



**Code key**  
**Système de codification**  
**Kodifizierungs-System** **D02**

**Applications**  
**Applications**  
**Anwendungen** **D03**

**Microturn**  
**Microturn**  
**Microturn** **D04**

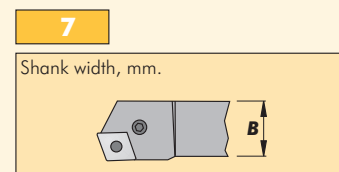
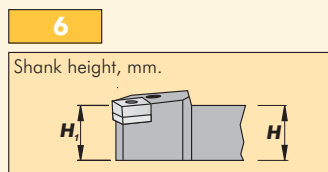
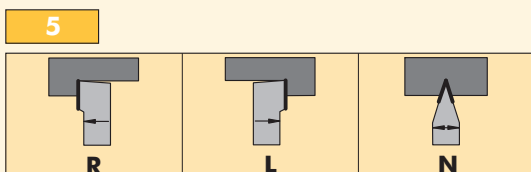
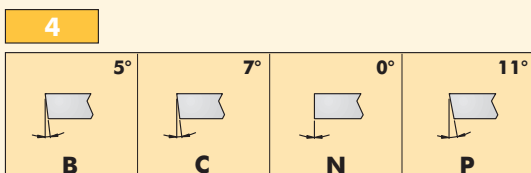
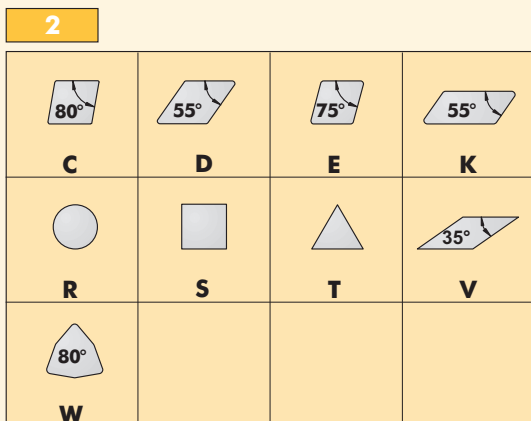
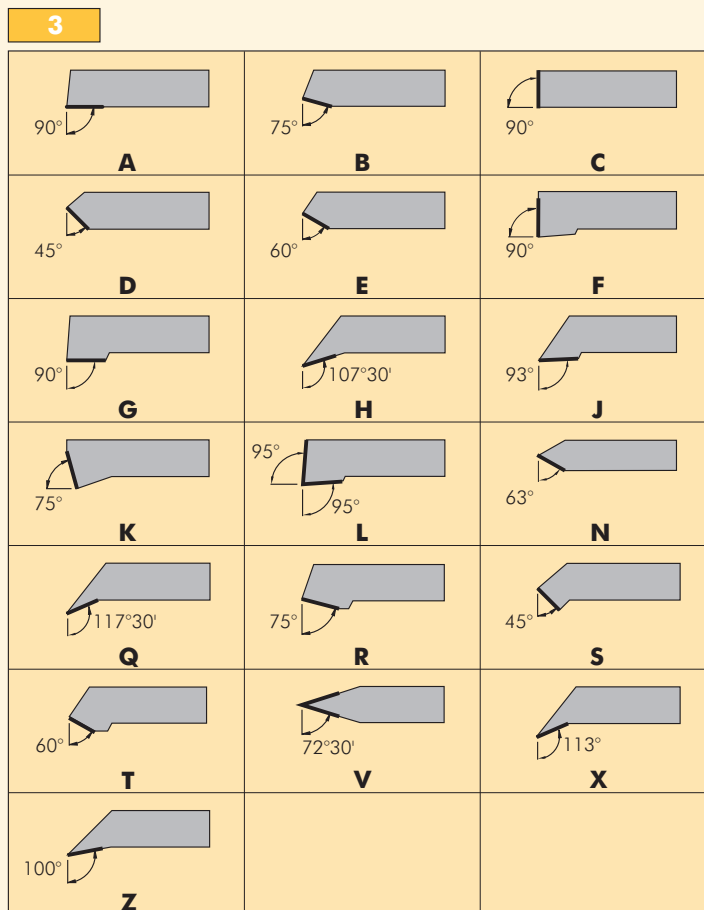
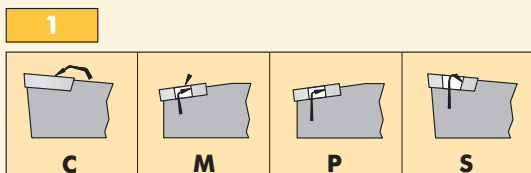
**Center screw toolholders**  
**Porte-outils avec vis centrale**  
**Klemmhalter mit Zentralschrauben-Klemmung** **D08**

**Other applications**  
**Autres applications**  
**Andere Anwendungen** **D11**

**Cutting data**  
**Conditions de coupe**  
**Schnittbedingungen** **D12**

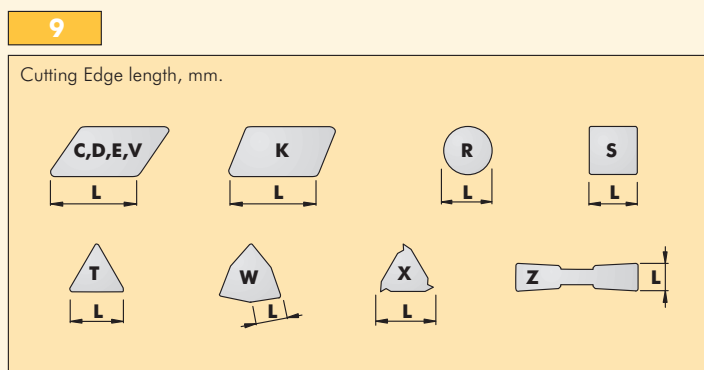
- Inserts
- Turning
- Automatic lathes
- Ceramic tools
- Parting & grooving
- Threading
- Drills
- Cartridges
- Brazed tools
- Milling cutters
- Solid carbide
- Boring heads
- Arbors & adaptors

|          |          |          |          |          |           |           |          |           |
|----------|----------|----------|----------|----------|-----------|-----------|----------|-----------|
| <b>S</b> | <b>C</b> | <b>A</b> | <b>C</b> | <b>R</b> | <b>12</b> | <b>12</b> | <b>M</b> | <b>09</b> |
| 1        | 2        | 3        | 4        | 5        | 6         | 7         | 8        | 9         |






