

hofer



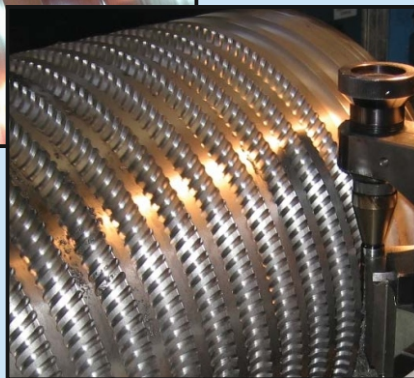
ISO 9001
Q-634

Tools for rolls machining



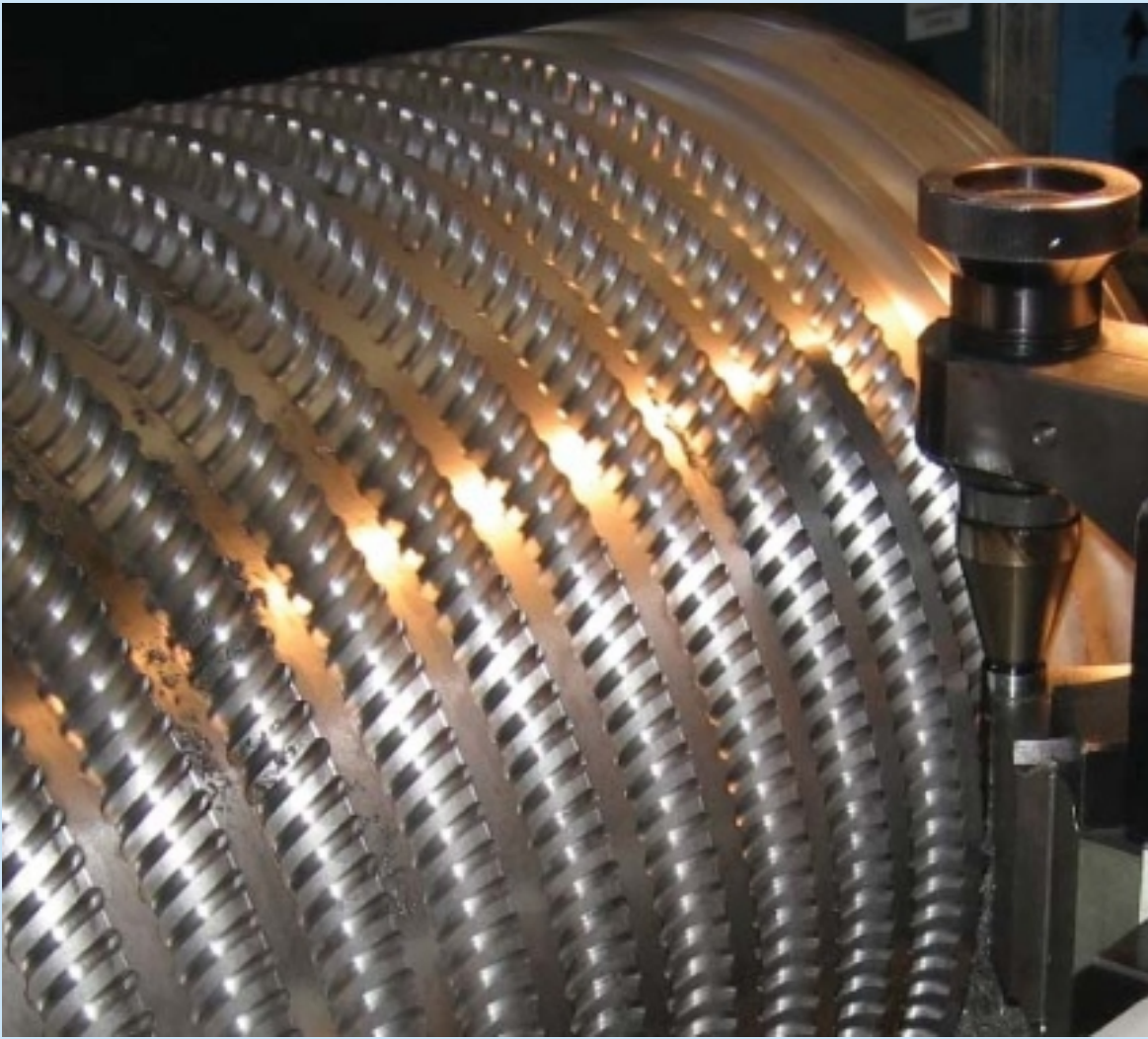
PCD

PCBN



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 **hofer**



Tools with half round arm and PCBN tipped

Tools for machining rollers for flattening reinforcing bars

Company Hofer d.o.o. is specialized in producing of tools for machining rollers for flattening reinforcing bars (rebar) and in our production program we offer wide range of special tools. Company Hofer d.o.o. can be your partner from first idea to final product.

