

BLANKS FOR COLD FORMING



HARDITALIA
your partner in hard metal
OMCD GROUP

GET MORE
IN LESS.
A FIRST RATE
PRODUCT
IN A VERY
SHORT TIME.



BEST QUALITY IN HARDMETAL ITEMS JUST IN TIME

We grant shipment within three weeks
for all kind of rough nibs.

Shorter delivery, on specific needs,
are possible thanks to our versatility.





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BLANKS FOR COLD FORMING

We offer the complete series of hard metal blanks for cold forming, from nibs to shears, supporting customers with technical help, high performance tungsten carbide grades and fast delivery.



**ROUGH NIBS
FOR DIES**



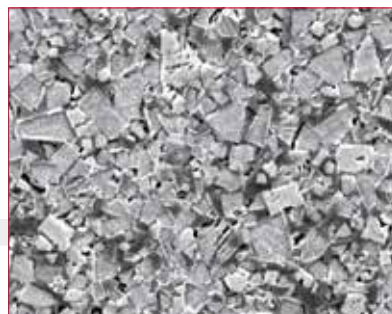
**ROUGH SEGMENTS
FOR DIES**



**WIRE
CUTTERS**



**PRE-SHAPED
SHEARS**



**HARD METAL
GRADES FOR DIES**

ROUGH NIBS FOR DIES

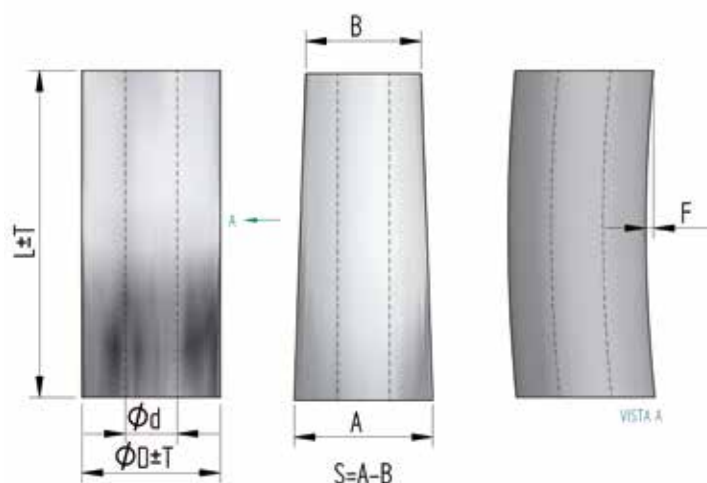
We manufacture nibs with cylindrical or shaped holes according to customer's needs. The pictures here below show the most common shapes we can produce.



The maximum dimensions that we can produce are: height 225 mm and outer diameter 212 mm. The minimum hole dimension changes according to the other sizes as shown in the table here below.

Ø Hole [mm]	L max [mm]
0.4	15
0.6	30
0.8	50
1	120
>3	225

Due to the combined effects of shrinkage and deformation during sintering it is not possible to produce rough items with hundredth tolerances. Here below it is shown the dimensional and geometric tolerances that we grant on our products. In order to compensate these tolerances it is needed some allowance on the rough pieces.



	Ø 10 - Ø 40	Ø 40 - Ø 100	> Ø 100
L <25	T ±0.15 F _{MAX} =0.1 S=0.1	T ±0.15 F _{MAX} =0.1 S=0.2	T ±0.2 F _{MAX} =0.2 S=0.2
L 25-50	T ±0.15 F _{MAX} =0.1 S=0.2	T ±0.15 F _{MAX} =0.15 S=0.2	T ±0.2 F _{MAX} =0.2 S=0.2
L 50-75	T ±0.15 F _{MAX} =0.2 S=0.25	T ±0.15 F _{MAX} =0.2 S=0.3	T ±0.2 F _{MAX} =0.2 S=0.3
L 75-100	T ±0.2 F _{MAX} =0.3 S=0.2	T ±0.2 F _{MAX} =0.2 S=0.3	T ±0.3 F _{MAX} =0.2 S=0.3
L 100-150	T ±0.2 F _{MAX} =0.3 S=0.2	T ±0.2 F _{MAX} =0.3 S=0.25	T ±0.3 F _{MAX} =0.3 S=0.3
L 150-200	T ±0.2 F _{MAX} =0.3 S=0.2	T ±0.2 F _{MAX} =0.3 S=0.25	T ±0.4 F _{MAX} =0.4 S=0.4
L >200	T ±0.2 F _{MAX} =0.4 S=0.2	T ±0.2 F _{MAX} =0.4 S=0.25	T ±0.5 F _{MAX} =0.5 S=0.5



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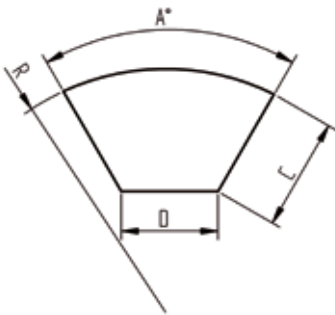
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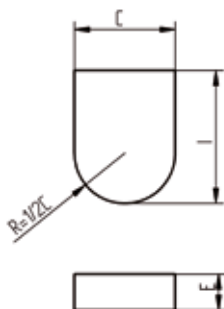
ROUGH SEGMENTS FOR DIES

We produce segments for modular dies, commonly segments are hexagonal (60°) but they can be with square shape (90°) or octagonal (40°). The usual length is between 20 and 25 mm but we can make them up to 100 mm.



