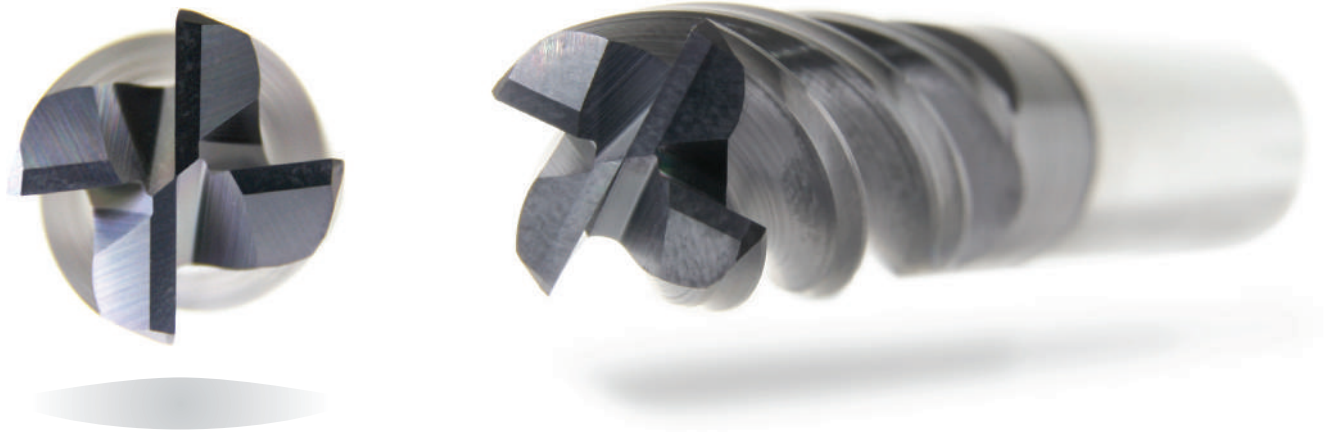


Technology  
Speed

# PlusCut



PlusCut are End Mills with partitioned variable tooth, that HELIX TOOLS has progressed for rough and finishing operations. Now PC serial carbide end mills due to new design geometry has the max. quenching specification of vibration and capacity of big quantity chip removing.

Our new end mills are a perfect solution even at low power machines, for max. chips removal under these conditions, and quenching the vibration. Helix Tool's new end mill PlusCut, with many new cutting techniques and max. chip removal capacity shortens machining (process) duration. 2xd can be used almost for all processes of flute grinding, contour processing of the materials as steel, cast, titanium.

Due to the new applied geometry of PlusCut Helix Tools, provides longer tool lives and a perfect surface sensitivity at the higher capacity chips removal percentage. Our PlusCut-PC serial carbide end mills are at dimensions between Ø3- Ø20

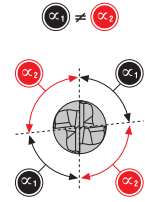
# PC404

## Solid Carbide End Mills, PlusCut

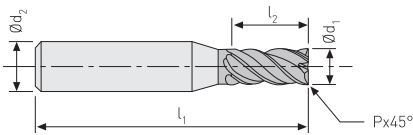
### Application Range

- Unalloyed Steels
- Machining Steels
- Low Alloy Steels
- Stainless Steels
- Heat Resistant Materials
- Titanium and Titanium Alloys
- Cast Iron
- Hardened Materials
- Aluminium Alloys
- Copper and Copper Alloys
- Plastics
- Graphite

