




Tungsten Carbide Rods grinded/polished

Ø h6	length 75	length 100	length 330
1,0			
1,5			
2,0			
2,5			
3,0			
3,5			
4,0			
4,5			
5,0			
6,0			
7,0			
8,0			
9,0			
10,0			
11,0			
12,0			
13,0			
14,0			
15,0			
16,0			
17,0			
18,0			
19,0			
20,0			
21,0			
22,0			
23,0			
24,0			
25,0			

Grades:

GM 25 Micrograin

GM 20 Micrograin

G 2000

GN 20

GN 30

GN 40

Dimensions immediately available

Other diameters,
 tolerances and
 segments on
 short calls.

Lengths up to
 450 mm.

Subject to prior sale

all dimensions in millimeters



Tungsten Carbide Rods blank

\varnothing size are incl. min. allowance	length 75	length 100	length 330
1,7			
2,2			
2,7			
3,2			
3,7			
4,2			
4,7			
5,3			
6,3			
7,3			
8,3			
9,3			
10,3			
11,3			
12,3			
13,3			
14,3			
15,3			
16,3			
17,3			
18,3			
19,3			
20,3			
21,4			
22,3			
23,3			
24,3			
25,3			



Grades:

- GM 25 Micrograin
- GM 20 Micrograin
- G 2000
- GN 20
- GN 30
- GN 40

Dimensions immediately available

Other diameters
on request.

Segments on short
calls.

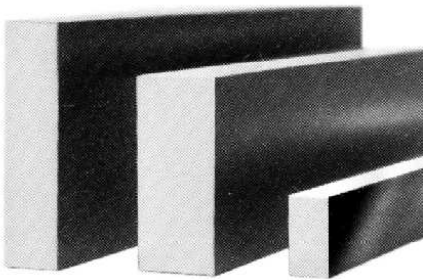
Lengths up to 450 mm.

Subject to prior sale

all dimensions in millimeters



Tungsten Carbide Bars blank

A x B x size are incl. min. allowance	length 75	length 100	length 330
1,2 x 2,2 x			A V A I L A B I L I T Y O N R E Q U E S T
1,2 x 4,3 x			
1,2 x 6,3 x			
1,7 x 6,3 x			
1,7 x 8,3 x			
1,7 x 16,3 x			
2,2 x 2,2 x			
2,2 x 3,2 x			
2,2 x 4,3 x			
2,2 x 5,3 x			
2,2 x 6,3 x			
2,2 x 8,3 x			
2,2 x 10,3 x			
2,2 x 12,3 x			
2,2 x 14,3 x			
2,2 x 16,3 x			
2,2 x 20,3 x			
2,2 x 25,3 x			
3,2 x 3,2 x			
3,2 x 4,3 x			
3,2 x 5,3 x			
3,2 x 6,3 x			
3,2 x 7,3 x			
3,2 x 8,3 x			
3,2 x 10,3 x			
3,2 x 12,3 x			
3,2 x 14,3 x			

Grades:

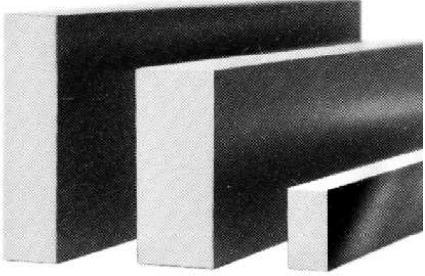
- GM 25 Micrograin
- GM 20 Micrograin
- G 2000
- GN 20
- GN 30
- GN 40

Dimensions immediately available

Variant dimensions,
segments and
grinded parts on
request.

Subject to prior sale

all dimensions in millimeters

A x B x size are incl. min. allowance	length 75	length 100	length 330
3,2 x 16,3 x			A V A I L A B I L I T Y O N R E Q U E S T
3,2 x 18,3 x			
3,2 x 20,3 x			
3,2 x 25,3 x			
3,2 x 30,3 x			
4,3 x 4,3 x			
4,3 x 5,3 x			
4,3 x 6,3 x			
4,3 x 8,3 x			
4,3 x 10,3 x			
4,3 x 12,3 x			
4,3 x 14,3 x			
4,3 x 16,3 x			
4,3 x 20,3 x			
4,3 x 30,3 x			
4,3 x 40,3 x			
5,3 x 5,3 x			
5,3 x 8,3 x			
5,3 x 10,3 x			
5,3 x 12,3 x			
5,3 x 14,3 x			
5,3 x 16,3 x			
5,3 x 18,3 x			
5,3 x 20,3 x			
5,3 x 25,3 x			
5,3 x 30,3 x			
6,3 x 6,3 x			
6,3 x 8,3 x			

