

WELCOME TO HONINGCRAFT

Total support in hydraulic
cylinder manufacturing

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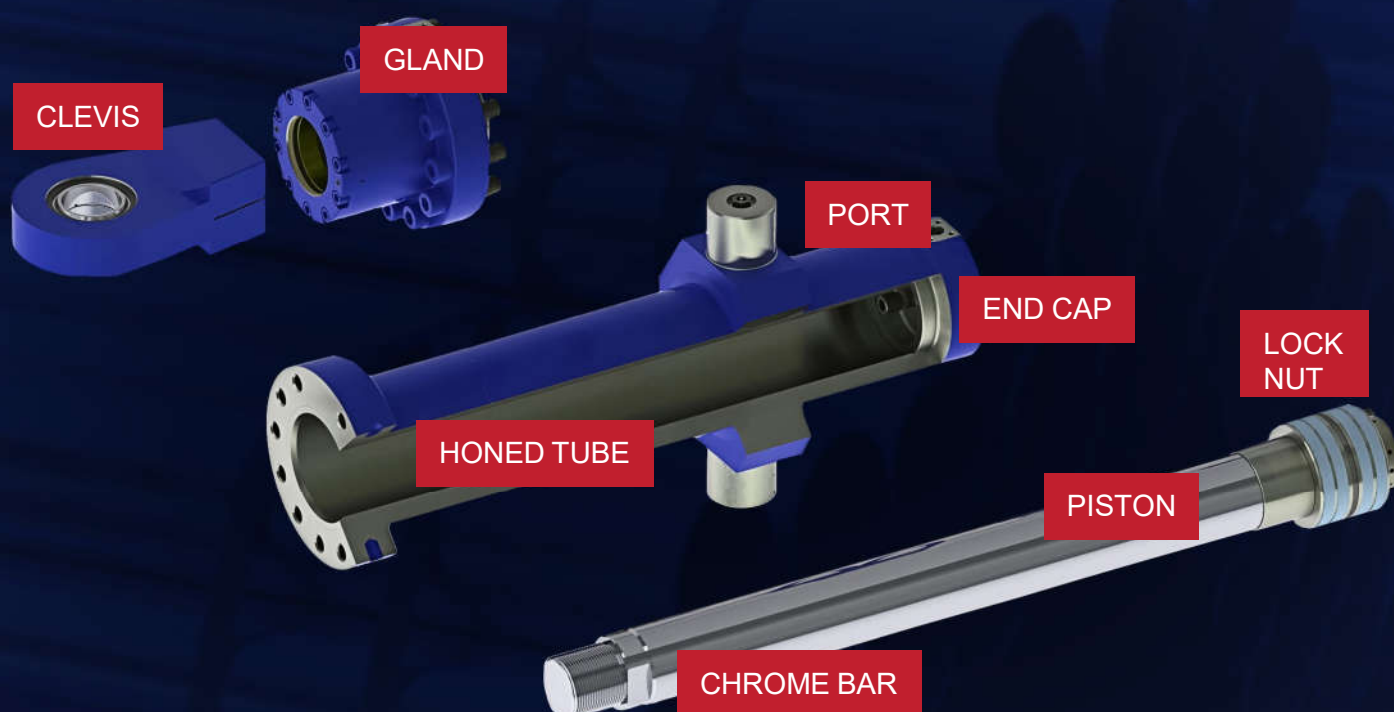
info@honingcraft.co.za

Address:

29 Dekema
Road, Wadeville,
Germiston, 1459



HONINGCRAFT PRODUCTS



Honingcraft stocks and manufactures honed tubes and hollow bars for manufacturing hydraulic cylinders barrels. We also stock and manufacture chrome bars for manufacturing hydraulic cylinder rods and shafts. Honingcraft distributes cylinder kits in all popular sizes.

Honingcraft provides value adding services like honing, chroming, precision grinding, boring, deep hole drilling, machining and welding to guarantee the lowest possible turnaround times at the best possible quality.

HONED TUBE



Honingcraft is one of the largest honed tube suppliers in South Africa. We stock cold-drawn seamless hydraulic steel tubes sourced from the best suppliers locally and internationally.

Our tubing is available in honed or Roller burnished variations, in popular metric and imperial sizes from 2 to 8 inches and 40 to 270 mm.

If you cannot find a standard size to suit your needs, we'll manufacture a custom tube to suit your needs.

MAIN MATERIAL:

St52 BK+S (E355 SR)

After cold drawing, the Honed Tubes are heat treated to relieve stress.

WE OFFER 2 TYPES OF PRODUCTION:

01

HONED TUBES:

ID tolerance -0,2
mm -0,3 mm

02

ROLLER BURNISHING TUBES:

ID tolerance -0,6
mm -0,9 mm

Honed Tubes are cold drawn, heat treated and straightened (1/1000).

Stock changes hourly so please contact Honingcraft to confirm price and availability.

HONED TUBE

HYDRAULIC CYLINDER TUBES, INSIDE HONED OR SKIVED AND ROLLER BURNISHED

Honed Tube is suitable for manufacturing a variety of hydraulic cylinders, where tight tolerances and smooth surface finishing is critical. The inside surface of Honed Tube is finished to the finest tolerance.

STEEL GRADES CORRESPONDENTS

EN	Werkstoff	DIN	B.S.	UNI	JIS	GOST	AISI / SAE / ASTM
E355	1.0580	St52	CFS5	Fe510	STKM19A	St6sp	1524 / 1024

CHEMICAL COMPOSITION - IN % BY WEIGHT

Steel grade	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	N
E355	max. 0.22	max. 0.55	max. 1.60	max. 0.025	max. 0.025	-	-	-	-	-	-

* Cr+Mo+Ni = max. 0.63

MECHANICAL PROPERTIES

Steel grade	Tensile strength R _m , N/mm ²	Yield point R _{p0.2} , N/mm ²	Elongation A ₅ , %	Impact energy KV ₂ , J	Hardness* Brinell N/mm ²	Norm
E355+C	min. 640	min. 540	min. 4	-	min. 185	EN 10305-2

C = cold drawn

* Wall thickness ≤ 12 mm

Outside diameter - OD	Ø50-400mm
Inside diameter - ID	Ø40-300mm
Inside tolerance - ID	ISO H8
Outside tolerance - OD	according to EN 10305-1
Roundness - ID	within the limits of diameter tolerances
Standard lengths	cut to lengths pieces, max. 6,600mm
Surface roughness - ID	Ra: max. 0.30 µm for skived and roller burnished surface Ra: max. 0.40 µm for honed surface
Straightness local deviation	max. 1 mm / 1000 mm
Straightness total deviation	max. 3.5 mm for tubes with length up to 6000 mm

TABLE OF DIMENSIONS TOLERANCE

Diameter, mm	ISO H8, µm
$30 < \varnothing \leq 50$	0 / +39
$50 < \varnothing \leq 80$	0 / +46
$80 < \varnothing \leq 120$	0 / +54
$120 < \varnothing \leq 180$	0 / +63
$180 < \varnothing \leq 120$	0 / +72

Larger sizes available upon request.



The skiving and roller burnishing production technique refers to a process consisting in micro-finishing metallic internal tube surfaces. The resulted effect is a mirror surface finish with technical roughness advantages.



Producing cylinder tubes by honing, results in having a crossgrinding pattern. The tubes in this case present an improved inside straightness. The very precise and smooth surface reduces negative effects of friction and extends the life of the cylinder's components.

STORAGE AND HANDLING RECOMMENDATIONS

- Keep the products stored in dry and covered spaces.
- Do not expose the bars or tubes to the sunlight or to very low temperatures for a long time.
- For storage, it is preferable to use rubber supports or wood lined supports; direct contact with the floor and steel supports that are not lined with soft materials must be avoided.
- Whenever possible, use a crane to load or unload the bundles; when you use a fork lift avoid direct contact between the forks and the products.
- Always lift the bundles using textile slings. Don't use metal slings when handling bundles.
- Keep protective plastic or cardboard on the products while they are in storage.

TUBES METRIC

SIZE	KG / MT
40 x 50	5.55
40 x 55	8.79
45 x 55	6.17
50 x 60	6.78
50 x 62	8.29
50 x 65	10.63
55 x 65	8.72
55 x 70	11.56
60 x 72	9.77
60 x 75	12.48
63 x 75	10.21
63 x 78	13.04
65 x 80	13.41
70 x 82	11.24
70 x 85	14.33
70 x 90	19.73

SIZE	KG / MT
75 x 85	9.86
75 x 90	15.26
75 x 95	20.96
80 x 92	12.72
80 x 95	16.18
80 x 100	22.19
80 x 105	28.51
80 x 110	35.14
85 x 100	17.11
90 x 105	18.03
90 x 110	24.66
95 x 108	16.27
95 x 120	33.14
100 x 110	12.95
100 x 115	19.88
100 x 120	27.13

SIZE	KG / MT
100 x 125	34.68
100 x 130	42.54
105 x 120	20.81
110 x 125	21.73
110 x 130	29.59
110 x 140	46.24
115 x 130	29.08
115 x 140	39.03
120 x 140	32.06
120 x 145	33.29
120 x 146	42.64
125 x 140	24.51
125 x 145	33.29
125 x 150	42.38
130 x 150	34.52
135 x 160	45.47



TUBES METRIC

SIZE	KG / MT
140 x 160	36.99
140 x 170	57.33
150 x 170	39.46
150 x 180	61.03
160 x 180	41.92
160 x 185	53.17
160 x 190	64.73
165 x 185	43.16
165 x 190	55.68
170 x 200	68.43
180 x 210	72.13
180 x 200	46.85
190 x 215	63.63
200 x 215	38.38
200 x 220	51.79
200 x 230	79.53
200 x 235	93.86
200 x 240	108.50
200 x 245	123.45
210 x 235	68.59
210 x 267	167.652
215 x 267	154.52
220 x 268	144.41
220 x 270	151.04
250 x 300	169.54
300 x 400	431.55

