS

Stainless Steel 0.75” Dovetail Fixture with 1.5” Dovetail Bottom

$800.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.0” / 50.8mm



RWP-015

Aluminum 0.75” Dovetail Fixture

$500.00

This fixture is designed to connect directly to the Haas TR110/TRT100 Trunnion. 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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.0” / 50.8mm



RWP-023

Aluminum 0.75” Dovetail Fixture Base with 4 holes and 4” diameter bolt circle

$675.00

Made for Tombstones with a 2.0” X 2.0” Hole Pattern or 4.0 Bolt Circle - without a boss or plug.



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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	3.0” / 76.2mm

RWP-024

Aluminum 0.75” Dovetail Fixture

$345.00

Designed for modular applications. Multiple RWP-024 fixtures can be placed in-line to hold long parts.



Max Workpiece Weight	8 Pounds / 3.628kg
Max Workpiece Size	4.0” / 101.6mm Cubed
Fixture Material	7075-T6511 Aluminum
Number of Clamps	1
Clamp Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	1.5” / 38.1mm

RWP-025

Aluminum 0.75” Mini Rail Dovetail Fixture with 1.5” Dovetail Bottom

$645.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	1.5” / 38.1mm

RWP-030SS

Stainless Steel 0.75” Dovetail Fixture

$1,600.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	3.0” / 76.2mm



RWP-034SS

Stainless Steel 0.75” Dovetail Fixture

$1,600.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.0”



RWP-038SS

Stainless Steel 0.75” Dovetail Fixture

$975.00

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

Max Workpiece Weight	TRT100: 4 Lbs / Others: 12 Lbs
Max Workpiece Size	5” / 127 Cubed
Fixture Material	17-4 Stainless Steel
Number of Clamps	2
Clamp Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	1.3” / 33.02mm



RWP-405

Aluminum 8” Rail with 0.75” Dovetail

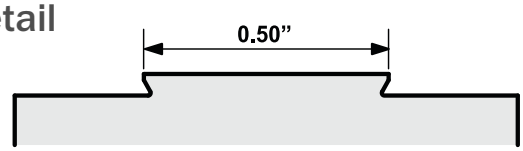
$1,625.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	3.0” / 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

$800.00

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 Part Number	RWP-CL306SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.50” / 12.7mm
Fixture Height	2.125” / 53.975mm



RWP-018

Aluminum 0.50” Dovetail Fixture

$675.00



Number of Clamps	2 Clamps
Clamp Part Number	RWP-CL306SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.50” / 12.7mm
Fixture Height	3.0” / 76.2mm

Max Workpiece Weight	10 Pounds / 4.535 kg
Max Workpiece Size	4.75” / 120.65mm Cubed
Fixture Material	7075-T6511 Aluminum

RWP-018SS

Stainless Steel 0.50” Dovetail Fixture

$1,250.00



Max Workpiece Weight	12 Pounds / 5.443 kg
Max Workpiece Size	5.0” / 127mm Cubed
Fixture Material	17-4 Stainless Steel

RWP-022SS

Stainless Steel 0.50” Dovetail Fixture with 1.5” Dovetail Bottom

$800.00

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

Max Workpiece Weight	6 Pounds / 2.721 kg
Max Workpiece Size	3.25” / 82.55mm Cubed
Fixture Material	17-4 Stainless Steel
Number of Clamps	1
Clamp Part Number	RWP-CL306SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.50” / 12.7mm
Fixture Height	2.0” / 50.8mm



0.375” DOVETAIL FIXTURE

RWP-019SS

Stainless Steel 0.375” Dovetail Fixture

$425.00

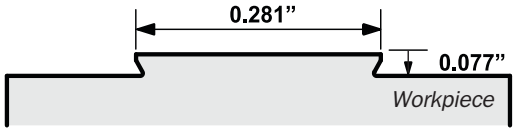
Modular capabilities when used with RWP-213SS or RWP-214SS, connecting to most 0.75” or 1.5” dovetail fixtures.

Max Workpiece Weight	2 Pounds / 0.907 kg
Max Workpiece Size	2.50” / 63.5mm Cubed
Fixture Material	17-4 Stainless Steel
Number of Clamps	1 Clamp
Clamp Part Number	RWP-CL305SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.375” / 9.525mm
Fixture Height	1.25” / 31.75mm



0.281” x 0.0781” DOVETAIL FIXTURES

The following fixtures are for parts using a dovetail width of 0.281 inches using a dovetail width of 0.281 inches These dovetail fixtures are available in multiple configurations.



