

**Diagram for determining cutting speed:**

Diagram shows the cutting speed in m/sec, defined RPM and sawblades diameter.

**V<sub>t</sub>** = cutting speed (m/sec)  
**D** = sawblades diameter (mm)  
**n** = RPM

$$V_t = \frac{D \times \pi \times n}{60 \times 1.000}$$

D=mm \ RPM	RPM																
	1500	2000	2500	2800	3000	3500	4000	4500	5000	5600	6000	8000	9000	10000	12000	18000	
80	6,5	8,5	10,5	12	13	14	15	19,1	21	23,5	26	34	38	42	52	76	
90	7	9,5	12	13,5	14	16	17	21	24	26,5	28	38	42	48	56	84	
100	8	10	13	15	16	18	21	24	26	29	31	41	47	52	63	96	
120	9,5	13	16	18	19	22	25	28	31	35	38	49	57	63	65		
125	10	14	16,5	20	19,5	24	27	31	34	36,5	41	53	61	68	82		
140	11	15	18	21	22	26	29	33	37	41	44	57	66	73	88		
150	12	16	19,5	22	23,5	27	31	35	39	44	47	63	71	79	94		
160	13	17	21	24	26	29	33	38	42	47	50	65	75	84			
180	14	19	24	27	28	33	42	42	47	53	57	73	85	94			
200	16	21	26	29	32	37	42	47	52	58,5	63	81	94				
225	17	23	30	32	36	40	46	52	58	66	69	92	104				
250	20	26	33	37	40	46	52	59	65	73,5	79						
300	24	31	40	44	48	55	63	71	79	88	94						
350	27	37	47	51	56	64	73	83	92	105							
400	31	42	54	59	64	73	83	92	105								
450	35	47	59	66	70,5	83	94	105									
500	39	52	67	73	80	92											

- Mineral fibreplates
- Wood-based material, plastic material and non-ferrous metal
- **Hardwood**
- **Softwood**
- **Safety limit**

**Recommended cutting speed:**

CUTTING MATERIAL		Cutting speed (m/s)	Feed rate (mm/z)
Softwood	Cutting along grain	58÷100	0,5÷3,0
	Cutting across grain	60÷100	0,2÷0,4
Hardwood	Cutting along grain	61÷100	0,3÷1,0
	Cutting across grain	65÷100	0,2÷0,8
Exotic timber	Cutting along grain	58÷100	0,3÷1,0
Plywood		55÷80	0,1÷0,2
Particle board		60÷85	0,3
HDF		60÷80	0,1÷0,3
MDF		60÷80	0,1÷0,3
Playwood boards, veneered or coated on both sides		60÷100	0,2
Laminated boards		55÷80	0,1-0,25
Melamine		58÷80	0,15
Thermoplastic		50÷75	0,05-0,1
Duroplastic		30÷60	0,02-0,05
Aluminium profiles		35÷70	0,005-0,08