TUBES IMPERIAL

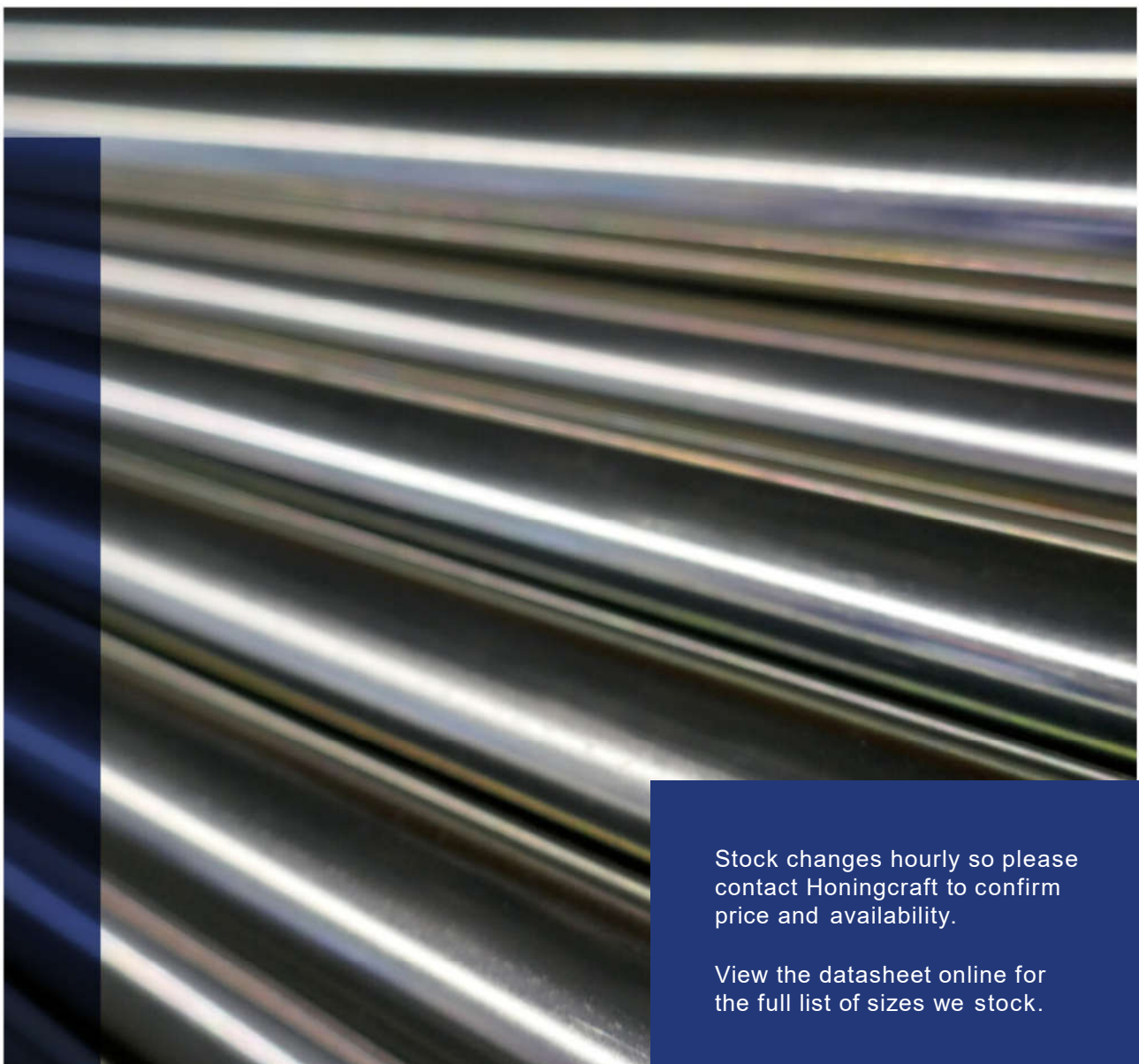
SIZE	KG / MT
2 x 2.5	8.95
2.25 x 2.75	9.94
2.5 x 2.75	5.22
2.5 x 3	10.94
2.75 x 3.25	11.93
2.75 x 3.5	18.64
3 x 3.5	12.93
3 x 3.75	20.14
3.25 x 3.75	13.92
3.25 x 3.87	17.71
3.25 x 4	21.63
3.5 x 4	14.92
3.5 x 4.25	23.12
3.5 x 4.5	31.82
3.75 x 4.25	15.91
4 x 4.5	16.9
4 x 4.75	26.1
4.25 x 5	27.59
4.25 x 5.25	37.79
4.5 x 5	18.89
4.5 x 5.5	39.77
4.5 x 5.25	29.08
4.75 x 5.5	30.58
4.75 x 5.75	42.64
5 x 5.5	20.88
5 x 5.75	32.07

SIZE	KG / MT
5 x 6	43.75
5.25 x 6.25	45.74
5.5 x 6.25	35.05
5.5 x 6.5	47.73
6 x 6.75	60.9
6 x 6.5	24.86
6 x 6.75	38.03
6 x 7	51.71
6.25 x 7.25	53.7
6.5 x 7.25	41.02
6.5 x 7.5	55.68
7 x 8	59.66
7.5 x 8.5	63.64
8 x 8.5	32.81
8 x 9	67.62

CHROME BAR

Honingcraft sources and manufactures only the best CK45 Chrome Bars. We stock all popular sizes in the metric and imperial ranges. Chrome Bars are wrapped in 1 mm thick plastic to protect against impact during delivery.

Standard Production	Diameter Tolerance	Standard Product Range	Production Range by Request
Ck 45	ISO f7 ovality ISO f7/3	6 mm – 127 mm and up to 6 m in length	130 mm to 350 mm



Stock changes hourly so please contact Honingcraft to confirm price and availability.

View the datasheet online for the full list of sizes we stock.

CHROME BAR

INDUCTION HARDENED AND CHROME PLATED STEEL BARS

STEEL GRADES CORRESPONDENTS

EN	Werkstoff	DIN	B.S.	UNI	JIS	GOST	AISI / SAE / ASTM
C45E	1.1191	Ck45	080M46	C45	S45C	45	1045

CHEMICAL COMPOSITION - IN % BY WEIGHT

Steel grade	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	N
C45E	0.42÷0.50	0.10÷0.40	0.50÷0.80	max. 0.025	max. 0.035	max. 0.40	max. 0.10	max. 0.40	max. 0.30	-	-

* Cr+Mo+Ni = max. 0.63

MECHANICAL PROPERTIES

Steel grade	Diameter Ø, mm	Tensile strength R _m N/mm ²	Yield point R _{p0.2} N/mm ²	Elongation A ₅ , %	Impact energy KV ₂ , J	Hardness* Brinell N/mm ²	Norm
C45E	6 < Ø ≤ 10	750 - 1050	min. 565	min. 5	-	225 - 320	EN 10277
	10 < Ø ≤ 16	710 - 1030	min. 500	min. 5		210 - 315	
	16 < Ø ≤ 40	650 - 1000	min. 410	min. 7		200 - 298	
	18 ≤ Ø ≤ 100	min. 580	min. 305	min. 16		172 - 242	EN ISO 683-1
	100 < Ø ≤ 200	min. 560	min. 275	min. 16		172 - 242	

* The hardness values are for information only



Dimensions	12-150mm / 3/4-5"
Diameter tolerance	ISO f7
Roundness	max. 1/2 from diameter tolerance
Standard lengths	6m cut to customer specification
Special lengths	On request we can offer cut to fix lengths pieces and special lengths up to 11.500 mm
Surface roughness	Ra: max. 0.20 µm
Chrome layer thickness	Ø < 20 mm: min. 15 µm Ø ≥ 20 mm: min. 20 µm
Chrome layer microhardness	min. 900 HV0.1
Straightness	Ø > 16 mm: max. 0.2 mm/1000 mm

TABLE OF DIMENSIONS TOLERANCE

Diameter, mm	ISO f7, µm
12 < Ø ≤ 18	-16 / -34
18 < Ø ≤ 30	-20 / -41
30 < Ø ≤ 50	-25 / -50
50 ≤ Ø ≤ 80	-30 / -60
80 < Ø ≤ 120	-36 / -71
120 < Ø ≤ 150	-43 / -83

CORROSION RESISTANCE LEVELS

Production	Diameter, mm	Mild corrosion resistance	
		NSS	AASS
Regular	Ø < 20	rating 9 after 72h	
	Ø < 20	rating 9 after 120h	rating 9 after 48h

Tested according to ISO 9227,
evaluated according to ISO 10289

CHROME BAR

Chrome Bar is durable and resists corrosion and wear. Use induction hardened Chrome Bar when cylinder rods will be exposed to damage from impact.

CORRESPONDENCE BETWEEN STEEL GRADE AND SURFACE HARDNESS

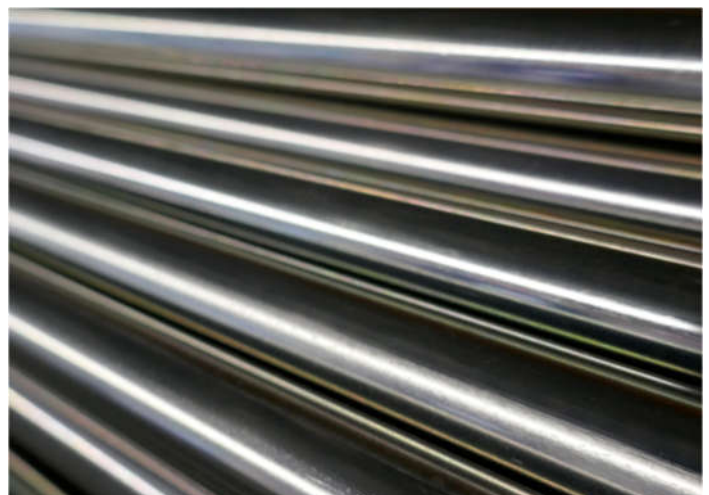
	C45E
Surface hardness beneath the chrome layer	58±3 HRC

HARDENING DEPTH

Diameter, mm	C45E, mm
6	0.5-0.8
6.35 - 12	0.6-1.0
12.7 - 15	0.8-1.4
15.875 - 18	1.1-1.5
19 - 19.05	1.2-1.5
20	1.2-1.5
22 - 25.4	1.4-1.7
28	1.5-1.8
28.575	1.5-1.8
30 - 36	1.5-1.9
38 - 40	1.7-2.3
42.42 - 45	1.7-2.3
50 - 80	2.2-2.6
82 - 101.6	2.2-3.2
105 - 120	2.5-3.5
125 - 140	2.5-3.5
145 - 180	2.8-4.0

