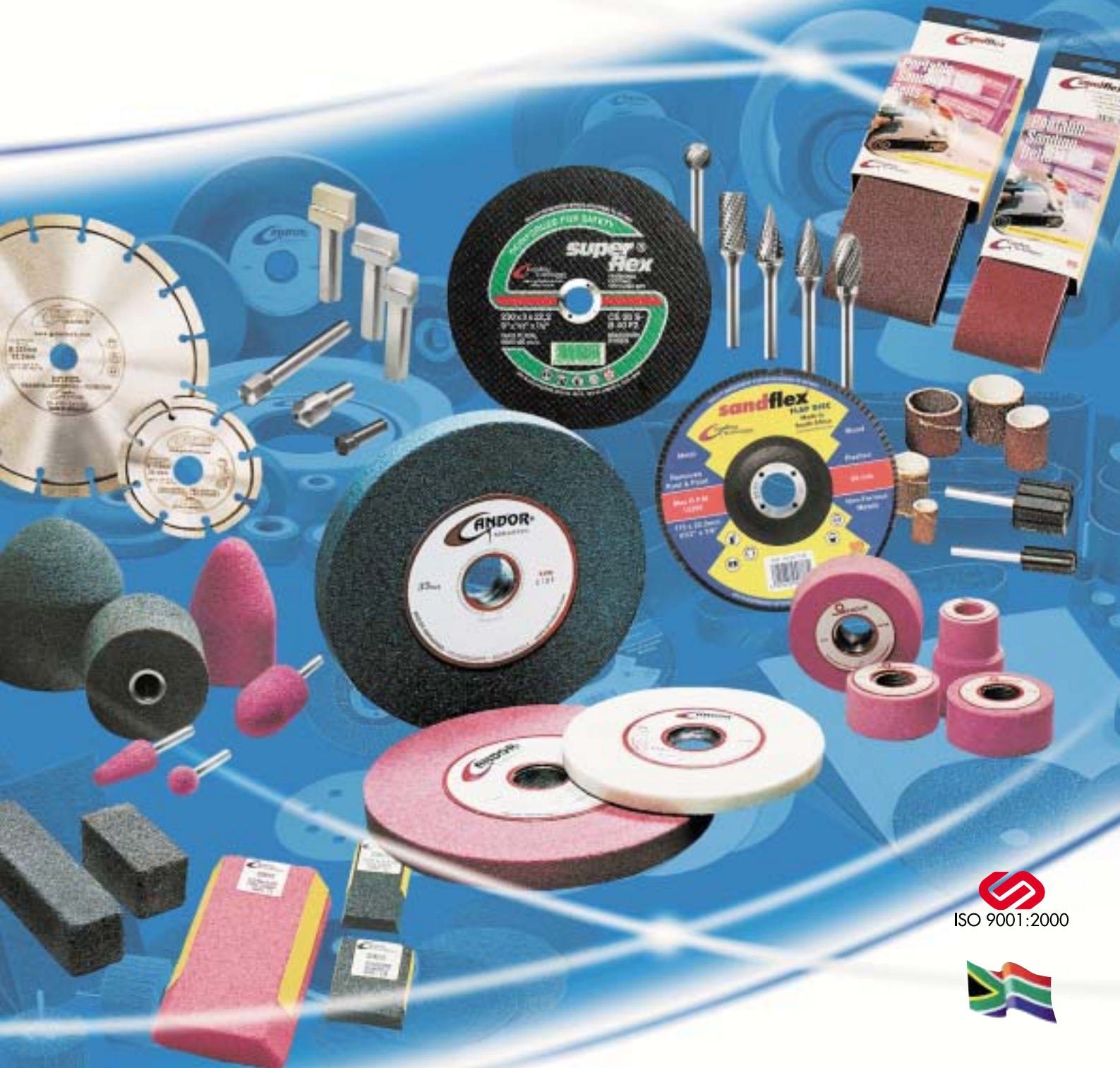


# Grinding Techniques (Pty) Ltd.

ON THE CUTTING EDGE OF TECHNOLOGY



  
ISO 9001:2000







Founded in 1981, Grinding Techniques (Pty) Ltd. is the largest privately owned abrasive manufacturer in Africa, operating under the principal business ethos of developing mutually beneficial business partnerships with our valued customers.



A wide spectrum of quality Bonded Abrasives are manufactured to ISO 9001:2000 standards; the company also converts Coated Abrasives, and markets Tungsten Carbide Burrs, diamond products and other ancillary items. In addition, Grinding Techniques (Pty) Ltd. is the Southern African agent for Tyrolit abrasives. The company distributes through a network of branches in South Africa, and exports extremely successfully on a worldwide basis.



Grinding Techniques (Pty) Ltd. is an equal opportunity employer, committed to environmental protection and constant product improvement through ongoing research.



