



# Application recommendations Inserts

Grade matrix

Carbide / carbide coated / PCD / CBN

Grade selection

● ▲ -

Chipbreaker recommendation

Chipbreaker →

Cutting material	Grade composition		Workpiece material					
	Substrat	Coating	Steel	Stainless steel	Cast iron	Nonferrous materials	Heavy machinable materials	Hardened steel
<b>K10</b>	K10	uncoated	---	---	● n	▲ n	● n	---
Chipbreaker →			---	→	-1000 -1045	-1620 -1645	-1620* -1645	
<b>G12</b>	K10	TiAlN Multilayer PVD	---	● n	t ▲ n	t ● n	---	---
Chipbreaker →			→	-1000 -1045	-1000 -1045	-1620 -1645		
<b>G16</b>	P40	TiAlN Multilayer PVD	▲ n	▲ n	●	---	● n	---
Chipbreaker →			-1045 -1000		-1045 -1000		-1045 -1000	
<b>G26</b>	P40	TiN CVD	● n	● n	---	---	▲ n	---
Chipbreaker →			-1045 -1000	-1045 -1000				
<b>PCD 10</b>	Grain size 10 µm		---	---	---	t ▲ n	---	---
Chipbreaker →			---	---	→	-0045 -1045		
<b>PCD 30</b>	Mixed grain		● n	---	---	t ▲ n	---	---
Chipbreaker →			→	-0045		-0045 -1045		
<b>CBN 40</b>			---	---	t ●	---	---	t ▲
Chipbreaker →			---	→	-0000			-0000
<b>CBN 80</b>	high CBN-content		● n	---	t ●	---	---	t ▲
Chipbreaker →			→	-0000	-0000			-0000

▲ = very good applicable ● = applicable - = not applicable \* = for Titanium t = dry n = wet

Further cutting materials, coatings and geometries on request.

We reserve the right to make technical changes.

## Application for PCD Inserts

Application	Ordering number	
- High surface quality	I W 3108-0314 0045 N	
- Stable conditions	I W 6120-0318 0045 N	
	I W 6127-0318 0045 R	
	↓ W 6127-0318 0045 L	
- High surface quality	I W 3108-0314 1045 N	
- Higher cutting depths	I W 6120-0318 1045 N	
- Instable conditions	I W 6127-0318 1045 R	
	I W 6127-0318 6445 R	
	↓ W 6120-0118 6245 R	
- High surface quality	W 6125-0118 6645 R	
- Very instable components		
- Very high surface quality (mixed assembly)	I W 6127-0315 0045 R ↓ W 6120-1000 0445 R	
- Defined surface quality	I W 3108-0414 0000 N I W 6120-0418 0000 N I W 6127-0418 0000 R I W 6127-0418 0000 L I W 6127-0318 0000 R ↓ W 6127-0218 0000 R	
- Defined surface quality with very instable components	I W 6127-0301 0045 R ↓ W 6127-0305 6445 R	

## Application recommendations for PCD-Inserts

Application	Grade code	
- Aluminium with low Si-content		PCD 10
- high cutting speed		
- high surface quality		
Aluminium with high Si content		PCD 30
- abrasive nonferrous-materials		
- very high cutting speed		
- Sintersteel		PCD 30
- CGI-machining		

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