

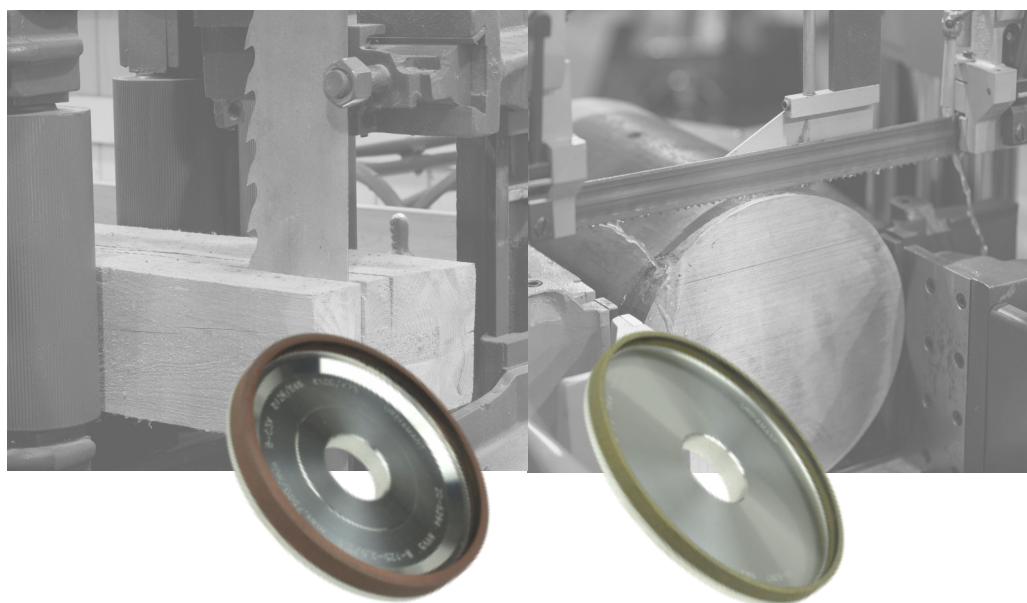
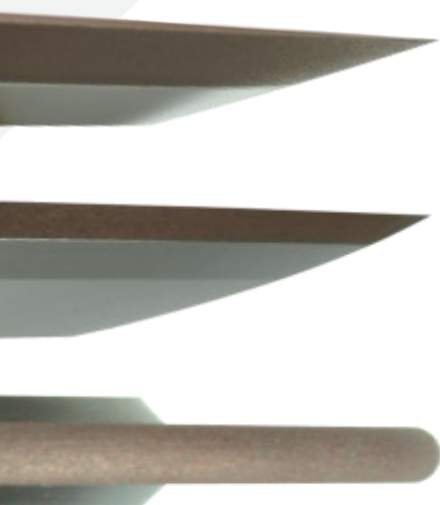
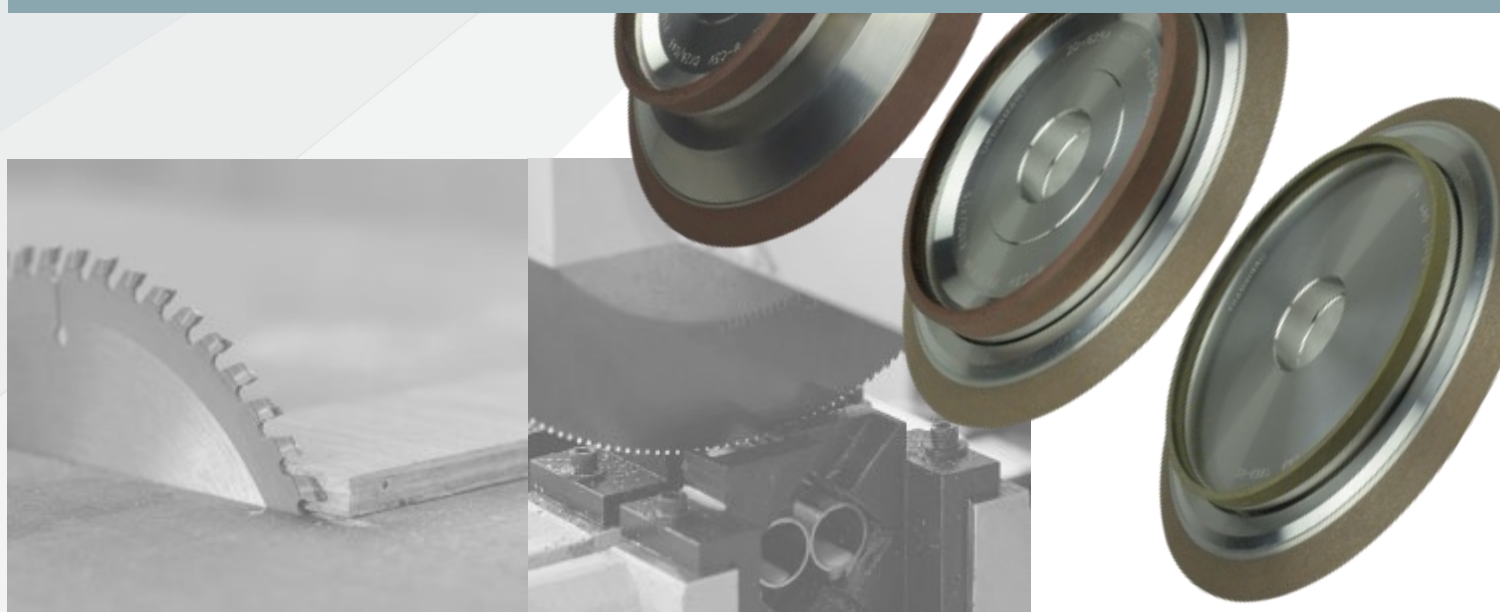
GRINDING TOOLS FOR MACHINING CIRCULAR SAW BLADES & BAND SAWS