From the wide range of tools we can sort out following products:

1. Tools for outside machining rollers



Toolholder
CCLN R/L 2525 M12-4-CD
CCLN R/L 3225 P16-CD

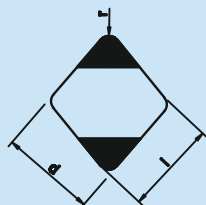


Toolholder
CSDN N 2525 P12-4-CD
CSDN N 3225 P12-4-CD



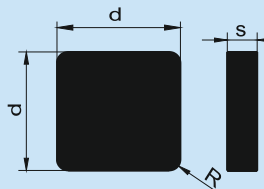
Toolholder
CSKN R/L 3232 P12-4-CD
CSKN R/L 3225 P12-4-CD

Inserts



CNGN 130420 T2A A90 2C7
CNGN 160620 T2A A90 2C9

Inserts

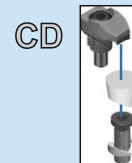
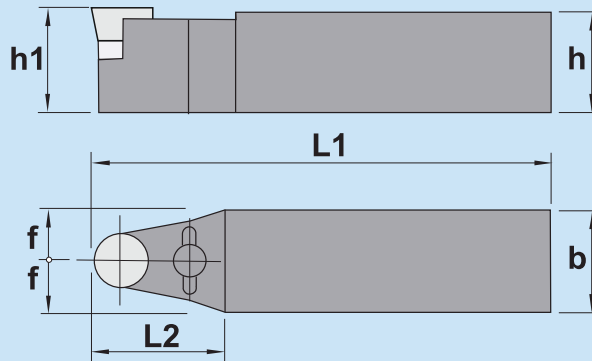
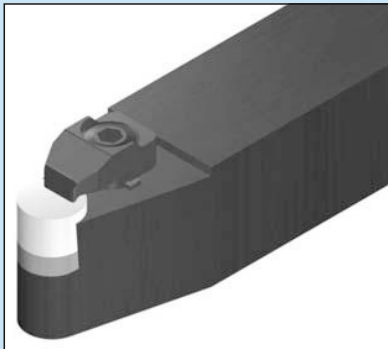


SNGN 130420 T2A A90
SNGN 150620 T2A A90

Wide range of all standard sorts of holders in combination with PCBN inserts enables machining of cast and hard metal rollers till 65 Hrc hardness.

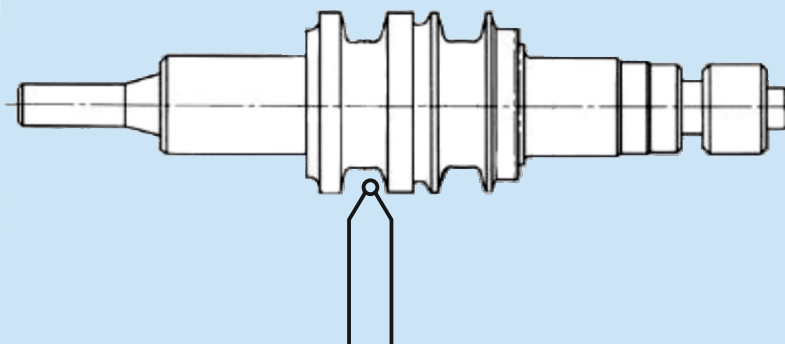
PCBN/CERAMIC RCGX

| | RCGX | | | | | Chamfer | a | s ±0,13 | d ±0,025 | AVAILABLE PCBN GRADES |
|--|---|-------------|-----|------|------|---------|---|---------|----------|--|
| | Ref. | RCGX 060700 | T2A | 140° | 3,18 | 6,35 | | | | S90 - 90% CBN content, 2-4 µm grain, AlCo binder |
| | | RCGX 090700 | T2A | 140° | 3,18 | 9,52 | | | | TBC80-350 - 90% CBN content, 10 µm grain, TiCN binder |
| | | RCGX 120700 | T3A | 140° | 4,76 | 12,70 | | | | |
| | Other dimensions available on request | | | | | | | | | |
| | Positive 7° clearance - Round inserts ORDER EXAMPLE RCGX 090300 T2A TBC80-350 | | | | | | | | | |
| | RCGX | | | | | Chamfer | a | s ±0,13 | d ±0,025 | AVAILABLE CERAMIC GRADES |
| | Ref. | RCGX 060700 | T2A | 140° | 3,18 | 6,35 | | | | CX1 - highly efficient cutting of gray cast iron |
| | | RCGX 090700 | T2A | 140° | 3,18 | 9,52 | | | | |
| | | RCGX 120700 | T4A | 140° | 4,76 | 12,70 | | | | |
| | Other dimensions available on request | | | | | | | | | |
| | Positive 7° clearance ORDER EXAMPLE RCGX 090700 T2A CX1 | | | | | | | | | |


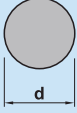

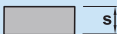
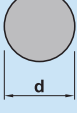