RWP-031SS

Stainless Steel 0.281” Width x 0.0781” Height Dovetail Fixture with .075” Dovetail Bottom

$650.00

Designed to connect directly to the following 0.75” dovetail fixtures: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-024 and RWP-030SS. This allows you to quickly machine smaller size parts without taking your primary fixtures off of the machine.

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 Part Number	RWP-CL307SQ
Dovetail Height	0.0781” / 19.8374mm
Dovetail Width	0.281” / 7.137mm
Fixture Height	1.438” / 36.5252mm



This fixture replaces the discontinued RWP-010SS. Please contact us if you have any questions.

RWP-032SS

Stainless Steel 0.281” Width x 0.0781” Height Dovetail Fixture

$650.00

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 Part Number	RWP-CL307SQ
Dovetail Height	0.0781” / 19.8374mm
Dovetail Width	0.281” / 7.137mm
Fixture Height	1.563” / 39.700mm



This fixture replaces the discontinued RWP-009SS. Please contact us if you have any questions.

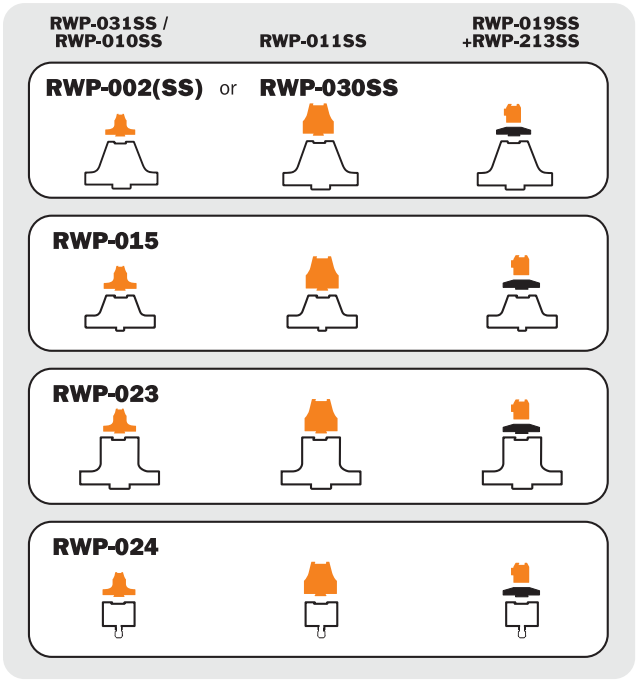
MODULAR FIXTURE COMPATABILITY

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

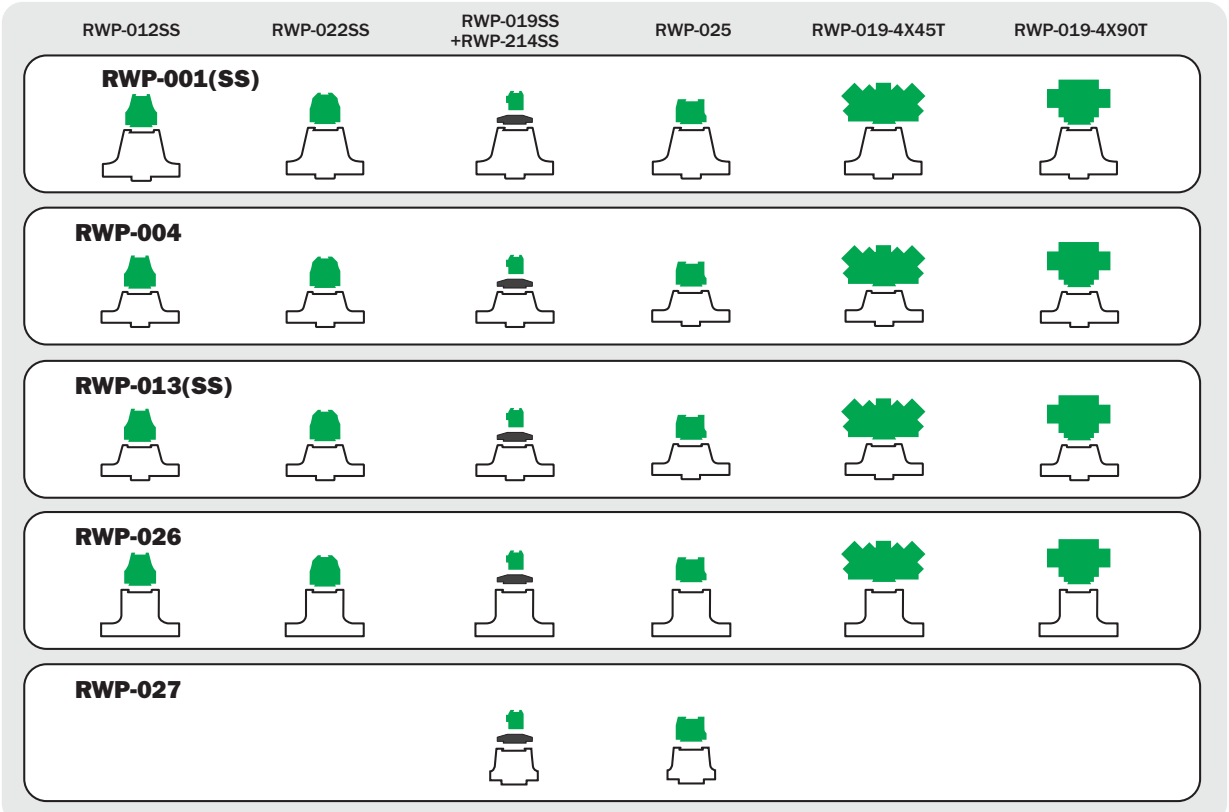
It's that easy. Spend time making parts, not figuring out how to hold them.



