










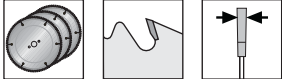




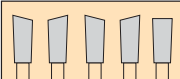


































Sawing- Index

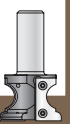
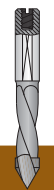
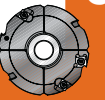
Technical Information

Material Type	Application	Grinding Type	Hook Angles	Additional Options
 Solid Wood		 p. 5-8		 
	 	 p. 8-10	 	 
 Boards		  p. 11-15 p. 14		
		    p. 15 p. 16-18 p. 19 p. 20	 	
		  p. 21-22 p. 23-26		
		  p. 28-29 p. 30		
		 p. 31		
 Plastic		 p. 32		
 Aluminium		 p. 33-34		
 Saw blade for Portable Machines		  p. 35-37		



Sawing- Index

Technical Information



Application:

Grinding Type



Along

Cutting along the grain



Across

Cutting across the grain



Across & along

Cutting along and across the grain or cutting panel materials



Laminate board (plywood)



Particle board



Panel sizing machines



Scoring



Hogging



Portable Machines



Flat top (FT)

For cutting soft and hard wood along the grain (Ripping)



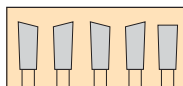
Alternate top bevel (ATB)

For: 1. cross cutting of soft and hard wood
2. cutting plywood and veneered boards



Higher alternate top bevel

For chip free cutting on a table saw of melamin coated boards.



Combination tooth

For: 1. cross cutting of soft and hard wood
2. cutting plywood and veneered boards



Triple chip (TCG)

For cutting man made particle boards coated and non coated



Alternate bevel tooth, chamfered

For cutting man made particle boards coated and non coated



Hollow ground (HG)

For: 1. cross cutting of soft and hard wood
2. cutting plywood and veneered boards
3. cutting man made particle coated boards
4. cutting plastic boards



Cone form (conical)

For Scoring application



Adjustable alternate top bevel

For Scoring application

Additional Options:



Negative hook angle Include 0 deg.



Positive hook angle



Dynamic balancing

Unique balancing procedure according to Iso 1940 performed on special dedicated balancing machines, for best performance as a result of minimal vibrations.



Dynamic straightness

Fully automated high performance dynamic operation for straightening the saw, assuring long-lasting straightness, life-time and cutting quality.



Can be used for multi rip sawing operation



Chip limiter body design



Vipers included



Thick kerf



Thin kerf



Wet

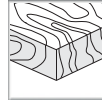
Cutting wet wood



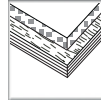
Low vibration body design



Sawing



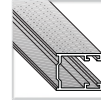
Solid Wood



Boards

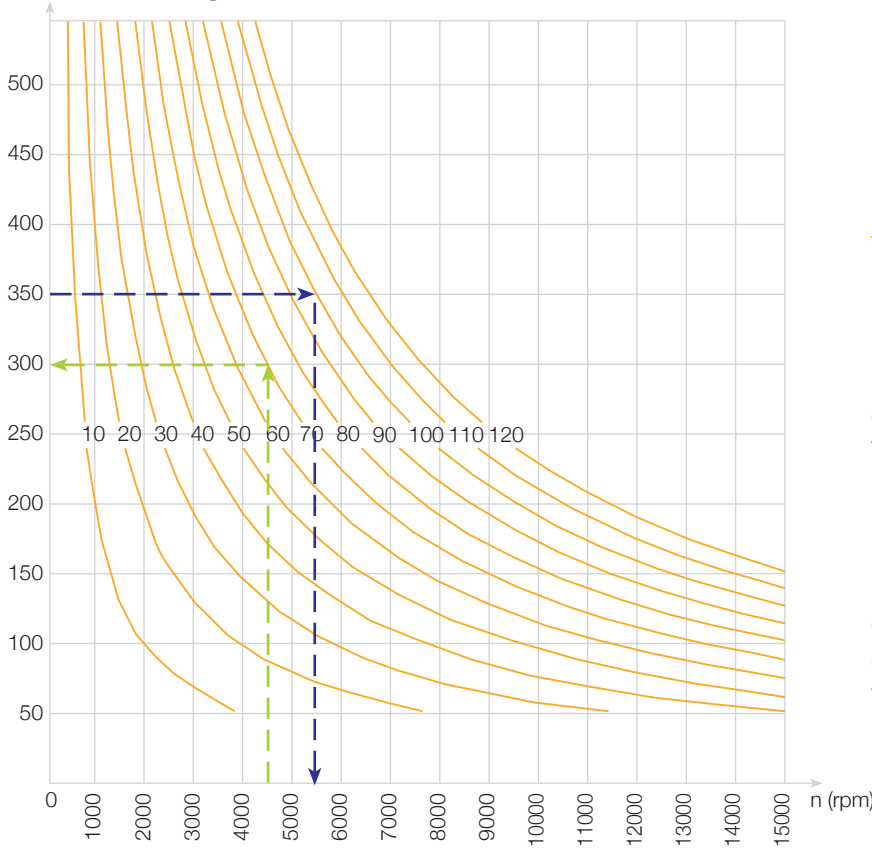


Plastic



Aluminium

Determining Saw Blade Diameter or R.P.M.



$$n \text{ (rpm)} = \frac{1000 \cdot 60 \cdot V}{\pi \cdot D}$$

V = Speed $\frac{M}{sec}$

D = Diameter mm

n = Spindle R.P.M.