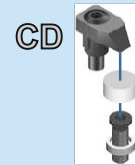
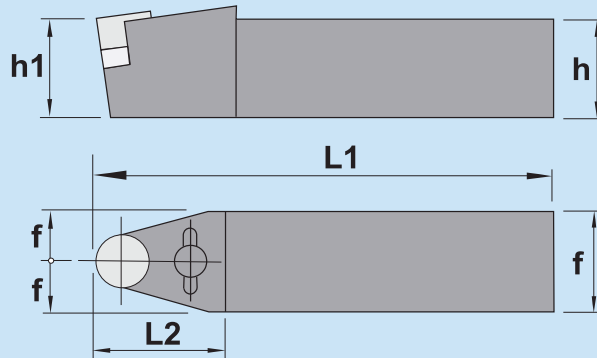
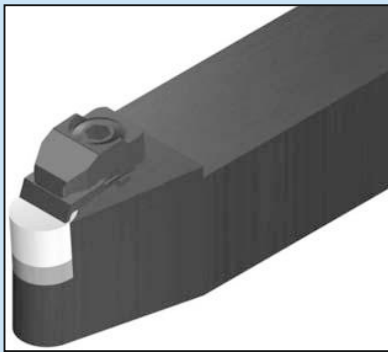
| CRDC | | | | | | | |
|------|--------------------|------|----|-----|----|------|-------------|
| Ref. | | h=h1 | b | L1 | L2 | f | Insert size |
| | CRDC N 2525 M06-CD | 25 | 25 | 150 | 20 | 12,5 | RCGX 0603.. |
| | CRDC N 2525 M09-CD | 25 | 25 | 150 | 20 | 12,5 | RCGX 0903.. |
| | CRDC N 3225 P09-CD | 32 | 25 | 170 | 20 | 12,5 | RCGX 0903.. |
| | CRDC N 2525 M12-CD | 25 | 25 | 150 | 25 | 12,5 | RCGX 1204.. |
| | CRDC N 3225 P12-CD | 32 | 25 | 170 | 25 | 12,5 | RCGX 1204.. |

| CD | CRDC N 2525 M06-CD | 3806-140-03 | 1392 | 2207 |
|----|--------------------|-------------|------|------|
| | CRDC N 2525 M09-CD | 3809-140-03 | 1225 | 2209 |
| | CRDC N 3225 P09-CD | 3809-140-03 | 1225 | 2209 |
| | CRDC N 2525 M12-CD | 3813-140-04 | 1230 | 2209 |
| | CRDC N 3225 P12-CD | 3813-140-04 | 1230 | 2209 |



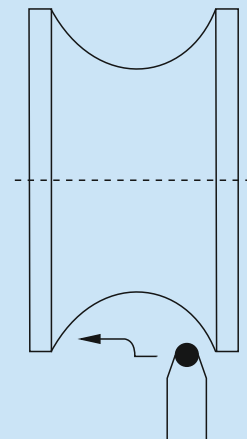
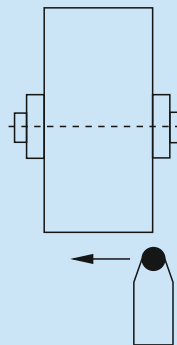
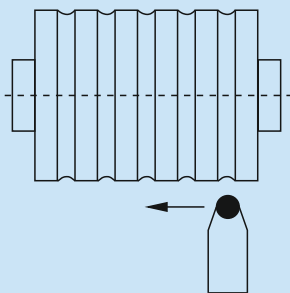
PCBN/CERAMIC RNGN

| | | | | | |
|--|------------------|--------------|---------------|-------|--|
|   | RNGN | | | | <i>AVAILABLE PCBN GRADES</i> |
| | Chamfer | $s \pm 0,13$ | $d \pm 0,025$ | | |
| | Ref. RNGN 120400 | T2A | 4,76 | 12,70 | A90 - 90% CBN content, 10 μm grain, AlNiB binder, solid shape A73 - 80% CBN content, 4 μm grain, TiN binder, solid shape TBC80-350 - 90% CBN content, 10 μm grain, TiCN binder  |
| Negative round inserts <i>ORDER EXAMPLE</i> RNGN 120400 T2A A90 | | | | | |
|   | RNGN | | | | <i>AVAILABLE CERAMIC GRADES</i> |
| | Chamfer | $s \pm 0,13$ | $d \pm 0,025$ | | |
| | Ref. RNGN 120400 | T2A | 4,76 | 12,70 | CX1 - highly efficient cutting of gray cast iron CC2 - semmi-finishing and finishing of cast iron machining of hardened materials |
| Negative round inserts <i>ORDER EXAMPLE</i> RNGN 120400 T4A CC2 | | | | | |

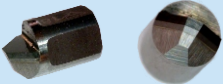

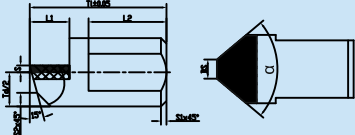
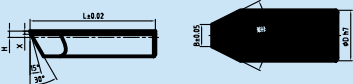


| CRDN | | $h=h_1$ | b | L_1 | L_2 | f | Insert size |
|-------------|---------------------|---------|-----|-------|-------|------|-------------|
| Ref. | CRDN N 2525 M12-4CD | 25 | 25 | 150 | 32 | 12,5 | RNGN 1204.. |
| | CRDN N 3225 P12-4CD | 32 | 25 | 170 | 32 | 12,5 | |

| CD | |  |  |  |  |  |
|----|---------------------|---|---|---|---|---|
| | CRDN N 2525 M12-4CD | IRSN 45 | 1160 | 2413 | 9414 | 5004 |
| | CRDN N 3225 P12-4CD | IRSN 45 | 1160 | 2413 | 9414 | 5004 |