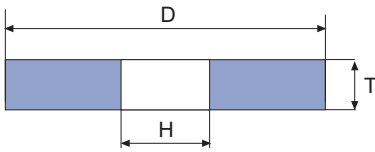
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### SPECIFICATIONS

#### SHAPE 1



**ORDERING DATA:**

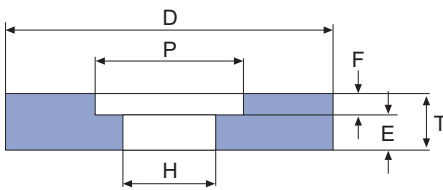
Diameter (D) x Thickness (T) x Hole size (H)

- Shape 1

These grinding wheels can also be supplied with faces as per page 11 from width T = 4

D	T				H	
50	4	6	10		13	(10)
80	4	6	8	10	13	(10)
100	6	8	10	13	20	
125	6	10	13	16	20	
150	6	10	13	16	20	31,75/32 (20)
175	6	10	13	16	20	31,75/32
200	6	10	13	16	20	31,75/32

#### SHAPE 5 Recessed one side



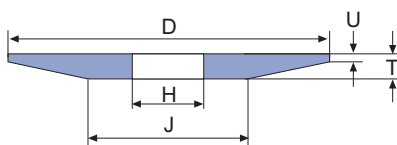
**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H) - P x F

- Shape 5

D	T	H		P	F
150	32	31,75/32	(20)	80	20
175	32	31,75/32	50,8	90	20
200	40	31,75/32	50,8	110	25
250	40	50,8	76,2	150	25
300	40		76,2	150	25
	50				30

#### SHAPE 3 Tapered one side



**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H) plus U, J

- Shape 3

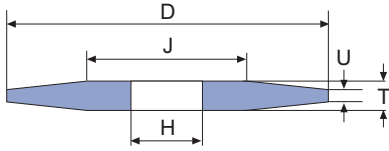
D	T	H		U	J
80	5	13		1	40
100	6	20		1,5	50
125	8	31,75/32	(20)	2	63
150	8	31,75/32	(20)	2	75
175	10	31,75/32		3	85
200	13	31,75/32		3	100
250	14	31,75/32		3	125

All dimensions in millimetres.

The specifications in this catalogue are recommendations only. For further information or special application specifications, please contact Grinding Techniques Technical Department (011) 271 6400 or email: [info@grindtech.com](mailto:info@grindtech.com)

### SPECIFICATIONS

#### SHAPE 4 Tapered both sides

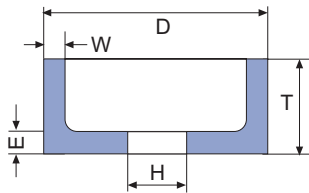


**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H) plus U, J  
 - Specification - Shape 4

D	T	H	U
80	8	12,7	2
100	10	20	2
125	10	31,75/32	2
150	13	31,75/32	2
180	13	31,75/32	3
200	16	31,75/32	3
250	20	31,75/32	4

#### SHAPE 6 Straight cup wheel

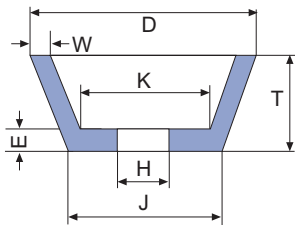


**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H)  
 - Specification - Rim width (W) x Back thickness (E)

D	T	H	W	E
100	50	31,75/32	10	10
125	40	31,75/32	50,8	10
	50	31,75/32	50,8	13
	60	31,75/32	50,8	13 16
	65	31,75/32	50,8	13 16
	80	31,75/32	50,8	20
150	40	31,75/32	50,8	10 13
	50	31,75/32	50,8 65,0	13 20
	65	31,75/32	50,8 65,0 76,2	20
	80	31,75/32	50,8 65,0 76,2	20 25
165	65	31,75/32	50,8	20
	80	31,75/32	50,8	20
180	65	31,75/32	50,8 65,0 76,2	20
	80	31,75/32	50,8 65,0 76,2	20
	100	31,75/32	50,8 65,0 76,2	20 25
200	80	31,75/32	50,8 65,0 76,2	20
	100	31,75/32	50,8 65,0 76,2	20 25
250	80	50,8 76,2	20 25	20 25
	100	50,8 76,2	25	25
300	100	76,2	25	25

#### SHAPE 11 Flaring cup wheel

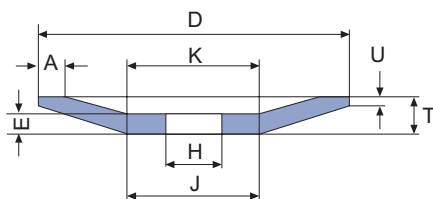


**ORDERING DATA:**

Standard sizes:  
 Diameter (D)/Diameter (J) x Thickness (T) x Hole size (H) -  
 Specification - Shape 11  
 Non-standard sizes:  
 All above information, plus dimensions W, E, K