**8**

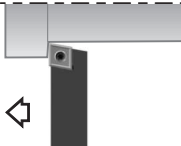
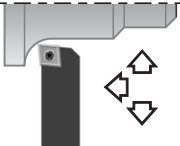
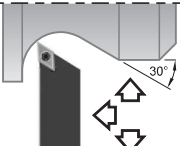
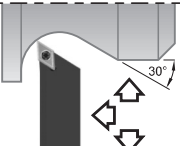
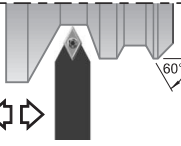
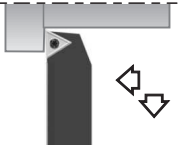
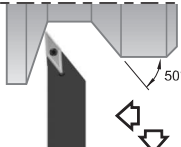
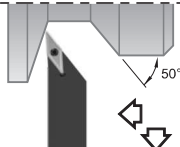
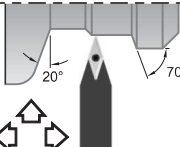
|                      |          |     |          |         |
|----------------------|----------|-----|----------|---------|
| Tool length, mm.<br> | <b>D</b> | 60  | <b>P</b> | 170     |
|                      | <b>E</b> | 70  | <b>R</b> | 200     |
|                      | <b>F</b> | 80  | <b>S</b> | 250     |
|                      | <b>H</b> | 100 | <b>T</b> | 300     |
|                      | <b>K</b> | 125 | <b>U</b> | 350     |
|                      | <b>L</b> | 140 | <b>V</b> | 400     |
|                      | <b>M</b> | 150 | <b>X</b> | Special |



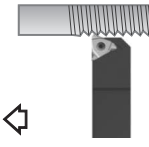
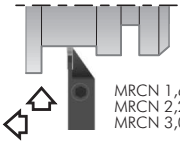
Microturn - Microturn - Microturn

|   |   |   |  |  |  |
|---|---|---|--|--|--|
| <p><b>STHE</b></p>  <p>Page D.04</p> | <p><b>MT</b></p>  <p>Page D.06</p> | <p>608.00<br/>611.00<br/>614.00<br/>616.00</p>  <p>Page D.07</p> |  |  |  |
|---|---|---|--|--|--|

Center screw toolholders - Porte-outils avec vis centrale - Klemmhalter mit Zentralschrauben-Klemmung

|  |  |   |   |   |   |
|--|--|---|---|---|---|
| <p><b>SCAC 90°</b></p>  <p>Page D.08 CC.. 0602..<br/>CC.. 09T3..</p>  | <p><b>SCLC 95°</b></p>  <p>Page D.08 CC.. 0602..<br/>CC.. 09T3..</p>  | <p><b>SDAC 90°</b></p>  <p>Page D.08 DC.. 0702..<br/>DC.. 11T3..</p> | <p><b>SDJC 93°</b></p>  <p>Page D.09 DC.. 0702..<br/>DC.. 11T3..</p> | <p><b>SDNC 63°</b></p>  <p>Page D.09 DC.. 0702..<br/>DC.. 11T3..</p> | <p><b>STJC 93°</b></p>  <p>Page D.09 TC.. 1102..</p> |
| <p><b>SVAC 90°</b></p>  <p>Page D.10 VC.. 1103..<br/>VC.. 1604..</p> | <p><b>SVJC 93°</b></p>  <p>Page D.10 VC.. 1103..<br/>VC.. 1604..</p> | <p><b>SVVC 72° 30°</b></p>  <p>Page D.10 VC.. 1103..</p>            |   |   |   |

Other applications - Autres applications - Andere Anwendungen

|   |   |  |  |  |  |
|---|---|--|--|--|--|
| <p><b>SXAN 90°</b></p>  <p>Threading<br/>Page D.11 08 ER/L..<br/>11 ER/L..<br/>16 ER/L..</p> | <p><b>CZCB</b></p>  <p>MRCN 1,6<br/>MRCN 2,2<br/>MRCN 3,0<br/>Parting and grooving<br/>Page D.11</p> |  |  |  |  |
|---|---|--|--|--|--|

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

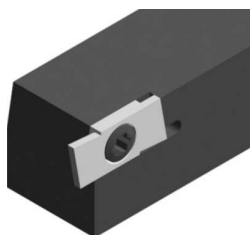
Milling cutters

Solid carbide

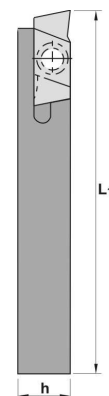
Boring heads

Arbors & adaptors

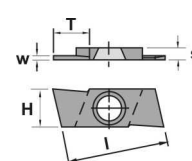
**STHE**



| REF.                  | h  | h1 | B  | L   | f  | Gl.. |     |     |
|-----------------------|----|----|----|-----|----|------|-----|-----|
| <b>STHER/L0808M07</b> | 8  | 8  | 8  | 150 | 8  | Gl.. | 130 | 508 |
| <b>STHER/L1010M07</b> | 10 | 10 | 10 | 150 | 10 | Gl.. | 130 | 508 |
| <b>STHER/L1212M07</b> | 12 | 12 | 12 | 150 | 12 | Gl.. | 130 | 508 |
| <b>STHER/L1616M07</b> | 16 | 16 | 16 | 150 | 16 | Gl.. | 130 | 508 |



| REF.        | l     | s    | H    |
|-------------|-------|------|------|
| <b>Gl..</b> | 17,00 | 2,00 | 7,00 |