Example 1:

Determining the saw diameter to cut melamine coated chipboard with a 4500 rpm diameter saw blade with 70 m/s cutting speed.

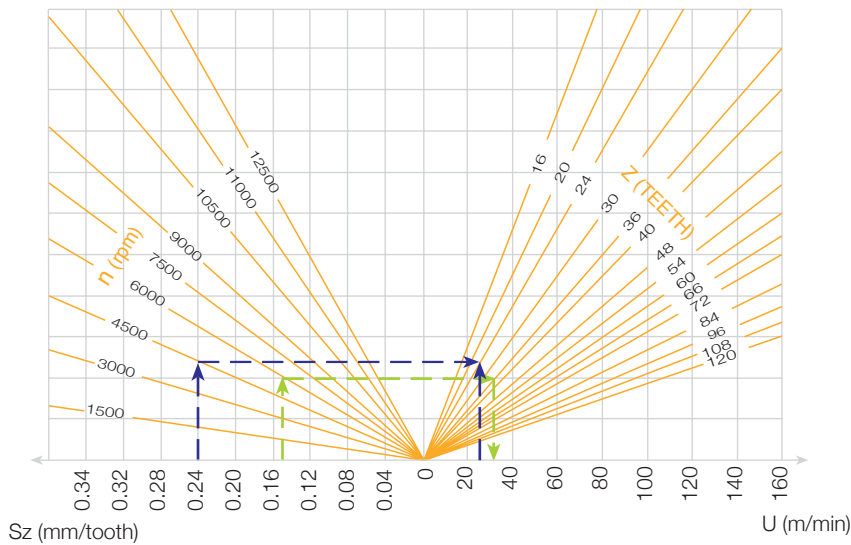
You should use a 300mm diameter saw blade.

Example 2:

Determining the r.p.m to the machinery in order to cut at a speed of 100m/sec with a 350m saw.

you should work with 5,500 R.P.M.

Determining Number of Teeth / Finding Feed Rate



Example 1:

Determining Feed Rate

Solid wood - chip size 0.15

r.p.m. - 6000

Number of teeth - 36

You should use Feed Rate - 32m/min

Example 2:

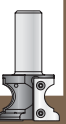
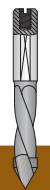
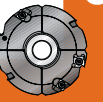
Determining number of teeth

Solid wood - chip size 0.24

r.p.m. - 4500

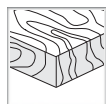
Feed - 22m/min

Therefore the number of teeth - 24

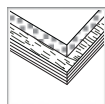




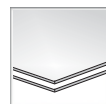
Sawing



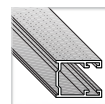
Solid Wood



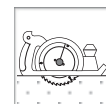
Boards



Plastic



Aluminium



Saw blade for Portable Machines

Recommended Feed Rates Sz (mm/tooth)

Material	Feed Rate Sz (mm/tooth)
Solid wood	0.10 - 0.20
Chipboard and plywood	0.05 - 0.25
Boards with plastic lamination	0.03 - 0.06
Boards veneered on both sides	0.03 - 0.08
Hardboard	0.03 - 0.08
Duroplastic boards	0.02 - 0.05
Thermoplastic boards	0.05 - 0.08

Saw Blade Flanges

Saw Blade Diameter	30mm	40mm	60mm	80mm	100mm	120mm	150mm
180 = <190	50/40	80/60		-	-	-	-
190 = <300	80/60		120/90		140/110	-	-
300 = <400	120/90			140/110		160/130	200/160
400 = <450	120/90			140/110		160/130	200/160
450 = <550	140/110				160/130		200/160
550 = <630	160/130					200/160	
630 = <800	200/160						

The size of the flange is determined by the saw blade diameter and bore diameter

Saw Blade Bushings

Code No.	D	d	B
1929280	19.0	15.9	1.8
1929125	20.0	12.7	1.6
1929030	20.0	13.0	1.6
1929040	20.0	15.0	1.8
1929200	20.0	16.0	1.8
1929210	22.0	19.0	1.8
1929050	22.0	20.0	1.8
1929175	25.0	16.0	1.8
1929100	25.0	20.0	1.8
1929260	25.4	16.0	1.8
1929170	25.4	18.0	1.8
1929270	25.4	19.0	1.8
1929145	25.4	20.0	1.8
1929110	30.0	12.0	1.8
1921040	30.0	12.7	1.8
1929080	30.0	15.0	1.8
1929160	30.0	15.9	1.8
1929180	30.0	16.0	1.8

Code No.	D	d	B
1929185	30	19.0	1.8
1929240	30	19.05	1.8
1929090	30	20.0	1.8
1929230	30	22.0	1.8
1929120	30	25.0	1.8
1929220	30	25.4	1.8
1929165	32	15.9	1.8
1929290	32	16.0	1.8
1929250	32	20.0	1.8
1929130	32	25.0	1.8
1929150	32	25.4	1.8
1929135	32	30.0	1.8
1929105	35	20.0	1.8
1929140	35	30.0	1.8
1929295	38	32.0	1.8
1929190	40	25.0	1.8
1929195	40	30.0	1.8
1929297	40	32.0	1.8

