

## Cutting data's for cut knurling

| Material                    | ø Workpiece  | ø Knurl        | VC (m/min) | Radial feed (mm/rev) (R) | Axial feed (mm/rev) (F) per Pitch (mm) |            |            |            |
|-----------------------------|--------------|----------------|------------|--------------------------|----------------------------------------|------------|------------|------------|
|                             |              |                |            |                          | P0.3 - 0.6                             | P0.6 - 1.2 | P1.2 - 1.6 | P1.6 - 2.0 |
| 600 N/mm <sup>2</sup> steel | <10 mm       | 8.9 mm         | 30 - 50    | 0.05 - 0.10              | 0.15                                   | 0.10       | 0.08       | 0.05       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 35 - 55    |                          | 0.20                                   | 0.15       | 0.13       | 0.10       |
|                             | 50 - 100 mm  | 21.5 mm        | 40 - 60    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 100 - 200 mm | 21.5 mm        | 40 - 60    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 200 - 300 mm | 35 / 42 mm     | 60 - 80    |                          | 0.30                                   | 0.25       | 0.20       | 0.15       |
| 900 N/mm <sup>2</sup> steel | <10 mm       | 8.9 mm         | 15 - 30    | 0.04 - 0.08              | 0.12                                   | 0.08       | 0.05       | 0.04       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 20 - 40    |                          | 0.15                                   | 0.10       | 0.08       | 0.06       |
|                             | 50 - 100 mm  | 21.5 mm        | 25 - 45    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
|                             | 100 - 200 mm | 21.5 mm        | 25 - 45    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
|                             | 200 - 300 mm | 35 / 42 mm     | 35 - 55    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
| Stainless steel             | <10 mm       | 8.9 mm         | 15 - 30    | 0.04 - 0.08              | 0.12                                   | 0.08       | 0.05       | 0.04       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 20 - 40    |                          | 0.15                                   | 0.10       | 0.08       | 0.06       |
|                             | 50 - 100 mm  | 21.5 mm        | 25 - 45    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
|                             | 100 - 200 mm | 21.5 mm        | 25 - 45    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
|                             | 200 - 300 mm | 35 / 42 mm     | 35 - 55    |                          | 0.20                                   | 0.15       | 0.10       | 0.08       |
| Cast steel                  | <10 mm       | 8.9 mm         | 30 - 50    | 0.05 - 0.10              | 0.15                                   | 0.10       | 0.08       | 0.05       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 35 - 55    |                          | 0.20                                   | 0.15       | 0.13       | 0.10       |
|                             | 50 - 100 mm  | 21.5 mm        | 40 - 60    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 100 - 200 mm | 21.5 mm        | 40 - 60    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 200 - 300 mm | 35 / 42 mm     | 60 - 80    |                          | 0.30                                   | 0.25       | 0.20       | 0.15       |
| Aluminium                   | <10 mm       | 8.9 mm         | 50 - 70    | 0.05 - 0.10              | 0.15                                   | 0.10       | 0.05       | 0.05       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 55 - 75    |                          | 0.20                                   | 0.15       | 0.13       | 0.10       |
|                             | 50 - 100 mm  | 21.5 mm        | 60 - 90    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 100 - 200 mm | 21.5 mm        | 60 - 90    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 200 - 300 mm | 35 / 42 mm     | 80 - 110   |                          | 0.30                                   | 0.25       | 0.20       | 0.15       |
| Brass                       | <10 mm       | 8.9 mm         | 35 - 55    | 0.05 - 0.10              | 0.15                                   | 0.10       | 0.12       | 0.05       |
|                             | 10 - 50 mm   | 14.5 / 21.5 mm | 40 - 60    |                          | 0.20                                   | 0.15       | 0.13       | 0.10       |
|                             | 50 - 100 mm  | 21.5 mm        | 45 - 65    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 100 - 200 mm | 21.5 mm        | 45 - 65    |                          | 0.25                                   | 0.20       | 0.15       | 0.12       |
|                             | 200 - 300 mm | 35 / 42 mm     | 70 - 90    |                          | 0.30                                   | 0.25       | 0.20       | 0.15       |