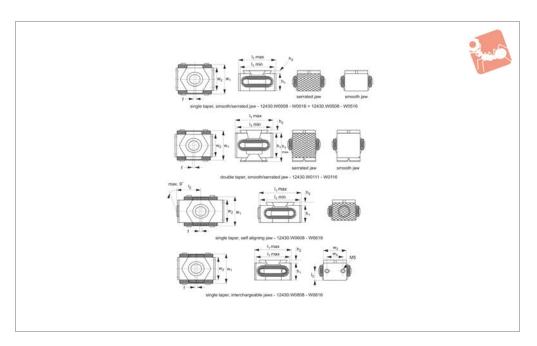


# **Taper Clamps** with downhold action







12430

#### Material

Body: tool steel, hardened, bright. Clamping segments: tool steel, hardened, ground and blackened. Spring: steel, screw grade 12,9.

#### **Technical Notes**

Ideal for horizontal or vertical clamping of multiple parts. Tighten the socket head cap screw to move clamping segments outwards to press the workpiece(s) against a fixed stop. Can be mounted in a threaded

hole or T-slot.

"f\*" is the float around the clamping screw centre

#### **Tips**

# Double taper clamps provide higher clamping force.

Taper clamps with interchangeable jaws are ideal where short runs of different parts are required. Economies can be achieved through changing only the jaw, rather than the whole clamp.

#### **Important Notes**

Jaw Hardness-12430.W0008 to .W0116: 48-52 HRC.

12430.W0608 and .W0616: X=30-34, Y=48-52 HRC.

12430.W0508 to .W0516 and 12430.W808 to .W0816: 30-34 HRC.

Taper surfaces ground, for increased precision.

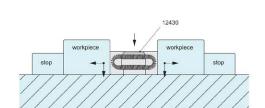
Order No.	Taper	Jaw type	l <sub>1</sub> min.	I <sub>1</sub> max.	l <sub>2</sub>	$d_1$	h <sub>1</sub>	h <sub>1</sub> max.	h <sub>2</sub>	$W_1$	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>	f max.	Clamping force kN max.	Torque to Nm max.	Weight g
12430.W0008	Single	Smooth	27	31		M 8	15		2,5	29	21			1	20	44	55
12430.W0009	Single	Serrated	27	31		M 8	15		2,5	29	21			1	20	44	55
12430.W0011	Single	Smooth	42	49		M12	22		4,0	41	30			2	30	85	180
12430.W0012	Single	Serrated	42	49		M12	22		4,0	41	30			2	30	85	180
12430.W0015	Single	Smooth	57	64		M16	29		5,0	56	42			3	50	210	465
12430.W0016	Single	Serrated	57	65		M16	29		5,0	56	42			3	50	210	465
12430.W0111	Double	Smooth	41	48		M12	30	36	5,0	41	30			2	50	85	275
12430.W0112	Double	Serrated	42	49		M12	30	36	5,0	41	30			2	50	85	275
12430.W0115	Double	Smooth	58	66		M16	42	50	5,0	56	52			3	80	210	730
12430.W0116	Double	Serrated	58	66		M16	42	50	5,0	56	52			3	80	210	730
12430.W0508	Single	Machinable	33	37		M 8	15		2,5	29	21			1	20	44	70
12430.W0512	Single	Machinable	52	59		M12	22		4,0	41	30			2	30	85	235
12430.W0516	Single	Machinable	67	75		M16	29		5,0	56	42			3	60	210	550
12430.W0608	Single	Self-Aligning	33	37	19,5	M 8	15		2,5	29	21		21,5	1	20	44	64
12430.W0616	Single	Self-Aligning	52	59	31,0	M12	22		4,0	41	30		34,5	2	30	85	212
12430.W0808	Single	Interchange	33	37	7,5	M 8	15		2,5	29	21	21	12	1	20	44	60
12430.W0812	Single	Interchange	46	53	11	M12	22		4,0	41	30	28	18	2	30	85	200
12430.W0816	Single	Interchange	61	69	14,5	M16	29		5,0	56	42	40	26	3	60	210	480





# Taper Clamps with downhold action



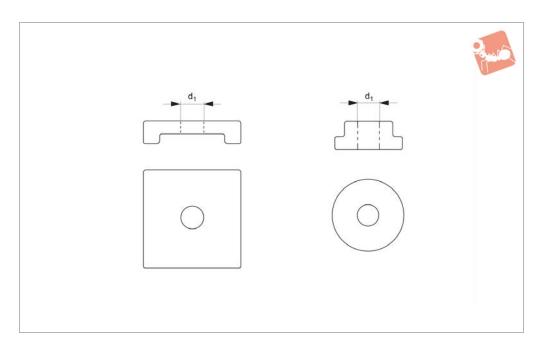








## Single Taper Adapter Set for 12430, 12440 and 12450





12432

#### Material

Fixing plate and bush: tool steel, hardened.