WIRE CUTTERS

We design and produce rough wire cutters and pre-shaped ones. Here below are listed the measurements for rough shapes and some examples of pre shaped.



C	I	E
7.7	11.5	2.2
7.7	11.5	4.2
7.7	13.5	4.2
7.7	30.5	4.2
7.7	45.5	5.2
7.7	11.5	6.2
11.7	15.5	4.2
11.7	15.5	6.2
11.7	15.5	8.2
6.2	18.5	6.2
15.7	18.5	8.2



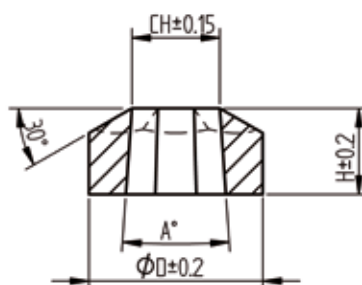
PRE-SHAPED SHEARS

We produce Hard Metal Shears both rough and finished. Here below are listed the Standard sizes with tolerances.

CH	A°	H	Ø D
6.65	6°	15.4	18.65
7.7	4°	14.6	19.65
9.7	4°	14.3	20.7
12.6	4°	16.6	26.6
12.6	6°	16.6	26.6
15.6	4°	17	32
16.6	4°	16.3	32.8
16.6	6°	16.3	32.8
17.6	4°	16.3	31.9
18.6	4°	16.3	35.8
21.5	6°	18.8	43.3
23.5	6°	17.3	42.5
29.5	6°	23.9	57
35.3	6°	26.4	65
35.3	12°	25.2	65

On customer's request we can supply finished shears, also with CVD coating. Here below are listed the standard sizes with tolerances.

Nominal key	Key	Key tolerances	D	H
8	7.83	+0.040/+0.098	15	6.6
10	9.78	+0.040/+0.098	17	7.5
11	10.73	+0.050/+0.120	18.5	8
12.7	12.42	+0.050/+0.120	22	10
13	12.73	+0.050/+0.120	22	10
16	15.73	+0.050/+0.120	27	12
17	16.73	+0.050/+0.120	29	10.5
18	17.73	+0.050/+0.120	32.5	12
19	18.67	+0.065/+0.149	32.5	12
22	21.67	+0.065/+0.149	37	12.5
24	23.67	+0.065/+0.149	40	13
30	29.72	+0.065/+0.149	52	15.1



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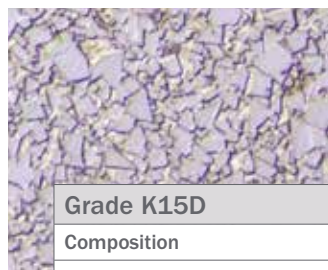
HARD METAL FOR DIES

**ISO
G30** ▶



K05C

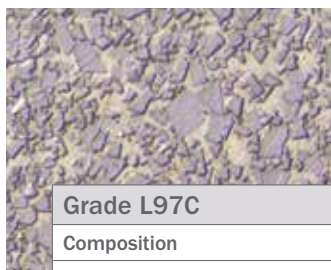
Grade K05C	
Composition	WC + Co
Grain	m-c
Vickers hardness	1050



K15D

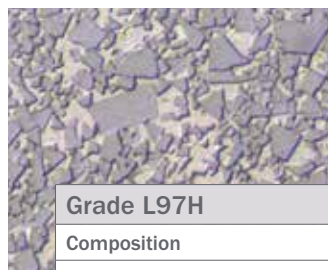
Grade K15D	
Composition	WC + Co
Grain	c
Vickers hardness	1150

**ISO
G40** ▶



L97C

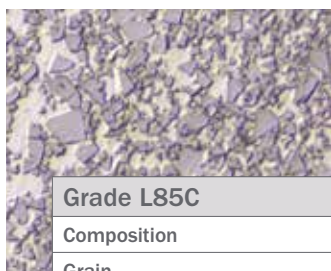
Grade L97C	
Composition	WC + Co
Grain	m-c
Vickers hardness	970



L97H

Grade L97H	
Composition	WC + Co
Grain	c
Vickers hardness	950

**ISO
G50** ▶



L85C

Grade L85C	
Composition	WC + Co
Grain	m-c
Vickers hardness	850



L85H

Grade L85H	
Composition	WC + Co
Grain	c
Vickers hardness	890

**ISO
G60** ▶



L78C

Grade L78C	
Composition	WC + Co
Grain	m-c
Vickers hardness	780



L78H

Grade L78H	
Composition	WC + Co
Grain	c
Vickers hardness	750

IN THE WORLD



Harditalia products are made in Italy and sold all over the world. Thanks to a combined network of direct sales, agents and resellers we can supply our products from Asia to America. A technician is always at the customer's disposal to discuss technical matters and suggest the best solutions.



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