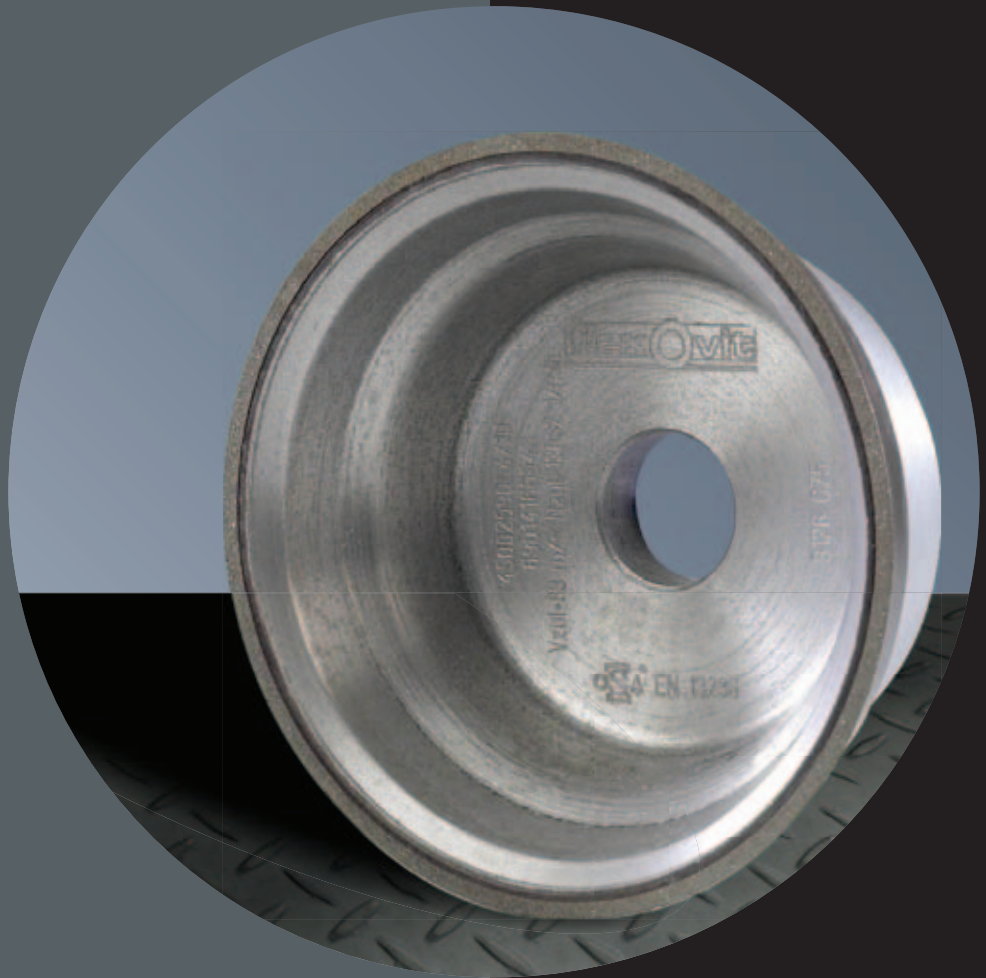
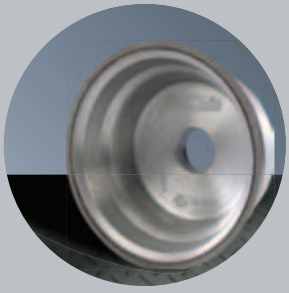


# Super Abrasives



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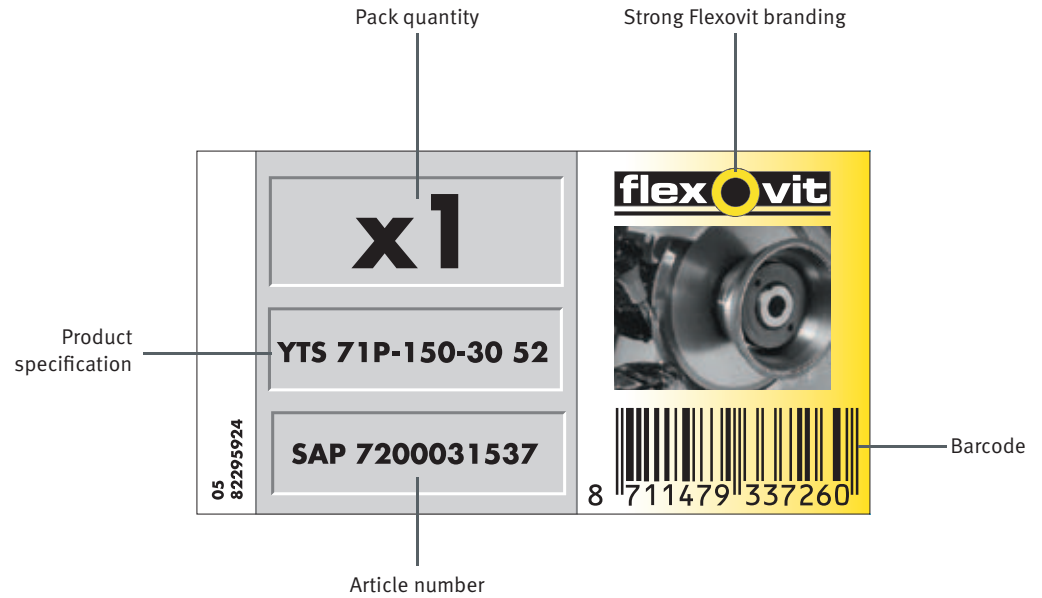