STORAGE AND HANDLING RECOMMENDATIONS

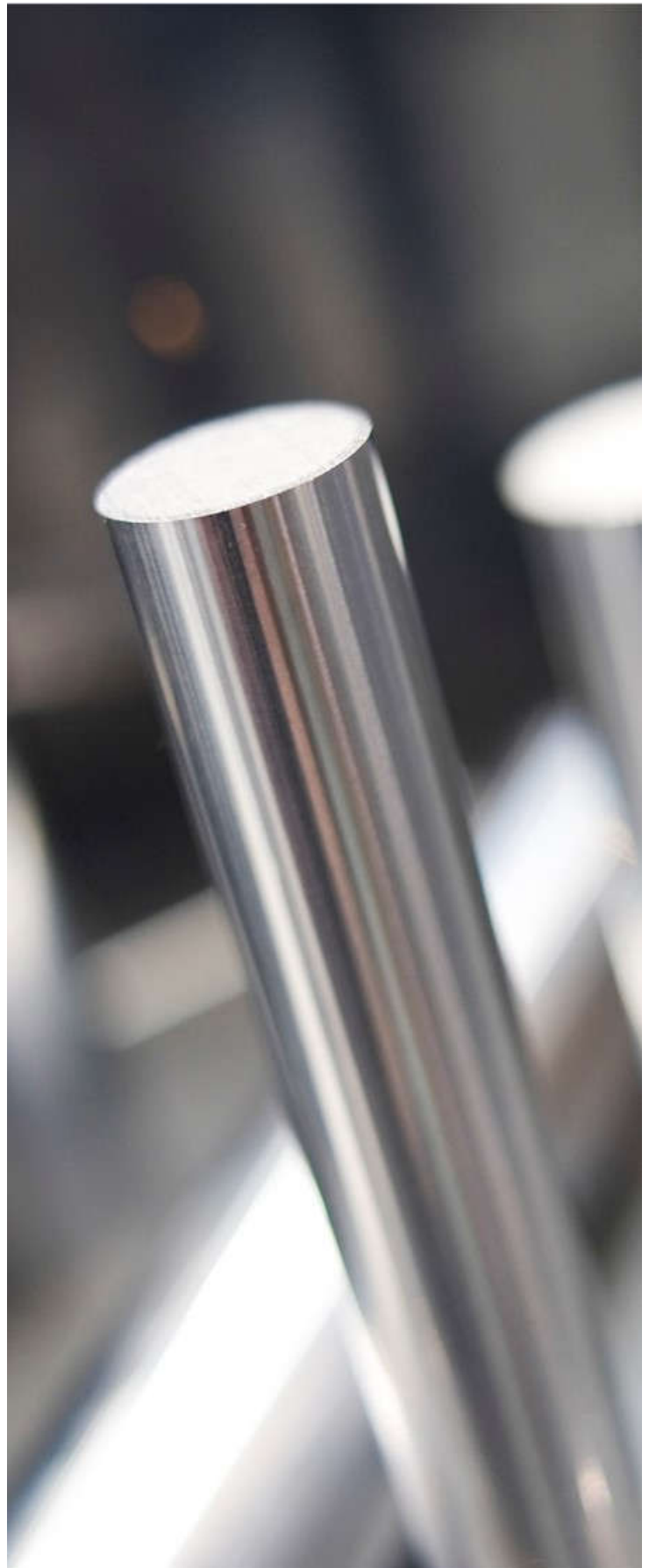
- Keep the products stored in dry and covered spaces.
- Do not expose the bars or tubes to the sunlight or to very low temperatures for a long time.
- For storage, preferable to use rubber supports or wood lined supports; direct contact with the floor and steel supports that are not lined with soft materials must be avoided.
- Whenever possible, use the crane to load or unload the bundles; when you use the fork lift avoid direct contact with the forks and the products.
- Always lift the bundles using textile slings. Don't use metal slings while handling the bundles.
- Keep protective plastic or cardboard on the products while they are in storage.





CHROME BAR SIZES

SIZE	SIZE
12mm	57.15mm (2 1/4")
16mm	60mm
18mm	63mm
19mm	63.5mm (2 1/2")
19.05mm (3/4")	65mm
20mm	69.85mm (2 3/4")
22mm	70mm
22.22mm (7/8")	75mm
25mm	76.2mm (3")
25.4mm (1")	80mm
28mm	82.55mm (3 1/4")
28.575mm (1 1/8")	85mm
30mm	88.9mm (3 1/2")
31.75mm (1 1/4")	90mm
32mm	95mm
33mm	95.25mm (3 3/4")
35mm	100mm
36mm	101.6mm (4")
38mm	105mm
38.1mm (1 1/2")	110mm
40mm	115mm
44.45mm (1 3/4")	120mm
45mm	125mm
50mm	127mm (5")
50.8mm (2")	130mm
55mm	140mm
56mm	150mm





CYLINDER KITS

Honingcraft stocks hydraulic cylinder kits. Our kits are readily available off the shelf to suit the gland and pistons you have. Each cylinder kit contains all the essential components necessary to fully assemble high-performance cylinders.

IN EACH BOX YOU WILL RECEIVE:

GLAND	PISTON	END CAP
LOCK NUTS	PORTS	

Glands and pistons come with seals.

SIZES IN METRIC AND IMPERIAL:

40/20 – 120/75

Stock changes hourly so please contact Honingcraft to confirm price and availability.

[View the datasheet online for a list of all the sizes we stock.](#)



CYLINDER KITS

TECHNICAL DATA

SIZE	GLAND	PISTON	BASE PLUG	NUT	PORT
40/20	40/20	40x16	40x50	M16	1/4"
40/25	40/25	40x20	40x50	M20	1/4"
50/25	50/25	50x20	50x60	M20	1/4"
50/32	50/32	50x20	50x60	M20	1/4"
60/30	60/30	60x20	60x70	M20	3/8"
63/32	63/32	63x25	63x75	M20	3/8"
63/40	63/40	63x25	63x75	M24	3/8"
70/35	70/35	70x25	70x85	M24	3/8"
75/40	75/40	75x32	75x90	M30	3/8"
80/40	80/40	80x30	80x95	M27	3/8"
80/50	80/50	80x30	80x95	M27	3/8"
90/50	90/50	90x30	90x105	M27	3/8"
100/50	100/50	100x40	100x115	M36	1/2"
100/60	100/60	100x40	100x115	M36	1/2"
100/65	100/65	100x40	100x115	M36	1/2"
125/65	125/65	125x40	125x145	M36	1/2"
125/70	125/70	125x740	125x145	M36	1/2"
125/80	125/80	125x40	125x145	M36	1/2"

GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CAST IRON WITH LAMELLAR GRAPHITE FOR GENERAL PURPOSES

Tensile strength N/mm ² min	250
Hardness HB	180-250
Micro structure	Pearlitic (min%90)
Chemical analysis (For the parts with medium thickness)	C: 3.00-3.25 Si: 1.85-2.10 Mn: 0.40-0.70 S: 0.12 max P: 0.25 max

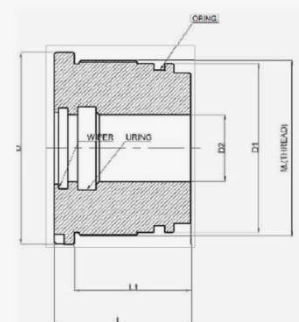
EQUIVALENT STANDARDS

TURKEY - TSE TS-552	DDL-25
EU - EN 1561	GJL 250
GERMANY - DIN 1691	GG 25
USA - ASTM A 4876	Class 35 B
G.BRITAIN - BS 1452	Grade 250
FRANCE - NF A32-101	Ft 25 D
ITALY - UNI 5007	GG 25
JAPAN - JIS G 5501	FC 250

PRODUCT TYPE	WORKING PRESSURE	TEST PRESSURE	OPERATING TEMPERATURE
GG25-26 Cast Iron Glands	320 BAR	400 BAR	-30° C +100° C

NOTE

Working and test pressure values may vary when using different seals.
Above values are according to standard sealing.



GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CODE	U-RING	WIPER	ORING	D	D1	D2	L	L1	THREAD	kg
GDC-B 32x16	YOK	16x24x5/7	28x2.5	40	33	16	40	32	36x1.5	0.190 kg
GDC-B 32x18	18x25x5	18x26x5/7	28x2.5	40	33	18	40	32	36x1.5	0.170 kg
GDC-B 32x20	20x28x5	20x28x5/7	28x2.5	40	33	20	40	32	36x1.5	0.150 kg
GDC-B 32x22	22x30x6	22x30x5/7	28x2.5	40	33	22	40	32	36x1.5	0.120 kg
GDC-B 35x20	20x28x5	20x28x5/7	31x3	45	36	20	40	32	39x1.5	0.200 kg
GDC-B 35x22	22x30x6	22x30x5/7	31x3	45	36	22	40	32	39x1.5	0.170 kg
GDC-B 35x25	25x35x6	25x33x5/7	31x3	45	36	25	40	32	39x1.5	0.245 kg
GDC-B 40x16	YOK	16x24x5/7	36x3	50	41	16	40	32	45x1.5	0.330 kg
GDC-B 40x20	20x28x5	20x28x5/7	36x3	50	41	20	40	32	45x1.5	0.300 kg
GDC-B 40x22	22x30x6	22x30x5/7	36x3	50	41	22	40	32	45x1.5	0.270 kg
GDC-B 40x25	25x35x6	25x35x5/7	36x3	50	41	25	40	32	45x1.5	0.230 kg
GDC-B 40x28	28x38x6	28x36x5/7	36x3	50	41	28	40	32	45x1.5	0.190 kg
GDC-B 45x20	20x28x5	20x28x5/7	39.69x3.53	55	46	20	45	37	50x1.5	0.440 kg
GDC-B 45x25	25x35x6	25x33x5/7	39.69x3.53	55	46	25	45	37	50x1.5	0.370 kg
GDC-B 45x30	30x40x8	30x38x5/7	39.69x3.53	55	46	30	45	37	50x1.5	0.280 kg
GDC-B 50x20	20x28x5	20x28x5/7	44.45x3.53	60	51	20	45	37	55x1.5	0.570 kg
GDC-B 50x25	25x35x6	25x33x5/7	44.45x3.53	60	51	25	45	37	55x1.5	0.500 kg
GDC-B 50x28	28x38x6	28x36x5/7	44.45x3.53	60	51	28	45	37	55x1.5	0.450 kg
GDC-B 50x30	30x40x8	30x38x5/7	44.45x3.53	60	51	30	45	37	55x1.5	0.410 kg
GDC-B 50x32	32x40x8	32x40x5/7	44.45x3.53	60	51	32	45	37	55x1.5	0.380 kg
GDC-B 50x35	35x45x8	35x43x5/7	44.45x3.53	60	51	35	45	37	55x1.5	0.320 kg
GDC-B 50x36	36x46x8	36x44x5/7	44.45x3.53	60	51	36	45	37	55x1.5	0.300 kg
GDC-B 55x25	25x65x6	25x33x5/7	47.63x3.53	65	56	25	52	42	60x1.5	0.750 kg
GDC-B 55x30	30x40x8	30x38x5/7	47.63x3.53	65	56	30	52	42	60x1.5	0.650 kg
GDC-B 55x35	35x45x8	35x43x5/7	47.63x3.53	65	56	35	52	42	60x1.5	0.550 kg
GDC-B 60x30	30x40x8	30x38x5/7	53.57x3.53	70	61	30	52	42	65x1.5	0.830 kg
GDC-B 60x35	35x45x8	35x43x5/7	53.57x3.53	70	61	35	52	42	65x1.5	0.720 kg
GDC-B 60x40	40x50x10	40x48x5/7	53.57x3.53	70	61	40	52	42	65x1.5	0.590 kg
GDC-B 60x45	45x55x10	45x55x5/7	53.57x3.53	70	61	45	52	42	65x1.5	0.450 kg
GDC-B 63x30	30x40x8	30x38x5/7	57.15x3.53	75	64	30	52	42	69x1.5	0.970 kg
GDC-B 63x35	35x45x8	35x43x5/7	57.15x3.53	75	64	35	52	42	69x1.5	0.870 kg
GDC-B 63x36	36x46x8	36x44x5/7	57.15x3.53	75	64	36	52	42	69x1.5	0.840 kg
GDC-B 63x40	40x50x10	40x48x5/7	57.15x3.53	75	64	40	52	42	69x1.5	0.740 kg



GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CODE	U-RING	WIPER	ORING	D	D1	D2	L	L1	THREAD	kg
GDC-B 120x55	55x65x10	55x65x5/7	110x5	140	121	55	82	70	125x2	5.540 kg
GDC-B 120x60	60x70x10	60x70x5/7	110x5	140	121	60	82	70	125x2	5.250 kg
GDC-B 120x65	65x75x10	65x75x5/7	110x5	140	121	65	82	70	125x2	4.950 kg
GDC-B 120x70	70x80x12	70x80x5/7	110x5	140	121	70	82	70	125x2	4.630 kg
GDC-B 120x75	75x85x12	75x87x7/12	110x5	140	121	75	82	70	125x2	4.230 kg
GDC-B 120x80	80x90x12	80x92x7/12	110x5	140	121	80	82	70	125x2	3.860 kg
GDC-B 120x85	85x95x12	85x97x7/12	110x5	140	121	85	82	70	125x2	3.420 kg
GDC-B 120x90	90x100x12	90x102x7/12	110x5	140	121	90	82	70	125x2	3.050 kg
GDC-B 125x50	50x60x10	50x60x5/7	115x5	145	126	50	82	70	130x2	6.350 kg
GDC-B 125x55	55x65x10	55x65x5/7	115x5	145	126	55	82	70	130x2	6.090 kg
GDC-B 125x60	60x70x10	60x70x5/7	115x5	145	126	60	82	70	130x2	5.850 kg
GDC-B 125x65	65x75x10	65x75x5/7	115x5	145	126	65	82	70	130x2	5.490 kg
GDC-B 125x70	70x80x12	70x80x5/7	115x5	145	126	70	82	70	130x2	5.190 kg
GDC-B 125x75	75x85x12	75x87x7/12	115x5	145	126	75	82	70	130x2	4.850 kg
GDC-B 125x80	80x90x12	80x92x7/12	115x5	145	126	80	82	70	130x2	4.430 kg
GDC-B 125x85	85x95x12	85x97x7/12	115x5	145	126	85	82	70	130x2	4.050 kg
GDC-B 125x90	90x100x12	90x102x7/12	115x5	145	126	90	82	70	130x2	3.570 kg
GDC-B 130x60	60x70x10	60x70x5/7	120x6	150	131	60	102	90	135x2	7.830 kg
GDC-B 130x70	70x80x12	70x80x5/7	120x6	150	131	70	102	90	135x2	6.970 kg
GDC-B 130x80	80x90x12	80x92x7/12	120x6	150	131	80	102	90	135x2	6.120 kg
GDC-B 130x90	90x100x12	90x102x7/12	120x6	150	131	90	102	90	135x2	5.100 kg
GDC-B 130x100	100x115x12	100x112x7/12	120x6	150	131	100	102	90	135x2	3.890 kg
GDC-B 140x60	60x70x10	60x70x5/7	130x6	160	141	60	102	90	145x2	9.410 kg
GDC-B 140x65	65x75x10	65x75x5/7	130x6	160	141	65	102	90	145x2	9.030 kg
GDC-B 140x70	70x80x12	70x80x5/7	130x6	160	141	70	102	90	145x2	8.660 kg
GDC-B 140x80	80x90x12	80x92x7/12	130x6	160	141	80	102	90	145x2	7.700 kg
GDC-B 140x85	85x95x12	85x97x7/12	130x6	160	141	85	102	90	145x2	7.250 kg
GDC-B 140x90	90x100x12	90x102x7 /12	130x6	160	141	90	102	90	145x2	6.680 kg
GDC-B 140x100	100x115x12	100x112x7/12	130x6	160	141	100	102	90	145x2	5.470 kg
GDC-B 150x60	70x80x12	70x80x5/7	140x6	170	151	60	102	90	155x2	11.070 kg
GDC-B 150x70	80x90x12	80x92x7/12	140x6	170	151	70	102	90	155x2	10.360 kg
GDC-B 150x80	90x100x12	90x102x7/12	140x6	170	151	80	102	90	155x2	9.340 kg
GDC-B 150x90	60x70x10	60x70x5/7	140x6	170	151	90	102	90	155x2	8.400 kg

GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CODE	U-RING	WIPER	ORING	D	D1	D2	L	L1	THREAD	kg
GDC-B 63x45	45x55x10	45x55x5/7	57.15x3.53	75	64	45	52	42	69x1.5	0.590 kg
GDC-B 63x50	YOK	50x60x5/7	57.15x3.53	75	64	50	52	42	69x1.5	0.520 kg
GDC-B 65x30	30x40x8	30x38x5/7	59.92x3.53	80	66	30	63	52	70x1.5	1.280 kg
GDC-B 65x35	35x45x8	35x43x5/7	59.92x3.53	80	66	35	63	52	70x1.5	1.160 kg
GDC-B 65x40	40x50x10	40x48x5/7	59.92x3.53	80	66	40	63	52	70x1.5	1.010 kg
GDC-B 65x45	45x55x10	45x55x5/7	59.92x3.53	80	66	45	63	52	70x1.5	0.840 kg
GDC-B 70x25	25x35x6	25x33x5/7	65.10x3.53	85	71	25	63	52	75x2	1.640 kg
GDC-B 70x30	30x40x8	30x38x5/7	65.10x3.53	85	71	30	63	52	75x2	1.530 kg
GDC-B 70x35	35x45x8	35x43x5/7	65.10x3.53	85	71	35	63	52	75x2	1.410 kg
GDC-B 70x40	40x50x10	40x48x5/7	65.10x3.53	85	71	40	63	52	75x2	1.250 kg
GDC-B 70x45	45x55x10	45x55x5/7	65.10x3.53	85	71	45	63	52	75x2	1.090 kg
GDC-B 70x50	50x60x10	50x60x5/7	65.10x3.53	85	71	50	63	52	75x2	0.900 kg
GDC-B 70x55	55x65x10	55x65x5/7	65.10x3.53	85	71	55	63	52	75x2	0.720 kg
GDC-B 75x30	30x40x8	30x38x5/7	69.85x3.53	90	76	30	63	52	80x2	1.800 kg
GDC-B 75x35	35x45x8	35x43x5/7	69.85x3.53	90	76	35	63	52	80x2	1.680 kg
GDC-B 75x40	40x50x10	40x48x5/7	69.85x3.53	90	76	40	63	52	80x2	1.520 kg
GDC-B 75x45	45x55x10	45x55x5/7	69.85x3.53	90	76	45	63	52	80x2	1.370 kg
GDC-B 75x50	50x60x10	50x60x5/7	69.85x3.53	90	76	50	63	52	80x2	1.170 kg
GDC-B 75x55	55x65x10	55x65x5/7	69.85x3.53	90	76	55	63	52	80x2	0.970 kg
GDC-B 80x30	30x40x8	30x38x5/7	74x4	95	81	30	63	52	85x2	2.080 kg
GDC-B 80x35	35x45x8	35x43x5/7	74x4	95	81	35	63	52	85x2	1.950 kg
GDC-B 80x40	40x50x10	40x48x5/7	74x4	95	81	40	63	52	85x2	1.790 kg
GDC-B 80x45	45x55x10	45x55x5/7	74x4	95	81	45	63	52	85x2	1.620 kg
GDC-B 80x50	50x60x10	50x60x5/7	74x4	95	81	50	63	52	85x2	1.450 kg
GDC-B 80x55	55x65x10	55x65x5/7	74x4	95	81	55	63	52	85x2	1.250 kg
GDC-B 80x56	56x66x10	56x66x5/7	74x4	95	81	56	63	52	85x2	1.210 kg
GDC-B 80x60	60x70x10	60x70x5/7	74x4	95	81	60	63	52	85x2	1.030 kg
GDC-B 85x35	35x45x8	35x43x5/7	79x4	100	86	35	63	52	90x2	2.275 kg
GDC-B 85x40	40x50x10	40x48x5/7	79x4	100	86	40	63	52	90x2	2.100 kg
GDC-B 85x45	45x55x10	45x55x5/7	79x4	100	86	45	63	52	90x2	1.940 kg
GDC-B 85x50	50x60x10	50x60x5/7	79x4	100	86	50	63	52	90x2	1.750 kg
GDC-B 85x55	55x65x10	55x65x5/7	79x4	100	86	55	63	52	90x2	1.550 kg
GDC-B 85x60	60x70x10	60x70x5/7	79x4	100	86	60	63	52	90x2	1.330 kg



GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CODE	U-RING	WIPER	ORING	D	D1	D2	L	L1	THREAD	kg
GDC-B 90x35	35x45x8	35x43x5/7	84x4	105	91	35	63	52	95x2	2.570 kg
GDC-B 90x40	40x50x10	40x48x5/7	84x4	105	91	40	63	52	95x2	2.420 kg
GDC-B 90x45	45x55x10	45x55x5/7	84x4	105	91	45	63	52	95x2	2.260 kg
GDC-B 90x50	50x60x10	50x60x5/7	84x4	105	91	50	63	52	95x2	2.070 kg
GDC-B 90x55	55x65x10	55x65x5/7	84x4	105	91	55	63	52	95x2	1.880 kg
GDC-B 90x60	60x70x10	60x70x5/7	84x4	105	91	60	63	52	95x2	1.670 kg
GDC-B 90x65	65x75x10	65x75x5/7	84x4	105	91	65	63	52	95x2	1.430 kg
GDC-B 100x40	40x50x10	40x48x5/7	90x5	115	101	40	82	70	105x2	4.060 kg
GDC-B 100x45	45x55x10	45x55x5/7	90x5	115	101	45	82	70	105x2	3.830 kg
GDC-B 100x50	50x60x10	50x60x5/7	90x5	115	101	50	82	70	105x2	3.610 kg
GDC-B 100x55	55x65x10	55x65x5/7	90x5	115	101	55	82	70	105x2	3.360 kg
GDC-B 100x56	56x66x10	56x66x5/7	90x5	115	101	56	82	70	105x2	3.290 kg
GDC-B 100x60	60x70x10	60x70x5/7	90x5	115	101	60	82	70	105x2	3.060 kg
GDC-B 100x65	65x75x10	65x75x5/7	90x5	115	101	65	82	70	105x2	2.760 kg
GDC-B 100x70	70x80x12	70x80x5/7	90x5	115	101	70	82	70	105x2	2.420 kg
GDC-B 100x75	75x85x12	75x87x12/7	90x5	115	101	75	82	70	105x2	2.030 kg
GDC-B 100x80	80x90x12	80x92x12/7	90x5	115	101	80	82	70	105x2	1.670 kg
GDC-B 110x50	50x60x10	50x60x5/7	100x5	130	111	50	82	70	115x2	4.650 kg
GDC-B 110x55	55x65x10	55x65x5/7	100x5	130	111	55	82	70	115x2	4.400 kg
GDC-B 110x56	56x66x10	56x66x5/7	100x5	130	111	56	82	70	115x2	4.380 kg
GDC-B 110x60	60x70x10	60x70x5/7	100x5	130	111	60	82	70	115x2	4.150 kg
GDC-B 110x65	65x75x10	65x75x5/7	100x5	130	111	65	82	70	115x2	3.820 kg
GDC-B 110x70	70x80x10	70x80x5/7	100x5	130	111	70	82	70	115x2	3.510 kg
GDC-B 110x75	75x85x12	75x87x12/7	100x5	130	111	75	82	70	115x2	3.110 kg
GDC-B 110x80	80x90x12	80x92x12/7	100x5	130	111	80	82	70	115x2	2.730 kg
GDC-B 115x50	50x60x10	50x60x5/7	105x5	130	116	50	82	70	120x2	5.150 kg
GDC-B 115x55	55x65x10	55x65x5/7	105x5	130	116	55	82	70	120x2	4.850 kg
GDC-B 115x60	60x70x10	60x70x5/7	105x5	130	116	60	82	70	120x2	4.580 kg
GDC-B 115x65	65x75x10	65x75x5/7	105x5	130	116	65	82	70	120x2	4.240 kg
GDC-B 115x70	70x80x12	70x80x5/7	105x5	130	116	70	82	70	120x2	3.940 kg
GDC-B 115x75	75x85x12	75x87x7/12	105x5	130	116	75	82	70	120x2	3.550 kg
GDC-B 115x80	80x90x12	80x92x7/12	105x5	130	116	80	82	70	120x2	3.180 kg
GDC-B 120x50	50x60x10	50x60x5/7	110x5	140	121	50	82	70	125x2	5.760 kg

