



# Global Jaya Teknik : The Advantage Product Series

## HSS-Carbide-Coated-Un coated Slitting Saw-Saw Blade



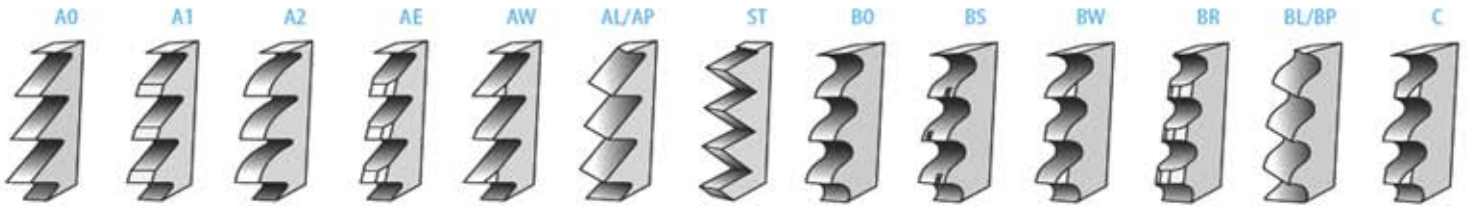
The cutting edge isn't straight in standard modification it can be equipped with teeth similar to that which are used on circular saw blades for metal cutting, or quite specific teeth forms. Circular knives without teeth (but with grooves or ridges on the cutting edge) can be manufactured, too.

Als Grundausführung ist die Schneidante nicht unterbrochen, sie kann jedoch verzahnt werden. Die Zahnform kann ähnlich wie bei den Metallkreissägen oder ganz spezifisch sein. Ebenso kann man Schneidmesser produzieren, deren Schneidante mit keinen Zähnen sondern mit Rillen, Rippen oder Vollen versehen ist.

- A - single bevel sharp with rounded crown edge Schneidante mit Frähschnitt
- B - double edge Schneidante
- C - single bevel blunt edge Schneidante - stumpf
- D - single bevel sharp edge Schneidante - scharf
- E - double single bevel edge Schneidante + Vorschneiden
- F - double bevel blunt double edge Schneidante - stumpf
- G - double bevel sharp double edge Schneidante - scharf
- H - double double bevel double edge Schneidante + Vorschneiden

### Tooth forms and cutting geometry

Circular saws are supplied with the following kinds of tooth form.



The tooth forms A, B, BW, BS and C can be also designed as a VARIO tooth form. VARIO tooth form is noted for a irregular tooth pitches in the groups of 4, 6 or 8 teeth. Other tooth forms can be also designed up to instructions of the end user (facets, chamfers, side clearance).

Type of material	Standard geometry of circular saws				
	Length mm/ft	Cutting tooth angle γ	Clearance angle α	Feed per tooth mm/2	Operational Speed m/min
Steel S1 lightness	250-500	10°-20°	8°-12°	0.020	30-50
Steel P1 lightness	500-750	15°-17°	6°-8°	0.020	30
Steel S10 lightness	750-1000	14°-16°	6°-8°	0.015	20
Cast Iron	100-400	10°-18°	6°-8°	0.020	20
Stainless Steel	500-800	14°-18°	6°-8°	0.010	30
Copper	200-400	20°-22°	10°-12°	0.015	400-600
Brass	200-400	24°-16°	8°-10°	0.015	400-600
Aluminium Alloys	200-400	22°-25°	10°-12°	0.040	750-1300



### PVD Coatings

Coating type	Technical features of coating					
	Surface microhardness HV	Friction coefficient μ	Max. working temperature °C	Color	Operation	Technical recommendations
VOPO	900	0,45	550°C	blue/black	General purposes	Non PVD coating Prevention of rust Side friction reduction
TN	2000	0,40	550°C	gold	Structural steel Alloyed steels Steel pipes and profiles Pipes and profiles from non ferrous metals	Redding of the coating hardness by reducing the friction Universal coating for better saw blade lifetime 50-100% higher speed and feed rates Prevention of side pick-ups
TiAlN	2500	0,50	800°C	purple/black	Very hard steels Non ferrous steels Titanium alloys Aluminium silicon cast alloys Copper and brass	Low-friction coefficient and high surface hardness Good saw blade lifetime at high cutting temperature Especially for drycutting or by insufficient cooling
TiCN	3700	0,20	400°C	blue/gray	Stainless steels Hard steels Titanium alloys	Multi-layer coating with extreme low friction coefficient and also with high surface hardness Over 100% higher cutting and feed rates when sawing steel tubes and profiles
CN	1800	0,30	700°C	metallic-gray	Non ferrous metals Aluminium Copper and brass and similar alloys	Good saw blade life because of high surface hardness Good surface finish without side pick-ups due to smooth coating surface

**Standard cutting geometries circular saws**  
**Standard Zahngeometrie der Metall-Kreissägeblätter**

Kind of steel the blade is made of Stahlsorte des Blattes	Rake angle - γ Spanwinkel - γ	Clearance angle - α Freiwinkel - α
HSS/Dm05	18°	8°
HSS/Em05	12°	6°