0.75" MODULAR CONFIGURATIONS

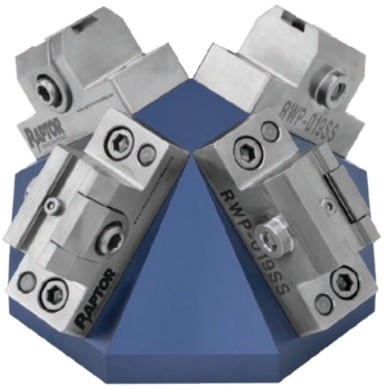


1.50" MODULAR CONFIGURATIONS



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

Auminum 0.75" Dovtail Fixture - The nest system holds 4 RWP-003 on a single base

$2,500.00

This Raptor Nest 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 Nest will mount to any of our standard adapters and risers.

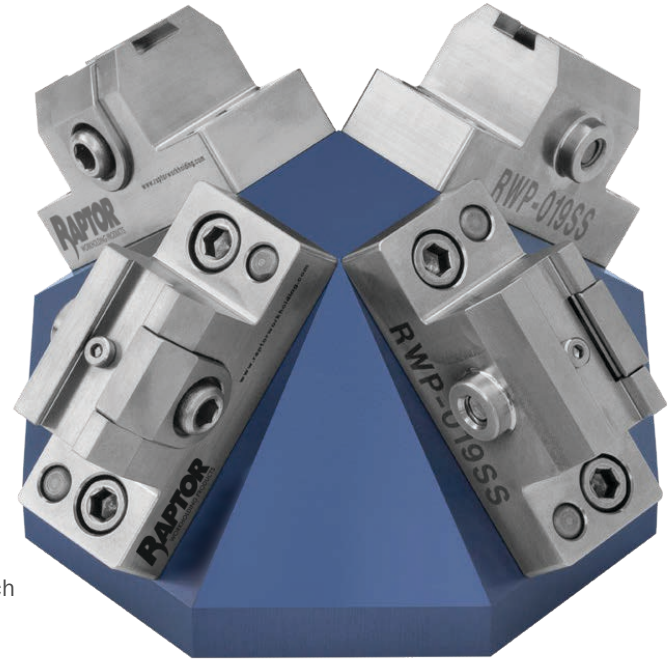


Max Workpiece Weight	3 Pounds / 1.360 kg Each
Max Workpiece Size	3.0" / 76.2mm Cubed Each
Fixture Material	7075-T6511 Aluminum
Number of Clamps	4 Clamps
Clamp Part Number	RWP-CL302SQ
Dovetail Height	0.125" / 3.175mm
Dovetail Width	0.75" / 19.05mm
Fixture Height	1.50" / 38.1mm

RWP-019-4X45T

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

$2,150.00



This Raptor Nest utilizes four included RWP-019SS 0.375” dovetail fixtures mounted at a 45 degree angle. This Raptor Nest 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 nest with your workpieces while the other one is cycling. Changeover time is reduced and the productivity of your machine is drastically increased.