TOOLS FOR GRINDING CARBIDE-TIPPED CIRCULAR SAW BLADES

- Flank grinding wheels
- Top grinding wheels
- Face grinding wheels
- Pins for hollow ground saw blades

TOOLS FOR GRINDING HSS OR FULL- CARBIDE CIRCULAR SAW BLADES

TOOLS FOR GRINDING BAND SAWS



TOOLS FOR GRINDING CARBIDE-TIPPED CIRCULAR SAW BLADES

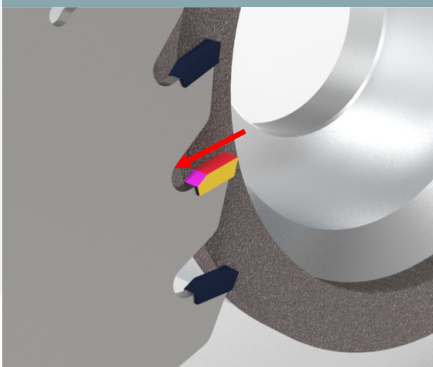
Circular saw-blades tipped with tungsten carbide (TC) segments are nowadays commonly used across various industries.

Be it during production of a new saw blade, or during a re-sharpening of a used saw, grinding of the TC segments is a multi-step process and is performed on different machines.

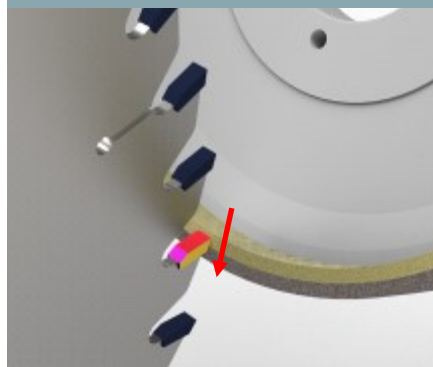
Irrelevant of the capabilities of the employed grinding machine, the process of sharpening TC segments has always 3 steps: flank, face and top grinding. See a graphical explanation of these steps below.