GLAND TECHNICAL PROPERTIES (CAST IRON GG25/GG26 DIN 1691)

CODE	U-RING	WIPER	ORING	D	D1	D2	L	L1	THREAD	kg
GDC-B 150x100	100x115x12	100x112x7/12	140x6	170	151	100	102	90	155x2	7.150 kg
GDC-B 160x60	60x70x10	60x70x5/7	150x6	180	161	60	102	90	165x2	12.830 kg
GDC-B 160x70	70x80x12	70x80x5/7	150x6	180	161	70	102	90	165x2	12.190 kg
GDC-B 160x80	80x90x12	80x92x7/12	150x6	180	161	80	102	90	165x2	11.330 kg
GDC-B 160x90	90x100x12	90x102x7/12	150x6	180	161	90	102	90	165x2	10.210 kg
GDC-B 160x100	100x115x12	100x112x7/12	150x6	180	161	100	102	90	165x2	8.940 kg
GDC-B 160x110	110x125x12	110x122x7/12	150x6	180	161	110	102	90	165x2	7.750 kg
GDC-B 160x120	120x135x15	120x132x7/12	150x6	180	161	120	102	90	165x2	6.310 kg
GDC-B 170x80	80x90x12	80x92x7/12	160x6	190	171	80	102	90	175x2	13.530 kg
GDC-B 170x90	90x100x12	90x102x7/12	160x6	190	171	90	102	90	175x2	12.250 kg
GDC-B 170x100	100x115x12	100x112x7 /12	160x6	190	171	100	102	90	175x2	10.860 kg
GDC-B 170x110	110x125x12	110x122x7/12	160x6	190	171	110	102	90	175x2	9.400 kg
GDC-B 170x120	120x135x15	120x132x7 /12	160x6	190	171	120	102	90	175x2	8.000 kg
GDC-B 180x70	70x80x12	70x80x5/7	170x6	200	181	70	102	90	185x2	16.010 kg
GDC-B 180x80	80x90x12	80x92x7/12	170x6	200	181	80	102	90	185x2	15.100 kg
GDC-B 180x90	90x100x12	90x102x7/12	170x6	200	181	90	102	90	185x2	14.070 kg
GDC-B 180x100	100x115x12	100x112x7/12	170x6	200	181	100	102	70	185x2	12.810 kg
GDC-B 180x110	110x125x12	110x122x7/12	170x6	200	181	110	102	90	185x2	11.520 kg
GDC-B 180x120	120x135x15	120x132x7/12	170x6	200	181	120	102	90	185x2	10.170 kg
GDC-B 180x130	130x150x15	130x142x7/12	170x6	200	181	130	102	90	185x2	8.680 kg
GDC-B 180x140	140x160x15	140x152x7/12	170x6	200	181	140	102	90	185x2	6.930 kg
GDC-B 200x90	90x100x12	90x102x7/12	190x6	220	201	90	102	90	205x2	18.300 kg
GDC-B 200x100	100x115x12	100x112x7 /12	190x6	220	201	100	102	90	205x2	17.400 kg
GDC-B 200x110	110x125x12	110x122x7/12	190x6	220	201	110	102	90	205x2	16.000 kg
GDC-B 200x120	120x135x15	120x132x7/12	190x6	220	201	120	102	90	205x2	14.590 kg
GDC-B 200x130	130x150x15	130x142x7/12	190x6	220	201	130	102	90	205x2	12.860 kg
GDC-B 200x140	140x160x15	140x152x7/12	190x6	220	201	140	102	90	205x2	11.330 kg
GDC-B 220x100	100x115x12	100x112x7 /12	210x6	250	221	100	102	90	225x2	22.600 kg
GDC-B 220x110	110x125x12	110x122x7/12	210x6	250	221	110	102	90	225x2	21.100 kg
GDC-B 220x120	120x135x15	120x132x7/12	210x6	250	221	120	102	90	225x2	19.770 kg
GDC-B 220x130	130x150x15	130x142x7/12	210x6	250	221	130	102	90	225x2	18.100 kg
GDC-B 220x140	140x160x15	140x152x7/12	210x6	250	221	140	102	90	225x2	16.540 kg



PISTON TECHNICAL PROPERTIES (STEEL SAE 1040 / SAE 1050)



CODE	U-RING	ORING	D	D1	L	kg
GDC-P 32x15	32x24x15.5x3.10	YOK	32	15	32	0.100 kg
GDC-P 35x16	35x25x16.4x6.35	16x3	35	16	40	0.150 kg
GDC-P 40x16	40x32x15 5x3.20	16x3	40	16	40	0.250 kg
GDC-P 40x20	40x32x15 5x3.20	20x3	40	20	40	0.210 kg
GDC P 45x20	45x35x16.4x6.35	20x3	45	20	40	0.270 kg
GDC-P 50x16	50x38x20.5x4.20	16x3	50	16	40	0.370 kg
GDC-P 50x20	50x38x20.5x4.20	20x3	50	20	40	0.330 kg
GDC-P 50x30	50x38x20.5x4.20	30x3	50	30	40	0.210 kg
GDC-P 55x20	55x39x20.5x3.10	20x3	55	20	40	0.400 kg
GDC-P 60x20	60x48x20.5x4.20	20x3	60	20	40	0.570 kg
GDC-P 63x25	63x51x20.5x4.20	25x3	63	25	40	0.580 kg
GDC-P 63x30	63x51 x20.5x4.20	30x3	63	30	40	0.520 kg
GDC-P 65x25	65x49x20.5x3.10	25x3	65	25	40	0.580 kg
GDC-P 70x25	70x58x20.5x4.20	25x3	70	25	40	0.790 kg
GDC-P 70x30	70x58x20.5x4.20	30x3	70	30	40	0.720 kg
GDC-P 75x32	75x55x22.4x6.35	32x3	75	32	50	0.900 kg
GDC-P 80x27	80x66x22.4x5.20	27x3	80	27	50	1.330 kg
GDC-P 80x30	80x66x22.4x5.20	30x3	80	30	50	1.280 kg
GDC-P 85x32	85x65x22.4x6.35	32x3	85	32	50	1.320 kg
GDC-P 90x30	90x76x22.4x5.20	30x3	90	30	50	1.750 kg
GDC-P 100x33	100x86x22.4x5.20	33x3	100	33	50	2.220 kg
GDC-P 100x40	100x86x22.4x5.20	40x4	100	40	50	2.050 kg

PISTON TECHNICAL PROPERTIES (STEEL SAE 1040 / SAE 1050)

CODE	U-RING	ORING	D	D1	L	kg
GDC-P 110x40	110x96x22.4x5.20	40x4	110	40	50	2.640 kg
GDC-P 115x40	115x101x22.4x5.20	40x4	115	40	50	3.030 kg
GDC-P 120x40	120x106x22.4x5.20	40x4	120	40	50	3.270 kg
GDC-P 125x40	125x103x26.5x5.10	40x4	125	40	40	3.290 kg
GDC-P 130x40	130x105x25.4x6.35	40x4	130	40	60	4.320 kg
GDC-P 140x40	140x123x26.5x7.20	40x4	140	40	60	5.570 kg
GDC-P 150x40	150x125x25.4x6.35/1	40x4	150	40	60	6.150 kg
GDC-P 160x50	160x143x26.5x7.20	50x4	160	50	60	7.240 kg
GDC-P 170x50	170x145x25.4x12.70	50x4	170	50	65	12.640 kg
GDC-P 180x50	180x163x26.5x7.20	50x4	180	50	60	9.600 kg
GDC-P 190x50	190x165x25.4x12.7	50x4	190	50	65	11.100 kg
GDC-P 200x55	200x175x25.4x12.70/1	55x4	200	55	65	12.630 kg
GDC-P 220x70	220x190x35.4x6.35/1	70x4	220	70	70	15.610 kg
GDC-P 250x80	250x225x25.4x12.70	80x4	250	80	70	21.410 kg



END CAP TECHNICAL PROPERTIES



CHEMICAL PROPERTIES	MATERIAL	W. No	C%	Mn %	Si %
	SAE 1040	1.1186	0.97-0.44	0.50-0.80	0.40
	SAE 1050	1.206	0.47-0.55	0.60-0.90	0.40

PRODUCT TYPE	WORKING PRESSURE	TEST PRESSURE	OPERATING TEMPERATURE
SAE 1040/1050 Gland	400 BAR	600 BAR	-30° C +150° C

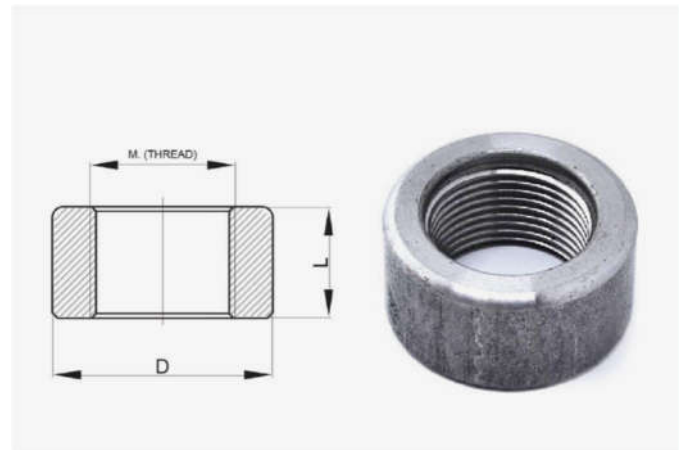
END CAP TECHNICAL PROPERTIES

CODE	L	L1	L2	D	D1	kg
GDC-AK 32x40	15	5	5	40	32	0.110 kg
GDC-AK 35x45	15	5	5	45	35	0.140 kg
GDC-AK 40x50	15	5	5	50	40	0.180 kg
GDC-AK 45x55	15	5	5	55	45	0.230 kg
GDC-AK 50x60	15	5	5	60	50	0.270 kg
GDC-AK 55x65	15	5	5	65	55	0.320 kg
GDC-AK 60x70	15	5	5	70	60	0.380 kg
GDC-AK 60x80	15	5	5	80	60	0.450 kg
GDC-AK 63x75	15	5	5	75	63	0.430 kg
GDC-AK 65x80	15	5	5	80	65	0.470 kg
GDC-AK 70x85	15	5	5	85	70	0.550 kg
GDC-AK 75x90	15	5	5	90	75	0.620 kg
GDC-AK 80x95	15	5	5	95	80	0.690 kg
GDC-AK 80x100	15	5	5	100	80	0.750 kg
GDC-AK 85x100	20	9	5	100	85	1.050 kg
GDC-AK 90x105	20	9	5	105	90	1.170 kg
GDC-AK 90x110	20	9	5	110	90	1.240 kg
GDC-AK 100x115	20	9	5	115	100	1.400 kg
GDC-AK 100x120	20	9	5	120	100	1.480 kg
GDC-AK 110x130	20	9	5	130	110	1.780 kg
GDC-AK 115x130	20	9	5	130	115	1.860 kg
GDC-AK 120x140	20	9	5	140	120	2.100 kg
GDC-AK 125x145	20	9	5	145	125	2.240 kg
GDC-AK 130x150	20	9	5	150	130	2.430 kg
GDC-AK 140x160	20	9	5	160	140	2.750 kg
GDC-AK 150x170	20	9	5	170	150	3.250 kg
GDC-AK 160x190	25	9	5	190	160	4.870 kg
GDC-AK 180x210	25	9	5	210	180	5.920 kg
GDC-AK 200x245	30	9	5	245	200	9.940 kg
GDC-AK 220x270	30	9	8	270	220	11.260 kg
GDC-AK 230x280	30	9	8	280	230	12.200 kg
GDC-AK 250x300	30	9	8	300	250	14.150 kg