Grades:

GM 25 Micrograin

GM 20 Micrograin

G 2000

GN 20

GN 30

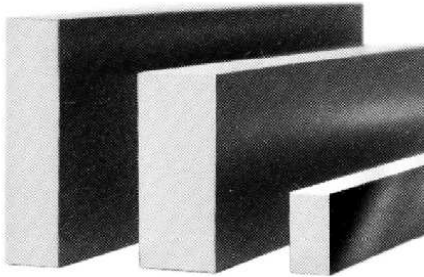
GN 40

Dimensions immediately available

**Variant dimen-
sions, segments
and grinded parts
on request.**

Subject to prior sale

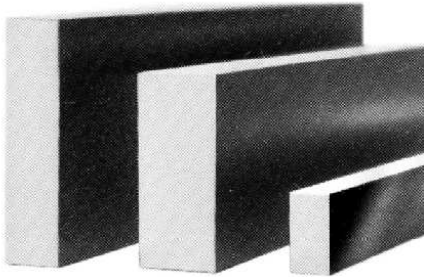
all dimensions in millimeters

A x B x size are incl. min. allowance	length 75	length 100	length 330
6,3 x 10,3 x	 <p>Grades:</p> <p>GM 25 Micrograin</p> <p>GM 20 Micrograin</p> <p>G 2000</p> <p>GN 20</p> <p>GN 30</p> <p>GN 40</p> <p>Dimensions immediately available</p>		<p>A V A I L A B I L I T Y O N R E Q U E S T</p>
6,3 x 12,3 x			
6,3 x 14,3 x			
6,3 x 16,3 x			
6,3 x 18,3 x			
6,3 x 20,3 x			
6,3 x 25,3 x			
6,3 x 30,3 x			
7,3 x 7,3 x			
7,3 x 10,3 x			
7,3 x 15,3 x			
7,3 x 18,3 x			
7,3 x 20,3 x			
7,3 x 25,3 x			
8,3 x 8,3 x			
8,3 x 10,3 x			
8,3 x 12,3 x			
8,3 x 14,3 x			
8,3 x 16,3 x			
8,3 x 18,3 x			
8,3 x 20,3 x			
8,3 x 25,3 x			
8,3 x 30,3 x			
9,3 x 10,3 x			
10,3 x 10,3 x			

Variant dimensions,
segments and
grinded parts on re-
quest.

Subject to prior sale

all dimensions in millimeters

A x B x size are incl. min. allowance	length 75	length 100	length 330
10,3 x 12,3 x			A V A I L A B I L I T Y O N R E Q U E S T
10,3 x 20,3 x			
10,3 x 25,3 x			
10,3 x 30,3 x			
12,3 x 12,3 x			
12,3 x 20,3 x			
12,3 x 25,3 x			
12,3 x 30,3 x			
13,3 x 13,3 x			
14,3 x 14,3 x			
14,2 x 20,4 x			
14,3 x 26,3 x			
15,3 x 15,3 x			
15,4 x 20,4 x			
15,4 x 30,4 x			
16,4 x 16,4 x			

Variant dimen-
sions, segments
and grinded parts
on request.

Subject to prior sale

all dimensions in millimeters



Tungsten Carbide Tubes grinded

Grades: GM 25 Micrograin, GM 20 Micrograin, G 2000

Ø	Ø ca. raw material	length
4,0 h6	0,6	330
4,0 n6	0,6	330
5,0 h6	0,6	330
5,0 n6	0,6	330
6,0 h6	0,8	330
6,0 n6	0,8	330
7,0 h6	0,8	330
7,0 n6	0,8	330
8,0 h6	1,2	330
8,0 n6	1,2	330
9,0 h6	1,5	330
9,0 n6	1,5	330
10,0 h6	1,5	330
10,0 n6	1,5	330
12,0 h6	3,0	330
12,0 n6	3,0	330
15,0 h6	4,0	330
15,0 n6	4,0	330
18,0 n6	6,0	330
20,0 n6	6,0	330
22,0 n6	6,0	330
25,0 n6	6,0	330

all dimensions in millimeters

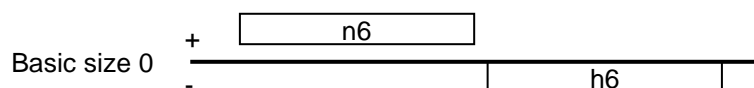


**All dimensions can be supplied
immediately from stock.**

One-off-production
Ø up to 50 mm, length up to 500 mm
on request.