For more information see page: A.72



**KIT STHE**

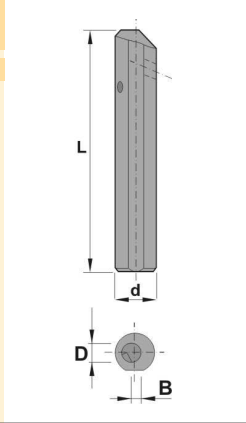
| REF.               | Holder       | Inserts |         |         |         |          |          |         |         |        |        |  |
|--------------------|--------------|---------|---------|---------|---------|----------|----------|---------|---------|--------|--------|--|
| <b>KIT STHER08</b> | STHER0808M07 | GISG09R | GISG11R | GISG13R | GISG16R | GISG185R | GIGP20RN | GIGW55R | GIGW60R | GIST3R | GISC3R |  |
| <b>KIT STHEL08</b> | STHEL0808M07 | GISG09L | GISG11L | GISG13L | GISG16L | GISG185L | GIGP20LN | GIGW55L | GIGW60L | GIST3L | GISC3L |  |
| <b>KIT STHER10</b> | STHER1010M07 | GISG09R | GISG11R | GISG13R | GISG16R | GISG185R | GIGP20RN | GIGW55R | GIGW60R | GIST3R | GISC3R |  |
| <b>KIT STHEL10</b> | STHEL1010M07 | GISG09L | GISG11L | GISG13L | GISG16L | GISG185L | GIGP20LN | GIGW55L | GIGW60L | GIST3L | GISC3L |  |
| <b>KIT STHER12</b> | STHER1212M07 | GISG09R | GISG11R | GISG13R | GISG16R | GISG185R | GIGP20RN | GIGW55R | GIGW60R | GIST3R | GISC3R |  |
| <b>KIT STHEL12</b> | STHEL1212M07 | GISG09L | GISG11L | GISG13L | GISG16L | GISG185L | GIGP20LN | GIGW55L | GIGW60L | GIST3L | GISC3L |  |
| <b>KIT STHER16</b> | STHER1616M07 | GISG09R | GISG11R | GISG13R | GISG16R | GISG185R | GIGP20RN | GIGW55R | GIGW60R | GIST3R | GISC3R |  |
| <b>KIT STHEL16</b> | STHEL1616M07 | GISG09L | GISG11L | GISG13L | GISG16L | GISG185L | GIGP20LN | GIGW55L | GIGW60L | GIST3L | GISC3L |  |



**00.30**



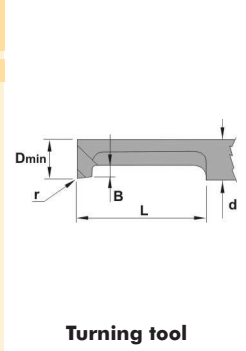
| REF.               | L   | d  | B    | D         | CTI  |  |  |
|--------------------|-----|----|------|-----------|------|---|---|
| <b>00.30.12.04</b> | 100 | 12 | 2,35 | 2,5 / 4,2 | 04.. | 157   | 525   |
| <b>00.30.16.06</b> | 120 | 16 | 2,80 | 8,2       | 06.. | 156   | 503   |



**AR**



| REF.               | L  | d | B   | Dmin | r   |
|--------------------|----|---|-----|------|-----|
| <b>CTI 0402 AR</b> | 15 | 4 | 0,8 | 4,2  | 0,2 |
| <b>CTI 0602 AR</b> | 20 | 6 | 1,8 | 6,2  | 0,2 |

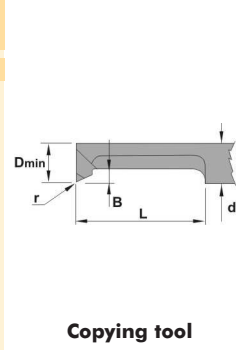


Turning tool

**BR**



| REF.               | L  | d | B   | Dmin | r   |
|--------------------|----|---|-----|------|-----|
| <b>CTI 0402 BR</b> | 15 | 4 | 0,8 | 4,2  | 0,2 |
| <b>CTI 0602 BR</b> | 20 | 6 | 1,8 | 6,2  | 0,2 |

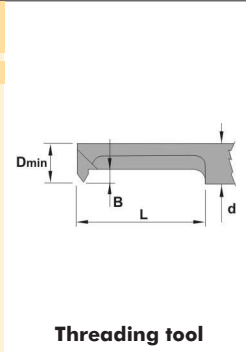


Copying tool

**CR**



| REF.               | L  | d | B   | Dmin | r |
|--------------------|----|---|-----|------|---|
| <b>CTI 0400 CR</b> | 15 | 4 | 0,8 | M5   | - |
| <b>CTI 0600 CR</b> | 20 | 6 | 1,8 | M8   | - |

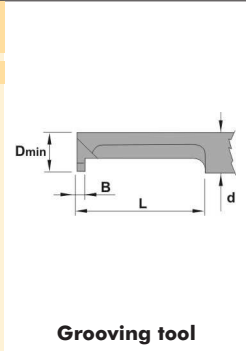


Threading tool

**DR**



| REF.               | L  | d | B   | Dmin | r |
|--------------------|----|---|-----|------|---|
| <b>CTI 0410 DR</b> | 15 | 4 | 1,0 | 4,2  | - |
| <b>CTI 0615 DR</b> | 20 | 6 | 1,8 | 6,2  | - |



Grooving tool

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide



Boring heads

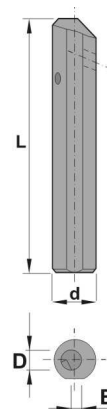
Arbors & adaptors

Inserts

**KIT MT12**



| REF.               | L   | d  | B    | D         | r   |  |  |
|--------------------|-----|----|------|-----------|-----|---|---|
| <b>00.30.12.04</b> | 100 | 12 | 2,35 | 2,5 / 4,2 | -   | 157   | 525   |
| <b>CTI 0402 AR</b> | 15  | 4  | 0,8  | 4,2       | 0,2 |   |   |
| <b>CTI 0402 BR</b> | 15  | 4  | 0,8  | 4,2       | 0,2 |   |   |
| <b>CTI 0404 CR</b> | 15  | 4  | 0,8  | M5        | -   |   |   |
| <b>CTI 0410 DR</b> | 15  | 4  | 1,0  | 4,2       | -   |   |   |



Turning



Automatic lathes

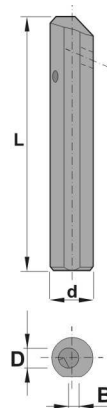
Ceramic tools

Parting & grooving

**KIT MT16**



| REF.               | L   | d  | B   | D   | r   |  |  |
|--------------------|-----|----|-----|-----|-----|---|---|
| <b>00.30.16.06</b> | 120 | 16 | 2,8 | 8,2 | -   | 156   | 503   |
| <b>CTI 0602 AR</b> | 20  | 6  | 1,8 | 6,2 | 0,2 |   |   |
| <b>CTI 0602 BR</b> | 20  | 6  | 1,8 | 6,2 | 0,2 |   |   |
| <b>CTI 0600 CR</b> | 20  | 6  | 1,8 | M8  | -   |   |   |
| <b>CTI 0615 DR</b> | 20  | 6  | 1,8 | 6,2 | -   |   |   |