PCD/CVD NOTCHING TOOLS

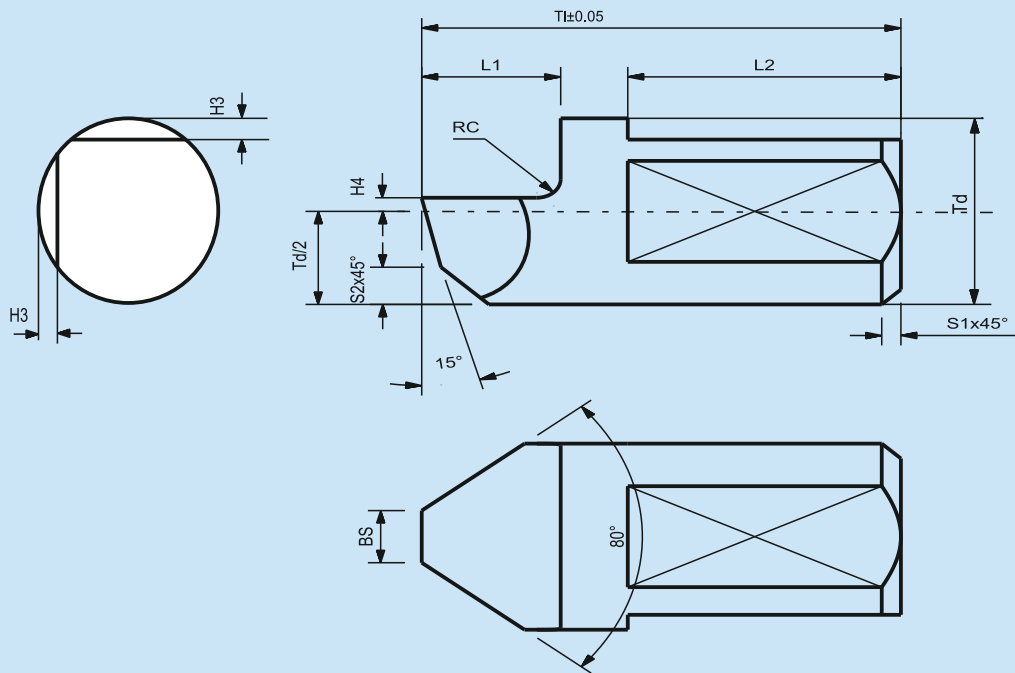
| PCD/CVD tipped notching tools | | PCD/CVD half face notching tools | |
|---|----------|---|---------|
|  | |  | |
|  | |  | |
| Rebar range | N8-N32 | Rebar range | N6-N16 |
| Tool diameter range | Ø3 - Ø12 | Tool diameter range | Ø2 - Ø5 |
| RECOMMENDED CUTTING CONDITIONS | | cutting speed 4-6 m/min depth of cut 0,02 - 0,04 | |

PCBN CUTTING CONDITIONS FOR ROLLS

| Roll material | Hardness | v, m/min | f, mm/okr(rev) | ap, mm |
|------------------|-------------|----------|----------------|---------|
| Carbide(>17% Co) | HRA 81-86 | 10-30 | 0,1-0,3 | 0,1-0,5 |
| Chilled iron | 65-85 | 30-80 | 0,1-0,5 | 0,2-2 |
| Nodular iron | 40-70 | 50-100 | 0,1-0,5 | 0,3-2 |
| High speed steel | 70-85 | 50-80 | 0,1-0,4 | 0,1-2 |
| Cooling | Dry cutting | | | |