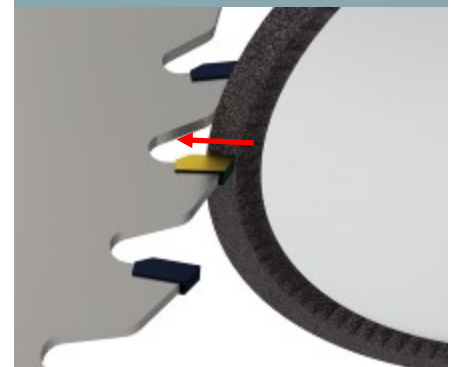
FLANK GRINDING



TOP GRINDING

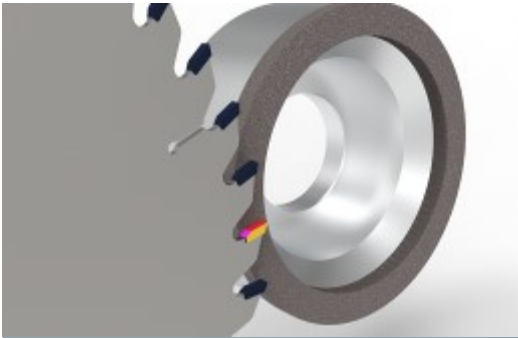


FACE GRINDING



All these grinding steps can be performed on machines of various producers. Each machine has specific capabilities, some are more suited for production of new saw blades, whereas some are better for re-sharpening. Some machines can perform multiple grinding steps, whereas some are one-step machines. On the following pages, we mention suitable machines for each wheel type. However, those lists of suitable machines are not exclusive and it is recommended to consult your application with us to select the right wheel.

Shape and dimensions of the grinding wheels that are used in grinding carbide-tipped saw blades depend on the grinding machine, as well as on the shape of the saw blade itself. Should you not find in the following pages a combination of shape & dimensions that you require, do not hesitate to contact us for an individual solution.

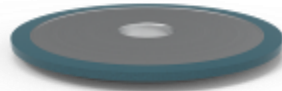
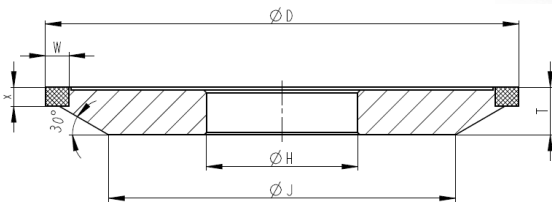


CARBIDE-TIPPED CIRCULAR SAW BLADES FLANK GRINDING TOOLS

Flank grinding is a step, where the cutting width of the circular saw blade is being defined.

During this grinding step, cup or peripheral wheels are employed in order to grind the tungsten carbide segments down to the required width. Often, two wheels are being used during this step simultaneously.

4A9



DIMENSIONS

(Adjustments upon request)

D: 100 - 150 mm
X: 3 - 6 mm
W: 6 - 10 mm

BOND TYPE

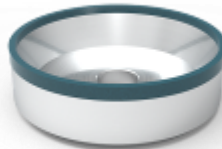
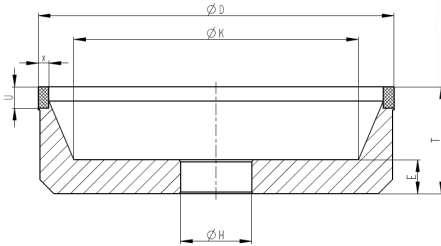
Resin

MACHINE TYPE

(Or similar)

Vollmer-Biberach (CHMF 400, CHF)

6A9



DIMENSIONS

(Adjustments upon request)

