

Integral Hard-Metal Saw Blades

Argensinter standard

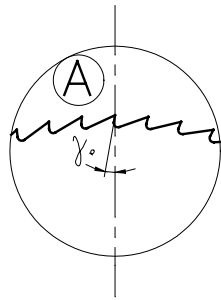


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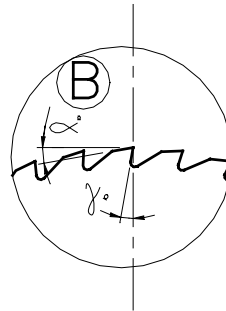
Side Cutting or Tooth Form - Side Dump - Tooth Profile (based on DIN 1840 and Argensinter standard)

Side Cutting or Tooth Form

Type A



Type B

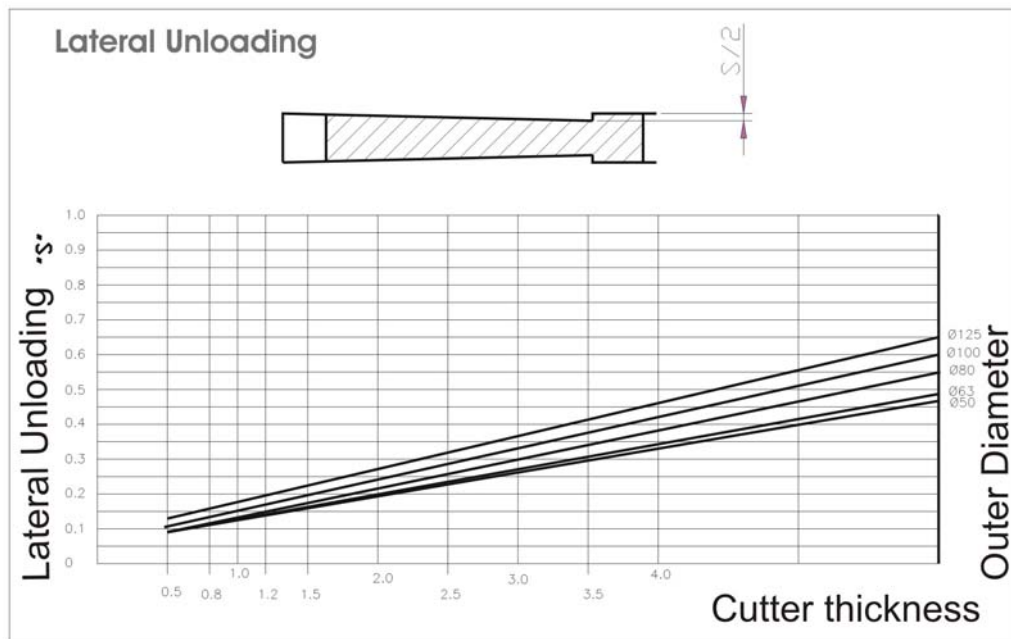


Cutting Type	γ Value for material		
	Type N ¹	Type H ¹	Type W ¹
A	5°	0°	10°
B	15°	8°	25°

Cutting Type	α Value for material		
	Type N ¹	Type H ¹	Type W ¹
B	8°	10°	12°

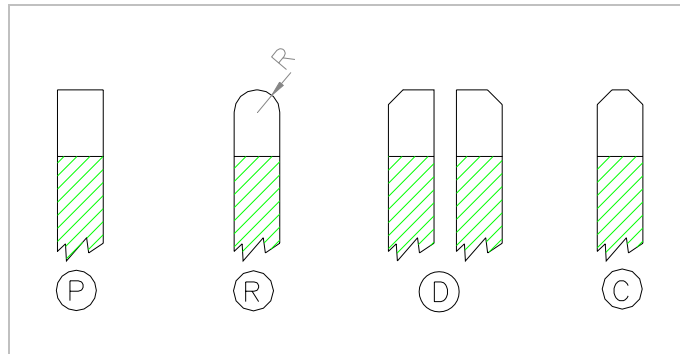
¹ Conforming to DIN 1836.

Side Dump



Integral Hard-Metal Saw Blades

Tooth profile



Tooth Profile	Description
P	Flat
R	Radial
D	Alternate Bevel
C	Bevel

Saw's Identification Code

The code structure is formed in the following way: Example: For a saw blade of diameter A = 100 mm, Thickness E = 0.8 mm, diameter d1 = 22 mm.

Article Family	Article Subfamily	Outer Diameter	Thickness	Inner Diameter	Tooth		
					Quantity	Side Cutting	Profile
F	I	100	0.80	22.0	Z=100	A	P
S I 100 x 0.80 x 22.0 Z=100 A P							
Code reference:							
Family: F = Saw							
Subfamily: I = Integral ó S = Weld Edge							
Tooth:							
- Side Cutting: A ó B (according to DIN 1840 and Argensinter's standard).							
- Tooth Profile: P = Flat, R = Radial, C =Bevel, D = Alternate Bevel.							

Integral Hard-Metal Saw Blades

(according to Argensinter's standard)

Material to be Machined. Classification - DIN 1836

Tool	Description
H	For particularly hard material and strong-hard material.
N	For general structural steel, grey cast iron, Non-Ferrous Metals of average hardness.
W	For particularly soft and light materials.

