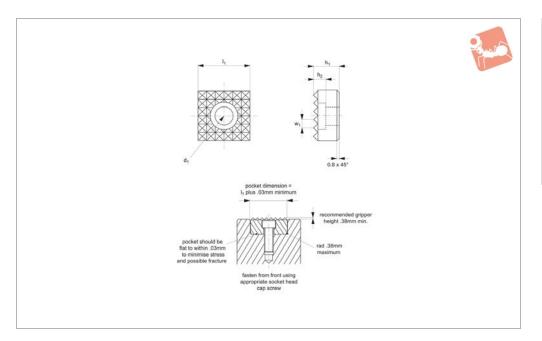


## **Grippers - Hard Tool Steel** square - front fixing





35490

#### Material

M2 tungsten-molybdenum high-speed steel, hardened to HRc 60-62.

#### **Technical Notes**

These hardened steel gripping pads press down onto the surface of the clamped

workpiece for safe holding without distortion. They are especially suitable where a high load or clamping force is applied. They can be built into clamps, stops and fixtures as well as chucks, vices and robotic grippers for extra grip.

#### Tips

Can be fastened from the front using a socket head cap screw.

Note installation recommendations in technical diagram.

Order No.	Tooth pattern	+0.00 -0.13	d <sub>1</sub> to fit DIN 912	h <sub>1</sub> +0.00 -0.13	h <sub>2</sub>	$w_1$
35490.W0001	Fine	12	M 4	10	5.6	3,2x90°
35490.W0002	Fine	12	M 4	12	5.6	3,2x90°
35490.W0003	Fine	20	M 5	10	6.6	3,2x90°
35490.W0004	Fine	20	M 5	12	6.6	3,2x90°
35490.W0005	Fine	25	M 6	10	7.6	3,2x90°
35490.W0006	Fine	25	M 6	12	7.6	3,2x90°
35490.W0161	Fine	16	M 4	10	5.6	3,2x90°
35490.W0162	Fine	16	M 4	12	5.6	3,2x90°



## 35300 - 35980 **Positioning Elements**

### **Carbide & Hardened Steel Grippers & Inserts**





Grippers enhance workholding for multiple machining operations.



Grippers increase handling capability.

#### Pads and Gripper Options

#### **Pads**



**Solid Carbide** High impact carbide pads, can be brazed or bonded into place.



**Carbide Tipped** Constructed with high impact carbide pad brazed to a heat treated alloy steel body. Mount via tapped hole or a flat on the outside diameter for set screw mounting.



**Hardened Steel** Made from 8620 steel, carburized and hardened to Rc 58/60 1.2mm with black oxide finish. Mount via tapped or counter bored hole.



Thermoplast Made from white thermoplast. Mount via tapped or counter bored hole.

Non-marking



Pad from 17-4 stainless steel, hardened to Rc 43/46. Mount via tapped or counter bored hole.

**Stainless Steel** 



**Abrasive Diamond Surface** Abrasive surface permanently fused to a 17-4 stainless steel pad, hardened to Rc 43/46. The surface texture is comparable to a 100 grit abrasive. Mount via tapped or counter bored hole.



**Soft Urethane Surface** Urethane surface is permanently bonded to a 300 series stainless steel pad. The urethane provides excellent protection against damage on delicate work surfaces. Tapped hole mounting.

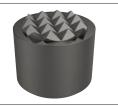
# see our website for our full range: wixroyd.com

#### **Grippers**



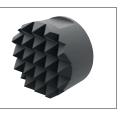
**High Speed Tool Steel** Manufactured from M-2

high speed tool steel, hardened to Rc 60/62 with black oxide finish. Mount via tapped hole, counter bored hole or a flat on the outside diameter for set screw mounting.



**Carbide Tipped** 

Constructed with high impact carbide pad brazed to a heat treated alloy steel body. Mounts via tapped hole or a flat on the outside diameter for set screw mounting.



**Solid Carbide** 

Manufactured from high impact carbide in a solid gripper pad or as a solid gripper body with a threaded brazed-in steel insert. Mount via tapped hole or a flat on the outside diameter for set screw mounting.





