# TN

16/ 22/ 27/ 33

## CARBIDE INSERTS

### TNMA

334

### TNMG

335

### TNMM

342

## CER AND CBN INSERTS

### TNGA CER

343

### TNGN CER

344

### TNGA CBN

344

**MATCH THE RIGHT SIZE (example)**

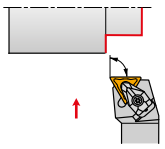
| Insert | Tool Holder |
|---|---|
| TNMM 160412E-OR | DTFNR 2525 M 16 |

## ISO TURNING – EXTERNAL

### DTFN(RL) EXT

90°

TN..: 16, 22



20×20 / 25×25

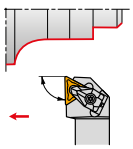
345

334 – 344

### DTGN(RL) EXT

90°

TN..: 16, 22



20×20 / 32×25

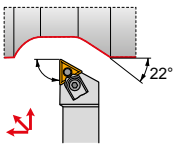
346

334 – 344

### MTJN(RL) EXT

93°

TN..: 16, 22




16×16 / 32×32

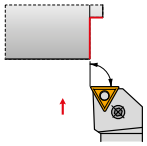
347

334 – 344

### PTFN(RL) EXT

90°

TN..: 16, 22, 27



16×16 / 40×40

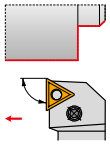
348

334 – 344

### PTGN(RL) EXT

90°

TN..: 16, 22, 27



16×16 / 40×40

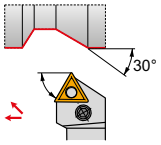
349

334 – 344

### PTTN(RL) EXT

60°

TN..: 16, 22




20×20 / 32×25

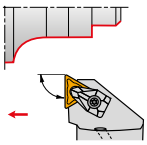
350

334 – 344

### C.-DTJN(RL) EXT

93°

TN..: 16



C4 / C5

351

334 – 344

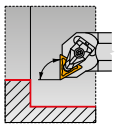
# TN

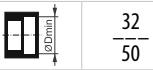
16/ 22/ 27/ 33

## ISO TURNING – INTERNAL

### DTFN(RL) INT

90°






TN..

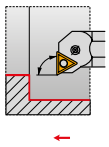
16
22

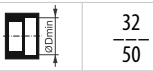
352

334 – 344

### PTFN(RL) INT

90°






TN..

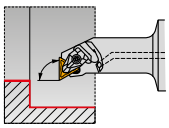
16
22

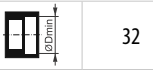
353

334 – 344

### C.-DTFN(RL) INT

91°






TN..

16

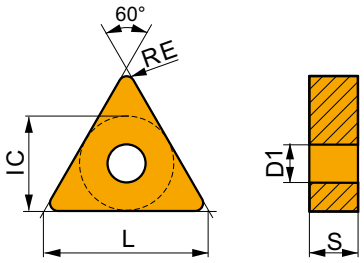
354

334 – 344

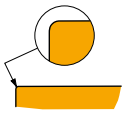
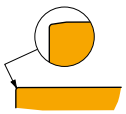
# TNMA

PRAMET

| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|---|---|---|---|---|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |
| 2204 | 12.700 | 5.16 | 22.00 | 4.76 |



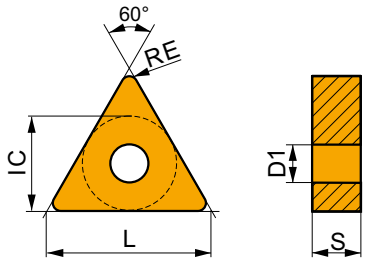

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | | | E | | | | | | | | | | | | | | | | | |
| | | | For fine-finish to semi-rough machining, and continuous to slightly interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMA 160404** | **T5305** | 0.4 | – | – | – | – | – | – | 220 | 0.10 | 1.5 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T5315** | 0.4 | – | – | – | – | – | – | 190 | 0.10 | 1.5 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| **TNMA 160408** | **T5305** | 0.8 | – | – | – | – | – | – | 205 | 0.20 | 1.5 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T5315** | 0.8 | – | – | – | – | – | – | 180 | 0.20 | 1.5 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T6310** | 0.8 | – | – | – | – | – | – | 90 | 0.20 | 1.5 | – | – | – | – | – | – | 20 | 0.15 | 1.0 |
| **TNMA 160412** | **T5305** | 1.2 | – | – | – | – | – | – | 215 | 0.20 | 1.5 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T5315** | 1.2 | – | – | – | – | – | – | 190 | 0.20 | 1.5 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| **TNMA 220408** | **T5305** | 0.8 | – | – | – | – | – | – | 195 | 0.20 | 2.0 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T5315** | 0.8 | – | – | – | – | – | – | 175 | 0.20 | 2.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T6310** | 0.8 | – | – | – | – | – | – | 90 | 0.20 | 2.0 | – | – | – | – | – | – | 20 | 0.15 | 1.0 |
| **TNMA 220412** | **T5305** | 1.2 | – | – | – | – | – | – | 205 | 0.20 | 2.0 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T5315** | 1.2 | – | – | – | – | – | – | 185 | 0.20 | 2.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
|   | | | S | | | | | | | | | | | | | | | | | |
| | | | For fine-finish to semi-rough machining, and continuous to slightly interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMA 160408S** | **T5305** | 0.8 | – | – | – | – | – | – | 205 | 0.20 | 1.5 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |

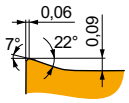
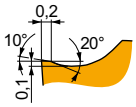
# TNMG

PRAMET

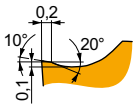
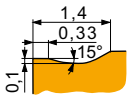
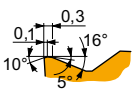
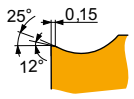
| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|---|---|---|---|---|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |
| 2204 | 12.700 | 5.16 | 22.00 | 4.76 |
| 2706 | 15.875 | 6.35 | 27.50 | 6.35 |
| 3309 | 19.050 | 7.94 | 33.00 | 9.525 |



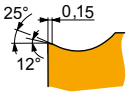
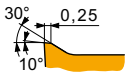
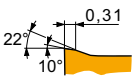