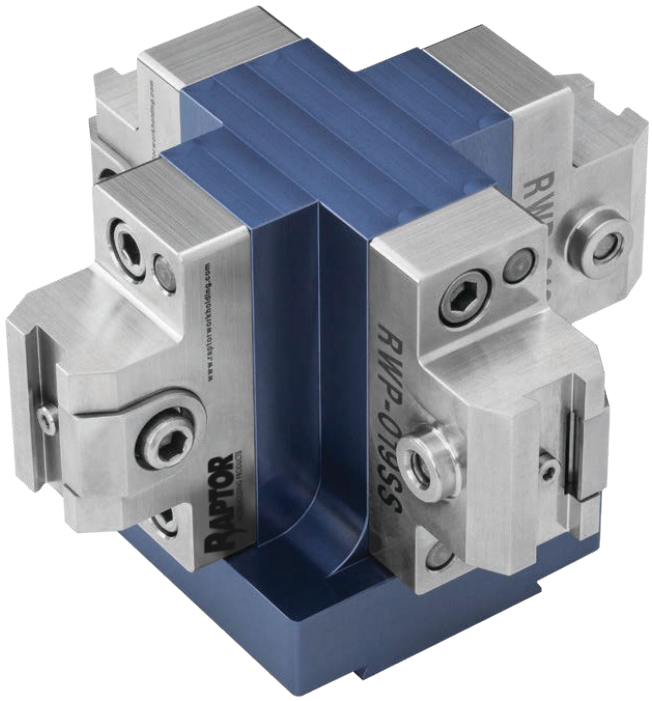
The RWP-019-4X45T Raptor Nest will mount to the following Raptor fixtures: RWP-001(SS), RWP-004, RWP-013(SS), or RWP-026

Max Workpiece Weight	2 Pounds / 0.907 kg Each
Max Workpiece Size	2.50” / 63.5mm Cubed Each
Fixture Material	17-4 Stainless Steel
Number of Clamps	4 Clamps
Clamp Part Number	RWP-CL305SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.375” / 9.525mm
Fixture Height	1.25” / 31.75mm

RWP-019-4X90T

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

$2,000.00



This Raptor Nest utilizes four included RWP-019SS 0.375” dovetail fixtures mounted at a 90 degree angle. This Raptor Nest 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 nest 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 Nest will mount to the following Raptor fixtures: RWP-001(SS), RWP-004, RWP-013(SS), or RWP-026

Max Workpiece Weight	2 Pounds / 0.907 kg Each
Max Workpiece Size	2.50” / 63.5mm Cubed Each
Fixture Material	17-4 Stainless Steel
Number of Clamps	4 Clamps
Clamp Part Number	RWP-CL305SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.375” / 9.525mm
Fixture Height	1.25” / 31.75mm

RWP-024-2XR

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

$950.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.875” / 73.025mm

	1 Workpiece (Total)	2 Workpieces (Each)
Max Workpiece Weight	16 Pounds / 7.257 kg	8 Pounds / 3.628 kg
Max Workpiece Size	8.5”L x 4.0”W x 4.0”H 215.9mm x 101.6mm x 101.6mm	4.0” / 101.6mm Cubed

RWP-024-3XR

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

$1,325.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.875” / 73.025mm

	1 Workpiece (Total)	3 Workpieces (Each)
Max Workpiece Weight	24 Pounds / 10.886 kg	8 Pounds / 3.628 kg
Max Workpiece Size	12.5”L x 4.0”W x 4.0”H 317.5mm x 101.6mm x 101.6mm	4.0” / 101.6mm Cubed

RWP-024-4XR

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

$1,705.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	2.875” / 73.025mm

	1 Workpiece (Total)	4 Workpieces (Each)
Max Workpiece Weight	32 Pounds / 14.514 kg	8 Pounds / 3.628 kg
Max Workpiece Size	16.5”L x 4.0”W x 4.0”H 419.1mm x 101.6mm x 101.6mm	4.0” / 101.6mm Cubed

RWP-024-6XC

Aluminum 0.75” Dovetail Fixture - 6 Fixture Carousel

$2,800.00

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 Part Number	RWP-CL302SQ
Dovetail Height	0.125” / 3.175mm
Dovetail Width	0.75” / 19.05mm
Fixture Height	1.5” / 38.1mm

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-201

Adapter for Mori Seiki NMV5000

$600.00



Enables compatible fixtures to be mounted on the Mori Seiki NMV5000.

Material	7075-T6511 Aluminum
Product Height	3.5”/ 88.9mm
Product Diameter	8.980” / 228.092mm
Bolt Circle Diameter	6.25” / 158.75mm
Connection Bolts	(4) 1/2” SHCS
Connects to	Mori Seiki NMV5000
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-202

Adapter for Haas TR210, HRT210 & HRC210

$500.00



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 / Plug	2.00” Dia x 0.375”
Connects to	Haas TR210, HRT210 & HRC210
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-203

Adapter for Haas Series: TR160 & HRT160

$500.00



Enables compatible fixtures to be mounted on the Haas Series: TR160 & HRT160.

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 / Plug	1.499” Dia x 0.313”
Connects to	Haas Series: TR160 & HRT160
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-205 / RWP-206

Riser for Mori Seiki NMV3000
(RWP-205 Metric Pallet / RWP-206 Inch Pallet)

$600.00



Enables compatible fixtures to be mounted on the Mori Seiki NMV3000.