## **Carbide & Hardened Steel Grippers & Inserts** technical information



#### **Tooth Pattern Specifications**



4 Point Smooth



 $x = 3.429 \times 90^{\circ}$ 



Fine  $x = 2.921 \times 90^{\circ}$ 



Straight  $x = 2.921 \times 90^{\circ}$ 



Angular straight  $x = 2.921 \times 90^{\circ}$ 



3 Point/90° straight  $x = 3.175 \times 90^{\circ}$ 

#### **Angular Grippers**

Our carbide and hardened steel grippers are available with a variety of tooth patterns, as specified on the product data tables.



Super Fine "SF"  $x = 1.600 \times 90^{\circ}$ 



Extra Fine "EF"  $x = 2.387 \times 90^{\circ}$ 



 $x = 3.175 \times 90^{\circ}$ 



Coarse  $x = 4.775 \times 90^{\circ}$ 



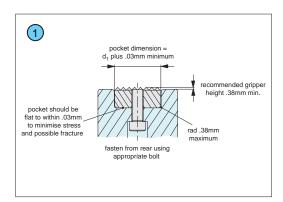
Single point  $x = 5.461 \times 90^{\circ}$ 

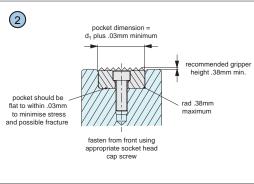


4 Point square  $x = 3.962 \times 90^{\circ}$ 

#### **Round/Square Grippers**

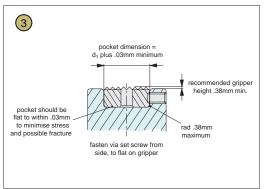
#### **Mounting options**



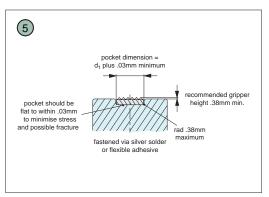


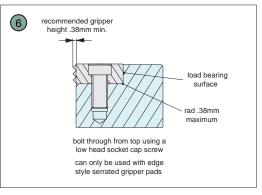
#### **Mounting Options** for Carbide and **Hardened Steel Grippers** and Inserts.

Our carbide grippers and inserts can be installed in a number of different ways, the most suitable mounting method depends upon the specific insert - please refer to the product data table for specific information.



- (4) pocket dimension = d<sub>1</sub> plus .03mm minimum recommended gripper height .38mm pocket should be flat to within .03mm to minimise stress rad 38mm and possible fracture differential screw from front or back utilising l.h. tapped hole in pocket
- Round or square grippers and rest pads with tapped blind-hole or through hole tap.
- 2 Round or square grippers and rest pads with counter-bored hole.
- 3 Round grippers with flat on the O.D. for set screw mounting. Also square gripper mounting.
- Round or square grippers with through tapped hole.
- Round or square carbide pads.
- Counter-bored edge grippers.







ov-W35300-A-T-W35520-A-T-technical-information-a-rnh - Updated - 28-10-2022





#### A Range of Specialist Gripping Pads to Suit Your Application

#### **Urethane Coated**



Unique urethane coat prevents marking of delicate components during machining or manipulation by robots. The urethane pad is permanently bonded to the stainless steel body of the gripping pad. With a bubbled texture, air is able to escape and hence avoid any suction action - enabling easy releasing of parts.

These are available in three different urethane durometers.





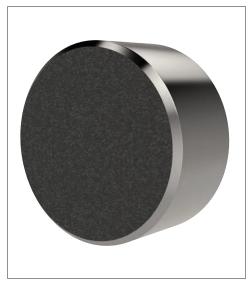


60 durometer: Car tyre



80 durometer: Skateboard wheel

#### **Abrasive Diamond Coated**



To improve handling of smooth or slippery components, with a minimum of clamping pressure, our abrasive diamond coated pads provide an excellent solution.

Diamond powders are permanently fused to a 17-4 stainless pad, to provide an abrasive surface comparable to 100 grit value.



Sandpaper of 100 grit texture

#### **Stainless Pads**



Pads of 17-4 Stainless, hardened to RC 43/46 provide solutions to applications where material selection is of greater importance; for example nuclear or food processing or pharmaceutical applications.

