

# CONVERSION TABLE – SPEEDS

## m/s to RPM

### SPEEDS UP TO 35 m/s

WHEEL DIA. (mm)	MAXIMUM OPERATING SPEED IN m/s						
	10 m/s	12 m/s	16 m/s	20 m/s	25m/s	32 m/s	35m/s
6	31900	38200	51000	64000	80000	102000	112000
8	24000	29000	38200	48000	60000	76500	84000
10	19100	23000	30600	38200	48000	61200	67000
13	14700	17700	23550	29500	36800	47100	51500
16	11950	14350	19100	23900	29850	38200	41800
20	9550	11500	15300	19100	23900	30600	33500
25	7650	9200	12300	15300	19100	24500	26800
32	6000	7200	9550	11950	14950	19100	20900
40	4800	5750	7650	9550	11950	15300	16750
50	3850	4600	6150	7650	9550	12250	13400
63	3050	3650	4850	6100	7600	9750	10650
80	2400	2900	3850	4800	6000	7650	8400
100	1950	2300	3100	3850	4800	6150	6700
115	1700	2000	2700	3350	4200	5350	5850
125	1550	1850	2450	3100	3850	4900	5350
150	1300	1550	2050	2550	3200	4100	4500
180	1100	1300	1700	2150	2700	3400	3750
200	955	1150	1550	1950	2400	3100	3350
230	830	1000	1350	1700	2100	2700	2950
250	765	920	1250	1550	1950	2450	2700
300	640	765	1050	1300	1600	2050	2250
350/356	550	655	875	1100	1400	1750	1950
400/406	480	575	765	960	1200	1550	1700
450/457	425	510	680	850	1100	1400	1500
500/508	385	460	615	765	960	1250	1350
600/610	320	385	510	640	800	1050	1150
660	290	350	465	580	725	930	1050
750/762	255	310	410	510	640	820	895
800/813	240	290	385	480	600	765	840
900/914	215	255	340	425	535	680	750
1000/1016	195	230	310	385	480	615	670
1050/1067	185	220	295	365	455	585	640
1100/1120	175	210	280	350	435	560	610
1200/1220	160	195	255	320	400	510	560
1500/1525	130	155	205	255	320	410	450

RPM

## m/s to RPM

### SPEEDS OVER 35 m/s

WHEEL DIA. (mm)	MAXIMUM OPERATING SPEED IN m/s							
	40 m/s	45m/s	50 m/s	63m/s	80 m/s	100m/s	125m/s	140m/s
6	128000	143500	160000	201000				
8	95500	107500	120000	150500	191000			
10	76500	86000	95500	120500	153000	191000		
13	58800	66200	73500	92600	118000	147000	184000	
16	47800	53750	59700	75200	95500	120000	150000	168000
20	38200	43000	47800	60200	76500	95500	120000	134000
25	30600	34500	38200	48200	61200	76500	95500	107000
32	23900	27000	30000	37600	48000	60000	75000	84000
40	19100	21500	23900	30100	38200	47800	59700	67000
50	15300	17200	19100	24100	30600	38200	47750	53500
63	12150	13650	15200	19100	24300	30350	37900	42500
80	9550	10750	12000	15100	19100	23900	29850	33500
100	7650	8600	9550	12100	15300	19100	23900	26800
115	6650	7500	8350	10500	13300	16650	20800	23250
125	6150	6900	7650	9650	12250	15300	19100	21400
150	5100	5750	6400	8050	10200	12750	16000	17850
180	4250	4780	5350	6700	8500	10650	13300	14900
200	3850	4300	4800	6050	7650	9550	11950	13400
230	3350	3750	4200	5250	6650	8350	10400	11650
250	3100	3450	3850	4850	6150	7650	9550	10700
300	2550	2870	3200	4050	5100	6400	8000	8950
350/356	2200	2460	2750	3450	4400	5500	6850	7650
400/406	1950	2150	2400	3050	3850	4800	6000	6700
450/457	1700	1910	2150	2700	3400	4250	5350	5950
500/508	1550	1720	1950	2450	3100	3850	4800	5350
600/610	1300	1450	1600	2050	2550	3200	4000	4500
660	1200	1300	1450	1850	2350	2900	3650	4050
750/762	1050	1150	1300	1650	2050	2550	3200	3600
800/813	960	1075	1200	1550	1950	2400	3000	3350
900/914	850	955	1100	1350	1700	2150	2700	3000
1000/1016	765	860	960	1250	1550	1950	2400	2700
1050/1067	730	820	910	1150	1500	1850	2300	2550
1100/1120	695	785	870	1100	1400	1750	2200	2450
1200/1220	640	720	800	1050	1300	1600	2000	2250
1500/1525	510	575	640	805	1050	1300	1600	1800

RPM

The table above shows the maximum operating speed in rpm of the abrasive wheel or machine spindle for a given abrasive wheel diameter and peripheral operating speed in m/s.

$$\text{Speed in rpm} = \frac{60,000 \times \text{speed in m/s}}{\pi \times \text{diameter (mm)}}$$

$$\text{Speed in m/s} = \frac{\pi \times \text{diameter (mm)} \times \text{speed in rpm}}{60,000}$$

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)



PHOTOSTAT THIS PAGE, COMPLETE THE ORDER FORM AND FAX TO: GRINDING TECHNIQUES (011) 271 6464

# ORDER FORM

COMPANY \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 \_\_\_\_\_  
 CODE \_\_\_\_\_  
 TEL. NO. \_\_\_\_\_  
 FAX NO. \_\_\_\_\_  
 EMAIL \_\_\_\_\_

To assure prompt processing of your order, please be sure to supply the following information:

	1. Wheel diameter
	2. Wheel thickness
	3. Bore
	4. Recess diameter by depth
	5. Operating speed of the wheel in RPM
	6. Speed in RPM of work piece
	7. If hand or machine work
	8. Type of machine
	9. Type of work
	10. If for wet or dry use
	11. Work piece or material to be ground
	12. Rockwell and Brinell hardness of the material to be ground
	13. Required finish
	14. Results obtained with the wheels previously used
	15. Any other useful information

If you wish us to duplicate a wheel which has previously been successfully used, make sure to enclose a fragment of such a wheel where possible.

For further information, refer to the contents of this product catalogue, or contact: Grinding Techniques (Pty) Ltd. - Telephone (011) 271 6400 - Email: info@grindtech.com