D	T	H	W	E	J	K
65	40	20	6	10	45	32
90	40	31,75/32	8	10	70	56
100	40	31,75/32	8	13	80	66
115	50	31,75/32	8	13	95	78
	40	31,75/32	8	13	95	76
	45	31,75/32	8	13	95	76
125	50	31,75/32	8	13	95	78
	50	31,75/32	50,8	10	13	92
	50	31,75/32	50,8	10	13	114
60	31,75/32	50,8	10	13	114	96
	65	31,75/32	50,8	10	15	120

#### SHAPE 12 Dish grinding wheel

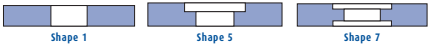


**ORDERING DATA:**

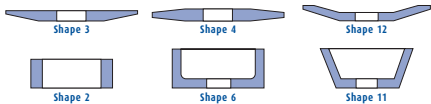
Standard sizes:  
 Diameter (D) x Thickness (T) x Hole size (H)  
 - Specification - Shape 12  
 Non-standard sizes:  
 All above information, plus dimensions A, U, E, J/K

D	T	H	A	U	E	J/K
100	13	31,75/32	5	3	8	50
125	13	31,75/32	6	3	8	64
150	13	31,75/32	10	3	8	80
150	20	31,75/32	10	3	10	80
180	13	31,75/32	11	3	8	89
200	20	31,75/32	13	3	13	100

### APPLICATION TABLE

FIELD OF APPLICATION		SPECIFICATION		
<b>With straight grinding wheels (shapes 1, 5, 7)</b> 		<b>up to <math>\phi 200</math></b>	<b><math>\phi 225</math> and above</b>	
<b>Hand tools</b>	Tool steel, soft	A46 N5V86 A60 M5V86 A80 L5V86	A36 P5V86 A46 N5V86 A60 M5V86	
	Tool steel	15A46 L6V86 15A60 L6V86 15A80 L6V86	15A46 L6V86 15A60 L6V86	
	High speed steel	11A46 K8V86 11A60 J6V86 11A80 J6V86	11A46 K8V86 11A60 J6V86	
<b>Turning and planing tools</b>	Tool steel	15A46 L6V86 15A60 L6V86 15A80 L6V86	15A46 K6V86 15A60 K6V86	
	High speed steel	11A46 J8V86 11A60 J6V86 11A80 J6V86	11A46 J8V86 15A46 I8V86 11A60 I8V86	
	Tungsten carbide tipped	8C46 I8V1 8C60 I8V1 8C80 I8V1	8C46 I8V1 8C60 I8V1	
<b>Twist drills</b>	Tool steel	15A60 K5V86 15A80 J6V86	15A60 K5V86	up to $\phi 10$
		15A46 K6V86 15A60 K5V86	15A46 K6V86 15A60 K5V86	over $\phi 10$
	High speed steel	15A60 J6V86 15A80 J6V86	15A60 J6V86 11A60 J6V86	up to $\phi 10$
		15A46 J6V86 15A60 J6V86	11A46 J6V86	over $\phi 10$
		Tool steel and high speed steel on bench grinder	A60 M5V86 A46 N5V86	
	Tungsten carbide tipped	8C60 K8V1 8C80 J8V1	8C60 K8V1	up to $\phi 10$
		8C46 K8V1 8C60 K8V1	8C46 K8V1	over $\phi 10$

### APPLICATION TABLE

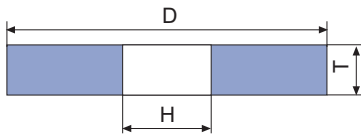
FIELD OF APPLICATION		SPECIFICATIONS	
<b>With grinding wheels other than straight type diameters (shapes 2, 3, 4, 6, 11, 12)</b> 		<b>Smaller wheel diameters</b>	<b>Larger wheel diameters</b>
<b>CUTTING TOOLS</b>			
<b>Universal Use</b>	Tool steel	11A60 K7V86	11A60 J6V86
	High speed steel	11A60 J7V86	11A46 J8V86
	Carbide tipped	8C60 J8V1	8C60 J8V1
<b>Specific Use</b>	Tool steel	11A46 K6V86	11A46 J8V86
		11A60 J5V86	11A60 J7V86
		11A80 J5V86	11A80 J7V86
	High speed steel	11A46 J8V86	11A46 I8V86
		11A60 J8V86	11A60 I8V86
		11A80 J8V86	11A60 J7V86
	Carbide tipped	8C60 J8V1	8C46 J8V1
		8C80 I8V1	8C60 I8V1
			8C60 J8V1
<b>Gear Hobbing Cutters</b> (Grinding wheel shape 3)			11A60 F12V86P 11A60 I9V86 9A46 J8V86
<b>Planing and Cutting Knives</b> (Grinding Wheel Shapes 2 & 6)	Tool steel		15A54 H5V86 15A54 J9V86 9A54 J8B2
		High speed steel	11A54 J9V86 11A54 F12V86P 9A54 I8B2
<b>Grooving Cutters for Wood-working</b> (Dish Grinding Wheel – Shape 12)		High speed steel	11A46 G12V86P 11A60 I8V86
<b>HSS Circular Mill Knives</b>			11A60 G8V86
<b>Mill Crop Shear Blades</b>			11A60 H8V86