Tools for rib machining on profile for flattening

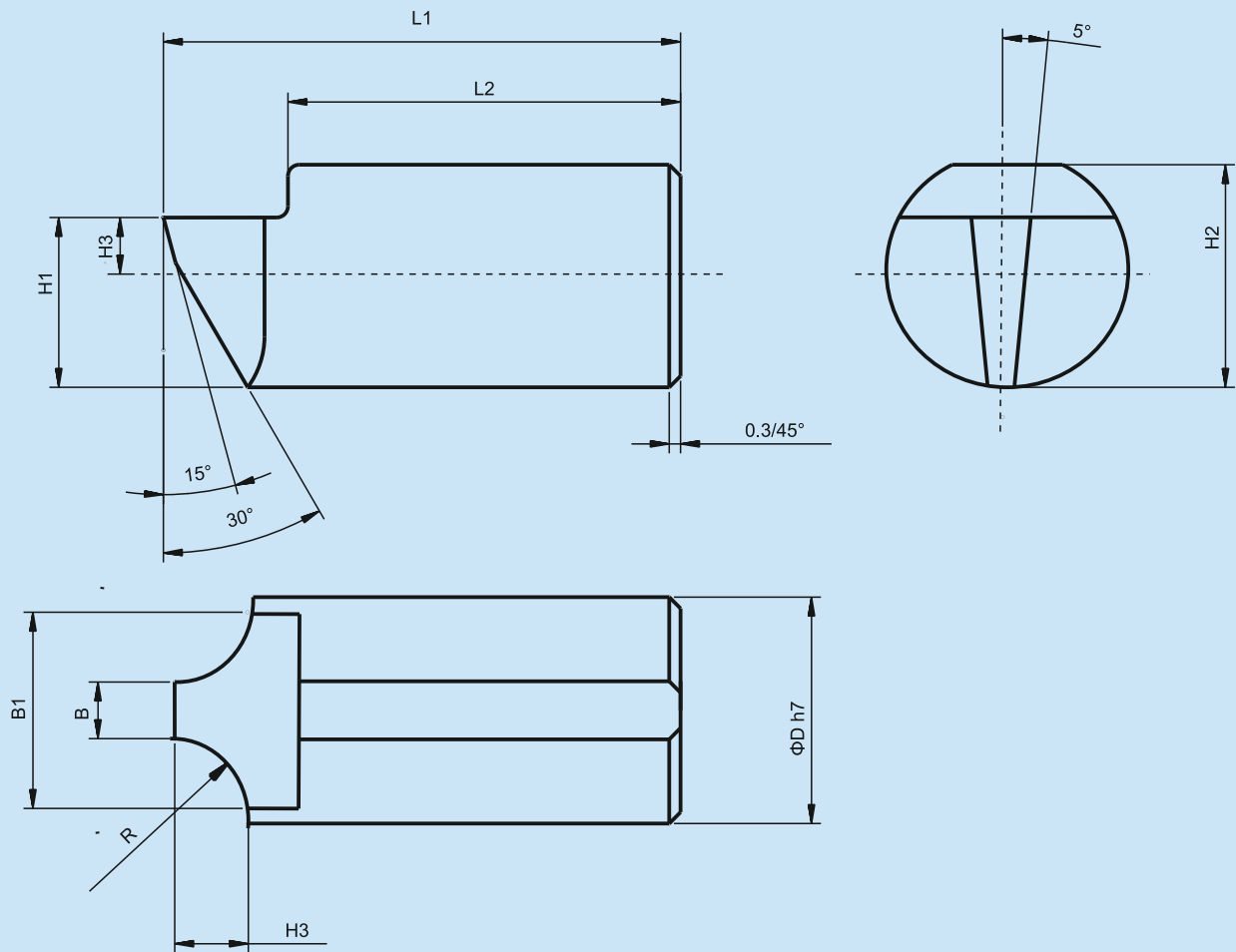
Tools with round hard metal arm



Type NZO 050...

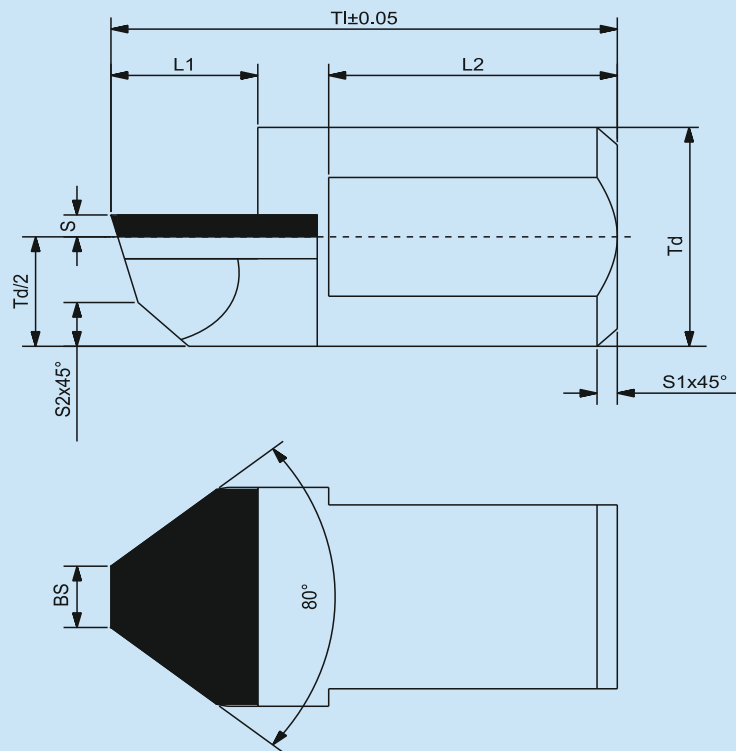
| RBC | Td | TI | TI min | BS | L1 | L2 | RC | S1x45 | S2x45 | H4 | H3 | MARKING |
|-----|----|------|--------|-----|-----|------|-----|-------|-------|-----|-----|------------|
| 8 | 3 | 5.3 | 4.62 | 0.8 | 1.8 | 2.8 | 0.3 | 0.24 | 0.6 | 0.3 | 0.2 | NZO 050.08 |
| 10 | 4 | 6.8 | 5.90 | 1 | 2.0 | 3.8 | 0.4 | 0.32 | 0.8 | 0.4 | 0.3 | NZO 050.10 |
| 12 | 4 | 8 | 6.56 | 1.2 | 2.3 | 4.1 | 0.4 | 0.32 | 0.8 | 0.4 | 0.3 | NZO 050.12 |
| 14 | 5 | 10 | 8.77 | 1.4 | 2.9 | 5.7 | 0.5 | 0.4 | 1 | 0.5 | 0.4 | NZO 050.14 |
| 16 | 6 | 11 | 9.65 | 1.6 | 3.2 | 6.3 | 0.6 | 0.48 | 1.2 | 0.5 | 0.5 | NZO 050.16 |
| 18 | 6 | 12 | 9.98 | 1.8 | 3.4 | 6.3 | 0.6 | 0.48 | 1.2 | 0.6 | 0.5 | NZO 050.18 |
| 20 | 8 | 13.5 | 11.70 | 2 | 4.0 | 7.5 | 0.8 | 0.64 | 1.6 | 0.6 | 0.6 | NZO 050.20 |
| 22 | 8 | 15 | 12.97 | 2.2 | 4.7 | 8.1 | 0.8 | 0.64 | 1.6 | 0.6 | 0.6 | NZO 050.22 |
| 25 | 10 | 17 | 14.75 | 2.5 | 4.8 | 9.7 | 1 | 0.8 | 2 | 0.8 | 0.8 | NZO 050.25 |
| 28 | 10 | 19 | 16.39 | 2.8 | 5.8 | 10.3 | 1 | 0.8 | 2 | 0.8 | 0.8 | NZO 050.28 |
| 32 | 12 | 22 | 18.82 | 3.2 | 7.1 | 11.4 | 1.2 | 0.96 | 2.4 | 0.9 | 0.9 | NZO 050.32 |