## Technical Information

The Flexovit Super Abrasive range provides technical solutions for the most popular applications encountered in two selected areas:

- S/A wheels: These are suitable for sharpening applications often encountered in a tool room environment and the metal industry
- S/A dressers: These can be used for dressing grinding wheels

## Understanding the Product



# Super Abrasives

## Grinding Wheels





# Grinding Wheels

## Selecting the Right Product

### ABRASIVES

#### Diamond (D)

Diamond abrasives are the optimum tools to grind carbide and other non-metallic materials. Using such products reduces costs as the wheels have long operating lives, provide high stock removal rates and give excellent all round results.

#### Cubic Boron Nitride (CBN)

Cubic Boron Nitride is the most suitable solution for grinding HSS and nickel based alloys. To reduce wheel wear and overheating, CBN wheels are the logical choice as they perform better in sharpening operations.

### SURFACE FINISH & GRIT SIZE

Grit size influences the surface finishing and the stock removal rate of the product.

- Grit 126: rough operation
- Grit 91/107: semi-finishing operation
- Grit 64: finishing operation

### CONCENTRATION

50: for large surface areas (2.2 carats/cm<sup>3</sup>)

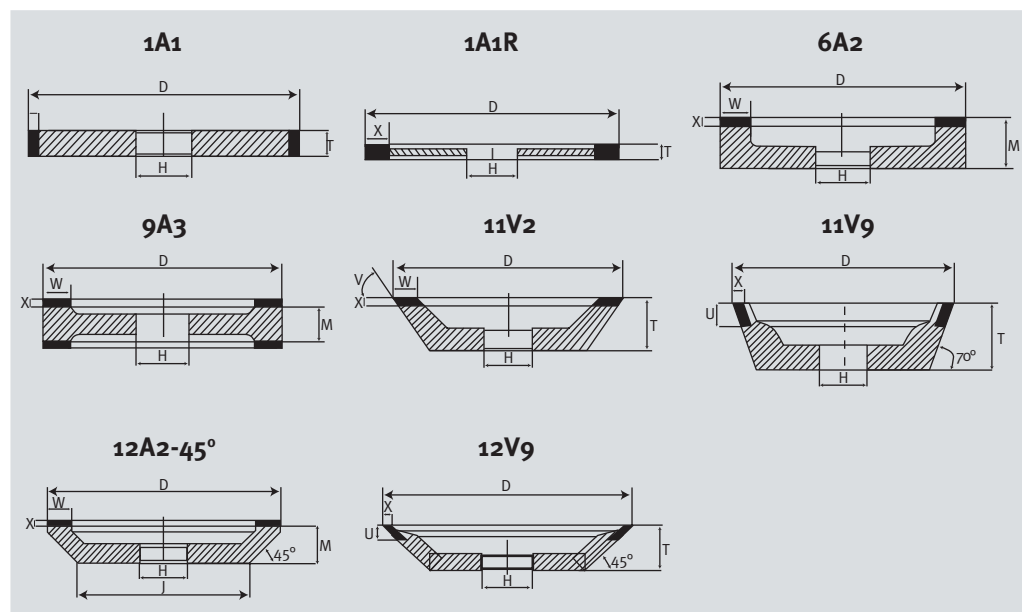
75: suitable for most standard applications (3.3 carats/cm<sup>3</sup>)

The concentration influences the stock removal rate and the geometry of the workpiece.

### BOND

Resin is extremely versatile and can be used for both wet and dry applications



### WHEEL SHAPES





## Getting the Best from your Super Abrasive Wheels

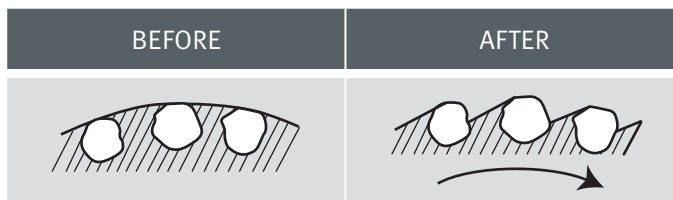
### WHEEL SPEED

MAXIMUM OPERATING SPEED		
	 Dry	 Wet
Diamond wheels	15m/s	25m/s
CBN	15 to 25m/s	25 to 35m/s

Both CBN and Diamond wheels can be used with or without coolant.