Material	7075-T6511 Aluminum
Product Height	3.5” / 88.9mm
Product Diameter	8.980 / 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 / Plug	1.180” Dia x 0.250
Connects to	Mori Seiki NMV3000
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-207

Riser for Matsuura MAM 72-63V

$3,500.00



Enables compatible fixtures to be mounted on the Matsuura MAM 72-63V

Material	7075-T6511 Aluminum
Product Height	5.0”/ 127mm
Product Diameter	15.90” / 403.86mm
Bolt Circle Diameter	12.00” / 304.8mm
Connection Bolts	(4) 5/8” SHCS
Boss / Plug	1.995” Dia x 0.058”
Connects to	Matsuura MAM 72-63V
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-208

Aluminum Emergency Adapter

$275.00



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 / Plug	2.500” Dia x 0.780 optional plug
Connects to	Any Machine
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-209

Aluminum Emergency Adapter

$400.00



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 / Plug	2.500” Dia x 0.780 optional plug
Connects to	Any Machine
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-210

Riser for Mazak Variaxis 630

$3,500.00



The RWP-210 is a riser/adapter plate that enables the RWP-006 fixture to be mounted on the Mazak Variaxis 630.

Material	7075-T6511 Aluminum
Product Height	6.0” / 152.4mm
Product Diameter	15.90” / 403.86mm
Bolt Circle Diameter	3.937” / 100mm
Boss / Plug	1.97” Dia / 49.99 mm
Connects to	Mazak Variaxis 630
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-213SS

Stainless Steel 0.75” Adapter for RWP-019SS

$300.00



Fixture Compatibility	RWP-002(SS) RWP-015 RWP-023 RWP-024 RWP-030SS

Allows the RWP-019SS to be attached to any compatible fixtures.