Segments on short call.

Engineering change and prior sale
without notice

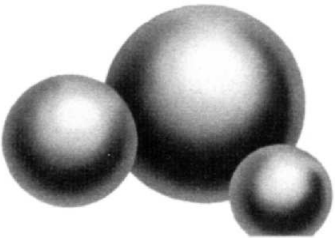


stock-list 01-2007

in jeder Form



Tungsten Carbide high-precision-balls grinded/polished

Ø	 Grades: WcCo <i>Hardness: 91 RA/1550 HV₃₀</i> Dimensions immediately available
1,0	
1,5	
2,0	
2,5	
3,0	
3,5	
4,0	
4,5	
5,0	
5,5	
6,0	
6,5	
7,0	
8,0	
9,0	
10,0	

Furthermore we supply balls in special-tolerances and other diameters (Ø 0,4 mm up to Ø 100 mm).

Subject to prior sale

stock-list 01-2007

NEGELE HARTMETALL - TECHNIK GMBH · STUTTGART

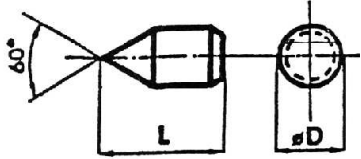


Tungsten Carbide Apex DIN 8012



in jeder Form

Type	D x L
KS 5	5 x 12
KS 6	6 x 12
KS 7	7 x 14
KS 8	8 x 16
KS 10	10 x 20
KS 11	11 x 20
KS 12	12 x 22
KS 14	14 x 22
KS 16	16 x 26
KS 18	18 x 30
KS 20	20 x 30
KS 22	22 x 32
KS 23	23 x 32
KS 25	25 x 40
KS 28	28 x 42
KS 28	28 x 45
KS 30	30 x 45



Grades:

GM 20 Microcrgrain
(G10/G20)

Dimensions immediately available

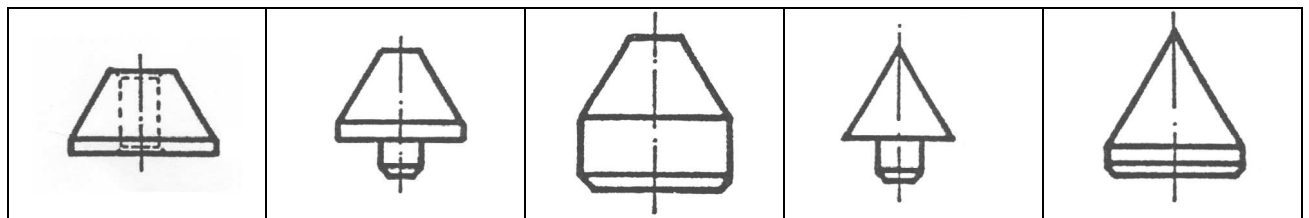
Other dimensions
on request.

On short call.

Subject to prior sale

all dimensions in millimeters

Examples for possible variations:



stock-list 01-2007



in jeder Form

Tungsten Carbide Plates rough/grinded

D x B x	length
2,5 x 74 x	100
4,5 x 74 x	
6,5 x 74 x	
8 x 74 x	
10 x 74 x	
16 x 74 x	
6,5 x 74 x	150
8 x 74 x	
10 x 74 x	
12 x 74 x	
14 x 74 x	
16 x 74 x	
18 x 74 x	
20 x 74 x	
22 x 74 x	
25 x 74 x	
30 x 73 x	
40 x 50 x	
50 x 60 x	
50 x 71 x	
50 x 50 x	200

all dimensions in millimeters



Grades:

- GM 25 Micrograin
- GM 20 Micrograin
- GM 25 EDM
- G 2000

Dimensions immediately available

Rough plates will be supplied with an allowance (min. 0,3 mm).