### OPEN-UP THE WHEEL FACE

To open-up the Diamond or CBN wheel face, you need to use an abrasive stick that will develop a cutting edge on the product. This operation removes some of the resin bond that covers the abrasive grains and means that the grinding process does not commence with dull abrasive grains.



DIAMOND OR CBN
grit 126 and coarser....use a 150 mesh abrasive stick
grit 54 - 107....use a 220 mesh abrasive stick
grit 46 and finer....use a 320 mesh abrasive stick

Recommendation: For better performance, put the abrasive stick in water or soluble oil before carrying out the operation as this avoids dust creation.



# Grinding Wheels

## Diamond

### 1A1

Grit	Specification	D	T	H	X	Quantity	Article Number	Barcode
91	D91C75R	100	4	20	3	1	69014173419*	8711479425332

\* Made-to-order

### 6A2

Grit	Specification	D	M	H	W	X	Quantity	Article Number	Barcode
91	D91C50R	100	18	20	12	2	1	66260396522	8711479425349
		150	18	20	15	2	1	69014169823*	8711479425356

\* Made-to-order

### 12A2 45°

Grit	Specification	D	M	H	W	X	Quantity	Article Number	Barcode
64	D64C75R	100	23	20	5	2	1	66260399024**	8711479425363
126	D126C75R	100	23	20	5	2	1	69014173127*	8711479425387
64	D64C75R	125	23	20	6	3	1	66260389829*	8711479425417
126	D126C75R	125	23	20	6	3	1	69014166130*	8711479425424

\* Made-to-order \*\* Destock

### 9A3

Grit	Specification	D	M	H	W	X	Quantity	Article Number	Barcode
64	D64C50R	175	30	20	5	2	1	69014169434*	8711479425431
126	D126C75R	175	30	20	5	2	1	66260398236*	8711479425448

\* Made-to-order

### 11V2

Grit	Specification	D	T	H	W	X	Quantity	Article Number	Barcode
126	D126C75R	100	25	20	5	3	1	69014162637*	8711479425455

\* Made-to-order

### 11V9

Grit	Specification	D	T	H	X	U	Quantity	Article Number	Barcode
64	D64C75R	75	30	20	2	10	1	66260396538**	8711479425462
126	D126C75R	75	30	20	2	10	1	66260392839**	8711479425479
64	D64C75R	100	35	20	2	10	1	69014167641**	8711479425486
126	D126C75R	100	35	20	2	10	1	69014166642*	8711479425493

\* Made-to-order \*\* Destock



## 12V9

Grit	Specification	D	T	H	X	U	Quantity	Article Number	Barcode
126	D126C75R	75	20	20	2	6	1	69014167444**	8711479425509
64	D64C75R	75	20	20	2	6	1	66260399045**	8711479425516
126	D126C75R	100	20	20	2	6	1	69014183741**	8711479425523
91	D91C75R	100	20	20	2	6	1	66260391649**	8711479425547

\*\* Destock

## 1A1R

Grit	Specification	D	T	H	X	Quantity	Article Number	Barcode
126	D126C75R	100	1	20	5	1	66260396050*	8711479425554
		125	1	20	5	1	69014165351*	8711479425578
		150	1	20	5	1	69014165852**	8711479425592

\* Made-to-order \*\* Destock

## CBN

### 12A2 45°

Grit	Specification	D	M	H	W	X	Quantity	Article Number	Barcode
126	B126C50R	100	23	20	5	2	1	66260395028**	8711479425622
		125	23	20	6	3	1	69014177031	8711479425646

\*\* Destock

## 11V9

Grit	Specification	D	T	H	X	U	Quantity	Article Number	Barcode
126	B126C75R	75	30	20	2	10	1	66260396540	8711479425677
		100	35	20	2	10	1	69014166843**	8711479425707

\*\* Destock

## 12V9

Grit	Specification	D	T	H	X	U	Quantity	Article Number	Barcode
107	B107C75R	75	20	20	2	6	1	66260396646	8711479425721
		100	20	20	2	6	1	66260396448*	8711479425745