Threading



Drills

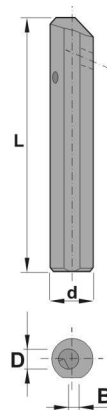
Cartridges

Brazed tools

**KIT MT**



| REF.               | L   | d  | B    | D         | r   |  |  |
|--------------------|-----|----|------|-----------|-----|---|---|
| <b>00.30.12.04</b> | 100 | 12 | 2,35 | 2,5 / 4,2 | -   | 157   | 525   |
| <b>00.30.16.06</b> | 120 | 16 | 2,80 | 8,2       | -   | 156   | 503   |
| <b>CTI 0402 AR</b> | 15  | 4  | 0,8  | 4,2       | 0,2 |   |   |
| <b>CTI 0602 AR</b> | 20  | 6  | 1,8  | 6,2       | 0,2 |   |   |
| <b>CTI 0402 BR</b> | 15  | 4  | 0,8  | 4,2       | 0,2 |   |   |
| <b>CTI 0602 BR</b> | 20  | 6  | 1,8  | 6,2       | 0,2 |   |   |
| <b>CTI 0400 CR</b> | 15  | 4  | 0,8  | M5        | -   |   |   |
| <b>CTI 0600 CR</b> | 20  | 6  | 1,8  | M8        | -   |   |   |
| <b>CTI 0410 DR</b> | 15  | 4  | 1,0  | 4,2       | -   |   |   |
| <b>CTI 0615 DR</b> | 20  | 6  | 1,8  | 6,2       | -   |   |   |



Milling cutters



Solid carbide

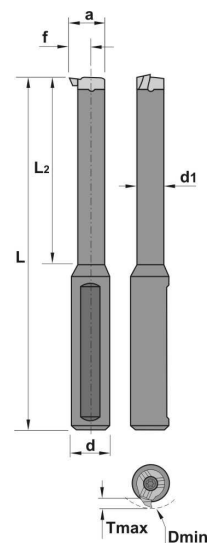
Boring heads

Arbors & adaptors

608.00  
611.00  
614.00  
616.00



| REF.          | Dmin | d  | d1 | L   | L2 | $\alpha$ | f    | Tmax | R/LS.. |  |  |
|---------------|------|----|----|-----|----|----------|------|------|--------|---|---|
| 608.0012.2 HM | 8    | 12 | 6  | 90  | 30 | 7,8      | 4,8  | 1,0  | R/LS08 | 706   | 508   |
| 611.0012.2 HM | 11   | 12 | 8  | 110 | 42 | 10,7     | 6,7  | 2,3  | R/LS11 | 735   | 530   |
| 614.0012.2 HM | 14   | 12 | -  | 110 | 45 | 13,8     | 9,0  | 4,0  | R/LS14 | 734   | 515   |
| 616.0012.2 HM | 16   | 12 | 11 | 130 | 56 | 15,7     | 10,2 | 4,3  | R/LS16 | 745   | 520   |



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

### KIT 608...616

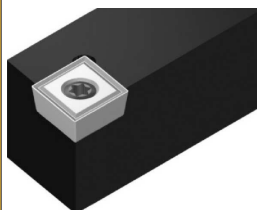
| REF.               | Holder        | Inserts    |            |            |            |              |
|--------------------|---------------|------------|------------|------------|------------|--------------|
| <b>KIT 6080012</b> | 608.0012.2 HM | RS008.0090 | RS008.0110 | RS008.0130 | RS008.0160 | RS08.0815.01 |
| <b>KIT 6110012</b> | 611.0012.2 HM | RS011.0090 | RS011.0110 | RS011.0130 | RS011.0160 | RS11.0815.01 |
| <b>KIT 6140012</b> | 614.0012.2 HM | RS014.0090 | RS014.0110 | RS014.0130 | RS014.0160 | RS14.0815.01 |
| <b>KIT 6160012</b> | 616.0012.2 HM | RS016.0090 | RS016.0110 | RS016.0130 | RS016.0160 | RS16.0815.01 |



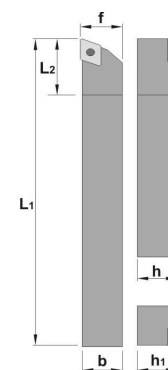


Inserts

**SCAC 90°**



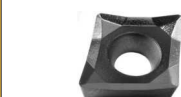
| REF.              | h=h1 | b  | L1  | L2 | f  | CC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| SCAC R/L 0808 M06 | 8    | 8  | 150 | 8  | 8  | 0602.. | 125 | 507 |
| SCAC R/L 1010 M06 | 10   | 10 | 150 | 10 | 10 | 0602.. | 125 | 507 |
| SCAC R/L 1212 M06 | 12   | 12 | 150 | 12 | 12 | 0602.. | 125 | 507 |
| SCAC R/L 1616 M06 | 16   | 16 | 150 | 16 | 16 | 0602.. | 125 | 507 |
| SCAC R/L 1212 M09 | 12   | 12 | 150 | 12 | 12 | 09T3.. | 140 | 515 |
| SCAC R/L 1616 M09 | 16   | 16 | 150 | 16 | 16 | 09T3.. | 140 | 515 |



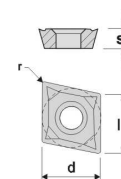
Turning

Automatic lathes

Ceramic tools



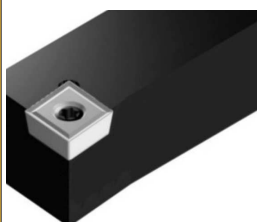
| REF.        | l    | s    | d    |
|-------------|------|------|------|
| CC.. 0602.. | 6,45 | 2,38 | 6,35 |
| CC.. 09T3.. | 9,65 | 3,97 | 9,52 |