Tools with round hard metal arm



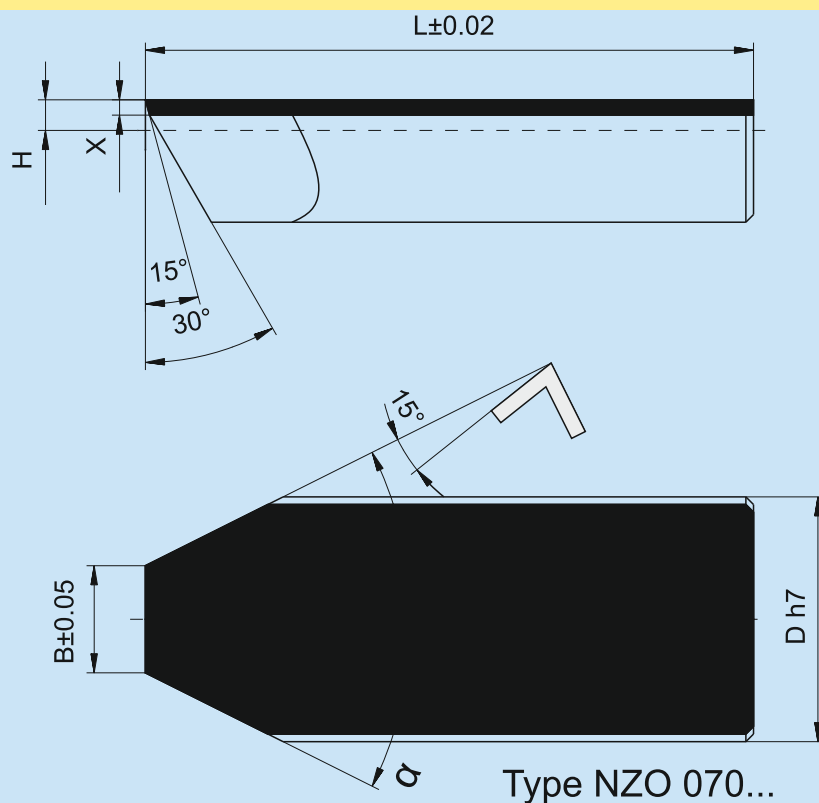
| RBČ | ΦD | L1 | L2 | H1 | H2 | H3 | B | B1 | R | | MARKING |
|-----|----------|-------|------|------|-----|------|------|------|-----|--|------------|
| 8 | 3 | 5.25 | 3.4 | 2.25 | 2.8 | 0.75 | 1.10 | 2.60 | 1.2 | | NZO 051.08 |
| 10 | 3.5 | 6.50 | 4.4 | 2.63 | 3.3 | 1.00 | 1.45 | 3.03 | 1.5 | | NZO 051.10 |
| 12 | 4 | 7.80 | 5.4 | 3.00 | 3.7 | 1.00 | 1.65 | 3.46 | 2.0 | | NZO 051.12 |
| 14 | 4 | 9.35 | 6.7 | 3.00 | 3.7 | 1.00 | 1.95 | 3.46 | 2.0 | | NZO 051.14 |
| 16 | 5 | 10.45 | 7.6 | 3.75 | 4.7 | 1.00 | 1.95 | 4.33 | 2.0 | | NZO 051.16 |
| 18 | 5 | 11.90 | 9.1 | 3.75 | 4.7 | 1.50 | 1.95 | 4.33 | 2.0 | | NZO 051.18 |
| 20 | 6 | 13.40 | 10.1 | 4.50 | 5.6 | 1.50 | 1.95 | 5.20 | 2.0 | | NZO 051.20 |
| 22 | 6 | 14.35 | 11.2 | 4.50 | 5.6 | 1.50 | 1.95 | 5.20 | 2.0 | | NZO 051.22 |
| 25 | 8 | 16.55 | 11.9 | 6.00 | 7.5 | 1.50 | 1.95 | 6.90 | 2.0 | | NZO 051.25 |
| 28 | 8 | 18.45 | 13.8 | 6.00 | 7.5 | 1.50 | 2.50 | 6.90 | 3.0 | | NZO 051.28 |
| 32 | 10 | 20.95 | 16.2 | 7.50 | 9.4 | 2.00 | 2.50 | 7.80 | 3.0 | | NZO 051.32 |

