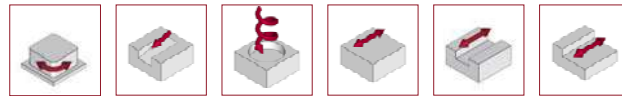


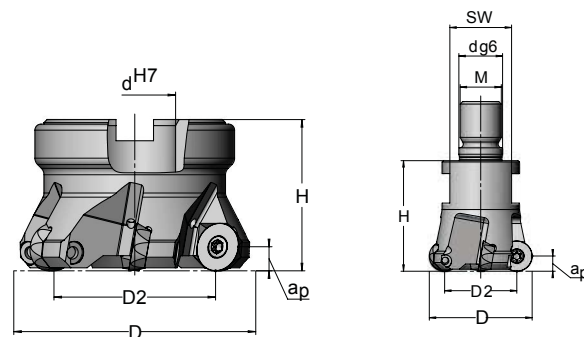
# COPY MILLING CUTTERS

## RO18



The RDGX indexable insert with facets prevents twisting and defines the fixation in the tool body

The axial and radial cutting angle guarantees a smooth cut

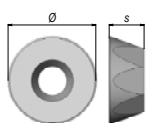


| RO18<br>Screw-in milling cutters |    |                |                 |    |    |    |                  |                |      |     |      | INS         |
|----------------------------------|----|----------------|-----------------|----|----|----|------------------|----------------|------|-----|------|-------------|
| Article                          | D  | D <sub>2</sub> | d <sub>g6</sub> | H  | M  | SW | z <sub>eff</sub> | a <sub>p</sub> | Ramp | lc  | kg   |             |
| 18R.2028.001                     | 20 | 10             | 10.5            | 28 | 10 | 15 | 2                | 5.0            | –    | no  | 0.05 | RD..10T3.N* |
| 18R.2433.001                     | 24 | 12             | 12.5            | 33 | 12 | 17 | 2                | 6.0            | 5°   | no  | 0.09 | RD..1204.N* |
| 18R.3243.003                     | 32 | 20             | 17.0            | 43 | 16 | 24 | 3                | 6.0            | 4°   | no  | 0.21 | RD..1204.N  |
| 18R.3243.004                     | 32 | 22             | 17.0            | 43 | 16 | 24 | 4                | 5.0            | 4°   | yes | 0.22 | RD..10T3.N  |
| 18R.4043.001                     | 40 | 28             | 17.0            | 43 | 16 | 24 | 4                | 6.0            | 3°   | no  | 0.25 | RD..1204.N  |
| 18R.4043.002                     | 40 | 28             | 17.0            | 43 | 16 | 24 | 3                | 6.0            | 3°   | no  | 0.23 | RD..1204.N  |

\*Note that the screw length required varies depending on the insert used

| RO18<br>Plug-in milling cutters |     |                |                 |    |                  |                |      |     |      |  |  | INS        |
|---------------------------------|-----|----------------|-----------------|----|------------------|----------------|------|-----|------|--|--|------------|
| Article                         | D   | D <sub>2</sub> | d <sup>H7</sup> | H  | z <sub>eff</sub> | a <sub>p</sub> | Ramp | lc  | kg   |  |  |            |
| 18R.5050.001                    | 50  | 38             | 22              | 50 | 5                | 6.0            | 3°   | yes | 0.30 |  |  | RD..1204.N |
| 18R.5050.002                    | 50  | 40             | 22              | 50 | 5                | 5.0            | 3°   | yes | 0.31 |  |  | RD..10T3.N |
| 18R.5250.001                    | 52  | 40             | 22              | 50 | 5                | 6.0            | 3°   | yes | 0.35 |  |  | RD..1204.N |
| 18R.5250.002                    | 52  | 42             | 22              | 50 | 6                | 5.0            | 3°   | yes | 0.35 |  |  | RD..10T3.N |
| 18R.6350.021                    | 63  | 51             | 27              | 50 | 6                | 6.0            | 3°   | yes | 0.46 |  |  | RD..1204.N |
| 18R.6350.001                    | 63  | 47             | 27              | 50 | 5                | 8.0            | 3°   | yes | 0.42 |  |  | RD..1605.N |
| 18R.6650.001                    | 66  | 50             | 27              | 50 | 5                | 8.0            | 4°   | yes | 0.51 |  |  | RD..1605.N |
| 18R.6650.005                    | 66  | 56             | 27              | 50 | 8                | 5.0            | 4°   | yes | 0.51 |  |  | RD..10T3.N |
| 18R.8050.002                    | 80  | 64             | 27              | 50 | 6                | 8.0            | 3°   | yes | 0.96 |  |  | RD..1605.N |
| 18R.1050.002                    | 100 | 84             | 32              | 50 | 7                | 8.0            | 3°   | yes | 1.49 |  |  | RD..1605.N |
| 18R.1263.001                    | 125 | 109            | 40              | 63 | 8                | 8.0            | 2°   | yes | 2.91 |  |  | RD..1605.N |

# INS SHAPE RD



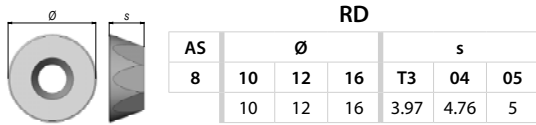
| RD |    |    |    |      |      |    |
|----|----|----|----|------|------|----|
| AS | Ø  |    |    | s    |      |    |
| 8  | 10 | 12 | 16 | T3   | 04   | 05 |
|    | 10 | 12 | 16 | 3.97 | 4.76 | 5  |