Variant dimensions and other grades on short calls

- as well with start-bohring

Engineering change and prior sale without notice

* time of delivery for grinded plates is 8 days

* surface-ground-plates are with ca. +0,1/+0,4 mm allowance

NHT Tungsten Carbide Grades

Physical and metallurgical properties

	NHT-Grade	WC Grain-size	Density	Hardness		Binder	Trans. Rup. strength	Compr. strength	
		μ	g/cm ³	HRA	HV30	%	N/mm ²	KN/mm ²	
ultra	G05UF	0,4	14,70	94,4	2030	Co	5,5	3700	6,6
	G10UF	0,4	14,40	93,4	1850	Co	8,5	3600	6,4
	G15UF	0,4	14,15	92,4	1700	Co	11,5	3200	6,2
micro	GM05	0,8	14,85	93,6	1880	Co	5,5	3000	6,6
	GM10	1,0	14,80	92,6	1700	Co	7,0	3100	6,5
	GM20	1,0	14,55	91,6	1550	Co	9,5	>3000	5,9
	GM25	1,0	14,25	90,3	1380	Co	13,0	>4000	5,4
normal	GN10	3,0	14,85	92,0	1600	Co	6,0	3150	5,8
	GN20	3,0	14,65	90,7	1425	Co	8,5	2900	5,2
	GN30S	3,0	14,35	88,5	1250	Co+Ni	11,5	>3500	5,0
	GN40	4,0	13,60	86,4	1025	Co	19,0	2800	3,3
	G40T	4,0	13,95	87,0	1065	Co	15,5	>3000	3,8
	GN50	5,0	13,50	84,2	870	Co	23,0	2700	3,0
	GN60	5,0	13,20	82,4	800	Co	26,0	2700	2,9
	GNI 10	2,0	14,65	90,9	1450	Ni	8,0	>3000	5,0
	GNI 30	2,0	14,55	88,6	1200	Ni	11,0	>2900	5,2

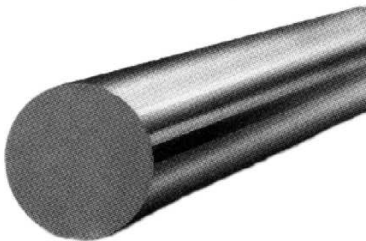
engineering change without notice

Date: 03.11.2006

stock-list 01-2007



Tunsten Copper Rods

Ø	EROMET 80/20 EROMET 75/25 length 300	EROMET S length 200
3	 Dimensions immediately available	
4		
5		
6		
8		
10		
12		
15		
16		
18		
20		
25		
30		
35		
40		
50		

Other diameters and lengths on short call.

Subject to prior sale

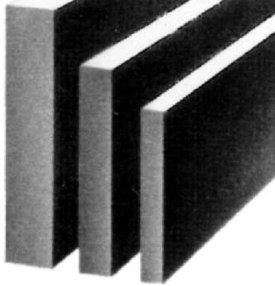
all dimensions in millimeters

stock-list 01-2007



in jeder Form

Tungsten Copper Bars

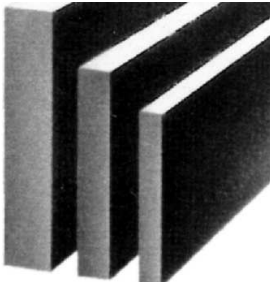
A x B x	EROMET 80/20 EROMET 75/25 length 300	EROMET S length 200
5 x 5 x		
5 x 6 x		
5 x 8 x		
5 x 10 x		
5 x 12 x		
5 x 15 x		
5 x 18 x		
5 x 20 x		
5 x 25 x		
5 x 30 x		
5 x 35 x		
5 x 40 x		
5 x 50 x		
6 x 6 x		
8 x 8 x		
10 x 10 x		
10 x 12 x		
10 x 15 x		
10 x 18 x		
10 x 20 x		
10 x 25 x		
10 x 30 x		
10 x 35 x		
10 x 40 x		
10 x 50 x		
12 x 12 x		

Dimensions immediately available

Other diameters
on request.

Subject to prior sale

all dimensions in millimeters


A x B x	length 300	length 200
15 x 15 x		<p>Other dimensions on request.</p> <p>Dimensions immediately available</p> <p>Subject to prior sale</p>
15 x 18 x		
15 x 20 x		
15 x 25 x		
15 x 30 x		
15 x 35 x		
15 x 40 x		
18 x 18 x		
20 x 20 x		
20 x 25 x		
20 x 30 x		
20 x 35 x		
20 x 40 x		
20 x 50 x		
25 x 25 x		
25 x 30 x		
25 x 35 x		
25 x 40 x		
30 x 30 x		
30 x 35 x		
30 x 40 x		
30 x 50 x		
35 x 35 x		
35 x 40 x		
40 x 40 x		

all dimensions in millimeters

stock-list 01-2007



Tungsten Copper Plates

A x B x	EROMET 80 / 20 EROMET 75 / 25 length 200	EROMET S length 200	
5 x 75 x			<p>Several dimensions as well up to length 300 mm.</p> <p>Further dimensions, variations and form- electrodes on request.</p> <p>Subject to prior sale</p>
10 x 75 x			
15 x 75 x			
20 x 75 x			
25 x 75 x			
30 x 50 x			
45 x 50 x			

all dimensions in millimeters