Material	17-4 Stainless Steel
Height	0.5” / 12.7mm

RWP-214SS

Stainless Steel 1.5” Adapter for RWP-019SS

$300.00



Fixture Compatibility	RWP-001(SS) RWP-004 RWP-013(SS) RWP-026

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

Aluminum Universal Adapter 9.875" Diameter, 2" Height

$600.00

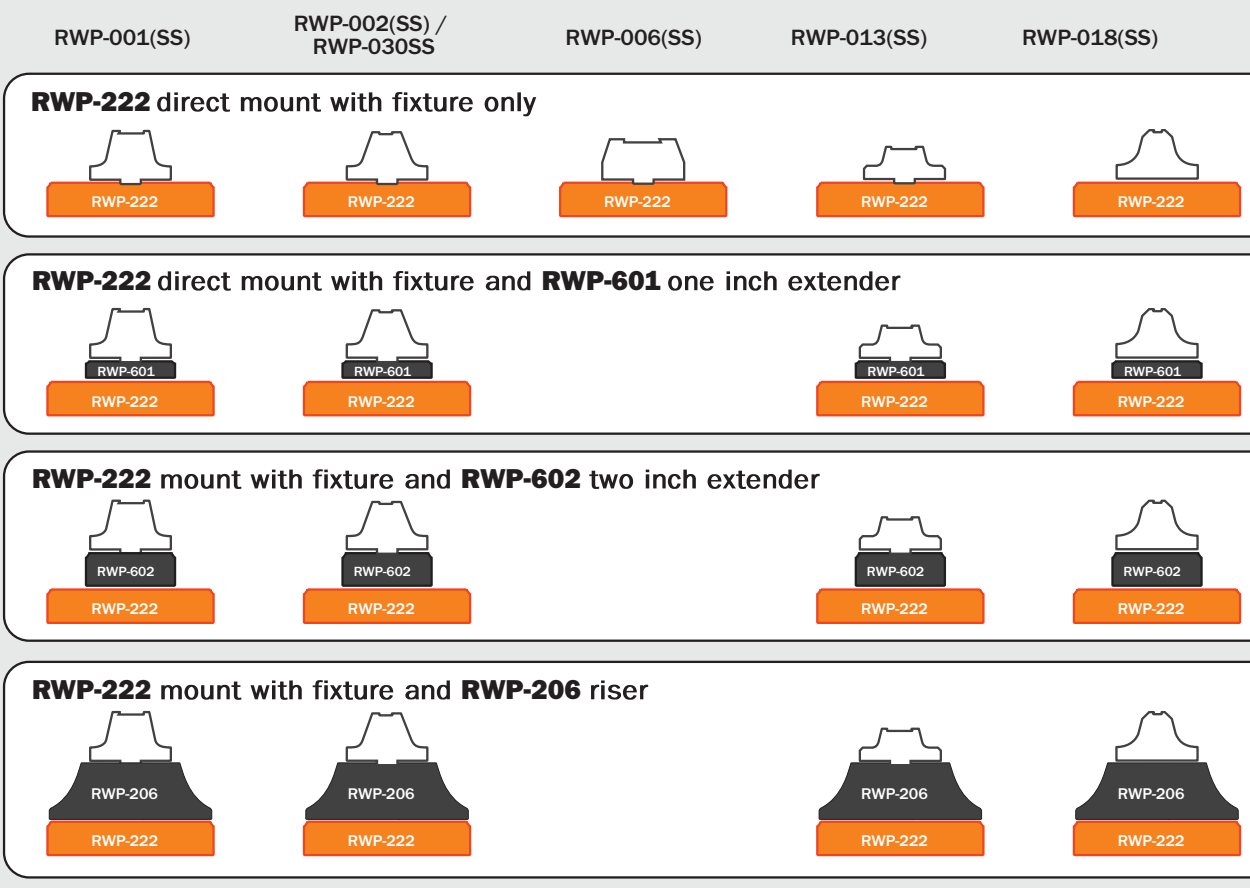


Has mutliple slots to allow for use on multiple machine pallets or rotary tables. This universal adapter is modular in design with many options

Material	7075 Aluminum, Anodized Type II
Product Height	2.0" / 50.8mm
Product Diameter	9.875" / 250.825mm
Bolt Circle Diameter	7.00" / 177.8mm T-Slots: 0.406"W x 4.45"L
Connection Bolts	(4) 1/2"-13 UNC-2B
Boss / Plug	1.00" Dia x 0.30" Receiving Hole
Connects to	RWP-206, RWP-601, RWP-602
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

*Centering plug required. Raptor's plug, sold separately, may need to be modified.