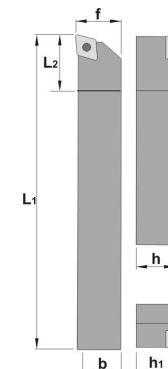
For more information see page: A.38

Parting & grooving

**SCLC 95°**



| REF.              | h=h1 | b  | L1  | L2 | f  | CC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| SCLC R/L 0808 M06 | 8    | 8  | 150 | 8  | 8  | 0602.. | 125 | 507 |
| SCLC R/L 1010 M06 | 10   | 10 | 150 | 10 | 10 | 0602.. | 125 | 507 |
| SCLC R/L 1212 M06 | 12   | 12 | 150 | 12 | 12 | 0602.. | 125 | 507 |
| SCLC R/L 1616 M06 | 16   | 16 | 150 | 16 | 16 | 0602.. | 125 | 507 |
| SCLC R/L 1212 M09 | 12   | 12 | 150 | 12 | 12 | 09T3.. | 140 | 515 |
| SCLC R/L 1616 M09 | 16   | 16 | 150 | 16 | 16 | 09T3.. | 140 | 515 |



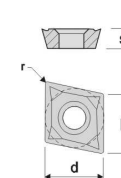
Threading

Drills

Cartridges



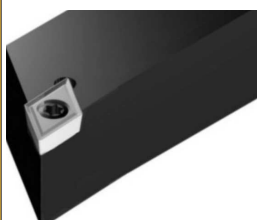
| REF.        | l    | s    | d    |
|-------------|------|------|------|
| CC.. 0602.. | 6,45 | 2,38 | 6,35 |
| CC.. 09T3.. | 9,65 | 3,97 | 9,52 |



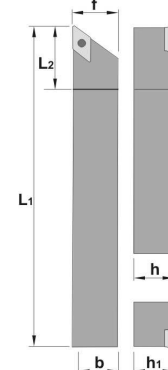
For more information see page: A.38

Brazed tools

**SDAC 90°**



| REF.              | h=h1 | b  | L1  | L2   | f  | DC..   |     |     |
|-------------------|------|----|-----|------|----|--------|-----|-----|
| SDAC R/L 0808 M07 | 8    | 8  | 150 | 12,7 | 8  | 0702.. | 125 | 507 |
| SDAC R/L 1010 M07 | 10   | 10 | 150 | 15,0 | 10 | 0702.. | 125 | 507 |
| SDAC R/L 1212 M07 | 12   | 12 | 150 | 15,0 | 12 | 0702.. | 125 | 507 |
| SDAC R/L 1616 M07 | 16   | 16 | 150 | 16,0 | 16 | 0702.. | 125 | 507 |
| SDAC R/L 1212 M11 | 12   | 12 | 150 | 18,0 | 12 | 11T3.. | 140 | 515 |
| SDAC R/L 1616 M11 | 16   | 16 | 150 | 20,0 | 16 | 11T3.. | 140 | 515 |



Milling cutters

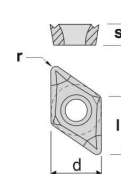
Solid carbide

Boring heads

Arbors & adaptors

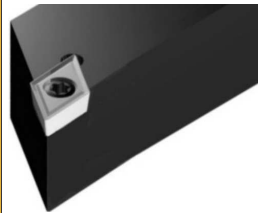


| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| DC.. 0702.. | 7,75  | 2,38 | 6,35 |
| DC.. 11T3.. | 11,60 | 3,97 | 9,52 |

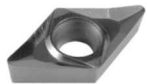
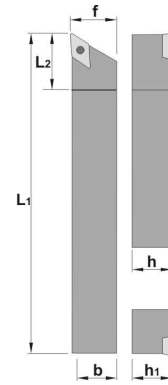


For more information see page: A.41

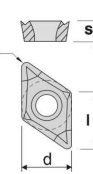
**SDJC 93°**



| REF.              | h=h1 | b  | L1  | L2 | f  | DC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| SDJC R/L 0808 M07 | 8    | 8  | 150 | 8  | 8  | 0702.. | 125 | 507 |
| SDJC R/L 1010 M07 | 10   | 10 | 150 | 10 | 10 | 0702.. | 125 | 507 |
| SDJC R/L 1212 M07 | 12   | 12 | 150 | 12 | 12 | 0702.. | 125 | 507 |
| SDJC R/L 1616 M07 | 16   | 16 | 150 | 16 | 16 | 0702.. | 125 | 507 |
| SDJC R/L 1212 M11 | 12   | 12 | 150 | 12 | 12 | 11T3.. | 140 | 515 |
| SDJC R/L 1616 M11 | 16   | 16 | 150 | 16 | 16 | 11T3.. | 140 | 515 |



| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| DC.. 0702.. | 7,75  | 2,38 | 6,35 |
| DC.. 11T3.. | 11,60 | 3,97 | 9,52 |

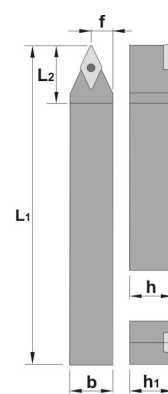


For more information see page: A.41

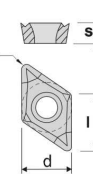
**SDNC 63°**



| REF.            | h=h1 | b  | L1  | L2 | f   | DC..   |     |     |
|-----------------|------|----|-----|----|-----|--------|-----|-----|
| SDNC N 1010 M07 | 10   | 10 | 150 | 15 | 5,2 | 0702.. | 125 | 507 |
| SDNC N 1212 M11 | 12   | 12 | 150 | 21 | 6,2 | 11T3.. | 140 | 515 |
| SDNC N 1616 M11 | 16   | 16 | 150 | 21 | 8,6 | 11T3.. | 140 | 515 |

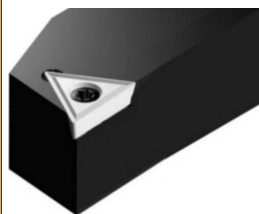


| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| DC.. 0702.. | 7,75  | 2,38 | 6,35 |
| DC.. 11T3.. | 11,60 | 3,97 | 9,52 |

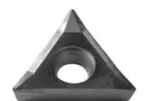
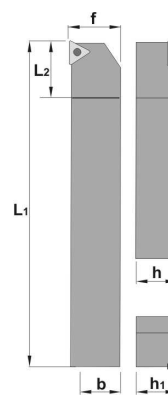


For more information see page: A.41

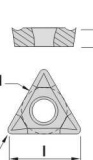
**STJC 93°**



| REF.              | h=h1 | b  | L1  | L2 | f  | TC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| STJC R/L 1010 M11 | 10   | 10 | 150 | 16 | 10 | 1102.. | 125 | 507 |
| STJC R/L 1212 M11 | 12   | 12 | 150 | 16 | 12 | 1102.. | 125 | 507 |
| STJC R/L 1616 M11 | 16   | 16 | 150 | 16 | 16 | 1102.. | 125 | 507 |



| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| TC.. 1102.. | 11,00 | 2,38 | 6,35 |