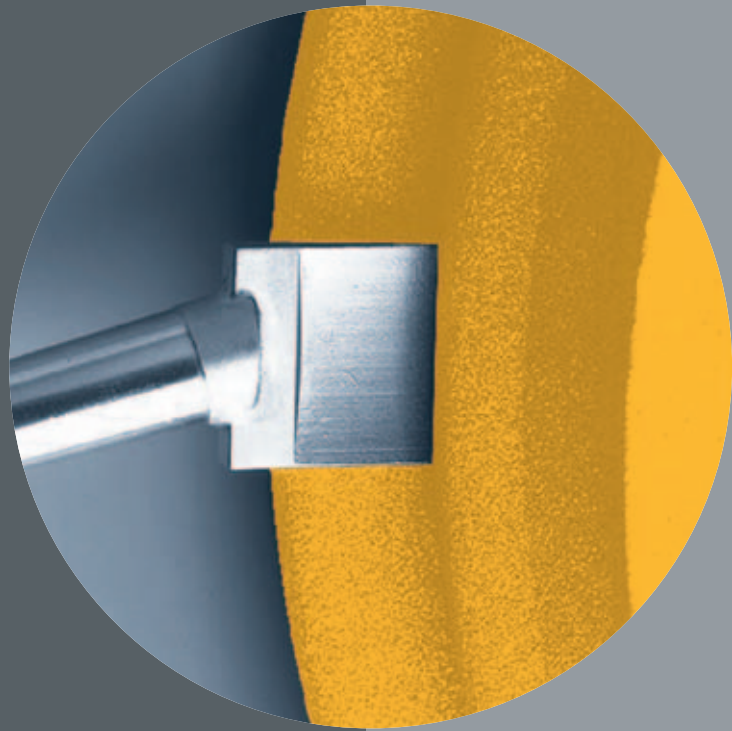
\* Made-to-order

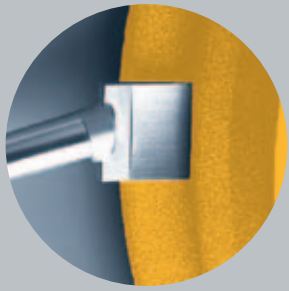




# Super Abrasives

## Diamond Dressing Tools





# Diamond Dressing Tools

## Selecting the Right Product

Dressing is the process of sharpening the cutting edges of grinding wheels to develop new sharp edges on the abrasive grains. The best tool to use when dressing vitrified wheels in cylindrical, external, and internal grinding applications is a single point.

### SINGLE POINT

To dress vitrified wheels both tapered and straight shank points are available. The choice of shank depends on the type of dresser holder.

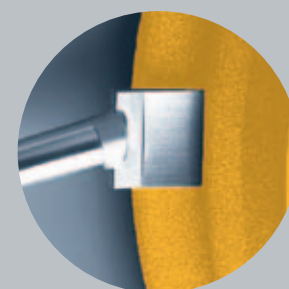
#### Choice of a single point

Which tool to choose depends mainly on the dimensions of the wheel to be dressed. In order to calculate this it is best to use the following method:

#### Wheel diameter (mm) x Wheel thickness (mm)

MULTIPLY THE DIAMETER OF THE WHEEL BY ITS THICKNESS		
	Diameter x Thickness (mm)	Carat
	<3000	0.25 Carat
	3000-12000	0.50 Carat
	>12000	1 Carat

For best results, always use a coolant when dressing.



## Diamond Dressing Tools

### MULTI POINT

Type	Shank (mm)	Grit	Carat	Quantity	Article Number	Barcode
MP250	MK1	D426	2.5	1	69014171502**	8711479425769
	Z10 x 50	D426	2.5	1	69014170804**	8711479425783
	MK1	D1001	2.5	1	66260390005*	8711479425813
	Z10 x 50	D1001	2.5	1	66260393806*	8711479425851
	MK1	D2240	2.5	1	69014160913*	8711479425837
	Z10 x 50	D2240	2.5	1	69014173011**	8711479425806
	Z11 x 50	D1001	2.5	1	69014158054*	8711479425776

\* Made-to-order \*\* Destock

### SINGLE POINT

Type	Shank (mm)	Carat	Quantity	Article Number	Barcode
SP	MK1	0.1	1	69014162116**	8711479425752
	Z10 x 50	0.1	1	66260396717*	8711479425738
	MK1	0.25	1	66260390118	8711479425714
	Z10 x 50	0.25	1	69014166419	8711479425691
	Z11 x 50	0.25	1	69014166052*	8711479425653
	MK1	0.5	1	66260399421**	8711479425639
	Z10 x 50	0.5	1	69014173220*	8711479425615
	MK1	1	1	69014164523**	8711479425608
	Z10 x 50	1	1	66260394422**	8711479425684
	Z11 x 50	1	1	69014157953**	8711479425585

\* Made-to-order \*\* Destock

### HAND DRESSER

Type	Shank (mm)	Grit	Carat	Quantity	Article Number	Barcode
HD150	13 x 200	18/25 SPC	1.6	1	66260396924	8711479425561