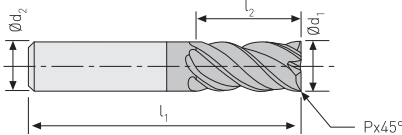
# HELIX TOOLS



**A**



**B**



K30F
ATN
Z=4
~38°
HELIX TOOLS Std.
HRC <48
Page 87

| Order Code     | d <sub>1</sub> mm<br>h10 | l <sub>1</sub> mm | l <sub>2</sub> mm | d <sub>2</sub> mm<br>h6 | z | P        | Type |
|----------------|--------------------------|-------------------|-------------------|-------------------------|---|----------|------|
| PC404-0300 ATN | 3                        | 57                | 8                 | 6                       | 4 | 0.10x45° | A    |
| PC404-0400 ATN | 4                        | 57                | 11                | 6                       | 4 | 0.15x45° | A    |
| PC404-0500 ATN | 5                        | 57                | 13                | 6                       | 4 | 0.15x45° | A    |
| PC404-0600 ATN | 6                        | 57                | 13                | 6                       | 4 | 0.20x45° | B    |
| PC404-0800 ATN | 8                        | 63                | 19                | 8                       | 4 | 0.20x45° | B    |
| PC404-1000 ATN | 10                       | 72                | 22                | 10                      | 4 | 0.25x45° | B    |
| PC404-1200 ATN | 12                       | 83                | 26                | 12                      | 4 | 0.25x45° | B    |
| PC404-1400 ATN | 14                       | 83                | 26                | 14                      | 4 | 0.40x45° | B    |
| PC404-1600 ATN | 16                       | 92                | 32                | 16                      | 4 | 0.40x45° | B    |
| PC404-1800 ATN | 18                       | 92                | 32                | 18                      | 4 | 0.50x45° | B    |
| PC404-2000 ATN | 20                       | 104               | 38                | 20                      | 4 | 0.50x45° | B    |



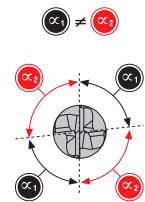
# PC414

## Solid Carbide End Mills, PlusCut, With Weldon Shank

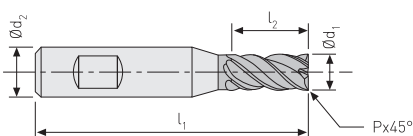
### Application Range

- Unalloyed Steels
- Machining Steels
- Low Alloy Steels
- Stainless Steels
- Heat Resistant Materials
- Titanium and Titanium Alloys
- Cast Iron
- Hardened Materials
- Aluminium Alloys
- Copper and Copper Alloys
- Plastics
- Graphite

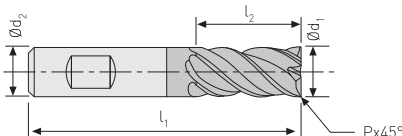
# HELIX TOOLS



**A**



**B**



K30F
ATN
Z=4
~38°
HELIX TOOLS Std.
HRC <48
Page 87

| Order Code     | d <sub>1</sub> mm<br>h10 | l <sub>1</sub> mm | l <sub>2</sub> mm | d <sub>2</sub> mm<br>h6 | z | P        | Type |
|----------------|--------------------------|-------------------|-------------------|-------------------------|---|----------|------|
| PC414-0300 ATN | 3                        | 57                | 8                 | 6                       | 4 | 0.10x45° | A    |
| PC414-0400 ATN | 4                        | 57                | 11                | 6                       | 4 | 0.15x45° | A    |
| PC414-0500 ATN | 5                        | 57                | 13                | 6                       | 4 | 0.15x45° | A    |
| PC414-0600 ATN | 6                        | 57                | 13                | 6                       | 4 | 0.20x45° | B    |
| PC414-0800 ATN | 8                        | 63                | 19                | 8                       | 4 | 0.20x45° | B    |
| PC414-1000 ATN | 10                       | 72                | 22                | 10                      | 4 | 0.25x45° | B    |
| PC414-1200 ATN | 12                       | 83                | 26                | 12                      | 4 | 0.25x45° | B    |
| PC414-1400 ATN | 14                       | 83                | 26                | 14                      | 4 | 0.40x45° | B    |
| PC414-1600 ATN | 16                       | 92                | 32                | 16                      | 4 | 0.40x45° | B    |
| PC414-1800 ATN | 18                       | 92                | 32                | 18                      | 4 | 0.50x45° | B    |
| PC414-2000 ATN | 20                       | 104               | 38                | 20                      | 4 | 0.50x45° | B    |