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | | U S | | | | | | | | | | | | | | | | | |
| | | | FF geometry with highly positive design for fine-finish machining, and continuous to slightly interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-FF** | **T7325** | 0.4 | 200 | 0.12 | 1.0 | 155 | 0.11 | 1.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T8315** | 0.4 | 185 | 0.12 | 1.0 | 110 | 0.11 | 1.0 | 175 | 0.12 | 1.0 | – | – | – | – | – | – | – | – | – |
| | **T8330** | 0.4 | 175 | 0.12 | 1.0 | 105 | 0.11 | 1.0 | 165 | 0.12 | 1.0 | – | – | – | – | – | – | – | – | – |
| | **T8430** | 0.4 | 210 | 0.12 | 1.0 | 115 | 0.11 | 1.0 | 175 | 0.12 | 1.0 | – | – | – | – | – | – | – | – | – |
| **TNMG 160408E-FF** | **T7325** | 0.8 | 225 | 0.15 | 1.0 | 175 | 0.14 | 1.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T8315** | 0.8 | 205 | 0.15 | 1.0 | 120 | 0.14 | 1.0 | 190 | 0.15 | 1.0 | – | – | – | – | – | – | – | – | – |
|  |  | | 1 S | | | | | | | | | | | | | | | | | |
| | | | FM geometry with positive design for finish to semi-rough machining, and continuous to slightly interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-FM** | **T7325** | 0.4 | 160 | 0.20 | 1.7 | 120 | 0.18 | 1.7 | – | – | – | – | – | – | 50 | 0.20 | 1.4 | – | – | – |
| | **T7335** | 0.4 | 160 | 0.20 | 1.7 | 120 | 0.18 | 1.7 | – | – | – | – | – | – | 50 | 0.20 | 1.4 | – | – | – |
| | **T8315** | 0.4 | 150 | 0.20 | 1.7 | 90 | 0.18 | 1.7 | 140 | 0.20 | 1.7 | – | – | – | 35 | 0.14 | 1.4 | – | – | – |
| | **T8330** | 0.4 | 145 | 0.20 | 1.7 | 85 | 0.18 | 1.7 | 135 | 0.20 | 1.7 | – | – | – | 35 | 0.14 | 1.4 | – | – | – |
| | **T8430** | 0.4 | 165 | 0.20 | 1.7 | 90 | 0.18 | 1.7 | 135 | 0.20 | 1.7 | – | – | – | 35 | 0.14 | 1.4 | – | – | – |
| | **T9310** | 0.4 | 245 | 0.20 | 1.7 | – | – | – | 230 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 0.4 | 220 | 0.20 | 1.7 | – | – | – | 205 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.4 | 200 | 0.20 | 1.7 | 120 | 0.18 | 1.7 | 190 | 0.20 | 1.7 | – | – | – | 45 | 0.20 | 1.4 | – | – | – |
| | **TT310** | 0.4 | 225 | 0.20 | 1.7 | 135 | 0.18 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 160408E-FM** | **T7325** | 0.8 | 195 | 0.20 | 1.7 | 150 | 0.18 | 1.7 | – | – | – | – | – | – | 60 | 0.16 | 1.4 | – | – | – |
| | **T7335** | 0.8 | 190 | 0.20 | 1.7 | 145 | 0.18 | 1.7 | – | – | – | – | – | – | 60 | 0.16 | 1.4 | – | – | – |
| | **T8315** | 0.8 | 180 | 0.20 | 1.7 | 105 | 0.18 | 1.7 | 170 | 0.20 | 1.7 | – | – | – | 45 | 0.16 | 1.4 | – | – | – |
| | **T8330** | 0.8 | 170 | 0.20 | 1.7 | 100 | 0.18 | 1.7 | 160 | 0.20 | 1.7 | – | – | – | 40 | 0.16 | 1.4 | – | – | – |
| | **T8430** | 0.8 | 195 | 0.20 | 1.7 | 105 | 0.18 | 1.7 | 160 | 0.20 | 1.7 | – | – | – | 40 | 0.16 | 1.4 | – | – | – |
| | **T9310** | 0.8 | 290 | 0.20 | 1.7 | – | – | – | 275 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 0.8 | 265 | 0.20 | 1.7 | – | – | – | 250 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 235 | 0.20 | 1.7 | 140 | 0.18 | 1.7 | 220 | 0.20 | 1.7 | – | – | – | 50 | 0.16 | 1.4 | – | – | – |
| | **TT310** | 0.8 | 270 | 0.20 | 1.7 | 160 | 0.18 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 160412E-FM** | **T7325** | 1.2 | 190 | 0.25 | 1.7 | 145 | 0.23 | 1.7 | – | – | – | – | – | – | 60 | 0.18 | 1.4 | – | – | – |
| | **T8330** | 1.2 | 165 | 0.25 | 1.7 | 95 | 0.23 | 1.7 | 155 | 0.25 | 1.7 | – | – | – | 40 | 0.18 | 1.4 | – | – | – |
| | **T8430** | 1.2 | 185 | 0.25 | 1.7 | 100 | 0.23 | 1.7 | 150 | 0.25 | 1.7 | – | – | – | 40 | 0.18 | 1.4 | – | – | – |
| | **T9310** | 1.2 | 280 | 0.25 | 1.7 | – | – | – | 265 | 0.25 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 1.2 | 255 | 0.25 | 1.7 | – | – | – | 240 | 0.25 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 225 | 0.25 | 1.7 | 135 | 0.23 | 1.7 | 210 | 0.25 | 1.7 | – | – | – | 50 | 0.18 | 1.4 | – | – | – |
| **TNMG 220404E-FM** | **T8330** | 0.4 | 145 | 0.20 | 1.7 | 85 | 0.18 | 1.7 | 135 | 0.20 | 1.7 | – | – | – | 35 | 0.20 | 1.4 | – | – | – |
| | **T8430** | 0.4 | 150 | 0.24 | 1.7 | 80 | 0.22 | 1.7 | 125 | 0.24 | 1.7 | – | – | – | 30 | 0.22 | 1.4 | – | – | – |
| | **T9315** | 0.4 | 220 | 0.20 | 1.7 | – | – | – | 205 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.4 | 200 | 0.20 | 1.7 | 120 | 0.18 | 1.7 | 190 | 0.20 | 1.7 | – | – | – | 45 | 0.20 | 1.4 | – | – | – |

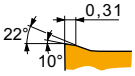
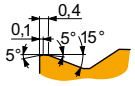
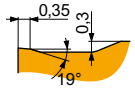
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap |
| | | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] |
|  |  | | | | | | | | | | | | | | | | | | | |
| FM geometry with positive design for finish to semi-rough machining, and continuous to slightly interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 220408E-FM** | **T8330** | 0.8 | 170 | 0.20 | 1.7 | 100 | 0.18 | 1.7 | 160 | 0.20 | 1.7 | – | – | – | 40 | 0.16 | 1.4 | – | – | – |
| | **T8430** | 0.8 | 195 | 0.20 | 1.7 | 105 | 0.18 | 1.7 | 160 | 0.20 | 1.7 | – | – | – | 40 | 0.16 | 1.4 | – | – | – |
| | **T9315** | 0.8 | 265 | 0.20 | 1.7 | – | – | – | 250 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 235 | 0.20 | 1.7 | 140 | 0.18 | 1.7 | 220 | 0.20 | 1.7 | – | – | – | 50 | 0.16 | 1.4 | – | – | – |
|  |  | | | | | | | | | | | | | | | | | | | |
| KR geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 160408E-KR** | **T5305** | 0.8 | 220 | 0.35 | 3.0 | – | – | – | 205 | 0.35 | 3.0 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T5315** | 0.8 | 200 | 0.35 | 3.0 | – | – | – | 190 | 0.35 | 3.0 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
|  |  | | | | | | | | | | | | | | | | | | | |
| M geometry for finish to semi-rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-M** | **T5315** | 0.4 | 215 | 0.20 | 1.6 | – | – | – | 200 | 0.20 | 1.6 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9315** | 0.4 | 205 | 0.20 | 1.6 | – | – | – | 190 | 0.20 | 1.6 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9325** | 0.4 | 180 | 0.20 | 1.6 | – | – | – | 170 | 0.20 | 1.6 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.4 | 155 | 0.20 | 1.6 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 160408E-M** | **T5305** | 0.8 | 250 | 0.30 | 1.6 | – | – | – | 235 | 0.30 | 1.6 | – | – | – | – | – | – | 50 | 0.15 | 1.0 |
| | **T5315** | 0.8 | 225 | 0.30 | 1.6 | – | – | – | 210 | 0.30 | 1.6 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T9310** | 0.8 | 220 | 0.30 | 1.6 | – | – | – | 205 | 0.30 | 1.6 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 205 | 0.30 | 1.6 | – | – | – | 190 | 0.30 | 1.6 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 185 | 0.30 | 1.6 | – | – | – | 175 | 0.30 | 1.6 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 160 | 0.30 | 1.6 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 160412E-M** | **T5315** | 1.2 | 215 | 0.40 | 1.6 | – | – | – | 200 | 0.40 | 1.6 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9315** | 1.2 | 190 | 0.40 | 1.6 | – | – | – | 180 | 0.40 | 1.6 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9325** | 1.2 | 170 | 0.40 | 1.6 | – | – | – | 160 | 0.40 | 1.6 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 145 | 0.40 | 1.6 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220408E-M** | **T5305** | 0.8 | 245 | 0.30 | 2.1 | – | – | – | 230 | 0.30 | 2.1 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T5315** | 0.8 | 215 | 0.30 | 2.1 | – | – | – | 200 | 0.30 | 2.1 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9310** | 0.8 | 215 | 0.30 | 2.1 | – | – | – | 200 | 0.30 | 2.1 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 200 | 0.30 | 2.1 | – | – | – | 190 | 0.30 | 2.1 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 180 | 0.30 | 2.1 | – | – | – | 170 | 0.30 | 2.1 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 155 | 0.30 | 2.1 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220412E-M** | **T5315** | 1.2 | 205 | 0.40 | 2.1 | – | – | – | 190 | 0.40 | 2.1 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9315** | 1.2 | 185 | 0.40 | 2.1 | – | – | – | 175 | 0.40 | 2.1 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9325** | 1.2 | 165 | 0.40 | 2.1 | – | – | – | 155 | 0.40 | 2.1 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 140 | 0.40 | 2.1 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
|  |  | | | | | | | | | | | | | | | | | | | |
| NF geometry with highly positive design for fine-finish to medium machining, and continuous cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-NF** | **HF7** | 0.4 | – | – | – | 90 | 0.14 | 1.4 | 140 | 0.15 | 1.4 | 450 | 0.18 | 1.4 | – | – | – | – | – | – |
| | **T6310** | 0.4 | 150 | 0.17 | 1.4 | 105 | 0.15 | 1.4 | 120 | 0.17 | 1.4 | 450 | 0.20 | 1.4 | 45 | 0.15 | 1.1 | – | – | – |
| | **T7325** | 0.4 | 170 | 0.18 | 1.4 | 130 | 0.16 | 1.4 | – | – | – | – | – | – | 55 | 0.16 | 1.1 | – | – | – |
| | **T7335** | 0.4 | 165 | 0.18 | 1.4 | 125 | 0.16 | 1.4 | – | – | – | – | – | – | 50 | 0.16 | 1.1 | – | – | – |
| | **T8315** | 0.4 | 160 | 0.17 | 1.4 | 95 | 0.15 | 1.4 | 150 | 0.17 | 1.4 | 480 | 0.20 | 1.4 | 40 | 0.15 | 1.1 | – | – | – |
| | **T8330** | 0.4 | 155 | 0.17 | 1.4 | 90 | 0.15 | 1.4 | 145 | 0.17 | 1.4 | 465 | 0.20 | 1.4 | 35 | 0.15 | 1.1 | – | – | – |
| | **T8430** | 0.4 | 175 | 0.17 | 1.4 | 95 | 0.15 | 1.4 | 140 | 0.17 | 1.4 | 480 | 0.20 | 1.4 | 35 | 0.15 | 1.1 | – | – | – |
| | **T9315** | 0.4 | 255 | 0.15 | 1.4 | – | – | – | 240 | 0.15 | 1.4 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.4 | 215 | 0.18 | 1.4 | 125 | 0.16 | 1.4 | 200 | 0.18 | 1.4 | – | – | – | 45 | 0.16 | 1.1 | – | – | – |