Matching of machining parameters  
with the AV material groups

|            |                      |                    | Recomm.<br>$a_p$ 1/4<br>INS-Ø | Steel   |         |         |         |         |         |        |
|------------|----------------------|--------------------|-------------------------------|---------|---------|---------|---------|---------|---------|--------|
| Article    | Designation          |                    |                               | A22     | A21     | A20     | A19     | A18     | A17     | A16    |
| RD..10T3   | RD.10T3.002.02 SKY77 | RDGX 10T3M0 TN- 25 | $f_z$                         | 0.75    | 0.65    | 0.60    | 0.55    | 0.50    | 0.40    | 0.35   |
|            |                      |                    | $v_c$                         | 280-320 | 240-280 | 210-240 | 180-210 | 140-180 | 110-140 | 80-110 |
| RD..1204.. | RD.1204.001.02 SKY77 | RDGX 1204 MOTN-25  | $f_z$                         | 0.75    | 0.65    | 0.60    | 0.55    | 0.50    | 0.40    | 0.35   |
|            |                      |                    | $v_c$                         | 280-320 | 240-280 | 210-240 | 180-210 | 140-180 | 110-140 | 80-110 |
| RD..1605.. | RD.1605.001.02 SKY77 | RDGX 1605 MOTN-25  | $f_z$                         | 0.65    | 0.60    | 0.55    | 0.50    | 0.45    | 0.35    | 0.25   |
|            |                      |                    | $v_c$                         | 280-320 | 240-280 | 210-240 | 180-210 | 140-180 | 110-140 | 80-110 |

|            |                      |                    | Recomm.<br>$a_p$ 1/4<br>INS-Ø | Cast iron |         |         |         |         |         |
|------------|----------------------|--------------------|-------------------------------|-----------|---------|---------|---------|---------|---------|
| Article    | Designation          |                    |                               | D21       | D20     | D19     | D18     | D17     | D16     |
| RD..10T3   | RD.10T3.002.02 SKY77 | RDGX 10T3M0 TN- 25 | $f_z$                         | 0.50      | 0.45    | 0.40    | 0.40    | 0.35    | 0.25    |
|            |                      |                    | $v_c$                         | 280-310   | 260-290 | 230-270 | 210-240 | 180-210 | 140-180 |
| RD..1204.. | RD.1204.001.02 SKY77 | RDGX 1204 MOTN-25  | $f_z$                         | 0.70      | 0.55    | 0.50    | 0.45    | 0.45    | 0.30    |
|            |                      |                    | $v_c$                         | 280-310   | 260-290 | 230-270 | 210-240 | 180-210 | 140-180 |
| RD..1605.. | RD.1605.001.02 SKY77 | RDGX 1605 MOTN-25  | $f_z$                         | 0.50      | 0.45    | 0.40    | 0.40    | 0.35    | 0.25    |
|            |                      |                    | $v_c$                         | 280-310   | 260-290 | 230-270 | 210-240 | 180-210 | 140-180 |



# INS SHAPE RD



Matching of machining parameters with the AV material groups

| Article    | Designation           | Recomm. $a_p$ 1/4 INS-Ø | Stainless steels |         |         |         | Titanium |       |       |       |
|------------|-----------------------|-------------------------|------------------|---------|---------|---------|----------|-------|-------|-------|
|            |                       |                         | C12              | C11     | C10     | C09     | S10      | S09   | S08   |       |
| RD..10T3   | RD.10T3.031.02 AV1055 | RDKT 10T3M0 SN-28       | $f_z$            | 0.50    | 0.35    | 0.30    | 0.25     | 0.35  | 0.30  | 0.25  |
|            |                       |                         | $v_c$            | 120-200 | 140-170 | 100-140 | 60-100   | 60-80 | 40-70 | 20-50 |
| RD..1204.. | RD.1204.031.03 AV1055 | RDKT 1204M0 SN-28       | $f_z$            | 0.50    | 0.40    | 0.35    | 0.25     | 0.45  | 0.35  | 0.25  |
|            |                       |                         | $v_c$            | 120-200 | 140-170 | 100-140 | 60-100   | 60-80 | 40-70 | 20-50 |
| RD..1605.. | RD.1605.031.02 AV1055 | RDKT 1605M0 SN-28       | $f_z$            | 0.50    | 0.40    | 0.35    | 0.25     | 0.45  | 0.35  | 0.25  |
|            |                       |                         | $v_c$            | 120-200 | 140-170 | 100-140 | 60-100   | 60-80 | 40-70 | 20-50 |

| Adaptation of $f_z$ at different $a_p$ values |       |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| INS   | $a_p$ | 0.5  | 1    | 1.5  | 2    | 2.5  | 3    | 3.5  | 4    | 5    | 6    | 7    | 8    |
| RD..10T3...                                   | $f_z$ | 2.00 | 1.50 | 1.25 | 1.10 | 1.00 | 0.95 | 0.90 | 0.85 | 0.90 | -    | -    | -    |
| RD..1204...                                   | $f_z$ | 2.10 | 1.50 | 1.30 | 1.15 | 1.10 | 1.00 | 0.95 | 0.90 | 0.85 | 0.85 | -    | -    |
| RD..1605...                                   | $f_z$ | 2.40 | 1.80 | 1.50 | 1.30 | 1.20 | 1.10 | 1.05 | 1.00 | 0.95 | 0.90 | 0.85 | 0.85 |

| INS          |  |  |
|--------------|---|---|
| RD..10T3...  | 08B.0375.7991   | TX208   |
| RD..10T3...* | 08B.0363.7991   | TX208   |
| RD..1204...  | 08B.3509.7991   | TX215   |
| RD..1204...* | 08B.3578.7991   | TX215   |
| RD..1605...  | 08B.0513.7991   | TX220   |

\* Note that the screw length required varies depending on the insert used

Technical information ramp and adaptation of  $f_z$  at different  $a_p$  values page 146