D: 100 - 150 mm
X: 3 - 6 mm
U: 6 - 10 mm

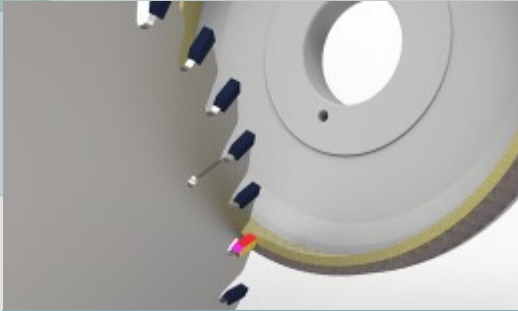
BOND TYPE

Resin

MACHINE TYPE

(Or similar)

Vollmer-Biberach (CHMF 400, CHF)



CARBIDE-TIPPED CIRCULAR SAW BLADES TOP GRINDING TOOLS

During the top grinding process, the periphery of a circular saw blade is ground, assuring the blades perfect circularity. This has crucial effect on the blade's cutting performance.

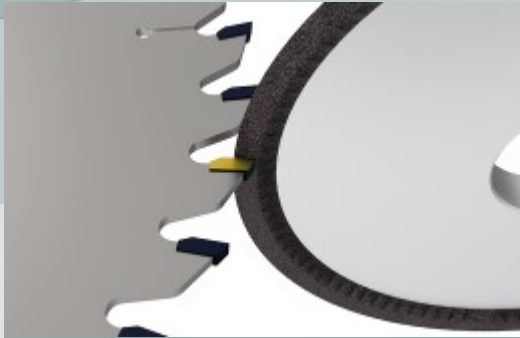
Both cup & peripheral wheels are being used, depending on the grinding machine & type of a saw blade.

<p>6V5</p>	<p>DIMENSIONS (Adjustments upon request)</p>	<p>D: 100 - 150 mm W: 3 - 6 mm X: 6 - 10 mm</p>
	<p>BOND TYPE</p>	<p>Resin</p>
	<p>MACHINE TYPE (Or similar)</p>	<p>Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma)</p>
<p>6VV5</p>	<p>DIMENSIONS (Adjustments upon request)</p>	<p>D: 100 - 150 mm W: 3 - 6 mm X: 6 - 10 mm</p>
	<p>BOND TYPE</p>	<p>Resin</p>
	<p>MACHINE TYPE (Or similar)</p>	<p>Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma)</p>
<p>6VVV5</p>	<p>DIMENSIONS (Adjustments upon request)</p>	<p>D: 100 - 150 mm W: 3 - 6 mm X: 6 - 10 mm</p>
	<p>BOND TYPE</p>	<p>Resin</p>
	<p>MACHINE TYPE (Or similar)</p>	<p>Vollmer Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840)</p>

<h2>6A2</h2>	DIMENSIONS (Adjustments upon request)	D: 100 - 150 mm W: 3 - 6 mm X: 6 - 10 mm
	BOND TYPE	Resin
	MACHINE TYPE (Or similar)	Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma)

<h2>14AA1</h2>	DIMENSIONS (Adjustments upon request)	D: 125 - 200 mm U ₁ / U ₂ : 2,5 / 2,5 mm X: 6, 10 mm
	BOND TYPE	Resin
	MACHINE TYPE (Or similar)	Walter Woodtronic

<h2>3AA1</h2>	DIMENSIONS (Adjustments upon request)	D: 125 - 200 mm U ₁ / U ₂ : 2,5 / 2,5 mm X: 6 - 10 mm
	BOND TYPE	Resin
	MACHINE TYPE (Or similar)	AKEMAT: B10; U10; F10