Material	Tool Type		
	N	H	W
Soft steel - Tensile strength up to 50 kp/mm ²	N		(W)
Medium steel – Tensile strength up to 80 kp/mm ²	N		
Hard steel - Tensile strength up to 100 kp/mm ²	N	(H)	
Hard steel – Tensile strength up to 130 kp/mm ²		H	
Cast steel	N	(H)	
Grey iron - HB30 bis hardness up to 180 kp/mm ²	N		
Grey iron - HB30 bis hardness up to 180 kp/mm ²	N	(H)	
Malleable cast iron	N		
Copper; Soft Copper Alloy	(N)		W
Dry copper alloy	N	(H)	
Zinc Alloy	(N)		W
Light aluminium alloy			W
Aluminium alloy, average hardness	N		(W)
Aluminium alloy, toughened - Low cutting speed	N		
Aluminium alloy, toughened - High cutting speed			W
Magnesium Alloy	(N)		W
Plastic, no laminate	N		(W)
Plastic laminate			W

The tool types N, when not in parenthesis, use them in a more convenient way.
The tool types in parenthesis indicate that they should only be used in special cases.

A Note about Side-Cutting or Shaping Cutters.

- Type A Engraving (fine-toothed, V toothed) - DIN 1837 A

This tooth type, with spaces from 0.8 to 6.3 mm between teeth according to the saw thickness and dimensions, has been developed specially for treatment of brittle materials with tear short shaving. This V-toothed has, thanks to its engraving teeth, a particularly small shaving bag. As the result of the relatively small spaces between the teeth, the type of teeth is only appropriate for small deep cutting or thin panel materials. It is recommended to use small spaces between teeth up to 2 mm for small deep cutting up to 3-4 mm. Larger spaces between teeth can be used for a maximum deep or maximum cross-sectional up to 15 mm.

Naturally, other important topics are the materials to cut and the cutting speed and the corresponding feed. Working with small feed, it is possible to plunge little deeper cuts without break teeth risk.

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(according to Argensinter Standard)

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- Type B Engraving (Coarse toothed, spiral toothed) - DIN 1838 B

This tooth type with spaces from 3.15 to 12.5 mm between teeth, according to the saw thickness and the saw dimensions, has relatively large semicircular shaving bags, which enables shaving generation. Its area of application is wider than DIN 1837 tooth type.

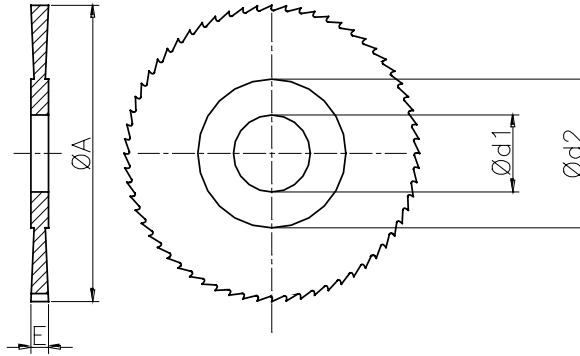
This type of teeth is particularly appropriate for cross-sectional treatment and greater cutting depth. Working with this type of teeth can enable cross-traversal cutting up to 100 mm, depending on the dimensions and the space between teeth and the corresponding feed. Usually, this type of teeth can be considered the most universal according to DIN.

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Integral Hard-Metal Saw Blades - DIN 1837 (according to Argensinter Standard)

in mm

Not bounded measures are to be chosen oneself.



ØA	20	25	30	40	50	63	80	100
Ød1	5	8	8	10	13	16	22	22
Ød2	10	12	14	18	25	32	36	40
Thickness E	Number of teeth Z							
0.30	2 6	32	40	-	-	-	-	-
0.40				-	-	-	-	-
0.50				-	-	-	-	-
0.60				-	-	-	-	-
0.80				50	60	64	84	100
1.00								
1.20								
1.60								
2.00								
2.50								

Engraved

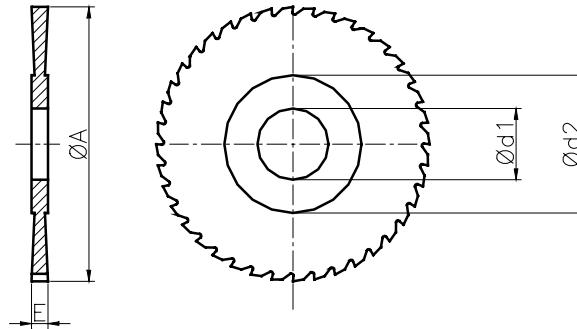
The saw blades of this standard have engraved:

- A: outside cutting diameter
- E: thickness.
- d1: inside diameter.
- Z: number of teeth.

Integral Hard-Metal Saw Blades - DIN 1837

(according to Argensinter Standard)

in mm
Not bounded measures are to be chosen oneself.



Ø A	50	63	80	100
Ø d1	13	16	22	22
Ø d2	25	32	36	40
Thickness E	Number of teeth Z			
0.50	50	64	-	-
0.60	50	64	-	-
0.80	50	50	64	-
1.00	40	50	64	64
	32	40	40	50
1.20	40	50	50	64
	32	32	40	50
1.60	40	40	50	64
	24	32	40	50
2.00	32	40	50	64
	24	32	40	40
2.50	32	40	50	50
	24	32	32	40
3.00	32	40	40	50
	24	24	32	40
4.00	32	34	40	50
	20	24	32	32

Engraved

The saw blades of this standard have engraved::

A: outside cutting diameter

E: thickness.

d1: inside diameter.

Z: number of teeth.

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