RWP-222 Universal Adapter Configuration Options



RWP-223

Aluminum Universal Adapter 11.95” Diameter, 2” Height

$850.00

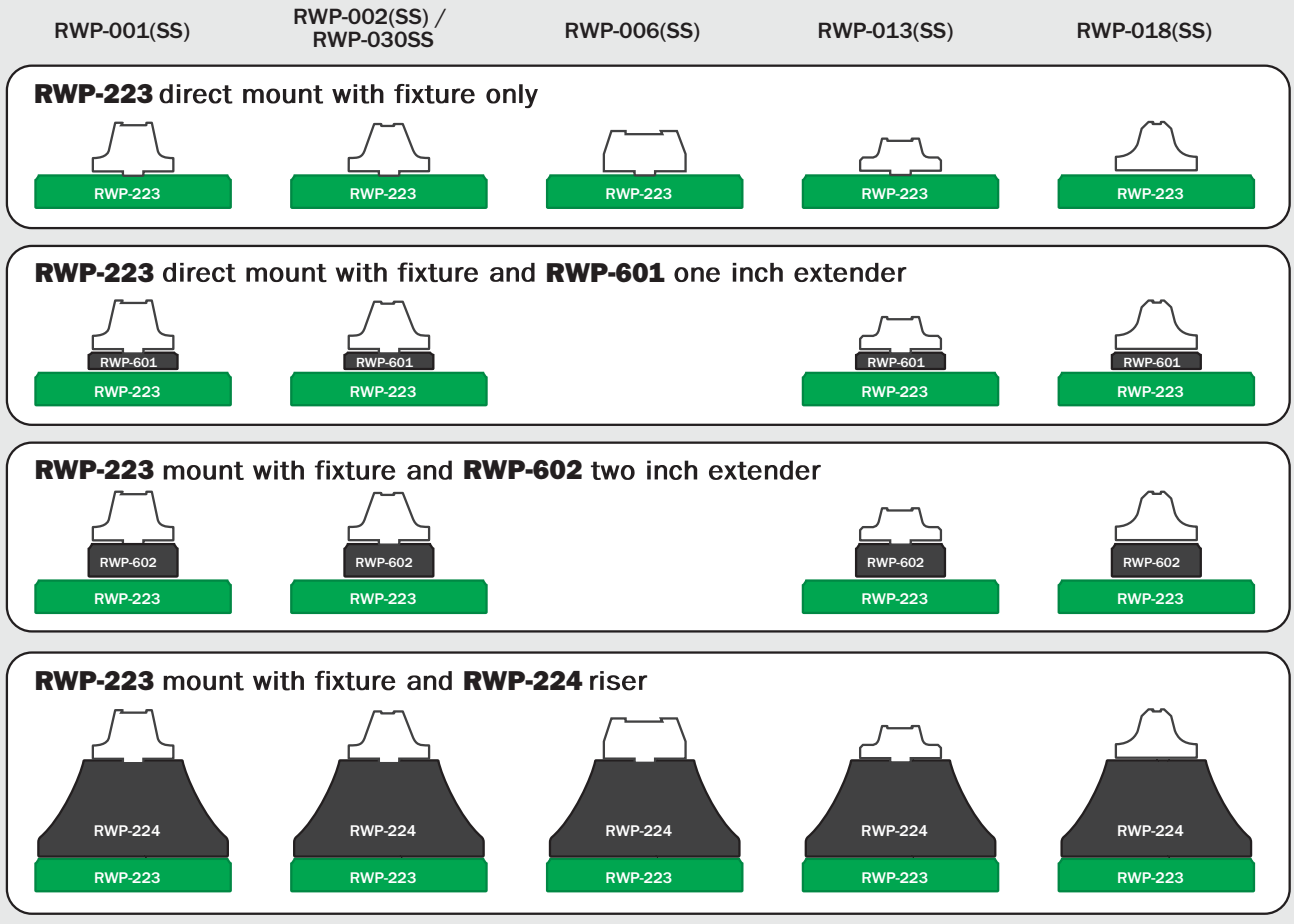


Has multiple slots to allow for use on multiple machine pallets or rotary tables. This universal adapter is modular in design with many options

Material	7075 Aluminum, Anodized Type II Class 2
Product Height	2.0” / 50.8mm
Product Diameter	11.950” / 303.53mm
Bolt Circle Diameter	10.150” / 257.81mm T-Slots: 0.53”W x 5”L
Connection Bolts	(4) 1/2”-13 UNC-2B
Boss / Plug	1.250” Dia x 0.30” Receiving Hole
Connects to	RWP-224, RWP-601, RWP-602
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS,

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

RWP-223 Universal Adapter Configuration Options



RWP-224

Aluminum Riser

$2,750.00



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 / Plug	1.00” Dia. X 0.30” Receiving Hole
Connects to	Any Machine, RWP-223
Fixture Compatibility	RWP–001(SS), RWP-002(SS), RWP-003-4X, RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-228

Aluminum Riser DMG Mori DMU50/50eco

$600.00



The RWP-228 is a riser/adapter plate that 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 / Plug	1.180” Dia x 0.25
Connects to	DMG Mori DMU50/50eco
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-234

Riser for Haas UMC-750 and UMC-750SS

$1,925.00



Enables compatible fixtures to be mounted on the Haas UMC-750 and UMC-750SS

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 / Plug	1.970” Dia. x 0.75
Connects to	Haas UMC-750 and UMC-750SS
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-003-4X, RWP-006(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-237

Aluminum Nest Riser

$4,000.00

The RWP-237 is an aluminum Nest riser, designed for the Haas UMC-750/UMC-750SS; base diameter 14.75” and is 6.5” high.



Material	7075-T6511 Aluminum
Product Height	6.550” / 166.37mm
Product Diameter	14.75” / 374.65mm
Bolt Circle Diameter	13.20” / 335.28mm
Connection Bolts	(8) 1/2” SHCS
Boss / Plug	1.970 Dia x 0.75
Connects to	Haas UMC-750 and UMC-750SS
Fixture Compatibility	RWP-001(SS), RWP-002(SS), RWP-013(SS), RWP-018(SS), RWP-030SS

RWP-238-8

Adapter 8 Thread

$550.00

Aluminum Adapter for RWP-003 5C Rotary Indexer Spindle Nose 8TPI



Material	7075 Aluminum
Machine Type	5C Rotary Indexer
Connects to	RWP-003

RWP-238-10

Adapter 10 Thread

$550.00

Aluminum Adapter for RWP-003 5C Rotary Indexer Spindle Nose 10TPI



RWP-601

Aluminum Extender 1” Height

$450.00

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
Fixture Compatibility	RWP-001(SS) RWP-002(SS) RWP-013(33) RWP-018(SS) RWP-030(SS)

RWP-602

Aluminum Extender 2” Height

$500.00

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





NEED DOVETAIL CUTTERS?

We have a solution for that too. Our dovetail cutters are available in a variety of dovetail heights and diameters depending on your need. 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.