For more information see page: A.51,52

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

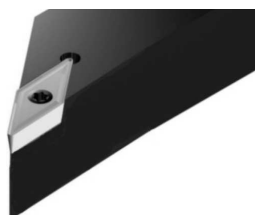
Solid carbide

Boring heads

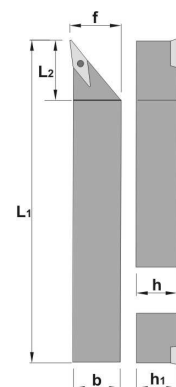
Arbors & adaptors

Inserts

**SVAC 90°**



| REF.              | h=h1 | b  | L1  | L2 | f  | VC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| SVAC R/L 0808 M11 | 8    | 8  | 150 | 26 | 8  | 1103.. | 125 | 507 |
| SVAC R/L 1010 M11 | 10   | 10 | 150 | 26 | 10 | 1103.. | 125 | 507 |
| SVAC R/L 1212 M11 | 12   | 12 | 150 | 26 | 12 | 1103.. | 125 | 507 |
| SVAC R/L 1616 M11 | 16   | 16 | 150 | 26 | 16 | 1103.. | 125 | 507 |
| SVAC R/L 1212 M16 | 12   | 12 | 150 | 40 | 12 | 1604.. | 140 | 515 |
| SVAC R/L 1616 M16 | 16   | 16 | 150 | 40 | 16 | 1604.. | 140 | 515 |



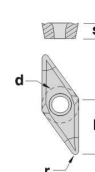
Turning

Automatic lathes

Ceramic tools



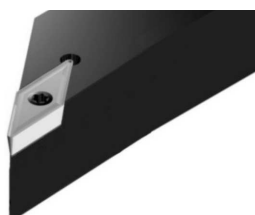
| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| VC.. 1103.. | 11,00 | 3,18 | 6,35 |
| VC.. 1604.. | 16,50 | 4,76 | 9,52 |



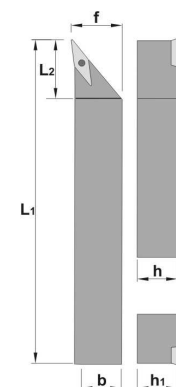
For more information see page: A.55,56

Parting & grooving

**SVJC 93°**



| REF.              | h=h1 | b  | L1  | L2 | f  | VC..   |     |     |
|-------------------|------|----|-----|----|----|--------|-----|-----|
| SVJC R/L 0808 M11 | 8    | 8  | 150 | 26 | 8  | 1103.. | 125 | 507 |
| SVJC R/L 1010 M11 | 10   | 10 | 150 | 26 | 10 | 1103.. | 125 | 507 |
| SVJC R/L 1212 M11 | 12   | 12 | 150 | 26 | 12 | 1103.. | 125 | 507 |
| SVJC R/L 1616 M11 | 16   | 16 | 150 | 26 | 16 | 1103.. | 125 | 507 |
| SVJC R/L 1212 M16 | 12   | 12 | 150 | 40 | 12 | 1604.. | 140 | 515 |
| SVJC R/L 1616 M16 | 16   | 16 | 150 | 40 | 16 | 1604.. | 140 | 515 |



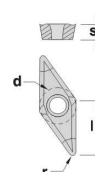
Threading

Drills

Cartridges



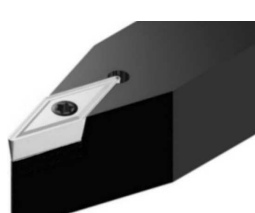
| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| VC.. 1103.. | 11,00 | 3,18 | 6,35 |
| VC.. 1604.. | 16,50 | 4,76 | 9,52 |



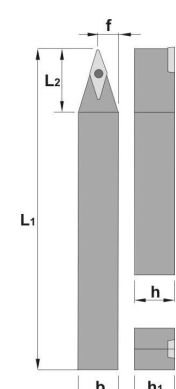
For more information see page: A.55,56

Brazed tools

**SVVC 72° 30'**



| REF.            | h=h1 | b  | L1  | L2 | f   | VC..   |     |     |
|-----------------|------|----|-----|----|-----|--------|-----|-----|
| SVVC N 0808 M11 | 8    | 8  | 150 | 21 | 4,3 | 1103.. | 125 | 507 |
| SVVC N 1010 M11 | 10   | 10 | 150 | 21 | 5,3 | 1103.. | 125 | 507 |
| SVVC N 1212 M11 | 12   | 12 | 150 | 21 | 6,3 | 1103.. | 125 | 507 |
| SVVC N 1616 M11 | 16   | 16 | 150 | 21 | 8,3 | 1103.. | 125 | 507 |



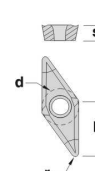
Milling cutters

Solid carbide

Boring heads



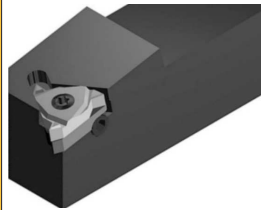
| REF.        | l     | s    | d    |
|-------------|-------|------|------|
| VC.. 1103.. | 11,00 | 3,18 | 6,35 |



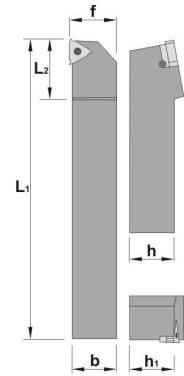
For more information see page: A.55,56

Arbors & adaptors

**SXAN 90°**



| REF.                     | h=h1 | b  | L1  | L2 | f  | ER/L.. |     |     |     |     |     |
|--------------------------|------|----|-----|----|----|--------|-----|-----|-----|-----|-----|
| <b>SXAN R/L 0808 M08</b> | 8    | 8  | 150 | 20 | 8  | 08     | 125 | 507 | -   | -   | -   |
| <b>SXAN R/L 1010 M08</b> | 10   | 10 | 150 | 20 | 10 | 08     | 125 | 507 | -   | -   | -   |
| <b>SXAN R/L 1212 M11</b> | 12   | 12 | 150 | 20 | 12 | 11     | 125 | 507 | -   | -   | -   |
| <b>SXAN R/L 1616 M16</b> | 16   | 16 | 150 | 20 | 16 | 16     | 133 | 515 | 436 | 435 | 203 |