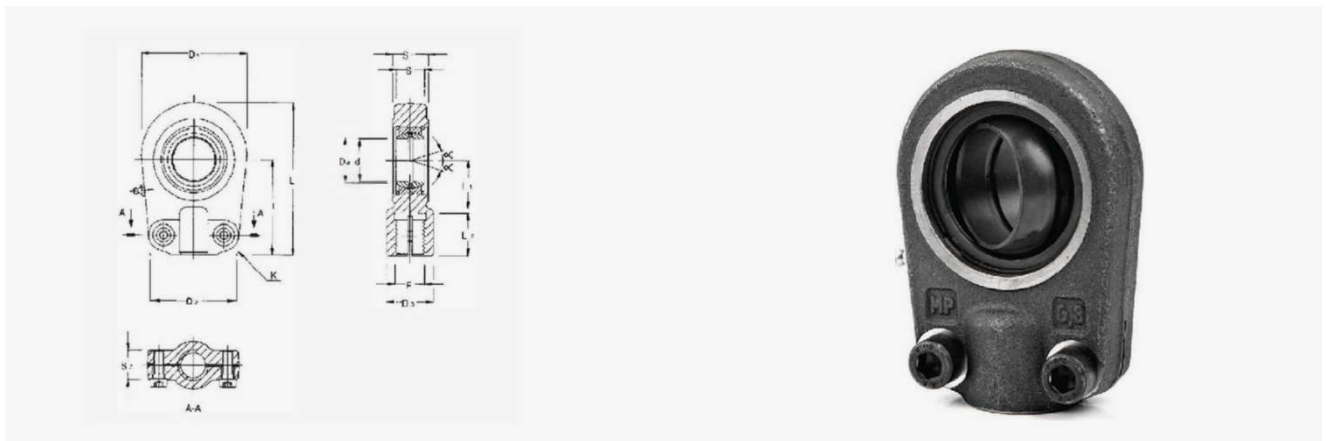


BSP WELDABLE PORT

CODE	THREAD	L	D	Kg
GDC-KM	R1/4-19	14	22	0.018 kg
GDC-KM	R3/8-19	14	26	0.034 kg
GDC-KM	R1/2-14	17	32	0.055 kg
GDC-KM	R3/4-14	20	40	0.113 kg
GDC-KM	R1"-11	23	45	0.185kg

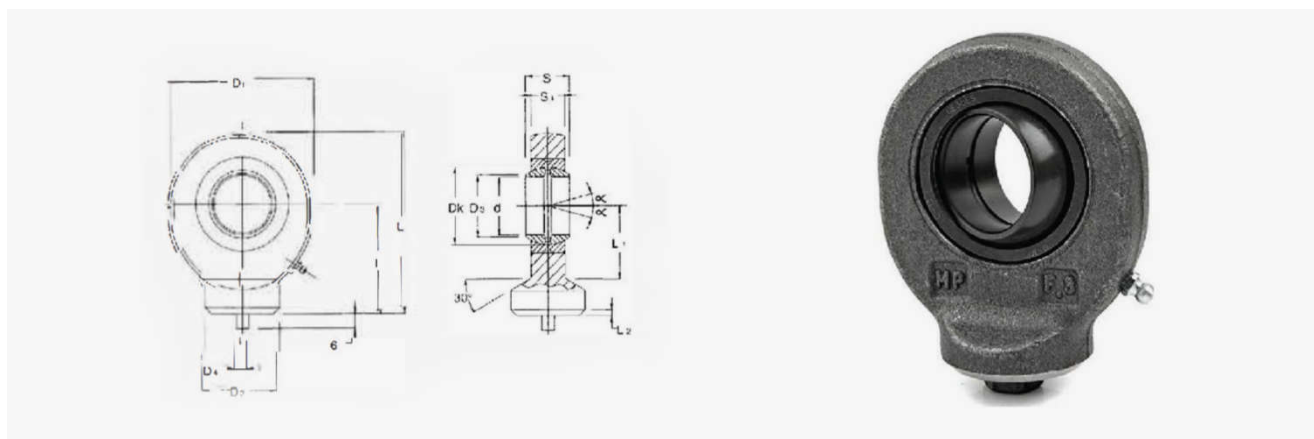


BOLT FASTENING ROD SIDE CLEAVES



CODE	D	I	S	LP	D1	LP	D3	D1	S1	S2	D	S1	F	a	THREAD	kg
PR 20 U	20	50	16	17	56	46	25	24.1	19	21	80	25	M16x1.5	9	M8x20	0.450 kg
PR 25 U	25	50	20	17	56	46	25	29.3	23	21	80	28	M16x1.5	7	M8x20	0.490 kg
PR 30 U	30	60	22	23	64	50	32	34.2	28	26	94	30	M22x1.5	6	M8x25	0.760 kg
PR 35 U	35	70	25	29	78	66	40	39.7	30	28	112	38	M28x1.5	6	M10x30	1.260 kg
PR 40 U	40	85	28	36	94	76	49	45	35	33	135	45	M35x1.5	7	M10x35	2.150kg
PR 50 U	50	105	35	46	116	90	61	56	40	37	138	55	M45x1.5	6	M12x40	3.800 kg
PR 80 U	60	130	44	59	130	120	75	66.8	50	46	200	65	M58x1.5	6	M16x45	6.200 kg
PR 70 U	70	150	49	66	157	130	86	77.8	55	51	232	75	M65x1.5	6	M16x50	9.830 kg
PR 80 U	80	170	55	81	178	160	105	89.4	60	55	265	80	M80x2	6	M20x55	13.970 kg
PR 90 U	90	210	60	101	210	180	124	98.1	65	63	323	90	M100x2	5	M20x60	23.500 kg
PR 100 U	100	235	70	111	234	200	138	109.5	70	65	360.7	105	M110x2	7	M24x65	32.000 kg

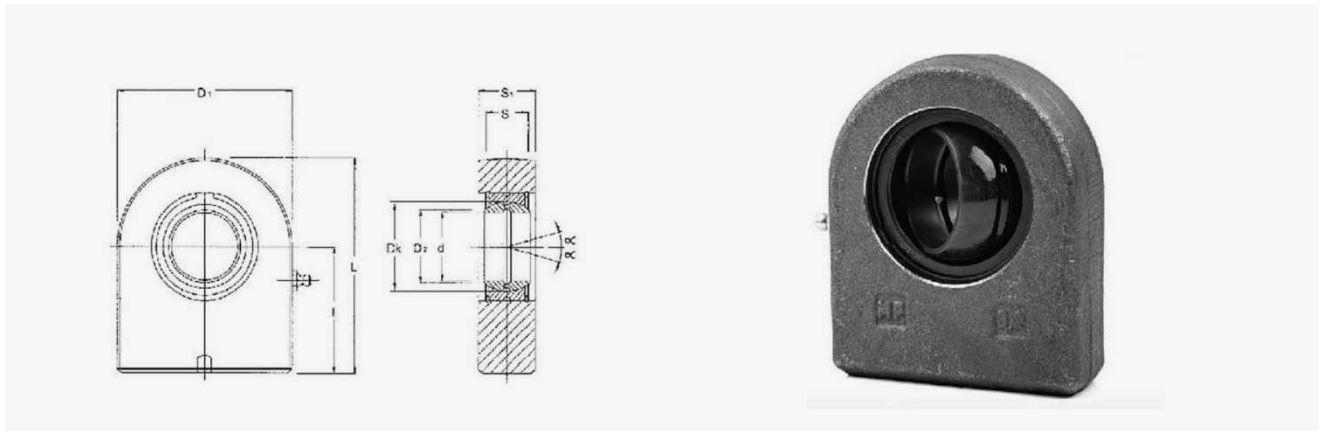
WELDABLE ROD SIDE CLEVISES



CODE	D	I	S	D1	D2	D3	D4	S1	L	L1	L2	a	kg
S 20 C	20	38	16	53	27.5	24.1	4	13	64.5	27.5	3	9	0.260 kg
S 25 C	25	45	20	64	33.5	29.3	4	17	77	33	4	7	0.450 kg
S 30 C	30	51	22	73	40	34.2	4	19	87.5	37.5	4	6	0.670 kg
S 35 C	35	61	25	82	47	39.7	4	21	102	43	4	6	1.020 kg
S 40 C	40	69	28	92	52	45	4	23	115	48	5	7	1.400 kg
S 45 C	45	77	32	102	58	50.7	6	27	123	52	5	7	1.930 kg
S 50 C	50	88	35	112	62	56	6	30	144	59	6	6	2.690 kg
S 60 C	60	100	44	197	70	66.8	6	38	167.5	72.5	8	6	4.600 kg
S 70 C	70	115	49	161	80	77.8	6	42	195	86	10	6	7.000 kg
S 80 C	80	141	55	180	95	89.4	6	47	231	98	10	6	11.000 kg