CARBIDE-TIPPED CIRCULAR SAW BLADES FACE GRINDING TOOLS

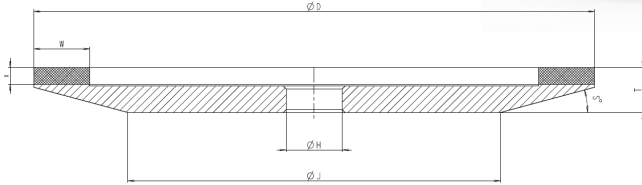
Face grinding is a step that requires a lot from the employed grinding wheel:

- Wear resistance. The wheel's grinding layer has to keep its edge stable for thousands of teeth.
- Narrow, tough and firmly mounted grinding layer. Frequently, the ground teeth have narrow space between them, requiring that the wheel's grinding layer is extremely thin. The grinding layer's toughness and firm mounting to the wheel's core body play crucial role in preventing breakage of the layer itself, or its separation from the wheel.

We provide grinding wheels of all shapes and sizes that withstand the challenging face grinding conditions.

<h3>12V2/30°</h3>	<p>DIMENSIONS (Adjustments upon request)</p> <p>D: 75 - 200 mm W: 4 mm X: 2 mm</p>	<p>BOND TYPE Resin</p> <p>MACHINE TYPE (Or similar) Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma); Walter Woodtronic</p>
<h3>MASTER</h3>	<p>DIMENSIONS (Adjustments upon request)</p> <p>D: 125 - 200 mm W: 2,3 - 2,5 mm X: 4 mm</p>	<p>BOND TYPE Resin</p> <p>MACHINE TYPE (Or similar) Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma); Walter Woodtronic</p>
<h3>MASTER II 20°</h3>	<p>DIMENSIONS (Adjustments upon request)</p> <p>D: 200 mm W: 2,5 - 2,9 mm X: 4,5 mm</p>	<p>BOND TYPE Resin</p> <p>MACHINE TYPE (Or similar) Vollmer Biberach (CHD 270; CHD 270 ROBOTER)</p>

4A2 - 15° / 20°



DIMENSIONS
(Adjustments upon request)

D: 75 - 200 mm
W: 2 - 10 mm
X: 1 - 4 mm

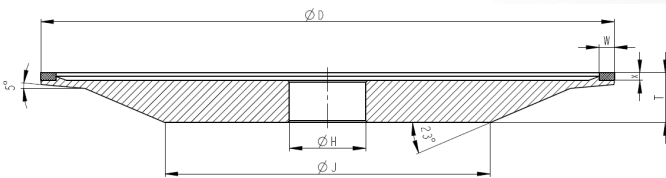
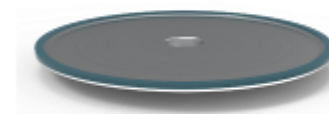
BOND TYPE

Resin

MACHINE TYPE
(Or similar)

Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma); Walter Woodtronic

4A2 - 23°



DIMENSIONS
(Adjustments upon request)

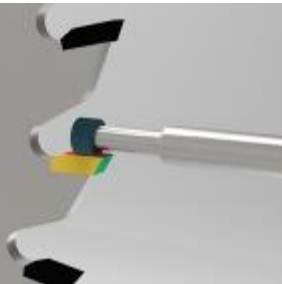
D: 100 - 175 mm
W: 2 - 10 mm
X: 1 - 2 mm

BOND TYPE

Resin

MACHINE TYPE
(Or similar)

Vollmer-Biberach (CX100; CHD 250; CHD 270; CHC 840; CHX 840); Vollmer-Dornhan (Finimat 800; Finimat Beta; Gamma); Walter Woodtronic

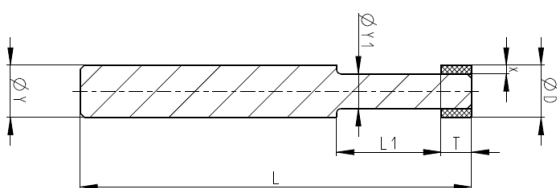


CARBIDE-TIPPED CIRCULAR SAW BLADES PINS FOR HOLLOW GROUND SAW BLADES

Some circular saw blades have teeth that are ground into a concave shape on top, or face of the TC segment. This helps achieve very clean cut and is used especially on all types of veneered woods that are very hard and smooth. Cutting these types of wood requires very sharp cutting edges on the saw blade. The cup-like shape of hollow ground teeth help achieve maximum sharpness and thus is perfect for cutting these materials.