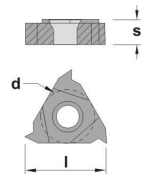
Inserts

Turning

Automatic lathes

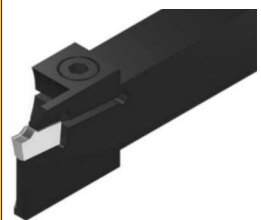
| REF.             | l     | d    |
|------------------|-------|------|
| <b>08 ER/L..</b> | 8,00  | 4,76 |
| <b>11 ER/L..</b> | 11,00 | 6,35 |
| <b>16 ER/L..</b> | 16,50 | 9,52 |

Ceramic tools

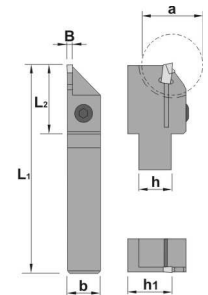


For more information see page: A.59

**CZCB**



| REF.                     | h  | b  | L1  | L2 | h1 | B   | α  | MRCN |     |     |
|--------------------------|----|----|-----|----|----|-----|----|------|-----|-----|
| <b>CZCB R/L 1010 J01</b> | 10 | 10 | 110 | 25 | 21 | 1,6 | 22 | 1,6  | 107 | 504 |
| <b>CZCB R/L 1010 J02</b> | 10 | 10 | 110 | 25 | 21 | 2,2 | 22 | 2,2  | 107 | 504 |
| <b>CZCB R/L 1212 J01</b> | 12 | 12 | 110 | 25 | 21 | 1,6 | 22 | 1,6  | 107 | 504 |
| <b>CZCB R/L 1212 J02</b> | 12 | 12 | 110 | 25 | 21 | 2,2 | 22 | 2,2  | 107 | 504 |
| <b>CZCB R/L 1612 J02</b> | 16 | 12 | 110 | 29 | 21 | 2,2 | 32 | 2,2  | 199 | 505 |
| <b>CZCB R/L 1612 J03</b> | 16 | 12 | 110 | 29 | 21 | 3,0 | 32 | 3,0  | 199 | 505 |
| <b>CZCB R/L 2016 K03</b> | 20 | 16 | 125 | 35 | 30 | 3,0 | 42 | 3,0  | 109 | 505 |
| <b>CZCB R/L 2016 K04</b> | 20 | 16 | 125 | 35 | 30 | 4,0 | 42 | 4,0  | 109 | 505 |
| <b>CZCB R/L 2016 K05</b> | 20 | 16 | 125 | 35 | 30 | 5,0 | 42 | 5,0  | 109 | 505 |
| <b>CZCB R/L 2016 K06</b> | 20 | 16 | 125 | 35 | 30 | 6,0 | 42 | 6,0  | 109 | 505 |
| <b>CZCB R/L 2520 M03</b> | 25 | 20 | 150 | 50 | 30 | 3,0 | 80 | 3,0  | 109 | 505 |
| <b>CZCB R/L 2520 M04</b> | 25 | 20 | 150 | 50 | 30 | 4,0 | 80 | 4,0  | 109 | 505 |
| <b>CZCB R/L 2520 M05</b> | 25 | 20 | 150 | 50 | 30 | 5,0 | 80 | 5,0  | 109 | 505 |
| <b>CZCB R/L 2520 M06</b> | 25 | 20 | 150 | 50 | 30 | 6,0 | 80 | 6,0  | 109 | 505 |



Parting & grooving

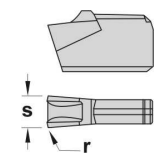
Threading

Drills

| REF.            | s   | r    |
|-----------------|-----|------|
| <b>MRCN 1,6</b> | 1,6 | 0,15 |
| <b>MRCN 2,2</b> | 2,2 | 0,20 |
| <b>MRCN 3,0</b> | 3,0 | 0,20 |
| <b>MRCN 4,0</b> | 4,0 | 0,20 |
| <b>MRCN 5,0</b> | 5,0 | 0,30 |
| <b>MRCN 6,0</b> | 6,0 | 0,40 |

Cartridges

Brazed tools



For more information see page: A.67

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

## Nominal cutting speed and feed values for automatic lathes

| Material           | P   | HB                   | Condition  | Cutting speed m/min. |      |           |             |             |             | Specific cutting force K <sub>c,0.4</sub> |
|--------------------|-----|----------------------|------------|----------------------|------|-----------|-------------|-------------|-------------|---|
|                    |     |                      |            | P25K                 | P40K | CK30      | TIC15       | TIC20       | TIC30       |   |
|                    |     |                      |            | 0.3-0.6-1.2          |      | 0.1 - 0.3 |             | 0.1-0.4-0.8 |             |   |
| Unalloyed steel    | 125 | C=0.15%              | 150 115 80 |                      |      | 350 280   | 480 345 250 | 440 300 205 | 330 230 110 | 1900                                      |
|                    | 150 | C=0.35%              | 145 105 70 |                      |      | 270 230   | 440 315 230 | 400 275 190 | 300 210 150 | 2100                                      |
|                    | 200 | C=0.60%              | 115 90 65  |                      |      | 240 190   | 385 275 200 | 350 240 165 | 260 185 130 | 2250                                      |
| Low alloyed steel  | 180 | Annealed             | 90 70 45   |                      |      | 300 260   | 380 265 195 | 320 220 170 | 200 140 100 | 2100                                      |
|                    | 275 | Hardened             | 65 45 30   |                      |      | 220 140   | 260 180 130 | 215 150 115 | 140 100 70  | 2600                                      |
|                    | 300 | Hardened             | 60 40 25   |                      |      | 230 180   | 240 165 120 | 200 135 105 | 125 90 60   | 2700                                      |
|                    | 350 | Hardened             | 50 35 20   |                      |      | 220 140   | 210 145 105 | 170 120 90  | 110 75 55   | 2850                                      |
| High alloyed steel | 200 | Annealed             | 80 60 45   |                      |      | 200 160   | 350 230 170 | 280 185 135 | 175 115 80  | 2600                                      |
|                    | 325 | Hardened             | 40 25 20   |                      |      | 200 160   | 170 110     | 120 80 60   | 85 55 40    | 3900                                      |
| Stainless steel    | 200 | Martensitic/Ferritic | 110 95 75  |                      |      | 270 130   | 295 240 190 | 275 210 165 | 225 180 145 | 2300                                      |
| Steel castings     | 180 | Unalloyed            | 60 50 35   |                      |      | 300 260   | 260 185 145 | 230 160 120 | 135 105 75  | 2000                                      |
|                    | 200 | Low alloyed          | 50 45 30   |                      |      | 230 180   | 230 160 120 | 190 125 85  | 120 90 60   | 2500                                      |
|                    | 225 | High alloyed         | 40 30 20   |                      |      | 220 140   | 190 130 95  | 170 115 80  | 95 70 55    | 2700                                      |