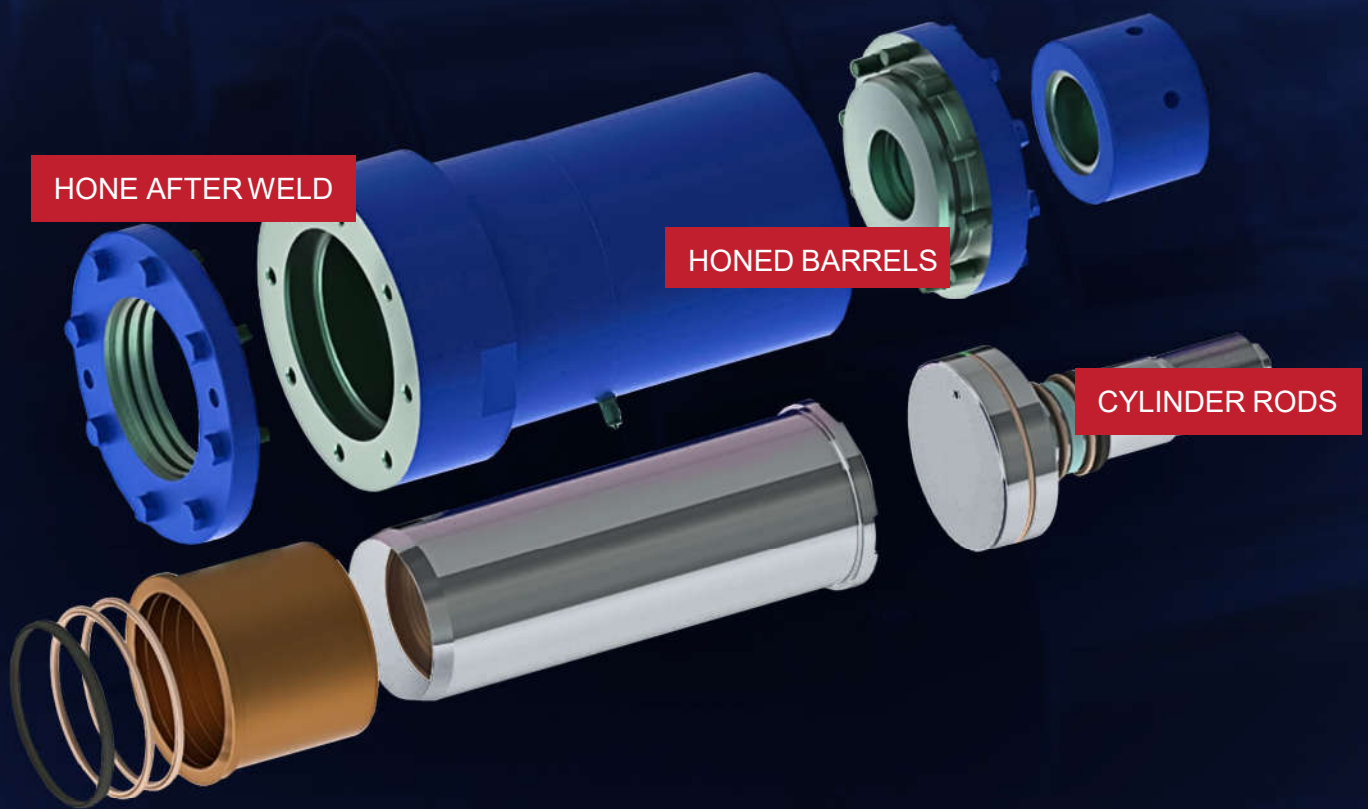


WELDABLE ROD SIDE CLEAVISES



CODE	d	s	l	D1	D2	S1	L	a	kg
S 20 N	20	16	38	50	24.1	19	63	9	0.360 kg
S 25 N	25	20	45	55	29.3	23	72.5	7	0.530 kg
S 30 N	30	22	51	65	34.2	28	83.5	6	0.850 kg
S 35 N	35	25	61	83	39.7	30	102.5	6	1.500 kg
S 40 N	40	28	69	101	45	35	119	7	2.420 kg
S 45 N	45	32	77	111	50.7	60	132	7	3.390 kg
S 50 N	50	35	88	123	56	40	149.5	6	4 240 kg
S 60 N	60	44	100	140	66.8	50	170	6	7.100 kg
S 70 N	70	49	115	164	77.8	55	197	6	10.700 kg
S 80 N	80	55	141	180	89.4	60	231	6	15.100 kg
S 90 N	90	60	150	226	98.1	65	263	6	23.400 kg
S 100 N	100	70	170	250	109.5	70	295	6	33.100 kg

HONINGCRAFT SOLUTIONS



For the ultimate Honingcraft experience, enjoy our semi-finished components. Honingcraft will manufacture the hydraulic cylinder barrel or hydraulic cylinder rod and the wear parts. All that is left for you to do is to assemble and test the cylinder. What could be easier?

HONED BARRELS

Honingcraft manufactures complete hydraulic cylinder barrels to OEM specifications. Once you've stripped and assessed the damage to a cylinder, determine which part needs to be remanufactured and request a quote. You will cut out the hassle and cost of running materials between service providers and cut down on total delivery time. This is a great option for our customers outside of South Africa.

Hydraulic cylinder barrels endure conditions of extreme pressure. To make them resistant to the extreme conditions under which they operate, the inside diameter of the barrel is honed to a smooth surface finish, ensuring that the barrel is free from ovality and that the bore is parallel.

The smooth surface protects the piston seals during operation, extending the effective life of the cylinder. The combination of experienced re-conditioners and high-quality machines, ensure that our clients receive the best reconditioned cylinder rods and barrels at an affordable price.



HONE AFTER WELD

Welding cylinder tubes often results in distortion of the material and we offer a hone after-weld service, at no extra cost, where our customers are supplied with honed or unhoned material. After machining and welding the material, it is returned to Honingcraft for the final honing process. This ensures the best possible tolerances on welded cylinders.

You will receive the size of tube you require which is cut to the length you specify. Weld your ports, end-cap and flange on and send it back to us for a final hone to adjust the inside diameter for warping during the welding process. We will deliver the completed barrel to you for assembly and testing.



CYLINDER RODS

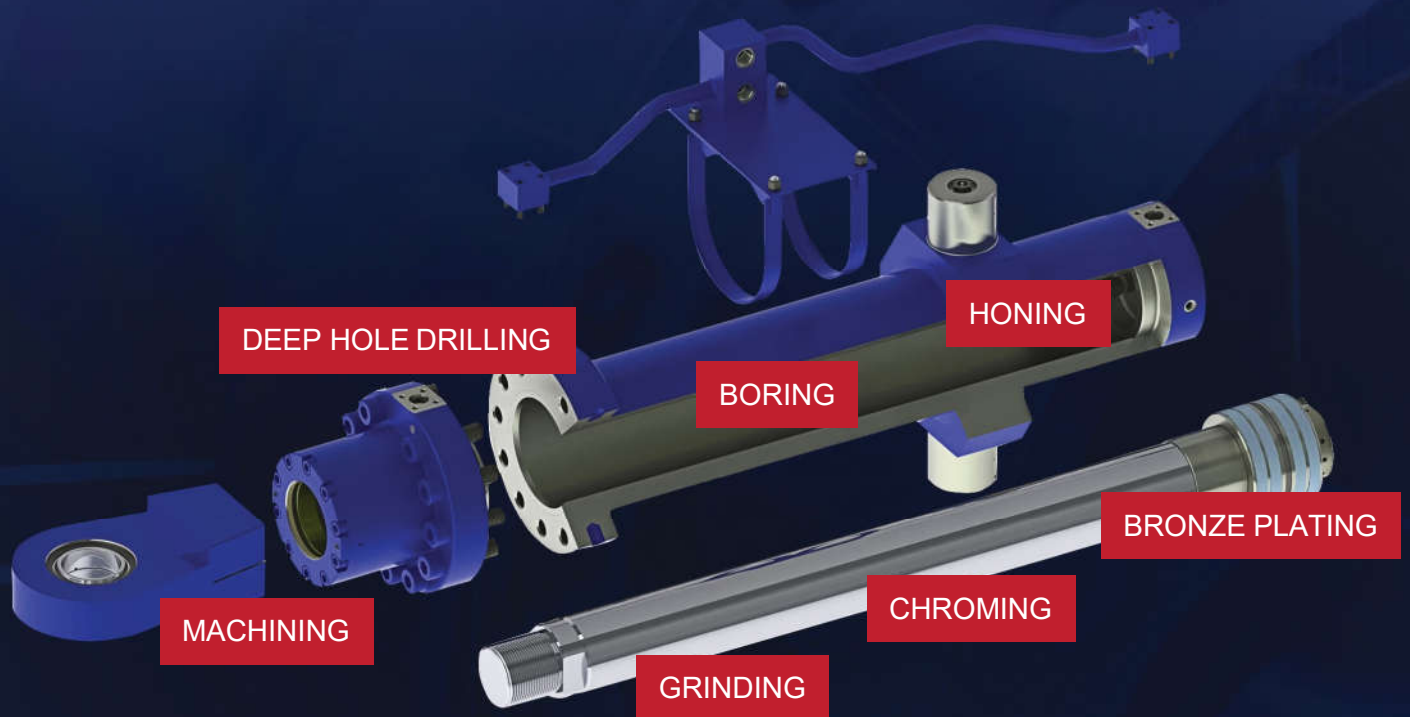
Honingcraft manufactures complete hydraulic cylinder rods to OEM specifications. Once you've stripped and assessed the damage to a cylinder, determine which part needs to be remanufactured and request a quote. You will cut out the hassle and cost of running materials between service providers and cut down on total delivery time. This is a great option for our customers outside of South Africa.

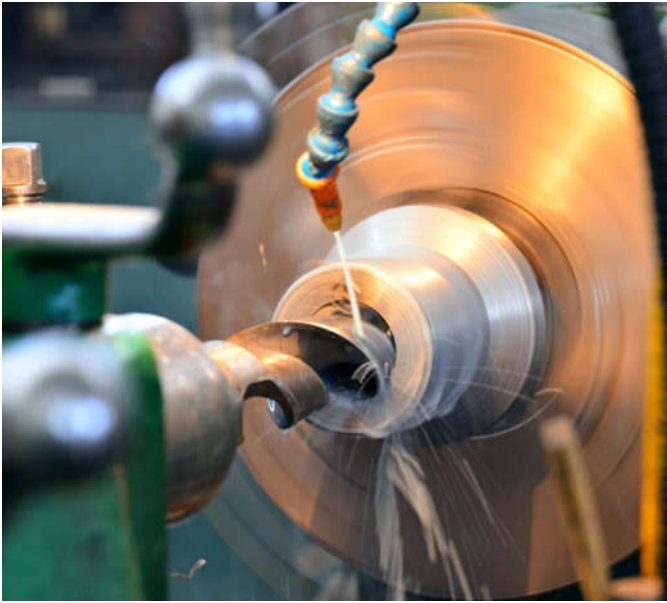
Cylinder rods are hard-chromed to make them resistant to the wear that would usually destroy the base material during normal operation. The smooth surface protects the rod wipers and seals, extending the effective life of the cylinder component that is most exposed to the elements.

The combination of experienced re-conditioners and high-quality machines, ensure that our clients receive the best reconditioned cylinder rods and barrels at an affordable price.



WORKSHOP SERVICES





BORING

Boring is the process of increasing the inside diameter of a hole that has already been drilled or cast using a single-point cutting tool. Boring can be viewed as the internal-diameter counterpart to turning, which cuts external diameters. Because of the limitations on tooling design imposed by the fact that the workpiece mostly surrounds the tool, boring is inherently more challenging than turning. Boring is viewed as an area of machining practice in its own right, separate from turning, with its own tips, tricks, challenges, and body expertise, despite the fact that they are in some ways identical.

CHROMING

Honingcraft Moser operates one of the largest shaft chroming plants in Africa, enabling us to provide any industrial chroming requirement. Moser can chrome shafts with a maximum diameter of 1,000 mm, at lengths up to 10,000 mm. Our rectifiers can supply a combined 124,000 amps of power into 122 kilolitre baths of chromic acid baths supported by 100 tonnes of combined overhead cranes. Our 500 years of combined chroming experience makes ours the most knowledgeable chroming team in African industry.

