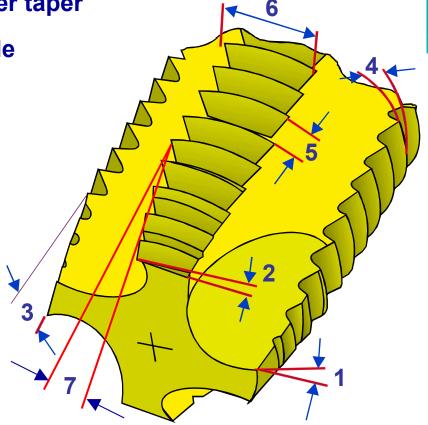
## Tap Geometry

- 1) Rake angle cutting edge
- 2) Radial chamfer relief
- 3) Length and chamfer taper
- 4) Thread tooth profile
- 5) Pitch
- 6) Crest width
- 7) Helix angle

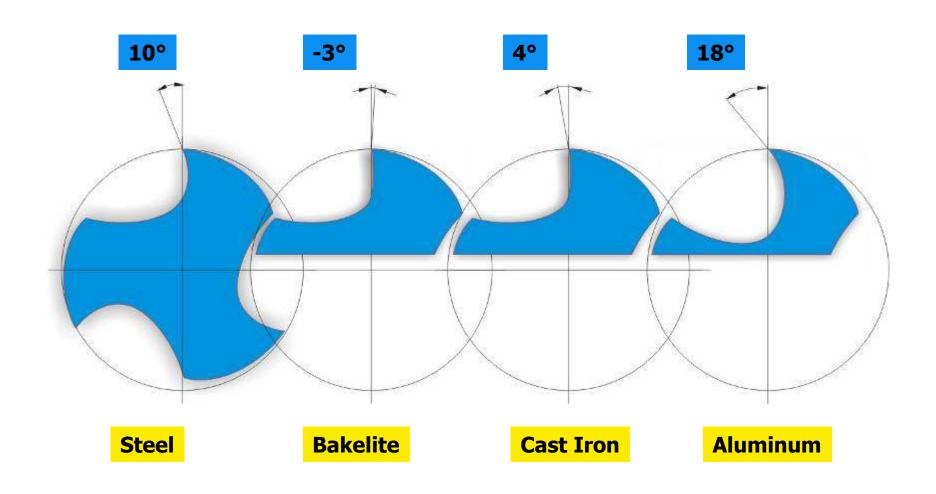








## Rake Angle Cutting Edge







## Rake Angle Cutting Edge

Materia	Rake Angle	Coolant
Steel 400-700 N/mm <sup>2</sup>	12° ÷ 15°	Emulsion
Steel >700 N/mm <sup>2</sup>	8° ÷ 12°	Emulsion
Stainless Steel	8° ÷ 12°	Emulsion/Oil
Nickel-Based Alloys	8° ÷ 12°	Oil
Titanium	10°	Oil
Gray Cast Iron	3° ÷ 5°	Emulsion/Dry
Cast Iron Nodular Graphite	4° ÷ 8°	Emulsion
Aluminum	25° ÷ 35°	Emulsion
Cast Aluminums	15° ÷ 25°	Emulsion
Cast Aluminums Si>12%	10° ÷ 15°	Emulsion
Brass	0° ÷ 5°	Emulsion
Bronze+Al	5° ÷ 8°	Emulsion/Oil
Bronze+Pb	2° ÷ 5°	Emulsion/Dry
Copper	15° ÷ 25°	Emulsion
Nylon,Polymer,Kevlar,Polyethylene Fibers	4° ÷ 8°	Air Jet
Bakelite	-3° ÷ 6°	Emulsion/Dry/Air
Carbon Fiber Reinforced Polymers	3°	Dry/Air