RWP-DC403U
3 Flute Uncoated 0.75" Diameter
0.125" High Dovetail Cutter
$155.00

RWP-DC404C
4 Flute Coated 0.75" Diameter
0.125" High Dovetail Cutter
$162.00

RWP-DC405C
4 Flute Coated 0.248" Diameter
0.0469" High Dovetail Cutter
$92.00

RWP-DC407C
4 Flute Coated 0.35" Diameter
0.125" High Dovetail Cutter
$120.00

RWP-DC408C
4 Flute Coated 0.45" Diameter
0.125" High Dovetail Cutter
$132.00

RWP-DC409C
4 Flute Coated 0.248" Diameter
0.0781" High Dovetail Cutter
$92.00

RPM & Feed Rates for RWP Dovetail Cutters

Workpiece Material	Cutting Speed	1/4" Dia.	3/8" Dia.	1/2" Dia.	3/4" Dia.
Aluminum	1600 - 2000	.0025	.0045	.006	.0075
Gray Cast Iron	490 - 590	.0008	.0012	.0018	.0024
Soft Steels > 35Rc	295 - 390	.0008	.0012	.0018	.0024
Alloy steels 4130-4340	250 - 450	.0016	.0025	.0031	.0037
Tool Steels A2, D2, S7	150 - 300	.0014	.0020	.0025	.0032
Die Steels P20, H13	250 - 450	.0016	.0025	.0031	.0037
SS 303	290 - 375	.0008	.0012	.0018	.0024
SS 304, Invar, Kovar	230 - 280	.0007	.0011	.0017	.0023
SS 304L, 316L, 13-8Ph, etc.	295 - 360	.0006	.0010	.0016	.0022
Titanium 6AlV4, 6-2222	160 - 230	.0006	.0011	.0014	.0022
High Temperature Alloys 718 Inconel, A286, Haynes	80 - 120	.0006	.0011	.0014	.0022

Notice: We have provided the manufacturer's recommended Speeds & Feeds Guidelines for our Raptor Dovetail Cutters. Raptor suggests that machinists consider their experience and their machining style (conservative or aggressive) as well as the type of machine being used and the material type being cut, and then make necessary adjustments using their best judgement taking into consideration all of the variables in the machining process.

REPLACEMENT CLAMP KITS



RWP-KIT-301SQ

Replacement Clamp Kit

$185.00

Fixture Compatibility RWP-001(SS), RWP-004, RWP-013(SS), RWP-026, RWP-027, RWP-036SS, RWP-401-11

RWP-KIT-302SQ

Replacement Clamp Kit

$185.00

Fixture Compatibility RWP-002(SS), RWP-003, RWP-003-4X, RWP-007SS, RWP-011SS, RWP-012SS, RWP-015, RWP-023, RWP-024, RWP-024-2XR, RWP-024-3XR, RWP-024-4XR, RWP-024-6XC, RWP-025, RWP-030SS, RWP-034SS, RWP-038SS, RWP-405

RWP-KIT-303SQ

Replacement Clamp Kit

$442.00

Fixture Compatibility RWP-006(SS)

RWP-KIT-304SQ

Replacement Clamp Kit

$180.00

Fixture Compatibility RWP-008SS, RWP-009SS, RWP-010SS

RWP-KIT-305SQ

Replacement Clamp Kit

$180.00

Fixture Compatibility RWP-019SS, RWP-019-4X45T, RWP-019-4X90T

RWP-KIT-306SQ

Replacement Clamp Kit

$185.00

Fixture Compatibility RWP-017SS, RWP-018(SS), RWP-022SS

RWP-KIT-307SQ

Replacement Clamp Kit

$180.00

Fixture Compatibility RWP-031SS, RWP-032SS

RWP-8-32

8/32 x 1/4 Replacement Locating Pins

$5.00

These replacement locating pins are for all Raptor Fixtures except the RWP-019SS.
Five replacement pins per pack.



RWP-8-32M0

8/32 x 8/32 x .165 Replacement Locating Pins

$25.00

These replacement locating pins are for the RWP-019SS only.
Five replacement pins per pack.



RWP-PLUG-208

RWP-208 Plug with One Screw

$33.00

Plug comes in standard size. Plug O.D. will need to be shaped to fit the hole size of each related machine or rotary table to which that item is being connected

Compatibility RWP-018, RWP-208, RWP-209, RWP-222, RWP-223



RWP-PLUG-208SS

RWP-208SS Plug with One Screw

$63.00

Plug comes in standard size. Plug O.D. will need to be shaped to fit the hole size of each related machine or rotary table to which that item is being connected

Compatibility RWP-018SS



RWP-AIR-501

Air Manifold

$195.00

This air manifold will mount to any manufacturing machine in your shop where you need to use compressed air.

Manifold Measurements
L x 3.00" x W 1.500" H x 5.00"



Connection Components shown are not 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.

RAPTOR
WORKHOLDING PRODUCTS

RaptorWorkholding.com

Patent No. US8,672,310 B2
Patent No. US9,126,299 B2

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