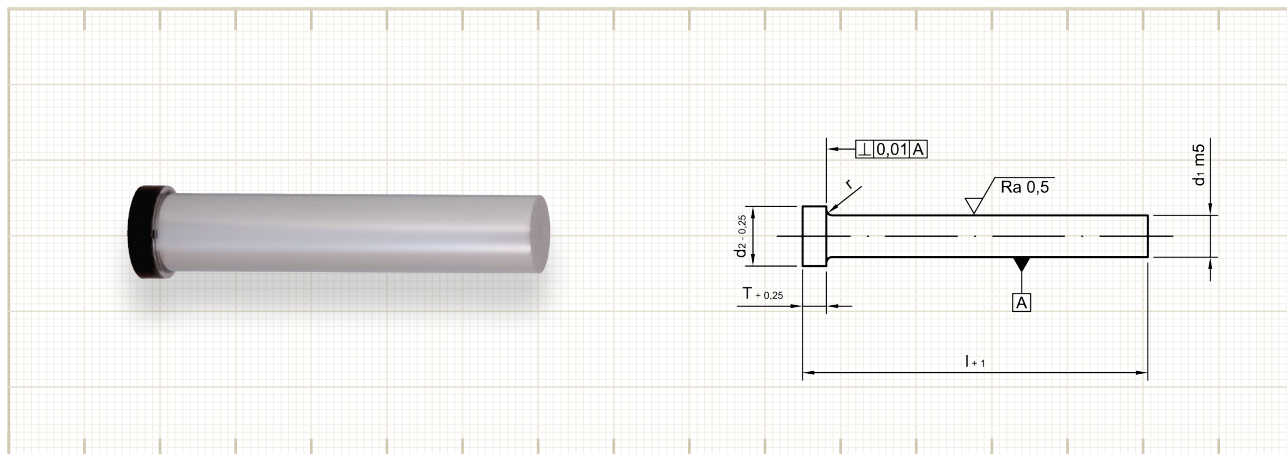


## Precizna izvedba rezilne igle s cilindričnima stblom in glavo, brušeno.

Precision designed Punch Cutting Pin with cylindrical shank and head, plunge cut ground.



### Obseg uporabe:

V rezilnih orodjih za rezanje lukenj v plošče (perforacija).

Dimenzije so prikazane v tabeli.

### Prileganje / Toleranca:

premer stebila  $d_1$ , dolžina  $l_1$

Ø	3	4+5+6	8+10	13+16	20+25	32
<b>M5</b>	+0,006	+0,009	+0,012	+0,015	+0,017	+0,020
	+0,002	+0,004	+0,006	+0,007	+0,008	+0,009

### Material:

**HWS** (visoko legirano orodno jeklo za delo v hladnem; vsebuje 12% kroma) / **HSS** (hitrorezno jeklo) / **HM** (karbidna kovina)

### Karakteristike:

**HWS:** visoka trpežnost, dolga življenjska doba

**HSS:** ekstremno visoka trpežnost, za materiale s katerimi se težko dela. Velika odpornost proti obrabi.

Visoka natezalna trdnost, visoka odpornost proti vročini.

Trdota	WS	HWS
Steblo	60 - 64	60 - 64
Glava	40 - 50	45 - 55

### Obdelava:

Kaljeno, popuščano, 60° stožčasta vroče kovana glava, naknadno brušeno po celotni dolžini, vključno z glavo.

### Range of application:

In cutting tools for cutting holes in the plate (perforation).

The dimensions are shown in the table.

### Fit / Tolerance:

Shank nominal diameter  $d_1$ , length  $l_1$

Ø	3	4+5+6	8+10	13+16	20+25	32
<b>M5</b>	+0,006	+0,009	+0,012	+0,015	+0,017	+0,020
	+0,002	+0,004	+0,006	+0,007	+0,008	+0,009

### Material:

**HWS:** High alloy cold working steel (approx. 12% Chrome) / **HSS** (HSS steel) / **HM** (hardmetal)

### Material properties:

**HWS:** High durability, long life

**HSS:** Extremely high durability for materials which are difficult to work with. High abrasion resistance. High tear strength, high heat resistance.

Hardness	WS	HWS
Shank	60 - 64	60 - 64
Head	40 - 50	45 - 55

### Finish:

A hardened, tempered, 60° conical hot forged head, subsequently ground along its entire length, including the head.

$\varnothing$ d1 m5	$\varnothing$ d2 <sup>-0,25</sup>	r <sup>±0,1</sup>	T <sub>+0,25</sub>	l <sub>+1</sub>						
				63	71	80	90	100	120	130
3	5	0,2	3	●	●	●	●	●		
4	6			●	●	●	●	●	●	
5	8	0,3	5	●	●	●	●	●	●	
6	9			●	●	●	●	●	●	
8	11			●	●	●	●	●	●	●
10	13			●	●	●	●	●	●	●
13	16	0,4		●	●	●	●	●	●	
16	19			●	●	●	●	●	●	
20	23			●	●	●	●	●		
25	28			●	●	●	●	●		
32	35			●	●	●	●	●		

**Opomba:** HSS igle so lahko na zahtevo prevlečene s posebno prevleko. Možne so tudi igle iz volfram karbida (hartmetall).

**Note:** HSS punch pins can be coated with a special coating upon request. Tungsten carbide (hartmetall) coating possible.