## SPECIFICATIONS

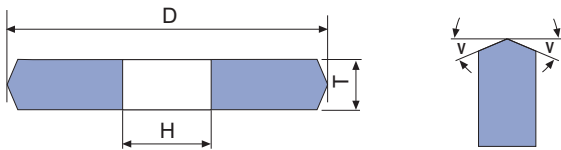
### SHAPE 1 Straight grinding wheels



**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H) – Shape 1

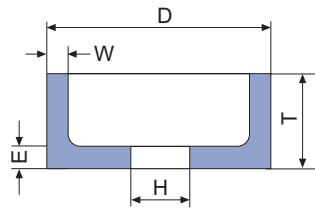
### SHAPE 1 “K” FACE Straight grinding wheels



For drills with crossed cutting edges:  $V = 24^\circ$

For drills with “X” cutting edges: Left “X” bits  $105^\circ : V = 20.5^\circ$   
Right “X” bits  $75^\circ : V = 27^\circ$   
Right “X” bits  $90^\circ : V = 24^\circ$

### SHAPE 6 Straight cup wheels For drills with chisel edges.



**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H)  
– Specification – Rim width (W) x Back thickness (E)

**ORDERING DATA:**

Diameter (D) x Thickness (T) x Hole size (H) x ‘V’ – Shape 1 “K”  
Quote angle ‘V’ to suit shape of cutting edges

All dimensions in millimetres.

## APPLICATION TABLE

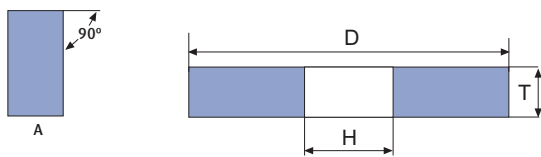
FIELD OF APPLICATION	SPECIFICATIONS			
	Straight wheels	“K” face wheels	Cup & cylinder wheels	Mounted
Coal Picks and Borers	8C54N5V11 – P5V55		8C46 N6 – P6V11	
Cross and “X” Bits	8C46 M5V11 8C54 M5V11	8C46 N5V11 8C60 L5V11		
4 Point Bits		8C54 M5V11 8C60 L5V11	8C46 N6 – P6V11	
Drag Bits and Reamers	8C54 M5V11			
Button Bits				W218 25X12X6spl. 6C60 MV W220 25X25X6 spl. 6C60 MV
Integral Drill Steel	8C46 N5V11 8C54 M5V11 8C60 L5V11		8C46 N6V11 8C54 M6V11 8C60 L6V11	W242 50X25X6spl 6C100 MV



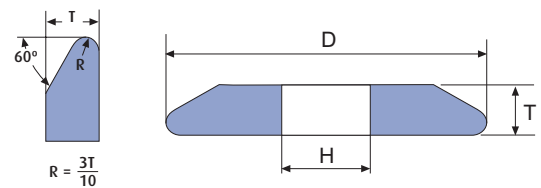
## SPECIFICATIONS

### STANDARD PROFILES:

#### "A" face



#### "D" face



#### ORDERING DATA:

Diameter (D) x Thickness (T) x Hole size (H) - Specification - A face/D face

All dimensions in millimetres.

## APPLICATION TABLE

FIELD OF APPLICATION	SPECIFICATIONS		
	Wheel width up to 4mm Fine teeth	Wheel width 4-10mm Medium teeth	Wheel width 10mm upwards Coarse teeth
<b>Saw sharpening with straight grinding wheels</b>			
<b>Metal Cutting Circular Saws</b>	A60 NB2 11A80 K5V86 11A80 M5V86	11A54 K6V86 11A60 L6V86	11A46 J6V86 11A54 K6V86 11A60 K6V86
<b>Band Saws</b>		15A60 L6V86 15A60 M5V86 15A80 K6V86	
<b>Woodworking Circular Plate Saws</b>		15A54 N6V86 9A54 N6V86	15A54 M6V86 9A54 M6V86
<b>Frame Saws</b>		15A54 N6V86 9A54 N6V86	15A54 M6V86 9A54 M6V86
<b>Slitting Saws</b>		11A60 M5V86 11A60 N5V86 11A80 M5V86	
<b>Chain Saws</b>		15A60 K6V86	