Tools with round arm and CVD tipped



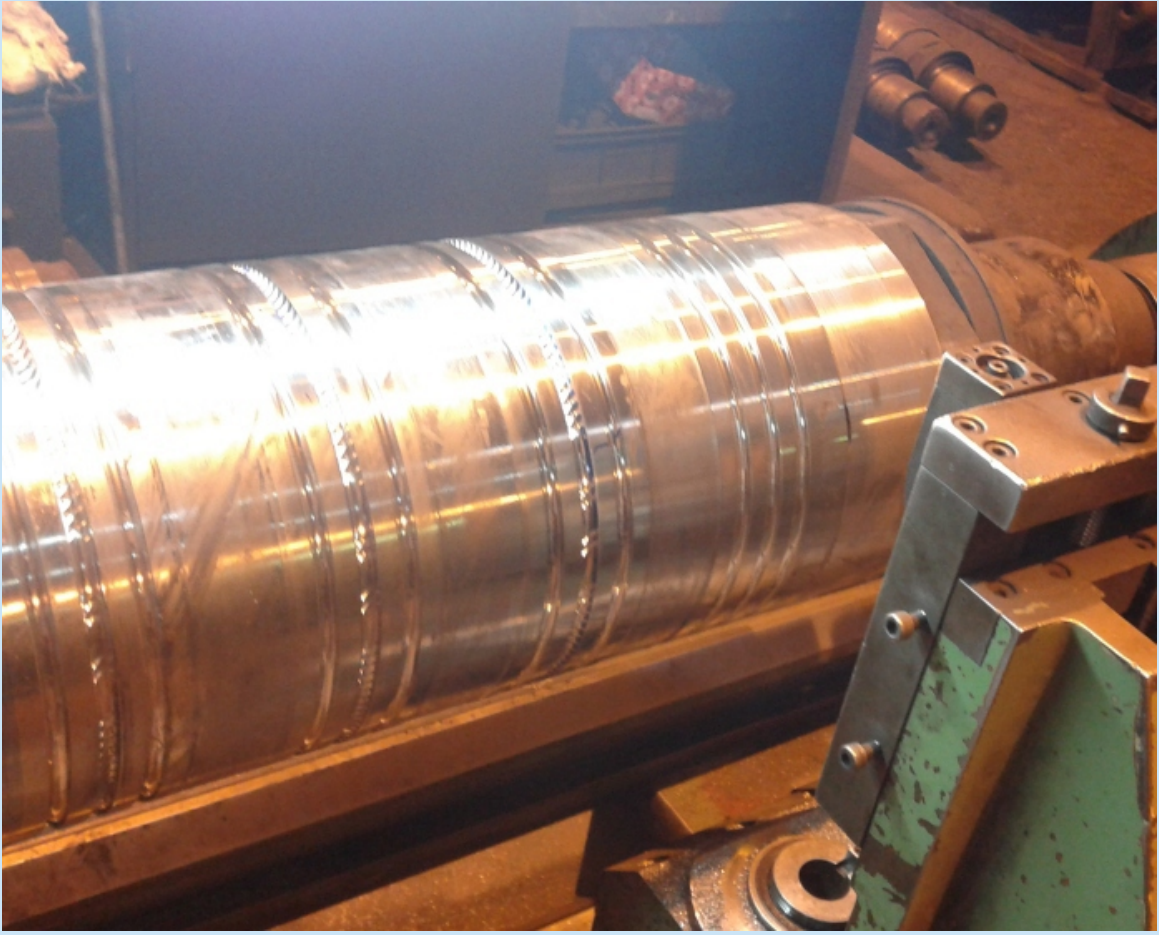
| RBC | Td | TI | TI min | BS | L1 | L2 | S1x45 | S2x45 | H3 | S | MARKING |
|-----|----|------|--------|-----|-----|------|-------|-------|-----|-----|-----------|
| 8 | 3 | 5.3 | 4.62 | 0.8 | 1.8 | 2.8 | 0.24 | 0.6 | 0.3 | 0.5 | NZO060.08 |
| 9 | 3 | 6.13 | 5.20 | 0.9 | 1.9 | 3.3 | 0.24 | 0.6 | 0.3 | 0.5 | NZO060.09 |
| 10 | 4 | 6.8 | 5.90 | 1 | 2.0 | 3.8 | 0.32 | 0.8 | 0.4 | 0.5 | NZO060.10 |
| 12 | 4 | 8 | 6.56 | 1.2 | 2.3 | 4.1 | 0.32 | 0.8 | 0.4 | 0.5 | NZO060.12 |
| 13 | 4 | 9 | 7.7 | 1.3 | 2.6 | 4.4 | 0.32 | 0.8 | 0.5 | 0.5 | NZO060.13 |
| 14 | 5 | 10 | 8.77 | 1.4 | 2.9 | 5.7 | 0.4 | 1 | 0.5 | 0.5 | NZO060.14 |
| 16 | 6 | 11 | 9.65 | 1.6 | 3.2 | 6.3 | 0.48 | 1.2 | 0.5 | 0.5 | NZO060.16 |
| 18 | 6 | 12 | 9.98 | 1.8 | 3.4 | 6.3 | 0.48 | 1.2 | 0.6 | 0.5 | NZO060.18 |
| 20 | 8 | 13.5 | 11.70 | 2 | 4.0 | 7.5 | 0.64 | 1.6 | 0.6 | 0.5 | NZO060.20 |
| 22 | 8 | 15 | 12.97 | 2.2 | 4.7 | 8.1 | 0.64 | 1.6 | 0.6 | 0.5 | NZO060.22 |
| 25 | 10 | 17 | 14.75 | 2.5 | 4.8 | 9.7 | 0.8 | 2 | 0.8 | 0.5 | NZO060.25 |
| 28 | 10 | 19 | 16.39 | 2.8 | 5.8 | 10.3 | 0.8 | 2 | 0.8 | 0.5 | NZO060.28 |
| 32 | 12 | 22 | 18.82 | 3.2 | 7.1 | 11.4 | 0.96 | 2.4 | 0.9 | 0.5 | NZO060.32 |