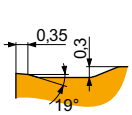
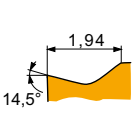
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] |
|  |   | | | | | | | | | | | | | | | | | | | |
| | | | NF geometry with highly positive design for fine-finish to medium machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160408E-NF** | **HF7** | 0.8 | – | – | – | 100 | 0.15 | 1.4 | 160 | 0.17 | 1.4 | 510 | 0.20 | 1.4 | – | – | – | – | – | – |
| | **T6310** | 0.8 | 180 | 0.18 | 1.4 | 125 | 0.16 | 1.4 | 145 | 0.18 | 1.4 | 540 | 0.22 | 1.4 | 50 | 0.16 | 1.1 | – | – | – |
| | **T7325** | 0.8 | 200 | 0.18 | 1.4 | 155 | 0.16 | 1.4 | – | – | – | – | – | – | 65 | 0.16 | 1.1 | – | – | – |
| | **T7335** | 0.8 | 195 | 0.18 | 1.4 | 150 | 0.16 | 1.4 | – | – | – | – | – | – | 60 | 0.16 | 1.1 | – | – | – |
| | **T8315** | 0.8 | 190 | 0.18 | 1.4 | 110 | 0.16 | 1.4 | 180 | 0.18 | 1.4 | 570 | 0.22 | 1.4 | 45 | 0.16 | 1.1 | – | – | – |
| | **T8330** | 0.8 | 180 | 0.18 | 1.4 | 105 | 0.16 | 1.4 | 170 | 0.18 | 1.4 | 540 | 0.22 | 1.4 | 45 | 0.16 | 1.1 | – | – | – |
| | **T8430** | 0.8 | 205 | 0.18 | 1.4 | 110 | 0.16 | 1.4 | 170 | 0.18 | 1.4 | 570 | 0.22 | 1.4 | 45 | 0.16 | 1.1 | – | – | – |
| | **T9315** | 0.8 | 290 | 0.17 | 1.4 | – | – | – | 275 | 0.17 | 1.4 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 255 | 0.18 | 1.4 | 150 | 0.16 | 1.4 | 240 | 0.18 | 1.4 | – | – | – | 55 | 0.16 | 1.1 | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| | | | NM geometry with highly positive design for fine-finish, medium and rough machining, in continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-NM** | **T7325** | 0.4 | 170 | 0.20 | 1.9 | 130 | 0.18 | 1.9 | – | – | – | – | – | – | 55 | 0.20 | 1.5 | – | – | – |
| | **T7335** | 0.4 | 160 | 0.20 | 1.9 | 120 | 0.18 | 1.9 | – | – | – | – | – | – | 50 | 0.20 | 1.5 | – | – | – |
| | **T8315** | 0.4 | 160 | 0.20 | 1.9 | 95 | 0.18 | 1.9 | – | – | – | 480 | 0.24 | 1.9 | 40 | 0.20 | 1.5 | – | – | – |
| | **T8330** | 0.4 | 145 | 0.20 | 1.9 | 85 | 0.18 | 1.9 | – | – | – | 435 | 0.24 | 1.9 | 35 | 0.20 | 1.5 | – | – | – |
| | **T8430** | 0.4 | 170 | 0.20 | 1.9 | 90 | 0.18 | 1.9 | – | – | – | 465 | 0.24 | 1.9 | 35 | 0.20 | 1.5 | – | – | – |
| | **T9325** | 0.4 | 210 | 0.20 | 1.9 | 125 | 0.18 | 1.9 | – | – | – | – | – | – | 45 | 0.20 | 1.5 | – | – | – |
| **TNMG 160408E-NM** | **T7325** | 0.8 | 190 | 0.25 | 1.9 | 145 | 0.23 | 1.9 | – | – | – | – | – | – | 60 | 0.20 | 1.5 | – | – | – |
| | **T7335** | 0.8 | 180 | 0.25 | 1.9 | 140 | 0.23 | 1.9 | – | – | – | – | – | – | 55 | 0.20 | 1.5 | – | – | – |
| | **T8315** | 0.8 | 175 | 0.25 | 1.9 | 105 | 0.23 | 1.9 | – | – | – | 525 | 0.30 | 1.9 | 40 | 0.20 | 1.5 | – | – | – |
| | **T8330** | 0.8 | 165 | 0.25 | 1.9 | 95 | 0.23 | 1.9 | – | – | – | 495 | 0.30 | 1.9 | 40 | 0.20 | 1.5 | – | – | – |
| | **T8430** | 0.8 | 185 | 0.25 | 1.9 | 100 | 0.23 | 1.9 | – | – | – | 510 | 0.30 | 1.9 | 40 | 0.20 | 1.5 | – | – | – |
| | **T9315** | 0.8 | 250 | 0.25 | 1.9 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 225 | 0.25 | 1.9 | 135 | 0.23 | 1.9 | – | – | – | – | – | – | 50 | 0.20 | 1.5 | – | – | – |
| **TNMG 220408E-NM** | **T7325** | 0.8 | 190 | 0.25 | 1.7 | 145 | 0.23 | 1.7 | – | – | – | – | – | – | 60 | 0.20 | 1.4 | – | – | – |
| | **T7335** | 0.8 | 185 | 0.25 | 1.7 | 140 | 0.23 | 1.7 | – | – | – | – | – | – | 60 | 0.20 | 1.4 | – | – | – |
| | **T8315** | 0.8 | 175 | 0.25 | 1.7 | 105 | 0.23 | 1.7 | – | – | – | 525 | 0.30 | 1.7 | 40 | 0.20 | 1.4 | – | – | – |
| | **T8330** | 0.8 | 165 | 0.25 | 1.7 | 95 | 0.23 | 1.7 | – | – | – | 495 | 0.30 | 1.7 | 40 | 0.20 | 1.4 | – | – | – |
| | **T8430** | 0.8 | 185 | 0.25 | 1.7 | 100 | 0.23 | 1.7 | – | – | – | 510 | 0.30 | 1.7 | 40 | 0.20 | 1.4 | – | – | – |
| | **T9315** | 0.8 | 255 | 0.25 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 225 | 0.25 | 1.7 | 135 | 0.23 | 1.7 | – | – | – | – | – | – | 50 | 0.20 | 1.4 | – | – | – |
| **TNMG 220412E-NM** | **T7325** | 1.2 | 190 | 0.30 | 1.7 | 145 | 0.27 | 1.7 | – | – | – | – | – | – | 60 | 0.24 | 1.4 | – | – | – |
| | **T7335** | 1.2 | 180 | 0.30 | 2.1 | 140 | 0.27 | 2.1 | – | – | – | – | – | – | 55 | 0.24 | 1.7 | – | – | – |
| | **T9325** | 1.2 | 215 | 0.30 | 2.1 | 125 | 0.27 | 2.1 | – | – | – | – | – | – | 45 | 0.24 | 1.7 | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| | | | NMR geometry with positive design for medium to rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-NMR** | **T6310** | 0.4 | 130 | 0.20 | 1.7 | 90 | 0.18 | 1.7 | – | – | – | – | – | – | 35 | 0.18 | 1.4 | – | – | – |
| | **T7325** | 0.4 | 145 | 0.20 | 1.7 | 110 | 0.18 | 1.7 | – | – | – | – | – | – | 45 | 0.18 | 1.4 | – | – | – |
| | **T7335** | 0.4 | 145 | 0.20 | 1.7 | 110 | 0.18 | 1.7 | – | – | – | – | – | – | 45 | 0.18 | 1.4 | – | – | – |
| | **T8330** | 0.4 | 130 | 0.20 | 1.7 | 75 | 0.18 | 1.7 | – | – | – | – | – | – | 30 | 0.18 | 1.4 | – | – | – |
| | **T8430** | 0.4 | 145 | 0.20 | 1.7 | 80 | 0.18 | 1.7 | – | – | – | – | – | – | 30 | 0.18 | 1.4 | – | – | – |
| | **T9315** | 0.4 | 200 | 0.20 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.4 | 180 | 0.20 | 1.7 | 105 | 0.18 | 1.7 | – | – | – | – | – | – | 40 | 0.18 | 1.4 | – | – | – |
| **TNMG 160408E-NMR** | **T6310** | 0.8 | 140 | 0.30 | 1.7 | 100 | 0.27 | 1.7 | – | – | – | – | – | – | 40 | 0.24 | 1.4 | – | – | – |
| | **T7325** | 0.8 | 155 | 0.30 | 1.7 | 120 | 0.27 | 1.7 | – | – | – | – | – | – | 50 | 0.24 | 1.4 | – | – | – |
| | **T7335** | 0.8 | 145 | 0.30 | 1.7 | 110 | 0.27 | 1.7 | – | – | – | – | – | – | 45 | 0.24 | 1.4 | – | – | – |
| | **T8330** | 0.8 | 140 | 0.30 | 1.7 | 80 | 0.27 | 1.7 | – | – | – | – | – | – | 35 | 0.24 | 1.4 | – | – | – |
| | **T8430** | 0.8 | 150 | 0.30 | 1.7 | 80 | 0.27 | 1.7 | – | – | – | – | – | – | 30 | 0.24 | 1.4 | – | – | – |
| | **T9315** | 0.8 | 205 | 0.30 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 185 | 0.30 | 1.7 | 110 | 0.27 | 1.7 | – | – | – | – | – | – | 40 | 0.24 | 1.4 | – | – | – |