We can provide tools for grinding the required shape of hollow teeth upon customer's request.

1A8W



DIMENSIONS
(Adjustments upon request)

D: 6,3 - 6,5 mm
T: 8 - 10 mm
X: 1 - 1,75 mm

BOND TYPE

Resin

MACHINE TYPE
(Or similar)

Vollmer-Biberach (CX100; CHD 250; CHD 270)

TOOLS FOR GRINDING HSS OR SOLID CARBIDE CIRCULAR SAW BLADES

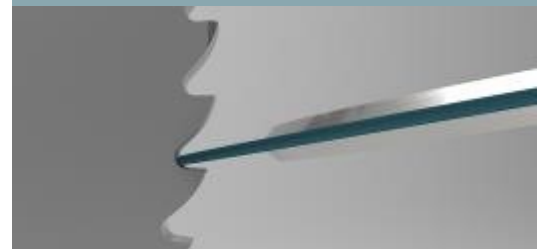


HSS or Solid Carbide Circular Saw Blades are made as one-piece tools. The teeth and body of a saw are made out of one material (High-Speed Steel or Tungsten Carbide, respectively).

These circular saw blades are manufactured usually with help of profile grinding wheels like 14F1 that have very good edge retention capabilities.

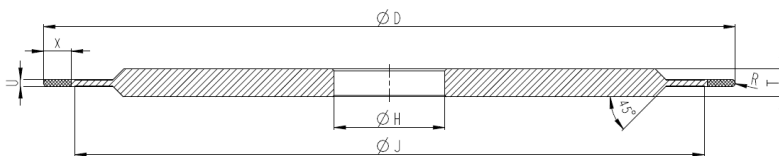
Our grinding wheels are made with CBN, or diamond, depending on the material the solid circular saw blade is made of (HSS, or tungsten carbide, respectively).

GRINDING WITH 14F1 WHEEL



14F1*

*marked as 14V1 for radius below R2 (i.e. U = 4 mm) and produced on steel core body



DIMENSIONS
(Adjustments upon request)

D: 150, 200 mm
U: 1,3 - 5 mm
R: 0,65 / 0,75 / 0,8 / 1 / 1,25 / 1,5 / 1,75 / 2 / 2,5
X: 6 - 8 mm

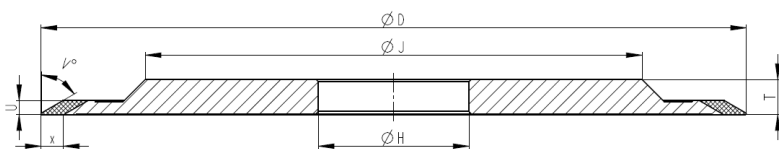
BOND TYPE

Resin

MACHINE TYPE
(Or similar)

Loroch KBN 710; PowerStar 850; KSC 710 - T; Schmidt Tempo ECE35; GrindTower 710; ChampTower 630

3V1



DIMENSIONS
(Adjustments upon request)

D: 150 mm
U: 3 - 6 mm
X: 6 - 10 mm

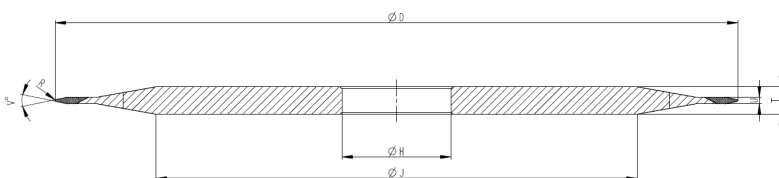
BOND TYPE

Metal

MACHINE TYPE
(Or similar)

