







TECHNICAL INFORMATION SEGMENTAL SAW BLADES



The number of teeth and the associated pitch depend on the thickness and shape of the cut material, it is a major factor in the correct operation of equipment and tools. This basic relationship which determines the selection of the saw blade is presented in the table below.

TOOTH PITCH:

D (mm)	light metals, copper, structural steel cast steel	cast iron, spring steel, valve steel, tool steel, high speed steel	all types of materials cut			
						
	maximum pitch					
20	8,0	6,5	5,5	5,0	4,0	
30	10,5	8,0	6,5	6,0	4,5	
40	12,5	9,5	7,5	7,0	5,0	
50	14,5	11,0	8,5	7,5	5,5	
60	16,5	12,0	9,5	8,0	6,0	
70	18,0	13,0	10,5	8,5	6,3	
80	19,5	14,0	11,0	9,0	6,5	
90	21,0	15,0	11,5	9,5	6,8	
100	22,5	16,0	12,0	10,0	7,0	
125	26,0	18,5	13,5	11,0	7,5	
150	29,5	20,5	15,0	12,0	8,0	
175	32,5	22,5	16,5	12,5	8,5	
200	35,5	24,0	17,5	13,0	9,0	
250	40,5	27,0	19,5	14,0	9,5	
300	45,5	30,0	21,5	15,0	10,0	

Key: D – height of cut material

DEPENDENCE OF CUTTING SPEED AND FEED PER TOOTH ON THE KIND MATERIAL BEING CUT:

material group	strength N/mm ²			cutting speed (v) m/min	feed rate (Sz)
ductile iron	600 ÷ 700	15°	6°	15 ÷ 20	0,18 ÷ 0,22
spring steel	1200 ÷ 1400	15°	6°	6 ÷ 10	0,10 ÷ 0,12
spring steel	1200 ÷ 1300	15°	6°	6 ÷ 10	0,12 ÷ 0,12
bearing steel	900 ÷ 1000	15°	6°	10 ÷ 12	0,12 ÷ 0,15
stainless and acid resistant steel	600 ÷ 800	15°	6°	10 ÷ 12	0,12 ÷ 0,15
low-alloy tool steel	600 ÷ 700	15°	6°	10 ÷ 12	0,12 ÷ 0,15
high-alloy tool steel	800 ÷ 900	15°	6°	10 ÷ 12	0,12 ÷ 0,15
high-speed steel	800 ÷ 900	15°	6°	10 ÷ 12	0,12 ÷ 0,15

ROTARY SPEED, CUTTING SPEED OF SEGMENTAL SAW BLADES:

WARNING:

For a cutting speed greater than 50 m/min look for the number of revolutions for the speed 10 times smaller, and multiply the result by 10.

EXAMPLE:

With cutting speed v=300 m/min, look for the graph for 30 m/min and, for example, for the saw blade Ø500 mm we find n=19 r/min, multiply by 10 and we obtain for v = 300 m/min and D=500 mm, n=190 rev/min.