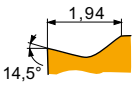
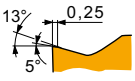
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap |
| | | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] |
|  |  | | | | | | | | | | | | | | | | | | | |
| | | | NMR geometry with positive design for medium to rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160412E-NMR** | **T7325** | 1.2 | 165 | 0.30 | 1.7 | 125 | 0.27 | 1.7 | – | – | – | – | – | – | 50 | 0.24 | 1.4 | – | – | – |
| | **T9315** | 1.2 | 215 | 0.30 | 1.7 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 195 | 0.30 | 1.7 | 115 | 0.27 | 1.7 | – | – | – | – | – | – | 40 | 0.24 | 1.4 | – | – | – |
| **TNMG 220408E-NMR** | **T6310** | 0.8 | 135 | 0.30 | 2.1 | 95 | 0.27 | 2.1 | – | – | – | – | – | – | 40 | 0.24 | 1.7 | – | – | – |
| | **T7325** | 0.8 | 150 | 0.30 | 2.1 | 115 | 0.27 | 2.1 | – | – | – | – | – | – | 45 | 0.24 | 1.7 | – | – | – |
| | **T7335** | 0.8 | 145 | 0.30 | 2.1 | 110 | 0.27 | 2.1 | – | – | – | – | – | – | 45 | 0.24 | 1.7 | – | – | – |
| | **T8330** | 0.8 | 135 | 0.30 | 2.1 | 80 | 0.27 | 2.1 | – | – | – | – | – | – | 30 | 0.24 | 1.7 | – | – | – |
| | **T8430** | 0.8 | 145 | 0.30 | 2.1 | 80 | 0.27 | 2.1 | – | – | – | – | – | – | 30 | 0.24 | 1.7 | – | – | – |
| | **T9315** | 0.8 | 200 | 0.30 | 2.1 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 180 | 0.30 | 2.1 | 105 | 0.27 | 2.1 | – | – | – | – | – | – | 40 | 0.24 | 1.7 | – | – | – |
| **TNMG 220412E-NMR** | **T6310** | 1.2 | 140 | 0.30 | 2.1 | 100 | 0.27 | 2.1 | – | – | – | – | – | – | 40 | 0.24 | 1.7 | – | – | – |
| | **T7325** | 1.2 | 160 | 0.30 | 2.1 | 120 | 0.27 | 2.1 | – | – | – | – | – | – | 50 | 0.24 | 1.7 | – | – | – |
| | **T9315** | 1.2 | 210 | 0.30 | 2.1 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 190 | 0.30 | 2.1 | 110 | 0.27 | 2.1 | – | – | – | – | – | – | 40 | 0.24 | 1.7 | – | – | – |
|  |  | | | | | | | | | | | | | | | | | | | |
| | | | R geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160408E-R** | **T5305** | 0.8 | 210 | 0.40 | 3.0 | – | – | – | 195 | 0.40 | 3.0 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T5315** | 0.8 | 185 | 0.40 | 3.0 | – | – | – | 175 | 0.40 | 3.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9310** | 0.8 | 185 | 0.40 | 3.0 | – | – | – | 175 | 0.40 | 3.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 165 | 0.40 | 3.0 | – | – | – | 155 | 0.40 | 3.0 | – | – | – | – | – | – | 30 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 150 | 0.40 | 3.0 | – | – | – | 140 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 130 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 160412E-R** | **T5315** | 1.2 | 195 | 0.40 | 3.0 | – | – | – | 185 | 0.40 | 3.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9310** | 1.2 | 195 | 0.40 | 3.0 | – | – | – | 185 | 0.40 | 3.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9325** | 1.2 | 160 | 0.40 | 3.0 | – | – | – | 150 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 140 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220408E-R** | **T9315** | 0.8 | 165 | 0.40 | 4.0 | – | – | – | 155 | 0.40 | 4.0 | – | – | – | – | – | – | 30 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 145 | 0.40 | 4.0 | – | – | – | 135 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 125 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220412E-R** | **T9310** | 1.2 | 185 | 0.40 | 4.0 | – | – | – | 175 | 0.40 | 4.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9315** | 1.2 | 170 | 0.40 | 4.0 | – | – | – | 160 | 0.40 | 4.0 | – | – | – | – | – | – | 30 | 0.15 | 1.0 |
| | **T9325** | 1.2 | 155 | 0.40 | 4.0 | – | – | – | 145 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| **TNMG 220416E-R** | **T9315** | 1.6 | 180 | 0.40 | 4.0 | – | – | – | 170 | 0.40 | 4.0 | – | – | – | – | – | – | 35 | 0.15 | 1.0 |
| | **T9325** | 1.6 | 165 | 0.40 | 4.0 | – | – | – | 155 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
|  |  | | | | | | | | | | | | | | | | | | | |
| | | | RM geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160408E-RM** | **T5305** | 0.8 | 245 | 0.40 | 3.0 | – | – | – | 230 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T5315** | 0.8 | 215 | 0.40 | 3.0 | – | – | – | 200 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T7325** | 0.8 | 155 | 0.40 | 3.0 | 120 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T7335** | 0.8 | 145 | 0.40 | 3.0 | 110 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9310** | 0.8 | 210 | 0.40 | 3.0 | – | – | – | 195 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 0.8 | 195 | 0.40 | 3.0 | – | – | – | 185 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 175 | 0.40 | 3.0 | 105 | 0.36 | 3.0 | 165 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 150 | 0.40 | 3.0 | 90 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |

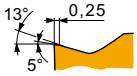
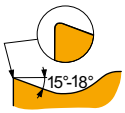
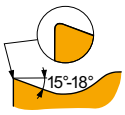
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] |
|  |  | | | | | | | | | | | | | | | | | | | |
| RM geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 160412E-RM** | **T5305** | 1.2 | 255 | 0.40 | 3.0 | – | – | – | 240 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T5315** | 1.2 | 225 | 0.40 | 3.0 | – | – | – | 210 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T7325** | 1.2 | 165 | 0.40 | 3.0 | 125 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T7335** | 1.2 | 155 | 0.40 | 3.0 | 120 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T8330** | 1.2 | 145 | 0.40 | 3.0 | 85 | 0.36 | 3.0 | 135 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T8430** | 1.2 | 150 | 0.40 | 3.0 | 80 | 0.36 | 3.0 | 125 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 1.2 | 205 | 0.40 | 3.0 | – | – | – | 190 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 185 | 0.40 | 3.0 | 110 | 0.36 | 3.0 | 175 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 160 | 0.40 | 3.0 | 95 | 0.36 | 3.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220408E-RM** | **T5305** | 0.8 | 235 | 0.40 | 4.0 | – | – | – | 220 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T5315** | 0.8 | 210 | 0.40 | 4.0 | – | – | – | 195 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T7325** | 0.8 | 150 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T7335** | 0.8 | 140 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9310** | 0.8 | 200 | 0.40 | 4.0 | – | – | – | 190 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 0.8 | 190 | 0.40 | 4.0 | – | – | – | 180 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 170 | 0.40 | 4.0 | 100 | 0.36 | 4.0 | 160 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 145 | 0.40 | 4.0 | 85 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220412E-RM** | **T5305** | 1.2 | 245 | 0.40 | 4.0 | – | – | – | 230 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T5315** | 1.2 | 220 | 0.40 | 4.0 | – | – | – | 205 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T7325** | 1.2 | 160 | 0.40 | 4.0 | 120 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T7335** | 1.2 | 150 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9315** | 1.2 | 200 | 0.40 | 4.0 | – | – | – | 190 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 180 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | 170 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 155 | 0.40 | 4.0 | 90 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 220416E-RM** | **T7325** | 1.6 | 165 | 0.40 | 4.0 | 125 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9315** | 1.6 | 210 | 0.40 | 4.0 | – | – | – | 195 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.6 | 185 | 0.40 | 4.0 | 110 | 0.36 | 4.0 | 175 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.6 | 160 | 0.40 | 4.0 | 95 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 270612E-RM** | **T7325** | 1.2 | 110 | 0.40 | 6.0 | 85 | 0.36 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 120 | 0.40 | 6.0 | 70 | 0.36 | 6.0 | 110 | 0.40 | 6.0 | – | – | – | – | – | – | – | – | – |
| **TNMG 270616E-RM** | **T7325** | 1.6 | 115 | 0.40 | 6.0 | 85 | 0.36 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9226** | 1.6 | 115 | 0.40 | 6.0 | 65 | 0.36 | 6.0 | 105 | 0.40 | 6.0 | – | – | – | – | – | – | – | – | – |
| | **T9315** | 1.6 | 135 | 0.40 | 6.0 | – | – | – | 125 | 0.40 | 6.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.6 | 125 | 0.40 | 6.0 | 75 | 0.36 | 6.0 | 115 | 0.40 | 6.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.6 | 100 | 0.40 | 6.0 | 60 | 0.36 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 270624E-RM** | **T7325** | 2.4 | 115 | 0.50 | 6.0 | 85 | 0.45 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| | **T9325** | 2.4 | 120 | 0.50 | 6.0 | 70 | 0.45 | 6.0 | 110 | 0.50 | 6.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 2.4 | 95 | 0.50 | 6.0 | 55 | 0.45 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 270632E-RM** | **T9335** | 3.2 | 90 | 0.60 | 6.0 | 50 | 0.54 | 6.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMG 330924E-RM** | **T9226** | 2.4 | 100 | 0.50 | 10.0 | 60 | 0.45 | 10.0 | 95 | 0.50 | 10.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 2.4 | 90 | 0.50 | 10.0 | 50 | 0.45 | 10.0 | – | – | – | – | – | – | – | – | – | – | – | – |
|  |  | | | | | | | | | | | | | | | | | | | |
| SF geometry with positive design for fine-finish machining of thin walls and continuous cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-SF** | **H07** | 0.4 | – | – | – | 75 | 0.14 | 1.3 | 120 | 0.15 | 1.3 | 390 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | – | – | – |
| | **T6310** | 0.4 | 150 | 0.15 | 1.3 | 105 | 0.14 | 1.3 | 120 | 0.15 | 1.3 | 450 | 0.18 | 1.3 | 45 | 0.12 | 1.0 | 30 | 0.15 | 1.0 |
| | **T7325** | 0.4 | 170 | 0.17 | 1.3 | 130 | 0.15 | 1.3 | – | – | – | – | – | – | 55 | 0.15 | 1.0 | – | – | – |
| | **T7335** | 0.4 | 165 | 0.17 | 1.3 | 125 | 0.15 | 1.3 | – | – | – | – | – | – | 50 | 0.15 | 1.0 | – | – | – |
| | **T8315** | 0.4 | 160 | 0.15 | 1.3 | 95 | 0.14 | 1.3 | 150 | 0.15 | 1.3 | 480 | 0.18 | 1.3 | 40 | 0.12 | 1.0 | 30 | 0.15 | 1.0 |
| | **T8330** | 0.4 | 150 | 0.15 | 1.3 | 90 | 0.14 | 1.3 | 140 | 0.15 | 1.3 | 450 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | 30 | 0.15 | 1.0 |
| | **T8430** | 0.4 | 180 | 0.15 | 1.3 | 95 | 0.14 | 1.3 | 145 | 0.15 | 1.3 | 495 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | 30 | 0.15 | 1.0 |
| | **T9315** | 0.4 | 245 | 0.15 | 1.3 | – | – | – | 230 | 0.15 | 1.3 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T9325** | 0.4 | 210 | 0.17 | 1.3 | 125 | 0.15 | 1.3 | 195 | 0.17 | 1.3 | – | – | – | 45 | 0.15 | 1.0 | – | – | – |