| Material                 | M                               | HB | Condition   | Cutting speed m/min. |      |         |         |             |         |         | Specific cutting force K <sub>c,0.4</sub> |             |                                      |
|--------------------------|---------------------------------|----|---|----------------------|------|---------|---------|-------------|---------|---------|---|-------------|--------------------------------------|
|                          |                                 |    |   | P25K                 | P40K | CK30    | TIC15   | TIC17       | TIC20   | TIC30   |   | TIC35       |                                      |
|                          |                                 |    |   | 0.1-0.3              |      | 0.1-0.3 |         | 0.1-0.4-0.8 |         | 0.1-0.3 |   | 0.2-0.4-0.6 |                                      |
| Stainless steel annealed | 180                             |    | Austenitic Ni > 8%,<br>Cr 12-25%<br>Austenitic/Ferritic<br>Austenitic/Ferritic, Low S | 205 170              |      |         | 240 200 | 180 150 120 | 600 100 |         | 190 160 130                               | 190 160 130 | 2450                                 |
|                          |                                 |    |   |                      |      |         | 160 130 | 180 150 120 | 400 100 |         | 190 160 100                               | 190 160 130 |                                      |
|                          |                                 |    |   |                      |      |         | 160 130 | 180 150 120 | 400 100 |         | 140 110                                   | 160 130 100 |                                      |
| Heat resistant alloys    | 200<br>280<br>250<br>350<br>320 |    | Annealed<br>Aged<br>Annealed<br>Aged<br>Cast  |                      |      |         |         |             | 50 20   |         | 40 20                                     | 40 20       | 3000<br>3050<br>3500<br>4150<br>4150 |
|                          |                                 |    |   |                      |      |         |         |             | 50 20   |         | 35 15                                     | 35 15       |                                      |
|                          |                                 |    |   |                      |      |         |         |             | 40 15   |         | 25 6                                      | 25 8        |                                      |
|                          |                                 |    |   |                      |      |         |         |             | 35 20   |         | 15 4                                      | 15 4        |                                      |
| Titanium alloys          | 400<br>950<br>1050              |    | Ti<br>Cast a, almost a and a+b<br>Aged cast a+b                                       |                      |      |         |         |             | 140 80  |         |   | 80 130      | 1530<br>1675<br>1690                 |
|                          |                                 |    |   |                      |      |         |         |             | 45 25   |         |   | 15 35       |                                      |
|                          |                                 |    |   |                      |      |         |         |             | 45 25   |         |   | 15 35       |                                      |

| Material                | K   | HB                       | Condition     | Cutting speed m/min. |         |             |       |         |               | Specific cutting force K <sub>c,0.4</sub> |
|-------------------------|-----|--------------------------|---------------|----------------------|---------|-------------|-------|---------|---------------|---|
|                         |     |                          |               | K15K                 | TIC17   | CK30        | TIC15 | TIC20   | Z10R          |   |
|                         |     |                          |               | 0.2-0.5-1.0          |         | 0.2-0.5-1.0 |       | 0.2-0.5 |               |   |
| Hardened steel          | 350 | Hardened steel           | 27 16 10      | 180 150 110          |         | 175 145 100 |       |         |               | 4500                                      |
|                         | 250 | Manganese steel 12%      | 65 40 16      | 120 90 60            |         | 120 85 50   |       |         |               | 3600                                      |
| Malleable cast iron     | 130 | Ferritic                 | 105 75 45     | 250 180 100          |         | 225 150 90  |       |         |               | 1100                                      |
|                         | 230 | Pearlitic                | 80 60 30      | 160 100 60           |         | 155 95 55   |       |         |               | 1100                                      |
| Cast iron               | 180 | Low tensile strength     | 135 95 60     | 180 120 80           | 300 200 | 165 110 70  |       |         |               | 1100                                      |
|                         | 260 | High tensile strength    | 95 65 40      | 140 105 60           | 250 180 | 120 90 55   |       |         |               | 1500                                      |
| Nodular SG iron         | 160 | Ferritic                 | 115 80 45     | 220 180 100          | 250 180 |             |       |         |               | 1100                                      |
|                         | 250 | Pearlitic                | 80 50 30      | 150 100 50           | 180 120 |             |       |         |               | 1800                                      |
| Chilled cast iron       | 400 |                          | 17 11         | 17 11                |         |             |       |         |               | 3000                                      |
| Aluminium alloys        | 60  | Non heat treatable       | 1750 1280 800 | 1750 1280 800        |         |             |       |         | 1750 1280 800 | 500                                       |
|                         | 100 | Heat treatable           | 510 370 250   | 510 370 250          |         |             |       |         | 510 370 250   | 800                                       |
| Aluminium alloys (Cast) | 75  | Non heat treatable       | 460 285 175   | 460 285 175          |         |             |       |         | 460 285 175   | 750                                       |
|                         | 90  | Heat treatable           | 300 180 110   | 300 180 110          |         |             |       |         | 300 180 110   | 900                                       |
| Bronze - Brass alloys   | 110 | Lead alloys, Pb > 1%     | 610 430 295   | 610 430 295          |         |             |       |         | 610 430 295   | 700                                       |
|                         | 90  | Brass and bronze         | 310 250 195   | 310 250 195          |         |             |       |         | 310 250 195   | 750                                       |
|                         | 100 | Inc. electrolytic copper | 225 160 115   | 225 160 115          |         |             |       |         | 225 160 115   | 1750                                      |
| Other materials         |     | Hard plastics            | 380 240       | 380 240              |         |             |       |         | 380 240       |   |
|                         |     | Fibre                    | 190 120       | 190 120              |         |             |       |         | 190 120       |   |
|                         |     | Hard rubber              | 225 160       | 225 160              |         |             |       |         | 225 160       |   |

