

## One Comprehensive Platform

- Standard diameter range covering 12–68mm in 2 x D, 3 x D, 4 x D, and 5 x D.
- Four real cutting edges each for entire platform.
- Eight insert sizes to cover complete diameter range.

## Easy to Apply

- No risk of mixing up inner and outer insert due to clear visual differences.
- Easy-to-change inserts, laser marked with geometries and grades.
- Easy-to-use nomenclature guide enabling the tool body and the related insert selection to avoid order failures.

## Highly Versatile

- Breadth of application capabilities include through and cross holes, inclined entry and exit opportunity, 45° corner, half cylindrical, concave, or chain drilling.
- Various geometries and grades available.

## Highest Performance

- 2x four true cutting edges.
- Cutting edge profile of central and periphery insert work together, leading to high stabilisation of the drill, preventing drifting of the tool even on irregular surfaces.
- X-offset design to adjust diameter size on turning machines and optimise tolerances on machining centres.
- Apply where speed and economy are prime considerations.
- Three grades to achieve higher tool life at accelerated speeds:
  - WU25CH grade for highest metal removal rate in general applications.
  - WU40PH grade for high toughness demands.
  - WPK10CH grade for high-speed applications.



The guide below provides an example of how to select the Top Cut 4 tool body and accompanying inserts for a stable steel drilling application.

**Metric Body**

<b>TCF</b>	<b>250</b>	<b>R</b>	<b>3</b>	<b>SL</b>	<b>32</b>	<b>M</b>	<b>D</b>
Tool Family Top Cut 4	Diameter Metric = 3 digits (e.g. 250 = 25mm) Inch = 4 digits (e.g. 2500 = 2.5")	Right-Hand Cutting	Length Diameter Ratio L/D = 3 x D	Shank Style SL = Side Lock Adaptor	Shank Size	Metric	Insert Size

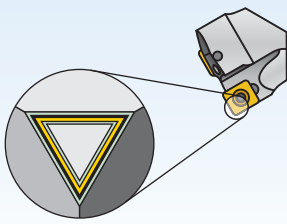
**Periphery Insert**

<b>TCF</b>	<b>08</b>	<b>03</b>	<b>08</b>	<b>D</b>	<b>P</b>	<b>V34</b>	<b>WU25CH</b>
Tool Family Top Cut 4	Size In-Circle D1	Insert Thickness	Insert Corner Radius	Insert Size	Insert Positioning C = Central P = Periphery	Insert Geometry	Grade

Insert Geometry – V34 for steel or cast iron or V36 for stainless steel and long chipping steel.

**Insert Guide for Grades**

<b>W</b>	<b>U</b>	<b>25</b>	<b>C</b>	<b>H</b>
<b>W</b>	<b>U</b>	<b>40</b>	<b>P</b>	<b>H</b>
<b>W</b>	<b>PK</b>	<b>10</b>	<b>C</b>	<b>H</b>
WIDIA™	Material Range U = Universal P = Steel K = Cast Iron	Toughness Range Choose high numbers for toughness in stable conditions, low numbers for high wear resistance at continuous cuts.	Coating P = PVD C = CVD	Application H = Holemaking



Coatings provide high-speed capability and are engineered for finishing to light roughing.

P	Steel
M	Stainless Steel
K	Cast Iron
N	Non-Ferrous
S	High-Temp Alloys
H	Hardened Materials

wear resistance ← → toughness

Grade	Coating	Grade Description	Material Groups																				
			P	M	K	N	S	H	05	10	15	20	25	30	35	40	45						
WPK10CH	 TiCN-Al <sub>2</sub> O <sub>3</sub>	<b>Composition:</b> With an advanced CVD TiCN-Al <sub>2</sub> O <sub>3</sub> coating combined with a cobalt-enriched carbide substrate, this grade offers a balanced combination of deformation-resistance and edge toughness. <b>Application:</b> Offers outstanding abrasion and crater wear resistance for high-speed machining of steels and cast irons. Use for very high cutting speeds with low to medium feed rates.	P																				
			M																				
			K																				
WU25CH	 TiCN-Al <sub>2</sub> O <sub>3</sub>	<b>Composition:</b> Advanced CVD TiCN-Al <sub>2</sub> O <sub>3</sub> coating together with a newly engineered tough carbide substrate. Ensures adequate deformation resistance and excellent edge strength and offers very good wear resistance over a wide range of machining conditions. <b>Application:</b> A high productivity grade with high speeds and feeds. First choice for high productivity with very good reliability in steels, stainless steels, and cast iron rates.	P																				
			M																				
			K																				
WU40PH	 TiCN-Al <sub>2</sub> O <sub>3</sub>	<b>Composition:</b> With a multilayered PVD TiN-TiAlN coating and a tough substrate, this grade withstands interruptions and provides high wear resistance for long tool life. <b>Application:</b> First choice for high reliability in most materials. This grade should be used at medium speeds and high feeds due to sharper edges and as a grade for high-toughness applications. It covers steel, stainless steel, cast iron, and high-temp alloys under certain conditions.	P																				
			M																				
			K																				