Tools with half round arm and PCD/CVD tipped



| RBC | H | ΦD | L | B | α | MARKING |
|-----|-----|----------|-------|-----|------------|------------|
| 6 | 0.3 | 2.0 | 4.0 | 0.6 | 90° | NZO 070.06 |
| 8 | 0.3 | 3.0 | 5.3 | 0.8 | 90° | NZO 070.08 |
| 9 | 0.3 | 3.0 | 6.0 | 0.9 | 90° | NZO 070.09 |
| 10 | 0.4 | 3.0 | 6.8 | 1.0 | 90° | NZO 070.10 |
| 12 | 0.5 | 4.0 | 8.5 | 1.2 | 90° | NZO 070.12 |
| 13 | 0.6 | 4.0 | 9.0 | 1.3 | 90° | NZO 070.13 |
| 14 | 0.6 | 4.0 | 9.85 | 1.4 | 90° | NZO 070.14 |
| 16 | 0.6 | 5.0 | 11.35 | 1.6 | 90° | NZO 070.16 |

Product range of Hofer company for rib machining on profile for flatting covers machining from rib 6 till rib 32.
Suitable for machining cast and hard metal rollers.

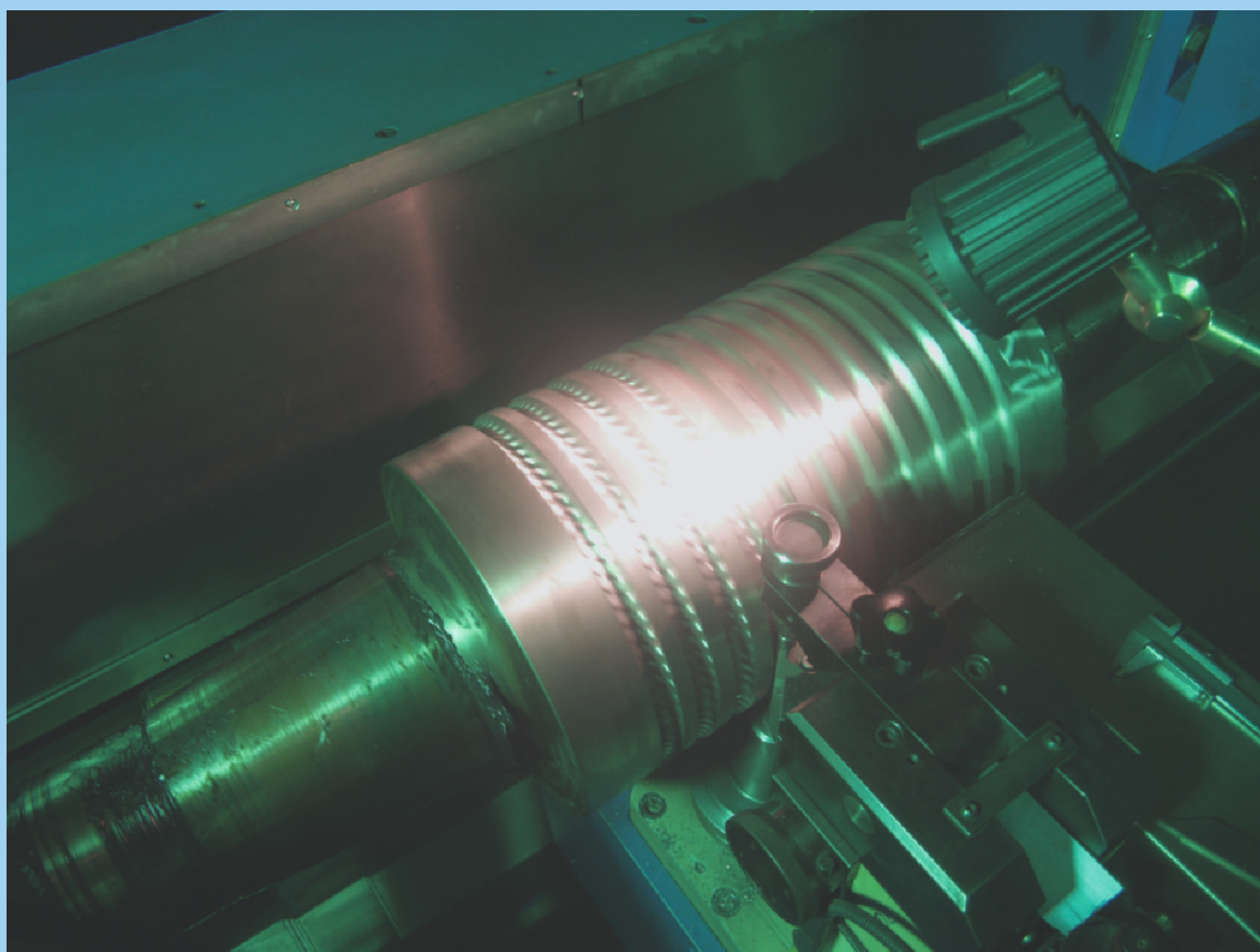




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