Chrome plating, often referred to simply as chroming, is a technique of electroplating a thin layer of chromium onto a metal object. Industrial chroming, or Hard Chrome, extends the life of any treated product by providing corrosion resistance, increasing surface hardness and easing cleaning procedures. The chrome layer provides corrosion resistance, eases seal operations and increases surface hardness. We offer fast-turnaround with no compromise on client specifications, no deviation from tube size or agreed deadline.



BRONZE PLATING

Bronze plating will reduce the friction of the part that is being plated and extends the usefulness of it. We electroplate inside diameters, outside diameters and flat surfaces with bronze to ensure surfaces are wear resistant.

Honingcraft offers fast turnaround times with no compromise on client specifications or quality. Don't compromise on quality. Buy your hydraulic materials from Honingcraft.

Honingcraft's offering is available to anyone. Contact us to purchase a part with or without an account. If you want to open an account with Honingcraft, please apply with our accounts department at accounts@honingcraft.co.za. All new customer accounts are subject to a credit check. Both deliveries and collections within a 25 km radius of either of our branches are free of charge. Deliveries outside that radius can be made upon request.



WELDING

During the course of most precision steel manufacturing projects, welding is often needed for a large variety of reasons. Engineering projects often require components to be welded with a high degree of precision. Honingcraft provides precision welding as part of its workshop services.

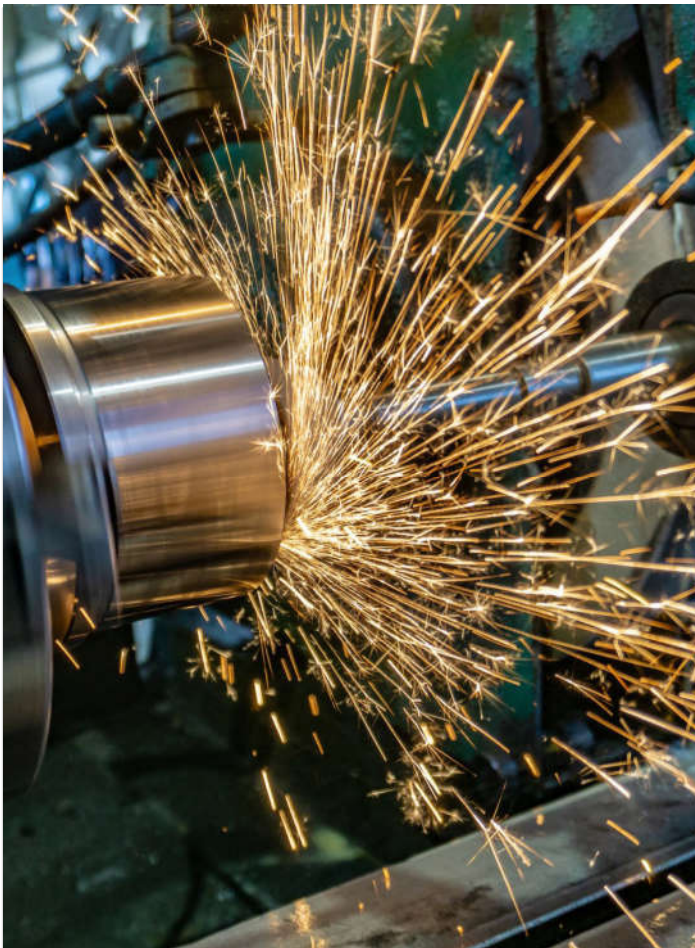
HONING



The main purpose of honing is to finish the inside or outside surface of a round tube to a precise geometric concentricity and parallelism throughout the length of the tube. Honingcraft hones tubes with diameters between 12 mm and 1,000 mm with lengths of up to 20 metres using our state of the art, cnc controlled honing machines.

Our facility allows for external and internal honing as required by any hydraulic cylinder manufacturing company. Honing any tube to a fine, smooth finish will give a signature "crosshatch" where the surface was honed.

Welding cylinder tubes often results in distortion of the material and we offer a hone after-weld service, at no extra cost, where our customers are supplied with honed or unhoned material, and after machining and welding the material, it is returned to Honingcraft for the final honing process. This ensures the best possible tolerances on welded cylinders.



GRINDING

Honingcraft Moser operates precision grinding machinery to provide surface finishing to exceptionally fine tolerances. We grind diameters between 30 mm and 1,300 mm in lengths up to 10 meters between centres.

Our grinding equipment is housed in a state of the art facility boasting overhead crane support of 50 tonnes at maximum and a combined 100 tonnes.

Grinding practice is a large and diverse area of manufacturing and toolmaking. It can produce very fine finishes and very accurate dimensions; yet in mass production contexts it can also rough out large volumes of metal quite rapidly. It is usually better suited to the machining of very hard materials than is "regular" machining (that is, cutting larger chips with cutting tools such as tool bits or milling cutters), and until recent decades it was the only practical way to machine such materials as hardened steels.



MACHINING

Honingcraft's machining department houses precision equipment that specialises in turning, boring, milling and threading of hydraulic cylinder components such as:

SHAFTS

TUBES

PISTONS

GLANDS

END-CAPS

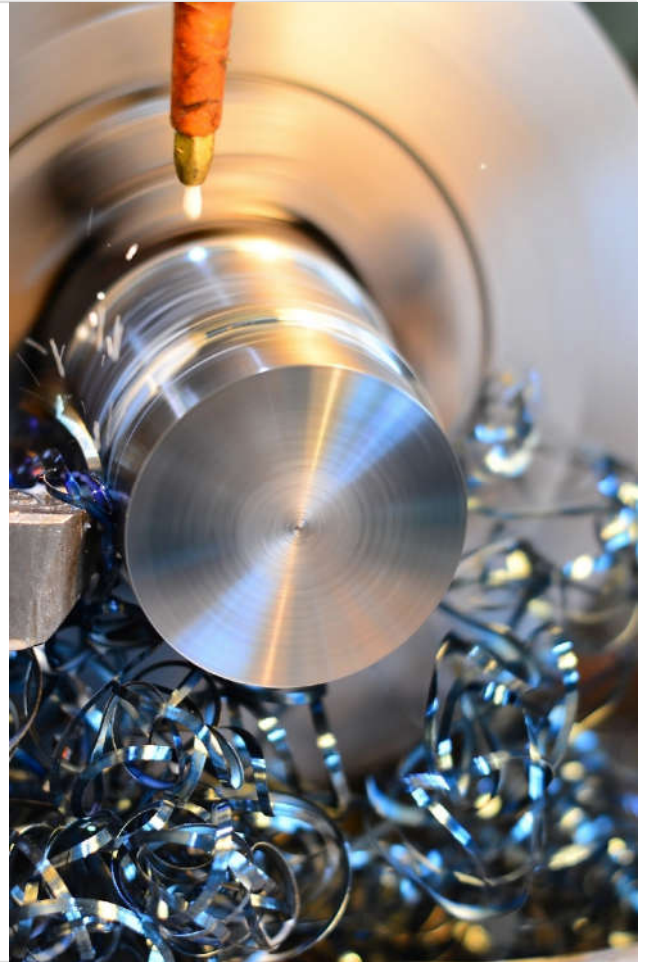
PORTS

MOUNTINGS

We can bore and machine shafts and rods with outside diameters of 800 mm and lengths up to 15 meters between centres. Our over saddle lathe machines can turn components with outside diameters of 500 mm up to 2 meters in length.

Being renowned for speed and accuracy, Honingcraft has the added advantage of being under the same roof as the material stores of Moser Hardchrome in Germiston and a machining branch in Port Elizabeth at Honingcraft Jünger.

For heavier or difficult to move jobs, we provide on-site (portable) precision machining and line boring. We have machined pressing crankshaft journals, bored in-frame bearing housings and line bored heavy earth moving equipment, all on-site. Just send a drawing of your required part to our sales team to receive an accurate quote and fair price on any machining work.



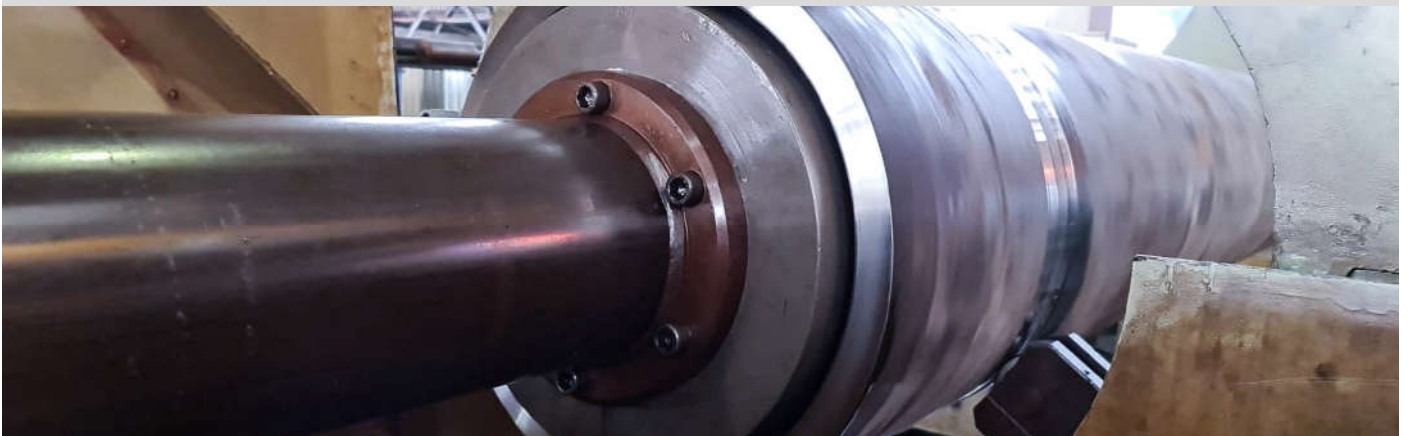
DEEP HOLE DRILLING

Honingcraft provides deep hole drilling services. Deep hole drilling is used to remove the core of a solid steel round-bar to manufacture highly specialised cylindrical components with a high degree of precision. Deep hole drilling is the preferred method to machine a hole through a solid round-bar billet. When engineers and manufacturing businesses need thick walled cylindrical components to deal with high pressure applications like in the case of thick-walled hydraulic cylinder barrels, deep hole drilling makes it possible to select from a large variety of standard steel round bars that are readily available from most steel merchants. The steel billet can then be drilled to make a hole through the round-bar.

Honingcraft's deep hole drilling machines can manufacture parts from round bars of 600 mm diameter and 6 meters long. Honingcraft also provides the steel round-bar from a trusted network of steel merchants to expand its own stock holding of precision manufacturing steel.

Main uses of such custom cylindrical products are ultra-high pressure hydraulic cylinder barrels, conveyor rollers and dynamometer rolls.

Deep hole drilling projects are complemented by Honingcraft's high precision honing department which can improve the surface finish of the inside diameter to a H8 tolerance.





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