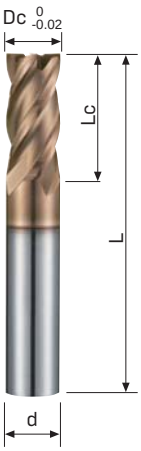
# Finishing End Mills

Code No. E164TX-Dc

| Dc 0 -0.02 | Lc mm | L mm | d h6 | AlTiSiN E164TX |
|---|---|---|---|---|
| 1 | 3 | 50 | 4 | ● |
| 1.5 | 5 | 50 | 4 | ● |
| 2 | 6 | 50 | 4 | ● |
| 2.5 | 8 | 50 | 4 | ● |
| 3 A | 8 | 50 | 4 | ● |
| 4 A | 11 | 50 | 4 | ● |
| 3 | 8 | 50 | 6 | ● |
| 3.5 | 10 | 50 | 6 | ● |
| 4 | 11 | 50 | 6 | ● |
| 4.5 | 11 | 50 | 6 | ● |
| 5 | 13 | 50 | 6 | ● |
| 5.5 | 13 | 50 | 6 | ● |
| 6 | 16 | 50 | 6 | ● |
| 7 | 20 | 60 | 8 | ● |
| 8 | 20 | 60 | 8 | ● |
| 9 | 22 | 72 | 10 | ● |
| 10 | 22 | 72 | 10 | ● |
| 11 | 26 | 75 | 12 | ● |
| 12 | 26 | 75 | 12 | ● |
| 14 | 32 | 90 | 16 | ● |
| 16 | 38 | 100 | 16 | ● |
| 18 | 38 | 100 | 20 | ● |
| 20 | 38 | 100 | 20 | ● |

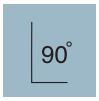



Steel < 56HRC

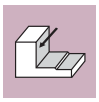
| P | H | M | K | N | S |
|---|---|---|---|---|---|
| ● | ● | | | | |

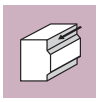
UMG Carbide

AlTiSiN TX



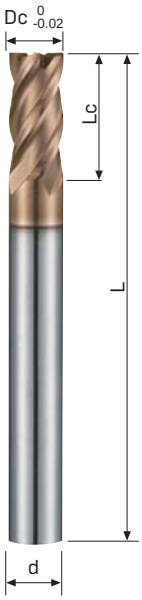

## Type of Operation





Code No. E165TX-Dc

| Dc 0 -0.02 | Lc mm | L mm | d h6 | AlTiSiN E165TX |
|---|---|---|---|---|
| 3 | 12 | 70 | 6 | ● |
| 4 | 15 | 70 | 6 | ● |
| 5 | 20 | 80 | 6 | ● |
| 6 | 20 | 80 | 6 | ● |
| 7 | 25 | 100 | 8 | ● |
| 8 | 25 | 100 | 8 | ● |
| 9 | 30 | 100 | 10 | ● |
| 10 | 30 | 100 | 10 | ● |
| 11 | 35 | 110 | 12 | ● |
| 12 | 40 | 110 | 12 | ● |
| 14 | 40 | 120 | 16 | ● |
| 16 | 50 | 140 | 16 | ● |
| 20 | 60 | 160 | 20 | ● |




## Work Material

| | | | |
|---|---|---|---|
| P | GR1 | Carbon Steel | ● |
| | GR2 | <24HRC Low-alloyed Steel | ● |
| | GR3 | <30HRC Hi-alloyed Steel | ● |
| H | GR4 | 30~38HRC Hardened Steel | ● |
| | GR5 | 38~48HRC Hardened Steel | ● |
| | GR6 | 48~56HRC Hardened Steel | ● |
| | GR7 | 56~68HRC Hardened Steel | ○ |
| M | GR8 | Stainless Steel | |
| K | GR9 | Cast Iron | |
| N | GR10 | Aluminium | |
| | GR11 | Copper | |
| | GR12 | Plastics | |
| | GR13 | FRP CFRP Composite Material | |
| | GR14 | Graphite | |
| S | GR15 | Titanium | |
| | GR16 | Nickel | |
| | GR17 | Heat-resistant Steel | |