#### **Technical Notes**

With the adapter set a single taper clamp

can be adapted to act as a double taper clamp, i.e. to pull down components as well as clamp sideways. Simply invert your existing single taper models, fit the adapter set and clamp as normal.

#### **Important Notes**

For use with "single taper" clamps 12430, 12440 and 12450 only - not for use with "double taper" clamps.
Clamping screw not supplied.

Order No.	Description	To suit taper clamp of thread $\mathbf{d}_1$
12432.W0008	Single Taper Adapter Set	M 8
12432.W0012	Single Taper Adapter Set	M12
12432.W0016	Single Taper Adapter Set	M16



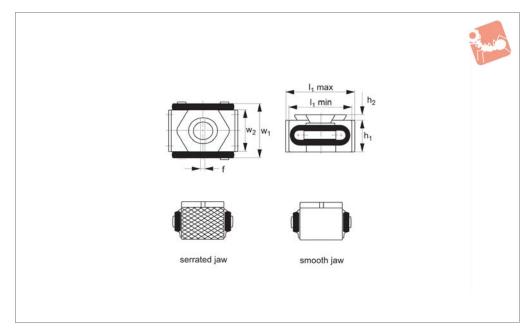
# Low Profile Side Clamping

## **Taper Clamps - Economy Version**





12440



#### Material

Body: tool steel, hardened, bright. Clamping segments: tool steel, hardened to 48-52 HRC, ground and blackened. Spring: rubber o-ring (12440.W0005) or steel (12440.W0008 and .W0009).

#### **Technical Notes**

Ideal for horizontal or vertical clamping of

multiple parts. Tighten the socket head cap screw to move clamping segements outwards to press the workpiece(s) against a fixed stop. Can be mounted in a threaded hole or T-slot.

"f\*" is the float around the clamping screw centre. Only bottom of jaw is ground.

#### Tips

 $\ensuremath{\mathsf{OK}}\textsc{-}\ensuremath{\mathsf{VISE}}$  is a registered trademark of  $\ensuremath{\mathsf{OK}}\textsc{-}\ensuremath{\mathsf{VISE}}$  OY.

For suitable T-nuts see no. 24000

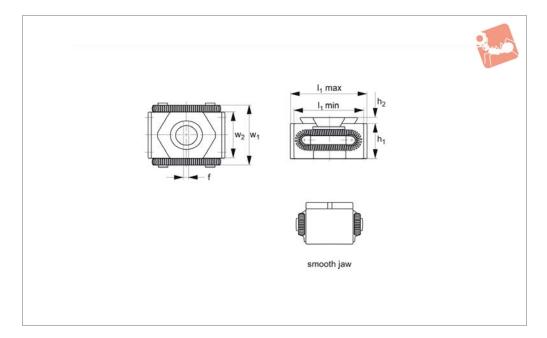
Order No.	Taper	Jaw type	l <sub>1</sub> min.	l <sub>1</sub> max.	$d_1$	h <sub>1</sub>	h <sub>2</sub>	$w_1$	w <sub>2</sub>	f max.	Clamping force kN max.	Torque to Nm max.	Weight g
12440.W0005	Single	Smooth	20	25	M 5	11	4.2	22	15	0.5	10	10	22
12440.W0008	Single	Serrated	28	32	M 8	15	4.0	29	21	1.0	15	25	55
12440.W0009	Single	Smooth	28	32	M 8	15	3.5	29	21	1.0	15	25	55





LOW PROFILE SIDE CLAMPING

### **Stainless Taper Clamps** stainless steel





12450

#### Material

Body: stainless steel. Clamping segment and spring: stainless steel.

#### **Technical Notes**

Ideal for wire EDM applications to clamp

multiple parts. Tighten the socket head cap screw to move clamping segements outwards to press the workpiece(s) against a fixed stop. Can be mounted in a threaded hole or T-slot.