Schmidt Tempo ECE35; GrindTower 710; ChampTower 630

14E1



DIMENSIONS
(Adjustments upon request)

D: 200 mm
U: 2 - 6 mm
X: 6 - 10 mm

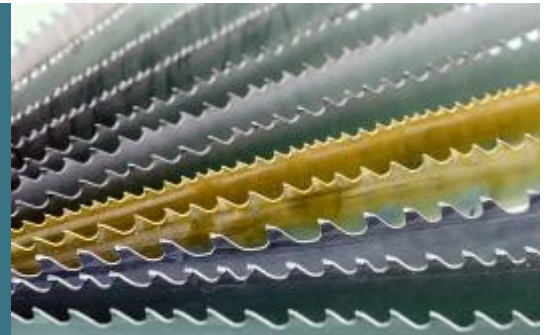
BOND TYPE

Resin

MACHINE TYPE
(Or similar)

Loroch KBN 710; PowerStar 850; KSC 710 - T

TOOLS FOR GRINDING HSS & STELLITE BAND SAW BLADES



Depending on their usage, band saw blades are made out of HSS, or with stellite deposits on their tips.

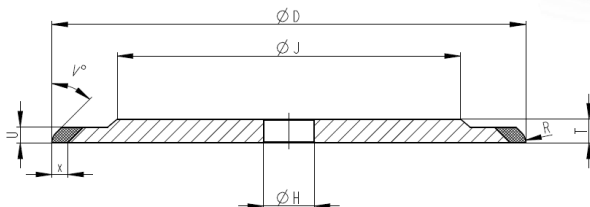
Different types of grinding wheels are being used during manufacture of band saw blades. HSS band saws usually require only peripheral wheels for production, whereas stellite-tipped band saws are also calibrated on the flanks, using cup wheels.

We offer resinous wheels for production and re-sharpening of band saws, but also re-plating service for customers, who prefer using electroplated grinding wheels.

GRINDING A BAND SAW BLADE



3V1 FOR TOP & FACE



DIMENSIONS

(Adjustments upon request)

D: 250 - 300 mm
U: 10 - 15 mm
X: 5 - 10 mm

BOND TYPE

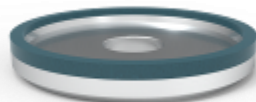
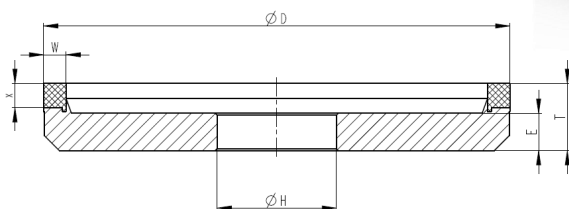
Resin

MACHINE TYPE

(Or similar)

Vollmer CA 300; CBF 310; Shark 600; 3000

6A2 FOR FLANKS



DIMENSIONS

(Adjustments upon request)

D: 125 mm
W: 3 mm
X: 6,5 mm

BOND TYPE

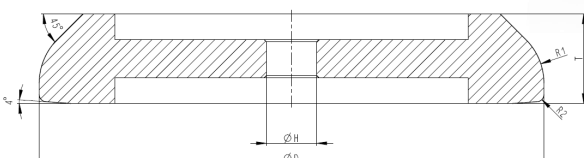
Resin

MACHINE TYPE

(Or similar)

Vollmer CA 300; CBF 310; Shark 600; 3000

ELECTROPLATED PROFILE WHEELS



DIMENSIONS

(Adjustments upon request)

We re-plate wheels of variable dimensions upon request. Feasibility subject to consultancy.

BOND TYPE

Electroplated

MACHINE TYPE

(Or similar)

Woodmizer, Pilous, etc.

CONTACT US FOR MORE INFORMATION

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