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap | vc | f | ap |
| | | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] | [m/min] | [mm/rev] | [mm] |
|  |   | | | | | | | | | | | | | | | | | | | |
| | | | E | | | | | | | | | | | | | | | | | |
| | | | SF geometry with positive design for fine-finish machining of thin walls and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160408E-SF** | **H07** | 0.8 | – | – | – | 85 | 0.15 | 1.3 | 140 | 0.17 | 1.3 | 445 | 0.20 | 1.3 | 45 | 0.14 | 1.0 | – | – | – |
| | **T6310** | 0.8 | 175 | 0.17 | 1.3 | 125 | 0.15 | 1.3 | 140 | 0.17 | 1.3 | 525 | 0.20 | 1.3 | 50 | 0.14 | 1.0 | 35 | 0.15 | 1.0 |
| | **T7325** | 0.8 | 200 | 0.17 | 1.3 | 155 | 0.15 | 1.3 | – | – | – | – | – | – | 65 | 0.15 | 1.0 | – | – | – |
| | **T7335** | 0.8 | 195 | 0.17 | 1.3 | 150 | 0.15 | 1.3 | – | – | – | – | – | – | 60 | 0.15 | 1.0 | – | – | – |
| | **T8315** | 0.8 | 185 | 0.17 | 1.3 | 110 | 0.15 | 1.3 | 175 | 0.17 | 1.3 | 555 | 0.20 | 1.3 | 45 | 0.14 | 1.0 | 35 | 0.15 | 1.0 |
| | **T8330** | 0.8 | 175 | 0.17 | 1.3 | 105 | 0.15 | 1.3 | 165 | 0.17 | 1.3 | 525 | 0.20 | 1.3 | 40 | 0.14 | 1.0 | 35 | 0.15 | 1.0 |
| | **T8430** | 0.8 | 205 | 0.17 | 1.3 | 110 | 0.15 | 1.3 | 170 | 0.17 | 1.3 | 570 | 0.20 | 1.3 | 45 | 0.14 | 1.0 | 35 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 275 | 0.17 | 1.3 | – | – | – | 260 | 0.17 | 1.3 | – | – | – | – | – | – | 55 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 250 | 0.17 | 1.3 | 150 | 0.15 | 1.3 | 235 | 0.17 | 1.3 | – | – | – | 55 | 0.15 | 1.0 | – | – | – |
| **TNMG 160412E-SF** | **T6310** | 1.2 | 160 | 0.30 | 1.3 | 115 | 0.27 | 1.3 | 125 | 0.30 | 1.3 | 480 | 0.36 | 1.3 | 45 | 0.21 | 1.0 | 30 | 0.15 | 1.0 |
| | **T7325** | 1.2 | 175 | 0.30 | 1.3 | 135 | 0.27 | 1.3 | – | – | – | – | – | – | 55 | 0.21 | 1.0 | – | – | – |
| | **T9325** | 1.2 | 205 | 0.30 | 1.3 | 120 | 0.27 | 1.3 | 190 | 0.30 | 1.3 | – | – | – | 45 | 0.21 | 1.0 | – | – | – |
| **TNMG 220404E-SF** | **T6310** | 0.4 | 145 | 0.17 | 1.7 | 100 | 0.15 | 1.7 | 115 | 0.17 | 1.7 | 435 | 0.20 | 1.7 | 40 | 0.15 | 1.4 | 25 | 0.15 | 1.0 |
| | **T7325** | 0.4 | 160 | 0.17 | 1.7 | 120 | 0.15 | 1.7 | – | – | – | – | – | – | 50 | 0.15 | 1.4 | – | – | – |
| | **T9325** | 0.4 | 205 | 0.17 | 1.7 | 120 | 0.15 | 1.7 | 190 | 0.17 | 1.7 | – | – | – | 45 | 0.15 | 1.4 | – | – | – |
| **TNMG 220408E-SF** | **T6310** | 0.8 | 170 | 0.17 | 1.7 | 120 | 0.15 | 1.7 | 135 | 0.17 | 1.7 | 510 | 0.20 | 1.7 | 50 | 0.15 | 1.4 | 30 | 0.15 | 1.0 |
| | **T8315** | 0.8 | 180 | 0.17 | 1.7 | 105 | 0.15 | 1.7 | 170 | 0.17 | 1.7 | 540 | 0.20 | 1.7 | 45 | 0.15 | 1.4 | 35 | 0.15 | 1.0 |
| | **T8430** | 0.8 | 195 | 0.17 | 1.7 | 105 | 0.15 | 1.7 | 160 | 0.17 | 1.7 | 540 | 0.20 | 1.7 | 40 | 0.15 | 1.4 | 30 | 0.15 | 1.0 |
| **TNMG 220412E-SF** | **T6310** | 1.2 | 155 | 0.30 | 1.7 | 110 | 0.27 | 1.7 | 125 | 0.30 | 1.7 | 465 | 0.36 | 1.7 | 45 | 0.21 | 1.4 | 30 | 0.15 | 1.0 |
| | **T7325** | 1.2 | 170 | 0.30 | 1.7 | 130 | 0.27 | 1.7 | – | – | – | – | – | – | 55 | 0.21 | 1.4 | – | – | – |
| | **T9325** | 1.2 | 205 | 0.30 | 1.7 | 120 | 0.27 | 1.7 | 190 | 0.30 | 1.7 | – | – | – | 45 | 0.21 | 1.4 | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| | | | S | | | | | | | | | | | | | | | | | |
| | | | SM geometry with positive design for medium machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404E-SM** | **T6310** | 0.4 | 135 | 0.22 | 1.7 | 95 | 0.20 | 1.7 | 105 | 0.22 | 1.7 | 405 | 0.26 | 1.7 | 40 | 0.20 | 1.4 | 25 | 0.15 | 1.0 |
| | **T7325** | 0.4 | 150 | 0.22 | 1.7 | 115 | 0.20 | 1.7 | – | – | – | – | – | – | 45 | 0.20 | 1.4 | – | – | – |
| | **T7335** | 0.4 | 145 | 0.22 | 1.7 | 110 | 0.20 | 1.7 | – | – | – | – | – | – | 45 | 0.20 | 1.4 | – | – | – |
| | **T8330** | 0.4 | 135 | 0.22 | 1.7 | 80 | 0.20 | 1.7 | 125 | 0.22 | 1.7 | 405 | 0.26 | 1.7 | 30 | 0.20 | 1.4 | 25 | 0.15 | 1.0 |
| | **T8430** | 0.4 | 145 | 0.22 | 1.7 | 80 | 0.20 | 1.7 | 120 | 0.22 | 1.7 | 405 | 0.26 | 1.7 | 30 | 0.20 | 1.4 | 25 | 0.15 | 1.0 |
| | **T9315** | 0.4 | 210 | 0.20 | 1.7 | – | – | – | 195 | 0.20 | 1.7 | – | – | – | – | – | – | 40 | 0.15 | 1.0 |
| | **T9325** | 0.4 | 185 | 0.22 | 1.7 | 110 | 0.20 | 1.7 | 175 | 0.22 | 1.7 | – | – | – | 40 | 0.20 | 1.4 | – | – | – |
| **TNMG 160408E-SM** | **T6310** | 0.8 | 150 | 0.25 | 1.7 | 105 | 0.23 | 1.7 | 120 | 0.25 | 1.7 | 450 | 0.30 | 1.7 | 45 | 0.20 | 1.4 | 30 | 0.15 | 1.0 |
| | **T7325** | 0.8 | 170 | 0.25 | 1.7 | 130 | 0.23 | 1.7 | – | – | – | – | – | – | 55 | 0.20 | 1.4 | – | – | – |
| | **T7335** | 0.8 | 165 | 0.25 | 1.7 | 125 | 0.23 | 1.7 | – | – | – | – | – | – | 50 | 0.20 | 1.4 | – | – | – |
| | **T8330** | 0.8 | 150 | 0.25 | 1.7 | 90 | 0.23 | 1.7 | 140 | 0.25 | 1.7 | 450 | 0.30 | 1.7 | 35 | 0.20 | 1.4 | 30 | 0.15 | 1.0 |
| | **T8430** | 0.8 | 170 | 0.25 | 1.7 | 90 | 0.23 | 1.7 | 135 | 0.25 | 1.7 | 465 | 0.30 | 1.7 | 35 | 0.20 | 1.4 | 25 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 230 | 0.25 | 1.7 | – | – | – | 215 | 0.25 | 1.7 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 205 | 0.25 | 1.7 | 120 | 0.23 | 1.7 | 190 | 0.25 | 1.7 | – | – | – | 45 | 0.20 | 1.4 | – | – | – |
| **TNMG 160412E-SM** | **T6310** | 1.2 | 155 | 0.30 | 1.7 | 110 | 0.27 | 1.7 | 125 | 0.30 | 1.7 | 465 | 0.36 | 1.7 | 45 | 0.24 | 1.4 | 30 | 0.15 | 1.0 |
| | **T7325** | 1.2 | 170 | 0.30 | 1.7 | 130 | 0.27 | 1.7 | – | – | – | – | – | – | 55 | 0.24 | 1.4 | – | – | – |
| | **T7335** | 1.2 | 165 | 0.30 | 1.7 | 125 | 0.27 | 1.7 | – | – | – | – | – | – | 50 | 0.24 | 1.4 | – | – | – |
| | **T9325** | 1.2 | 205 | 0.30 | 1.7 | 120 | 0.27 | 1.7 | 190 | 0.30 | 1.7 | – | – | – | 45 | 0.24 | 1.4 | – | – | – |
| **TNMG 220404E-SM** | **T6310** | 0.4 | 130 | 0.24 | 1.7 | 90 | 0.22 | 1.7 | 100 | 0.24 | 1.7 | 390 | 0.29 | 1.7 | 35 | 0.22 | 1.4 | 25 | 0.15 | 1.0 |
| | **T7325** | 0.4 | 145 | 0.24 | 1.7 | 110 | 0.22 | 1.7 | – | – | – | – | – | – | 45 | 0.22 | 1.4 | – | – | – |
| | **T8330** | 0.4 | 130 | 0.24 | 1.7 | 75 | 0.22 | 1.7 | 120 | 0.24 | 1.7 | 390 | 0.29 | 1.7 | 30 | 0.22 | 1.4 | 25 | 0.15 | 1.0 |
| | **T8430** | 0.4 | 145 | 0.24 | 1.7 | 80 | 0.22 | 1.7 | 120 | 0.24 | 1.7 | 405 | 0.29 | 1.7 | 30 | 0.22 | 1.4 | 25 | 0.15 | 1.0 |
| | **T9325** | 0.4 | 175 | 0.24 | 1.7 | 105 | 0.22 | 1.7 | 165 | 0.24 | 1.7 | – | – | – | 35 | 0.22 | 1.4 | – | – | – |
| **TNMG 220408E-SM** | **T6310** | 0.8 | 150 | 0.25 | 1.7 | 105 | 0.23 | 1.7 | 120 | 0.25 | 1.7 | 450 | 0.30 | 1.7 | 45 | 0.20 | 1.4 | 30 | 0.15 | 1.0 |
| | **T7325** | 0.8 | 170 | 0.25 | 1.7 | 130 | 0.23 | 1.7 | – | – | – | – | – | – | 55 | 0.20 | 1.4 | – | – | – |
| | **T7335** | 0.8 | 165 | 0.25 | 1.7 | 125 | 0.23 | 1.7 | – | – | – | – | – | – | 50 | 0.20 | 1.4 | – | – | – |
| | **T8330** | 0.8 | 150 | 0.25 | 1.7 | 90 | 0.23 | 1.7 | 140 | 0.25 | 1.7 | 450 | 0.30 | 1.7 | 35 | 0.20 | 1.4 | 30 | 0.15 | 1.0 |
| | **T8430** | 0.8 | 170 | 0.25 | 1.7 | 90 | 0.23 | 1.7 | 135 | 0.25 | 1.7 | 465 | 0.30 | 1.7 | 35 | 0.20 | 1.4 | 25 | 0.15 | 1.0 |
| | **T9315** | 0.8 | 230 | 0.25 | 1.7 | – | – | – | 215 | 0.25 | 1.7 | – | – | – | – | – | – | 45 | 0.15 | 1.0 |
| | **T9325** | 0.8 | 205 | 0.25 | 1.7 | 120 | 0.23 | 1.7 | 190 | 0.25 | 1.7 | – | – | – | 45 | 0.20 | 1.4 | – | – | – |