"f\*" is the float around the clamping screw

centre. Only the bottom of jaw is ground.

OK-VISE is a registered trademark of OK-VISE OY.

Order No.	Taper	Jaw type	l <sub>1</sub> min.	l <sub>1</sub> max.	$d_1$	$h_1$	h <sub>2</sub>	$\mathbf{w}_1$	$w_2$	f max.	Clamping force kN	Torque to Nm	Weight g
											max.	max.	
12450.W0008	Single	Smooth	27	31	M 8	15	2.5	29	21	1.0	25	44	55



## **Single Taper Clamps**

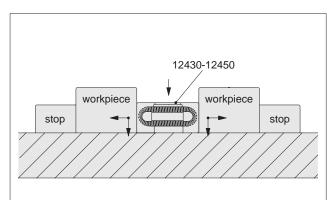
small but powerful



Our low-profile taper clamps can be used on stand alone machines just as successfully as on large, flexible manufacturing systems. Working on the principle that, when tightened, they expand to simultaneously pull down and clamp the workpiece against stops, preventing any movement or play, they can produce clamping forces of up to 150 kN. With faces hardened to 48-52 HRC they are ideal for a range of clamping applications.

#### **Operating Principle**

LOW PROFILE SIDE CLAMPING



When tightening the clamping screw, the clamp's tapers expand simultaneously, pushing components against the fixture stops as well as exerting a pull-down force, pulling components to the fixture base (double taper models only).

With excellent clamping forces of up to 150 kN, these clamps generate high enough forces for workpieces to be safely clamped.



#### Models Available



Single Taper Providing horizontal clamping forces, holding workpieces solidly in place.



Single Taper Adapter Set

Single taper clamps can be adapted to perform as a double taper model. Simply invert your existing single taper models, fit our adapter set and clamp as normal.



**Economy Model** 

When ultra precision and the highest clamping forces are not necessary, our economy models offer a cost-effective choice. Ground only on the bottom jaw of the clamp for a cost saving.



**Stainless Steel** 

Designed with the demands of wire EDM clamping applications in mind.



#### **Double Taper**

Horizontal clamping and pull-down action, ensuring full contact of workpiece with fixture base.

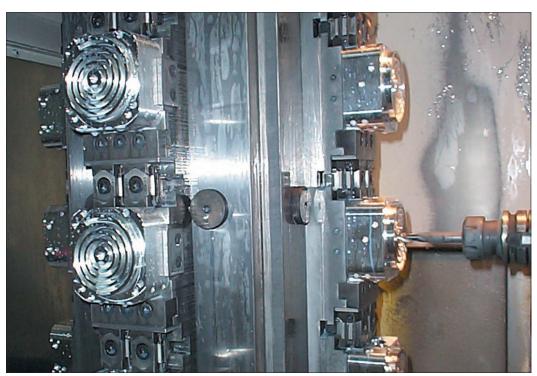


# **Single Taper Clamps**

small in size, yet big in clamping



- Compact with small clamping footprint for multi-component clamping.
- Powerful clamping, up to 150 kN.
- Low profile with no obstruction of tooling path.
- Maximum clamping stability.
- Pulls down and clamps.
- Quick set-up and clamping.
- Maximise workpieces per fixture.
- Enables three-dimensional machining of components in a single operation, improving accuracy and quality.



#### **Features**

#### **Benefits**

# Clamping Force (kN) 140 140 80 60 40 20 10 30 50 70 90 110 130 150 170 190 210 230 250 270 290 310 330 350 370 390

#### Horizontal Forces of Wixroyd Low Profile Clamps 12430 to 12450

Product no./graph key	Force up to (kN)
12440.W0005	10
12430.W0009	25
12430.W0508	20
12430.W0608	25
12440.W0008	25
12430.W0008	25
12440.W0009	25
12450.W0008	25
12430.W0808	25
12430.W0012	65
12430.W0512	55
12430.W0616	65
12430.W0011	65
12430.W0812	65
12430.W0112	90
12430.W0111	90
12430.W0016	110
12430.W0516	105
12430.W0015	110
12430.W0816	110
12430.W0116	150
12430.W0115	150



ov-W12111-A-T-eccentric-pull-down-clamping-screw-rnh - Updated -24-10-2022