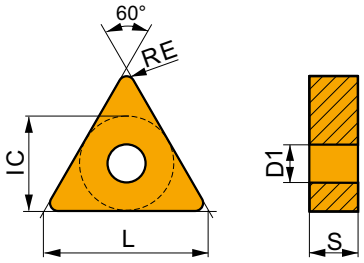
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE | P | | | M | | | K | | | N | | | S | | | H | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] | vc [m/min] | f [mm/rev] | ap [mm] |
|  |  | | S | | | | | | | | | | | | | | | | | |
| | | | SM geometry with positive design for medium machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 220412E-SM** | **T6310** | 1.2 | ■ 155 | 0.30 | 1.7 | ■ 110 | 0.27 | 1.7 | ■ 125 | 0.30 | 1.7 | ◪ 465 | 0.36 | 1.7 | ■ 45 | 0.24 | 1.4 | ◪ 30 | 0.15 | 1.0 |
| | **T7325** | 1.2 | ◪ 170 | 0.30 | 1.7 | ■ 130 | 0.27 | 1.7 | – | – | – | – | – | – | ■ 55 | 0.24 | 1.4 | – | – | – |
| | **T7335** | 1.2 | ◪ 165 | 0.30 | 1.7 | ■ 125 | 0.27 | 1.7 | – | – | – | – | – | – | ■ 50 | 0.24 | 1.4 | – | – | – |
| | **T9315** | 1.2 | ■ 225 | 0.30 | 1.7 | – | – | – | ◪ 210 | 0.30 | 1.7 | – | – | – | – | – | – | ◪ 45 | 0.15 | 1.0 |
| | **T9325** | 1.2 | ■ 205 | 0.30 | 1.7 | ■ 120 | 0.27 | 1.7 | ◪ 190 | 0.30 | 1.7 | – | – | – | ◪ 45 | 0.24 | 1.4 | – | – | – |
|  |  | | E | | | | | | | | | | | | | | | | | |
| | | | ER-SI geometry with positive right-handed design for fine-finish to semi-rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404ER-SI** | **T7325** | 0.4 | ◪ 190 | 0.20 | 1.5 | ■ 145 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 60 | 0.18 | 1.2 | – | – | – |
| | **T7335** | 0.4 | ◪ 180 | 0.20 | 1.5 | ■ 140 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 55 | 0.18 | 1.2 | – | – | – |
| | **T8315** | 0.4 | ◪ 175 | 0.20 | 1.5 | ■ 105 | 0.18 | 1.5 | – | – | – | ◪ 525 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T8330** | 0.4 | ■ 165 | 0.20 | 1.5 | ■ 95 | 0.18 | 1.5 | – | – | – | ◪ 495 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T8430** | 0.4 | ■ 185 | 0.20 | 1.5 | ■ 100 | 0.18 | 1.5 | – | – | – | ◪ 510 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T9325** | 0.4 | ■ 230 | 0.20 | 1.5 | ■ 135 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 50 | 0.18 | 1.2 | – | – | – |
| | **T9335** | 0.4 | ■ 195 | 0.20 | 1.5 | ■ 115 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 40 | 0.18 | 1.2 | – | – | – |
| **TNMG 160408ER-SI** | **T7325** | 0.8 | ◪ 190 | 0.35 | 1.5 | ■ 145 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 60 | 0.25 | 1.2 | – | – | – |
| | **T7335** | 0.8 | ◪ 180 | 0.35 | 1.5 | ■ 140 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 55 | 0.25 | 1.2 | – | – | – |
| | **T8315** | 0.8 | ◪ 175 | 0.35 | 1.5 | ■ 105 | 0.32 | 1.5 | – | – | – | ◪ 525 | 0.42 | 1.5 | ◪ 40 | 0.25 | 1.2 | – | – | – |
| | **T8330** | 0.8 | ■ 170 | 0.35 | 1.5 | ■ 100 | 0.32 | 1.5 | – | – | – | ◪ 510 | 0.42 | 1.5 | ◪ 40 | 0.25 | 1.2 | – | – | – |
| | **T8430** | 0.8 | ■ 180 | 0.35 | 1.5 | ■ 95 | 0.32 | 1.5 | – | – | – | ◪ 495 | 0.42 | 1.5 | ◪ 35 | 0.25 | 1.2 | – | – | – |
| | **T9325** | 0.8 | ■ 215 | 0.35 | 1.5 | ■ 125 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 45 | 0.25 | 1.2 | – | – | – |
| | **T9335** | 0.8 | ■ 190 | 0.35 | 1.5 | ■ 110 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 40 | 0.25 | 1.2 | – | – | – |
|  |  | | E | | | | | | | | | | | | | | | | | |
| | | | EL-SI geometry with positive left-handed design for fine-finish to semi-rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMG 160404EL-SI** | **T7325** | 0.4 | ◪ 190 | 0.20 | 1.5 | ■ 145 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 60 | 0.18 | 1.2 | – | – | – |
| | **T7335** | 0.4 | ◪ 180 | 0.20 | 1.5 | ■ 140 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 55 | 0.18 | 1.2 | – | – | – |
| | **T8315** | 0.4 | ◪ 175 | 0.20 | 1.5 | ■ 105 | 0.18 | 1.5 | – | – | – | ◪ 525 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T8330** | 0.4 | ■ 165 | 0.20 | 1.5 | ■ 95 | 0.18 | 1.5 | – | – | – | ◪ 495 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T8430** | 0.4 | ■ 185 | 0.20 | 1.5 | ■ 100 | 0.18 | 1.5 | – | – | – | ◪ 510 | 0.24 | 1.5 | ◪ 40 | 0.18 | 1.2 | – | – | – |
| | **T9325** | 0.4 | ■ 230 | 0.20 | 1.5 | ■ 135 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 50 | 0.18 | 1.2 | – | – | – |
| | **T9335** | 0.4 | ■ 195 | 0.20 | 1.5 | ■ 115 | 0.18 | 1.5 | – | – | – | – | – | – | ◪ 40 | 0.18 | 1.2 | – | – | – |
| **TNMG 160408EL-SI** | **T7325** | 0.8 | ◪ 190 | 0.35 | 1.5 | ■ 145 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 60 | 0.25 | 1.2 | – | – | – |
| | **T7335** | 0.8 | ◪ 180 | 0.35 | 1.5 | ■ 140 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 55 | 0.25 | 1.2 | – | – | – |
| | **T8315** | 0.8 | ◪ 175 | 0.35 | 1.5 | ■ 105 | 0.32 | 1.5 | – | – | – | ◪ 525 | 0.42 | 1.5 | ◪ 40 | 0.25 | 1.2 | – | – | – |
| | **T8330** | 0.8 | ■ 170 | 0.35 | 1.5 | ■ 100 | 0.32 | 1.5 | – | – | – | ◪ 510 | 0.42 | 1.5 | ◪ 40 | 0.25 | 1.2 | – | – | – |
| | **T8430** | 0.8 | ■ 180 | 0.35 | 1.5 | ■ 95 | 0.32 | 1.5 | – | – | – | ◪ 495 | 0.42 | 1.5 | ◪ 35 | 0.25 | 1.2 | – | – | – |
| | **T9325** | 0.8 | ■ 215 | 0.35 | 1.5 | ■ 125 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 45 | 0.25 | 1.2 | – | – | – |
| | **T9335** | 0.8 | ■ 190 | 0.35 | 1.5 | ■ 110 | 0.32 | 1.5 | – | – | – | – | – | – | ◪ 40 | 0.25 | 1.2 | – | – | – |

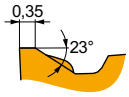
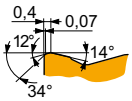
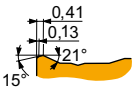
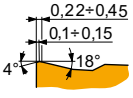
# TNMM

PRAMET

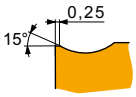
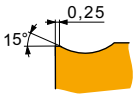
| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|---|---|---|---|---|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |
| 2204 | 12.700 | 5.16 | 22.00 | 4.76 |
| 2706 | 15.875 | 6.35 | 27.50 | 6.35 |




Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |   | | | | | | | | | | | | | | | | | | | |
| DR geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMM 160408E-DR** | **T9325** | 0.8 | 175 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | 165 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| **TNMM 220408E-DR** | **T9325** | 0.8 | 175 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | 165 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 0.8 | 155 | 0.40 | 4.0 | 90 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMM 220412E-DR** | **T9315** | 1.2 | 205 | 0.40 | 4.0 | – | – | – | 190 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 1.2 | 185 | 0.40 | 4.0 | 110 | 0.36 | 4.0 | 175 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.2 | 160 | 0.40 | 4.0 | 95 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMM 220416E-DR** | **T9325** | 1.6 | 195 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | 185 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| **TNMM 270616E-DR** | **T9325** | 1.6 | 135 | 0.40 | 4.0 | 80 | 0.36 | 4.0 | 125 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.6 | 110 | 0.40 | 4.0 | 65 | 0.36 | 4.0 | – | – | – | – | – | – | – | – | – | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| HR geometry for rough to heavy-rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMM 270616E-HR** | **T9325** | 1.6 | 90 | 0.60 | 7.0 | 50 | 0.54 | 7.0 | 85 | 0.60 | 7.0 | – | – | – | – | – | – | – | – | – |
| | **T9335** | 1.6 | 75 | 0.60 | 7.0 | 45 | 0.54 | 7.0 | – | – | – | – | – | – | – | – | – | – | – | – |
| **TNMM 270624E-HR** | **T9226** | 2.4 | 80 | 0.65 | 7.0 | 45 | 0.59 | 7.0 | 75 | 0.65 | 7.0 | – | – | – | – | – | – | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| NR2 geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMM 160408E-NR2** | **T9325** | 0.8 | 165 | 0.40 | 3.0 | 95 | 0.36 | 3.0 | 155 | 0.40 | 3.0 | – | – | – | 35 | 0.28 | 2.4 | – | – | – |
| **TNMM 220408E-NR2** | **T7325** | 0.8 | 145 | 0.40 | 4.0 | 110 | 0.36 | 4.0 | – | – | – | – | – | – | 45 | 0.28 | 3.2 | – | – | – |
| | **T9325** | 0.8 | 160 | 0.40 | 4.0 | 95 | 0.36 | 4.0 | 150 | 0.40 | 4.0 | – | – | – | 35 | 0.28 | 3.2 | – | – | – |
| **TNMM 220412E-NR2** | **T7325** | 1.2 | 150 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | – | – | – | – | – | – | 45 | 0.32 | 3.2 | – | – | – |
| | **T8330** | 1.2 | 135 | 0.40 | 4.0 | 80 | 0.36 | 4.0 | 125 | 0.40 | 4.0 | – | – | – | 30 | 0.32 | 3.2 | – | – | – |
| | **T8430** | 1.2 | 140 | 0.40 | 4.0 | 75 | 0.36 | 4.0 | 115 | 0.40 | 4.0 | – | – | – | 30 | 0.32 | 3.2 | – | – | – |
| | **T9325** | 1.2 | 170 | 0.40 | 4.0 | 100 | 0.36 | 4.0 | 160 | 0.40 | 4.0 | – | – | – | 35 | 0.32 | 3.2 | – | – | – |
|  |   | | | | | | | | | | | | | | | | | | | |
| OR geometry for semi-rough to rough machining, and continuous to interrupted cuts. | | | | | | | | | | | | | | | | | | | | |
| **TNMM 160408E-OR** | **T9315** | 0.8 | 185 | 0.40 | 3.0 | – | – | – | 175 | 0.40 | 3.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 165 | 0.40 | 3.0 | 95 | 0.36 | 3.0 | 155 | 0.40 | 3.0 | – | – | – | 35 | 0.28 | 2.4 | – | – | – |
| **TNMM 160412E-OR** | **T9325** | 1.2 | 175 | 0.40 | 3.0 | 105 | 0.36 | 3.0 | 165 | 0.40 | 3.0 | – | – | – | 35 | 0.32 | 2.4 | – | – | – |
| **TNMM 220408E-OR** | **T9315** | 0.8 | 180 | 0.40 | 4.0 | – | – | – | 170 | 0.40 | 4.0 | – | – | – | – | – | – | – | – | – |
| | **T9325** | 0.8 | 160 | 0.40 | 4.0 | 95 | 0.36 | 4.0 | 150 | 0.40 | 4.0 | – | – | – | 35 | 0.32 | 3.2 | – | – | – |
| | **T9335** | 0.8 | 140 | 0.40 | 4.0 | 80 | 0.36 | 4.0 | – | – | – | – | – | – | 30 | 0.32 | 3.2 | – | – | – |
| **TNMM 220412E-OR** | **T9325** | 1.2 | 175 | 0.40 | 3.0 | 105 | 0.36 | 3.0 | 165 | 0.40 | 3.0 | – | – | – | 35 | 0.32 | 2.4 | – | – | – |
| | **T9335** | 1.2 | 150 | 0.40 | 3.0 | 90 | 0.36 | 3.0 | – | – | – | – | – | – | 30 | 0.32 | 2.4 | – | – | – |

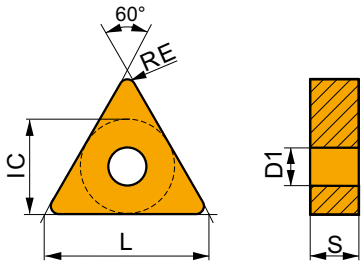
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |   | |  | | | | | | | | | | | | | | | | | |
| | | | ER geometry with right-handed design for medium to semi-rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMM 220412ER** | **T9335** | 1.2 | ■ 190 | 0.35 | 2.1 | ■ 110 | 0.32 | 2.1 | – | – | – | – | – | – | ◪ 40 | 0.25 | 1.7 | – | – | – |
|  |   | |  | | | | | | | | | | | | | | | | | |
| | | | EL geometry with left handed design for medium to semi-rough machining, and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNMM 220412EL** | **T9335** | 1.2 | ■ 190 | 0.35 | 2.1 | ■ 110 | 0.32 | 2.1 | – | – | – | – | – | – | ◪ 40 | 0.25 | 1.7 | – | – | – |

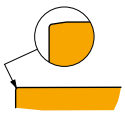
## TNGA CER

PRAMET

| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|---|---|---|---|---|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |



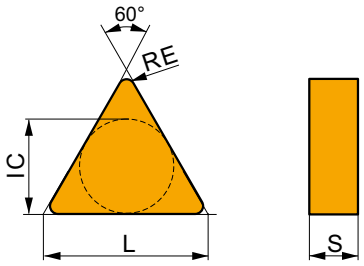

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | |  | | | | | | | | | | | | | | | | | |
| | | | For machining with high speeds and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNGA 160408 T01020** | **TC100** | 0.8 | – | – | – | – | – | – | ◪ 475 | 0.20 | 1.5 | – | – | – | – | – | – | – | – | – |
| **TNGA 160412 T01020** | **TC100** | 1.2 | – | – | – | – | – | – | ◪ 500 | 0.20 | 1.5 | – | – | – | – | – | – | – | – | – |

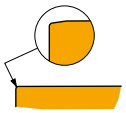
# TNGN CER

PRAMET

| | IC [mm] | L [mm] | S [mm] |
|---|---|---|---|
| 1604 | 9.525 | 16.50 | 4.76 |
| 1607 | 9.525 | 16.50 | 7.94 |



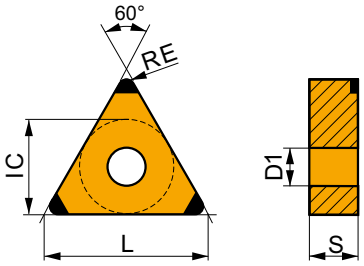

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | | HSC T | | | | | | | | | | | | | | | | | |
| | | | For machining with high speeds and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNGN 160408 T01020** | **TC100** | 0.8 | – | – | – | – | – | – | 475 | 0.20 | 1.5 | – | – | – | – | – | – | – | – | – |
| **TNGN 160412 T01020** | **TC100** | 1.2 | – | – | – | – | – | – | 500 | 0.20 | 1.5 | – | – | – | – | – | – | – | – | – |
| **TNGN 160708 T02020** | **TC100** | 0.8 | – | – | – | – | – | – | 475 | 0.20 | 1.5 | – | – | – | – | – | – | – | – | – |

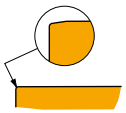
# TNGA CBN

PRAMET

| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|---|---|---|---|---|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |




Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | | RE [mm] | P vc [m/min] | P f [mm/rev] | P ap [mm] | M vc [m/min] | M f [mm/rev] | M ap [mm] | K vc [m/min] | K f [mm/rev] | K ap [mm] | N vc [m/min] | N f [mm/rev] | N ap [mm] | S vc [m/min] | S f [mm/rev] | S ap [mm] | H vc [m/min] | H f [mm/rev] | H ap [mm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | | HSC S | | | | | | | | | | | | | | | | | |
| | | | For finish machining and continuous cuts. | | | | | | | | | | | | | | | | | |
| **TNGA 160408S01020C** | **TB310** | 0.8 | – | – | – | – | – | – | 450 | 0.15 | 0.6 | – | – | – | 115 | 0.11 | 0.5 | 95 | 0.15 | 1.0 |