

KENNEDY Industrial Power/ Machine Saw Blades

Designed for use across a wide range of ferrous and non-ferrous materials.

Power Saw Blade Selection

Power Saw Hacksaw Blade Tooth Recommendations

TPI	Suitable for Section Width
18	up to 13mm (up to 1/2")
14	6 to 19mm (1/4" to 3/4")
10	8 to 25mm (5/16" to 1)
6	13 to 38mm (1/2" to 1 1/2")
4	19mm and above (3/4" and above)

Type of Machine	Coolant Required	Unannealed Tool Steel & Hard Metals	Annealed Tool Steel	Machinery Steel & Soft Metal
Light	No	40spm	50 - 60spm	50-60spm
Medium	No	40spm	50 - 60spm	50-60spm
Medium	Yes	60spm	60 - 90spm	100-110spm
Heavy	Yes	60spm	90spm	110-120spm
Ex. Heavy	Yes	60spm	90spm	110-120spm

18 Teeth Per Inch

Recommended for cutting thin cross-sections such as tubing, small bars and light angle iron. Because blades are relatively thin they should be used only on light machines.

10 - 14 Teeth Per Inch

Recommended for cutting small cross sections and hard stock. This is the most popular choice for machine shops that are cutting a wide variety of materials.

4 - 6 Teeth Per Inch

Recommended for cutting large sections of softer ferrous metals, most alloy steels and all non-ferrous metals. The increased gullet clearance is able to handle heavy chips without clogging.

Operating Recommendations

Lower speeds and higher feed give best results. Ensure that the machine lifts the blade slightly on the return stroke. Exact speed and feed for each job can be established only from tests. The table below is to be used for guidance only.

When matching a section thickness against a suitable Blade TPI there are usually a number of blade options - Use coarse pitches (less TPI) for faster cutting and finer pitches (more TPI) for better surface finishes.

HSS All Hard Power Saw Blades

Recommended for cutting thin cross-sections such as tubing, small bars and light angle iron. Because blades are relatively thin they should be used only on light machines.



Length	Width	Thickness	TPI	Weight per 10	Order Code KEN-040
12"	5/8"	.032"	18T	0.36kg	-4630K
12"	1"	.050"	10T	0.78kg	-5030K
12"	1"	.050"	14T	0.79kg	-5040K
14"	1"	.050"	10T	0.93kg	-5130K
14"	1"	.050"	14T	0.80kg	-5140K
14"	1 1/4"	.062"	6T	1.30kg	-5200K
14"	1 1/4"	.062"	10T	1.30kg	-5220K
14"	1 1/4"	.062"	14T	1.30kg	-5230K
16"	1 1/4"	.062"	6T	1.40kg	-5390K
16"	1 1/4"	.062"	10T	0.90kg	-5410K
16"	1 1/4"	.062"	14T	1.60kg	-5420K
16"	1 1/2"	.062"	4T	2.20kg	-5490K
16"	1 1/2"	.062"	6T	2.20kg	-5500K
17"	1 1/4"	.062"	10T	1.80kg	-5530K
18"	1 1/4"	.062"	6T	1.90kg	-5550K
18"	1 1/4"	.062"	10T	1.60kg	-5570K
18"	1 1/2"	.075"	6T	2.55kg	-5650K
19"	1 1/4"	.088"	6T	3.80kg	-5720K
20"	1 1/2"	.075"	6T	3.20kg	-5750K
21"	1 1/2"	.075"	6T	3.00kg	-5770K
21"	1 1/2"	.075"	10T	3.00kg	-5790K
21"	1 3/4"	.088"	6T	5.30kg	-5820K
24"	2"	.100"	6T	6.30kg	-5960K

Speeds & Feeds - Recommended speeds, strokes per minute and TPI.

Group	Materials	Brinell Hardness HB	Rockwell Hardness HRC	Tensile Strength N/mm ²	Cutting Speed m/min	Strokes Per Min	Section Thickness or diameter-Recommended TPI			
							Below 10mm	10-40 mm	40-80 mm	Above
1.1 to 1.2	General purpose steels mild and structural	<200	-	<700	25 - 35	70 - 90	14	10 - 6	6 - 4	4
1.3	Non-alloy, plain and medium carbon steels and castings	<260	<26	<850	20 - 30	50 - 70	14	10 - 6	6 - 4	4 - 3
1.4	Alloy steels generally low to medium steels and castings	<260	<26	<850	20 - 30	50 - 70	14	10 - 6	6 - 4	4 - 3
1.5	Medium to high alloy steels tool steels and steel castings	>260 <340	>26 <36	>850 <1200	18 - 28	40 - 60	14	10 - 6	6 - 4	4 - 3
1.6	Heat treated high alloy steels and castings	>340 <450	>36 <48	>1200 <1500	15 - 25	30 - 45	14	10 - 6	6 - 4	4 - 3
2.1 to 2.3	Stainless steels free machine and austenitic	<290	<30	<1000	10 - 25	40 - 60	14	10 - 6	6 - 4	4 - 3
3.1 to 3.2	Grey cast iron	<300	-	-	30 - 40	70 - 90	14	10 - 6	6 - 4	4 - 3
3.3 to 3.4	S.G. iron nodular and malleable	<300	-	-	30 - 40	70 - 90	14	10 - 6	6 - 4	4 - 3
6.1 to 6.3	Non ferrous metals brass, copper and bronze	-	-	<800	40 - 60	80 - 115	14	10 - 6	6 - 4	4 - 3
7.1 to 7.4	Aluminium alloys to zinc and magnesium	-	-	<50	40 - 60	80 - 115	14 - 10	10 - 6	6 - 4	4 - 3

KENNEDY Flexible Back Bi-metal Hacksaw Blades

The perfect combination of shatter resistant spring steel, used as the backing material, and tough, wear-resistant HSS teeth - Electron-beam welded together. Ideal for interrupted cuts in cramped places or where the blade is subject to stress caused by twisting or bending. Provides optimum tooth strength/life and reduced breakage and fracture when compared to traditional all-hard blades.

Made to BS 1919 : Part 1: 1993.



Improved re-usable packaging

Length	Width	Thickness	TPI	Weight per 100	Order Code KEN-040
10"	1/2"	.025	18T	1.50kg	-2130K
10"	1/2"	.025	24T	1.40kg	-2250K
10"	1/2"	.025	32T	1.40kg	-2320K
12"	1/2"	.025	14T	1.70kg	-2510K
12"	1/2"	.025	18T	1.70kg	-2630K
12"	1/2"	.025	24T	1.70kg	-2750K
12"	1/2"	.025	32T	1.70kg	-2870K



TPI Selection Guide

Group	Materials	Brinell Hardness HB	Rockwell Hardness HRC	Tensile Strength N/mm2	Number of Teeth per Inch Section thickness or diameter		
					Below 2mm	2 - 5 mm	Above
1.1	Mild steel	<200	-	<700	32	24	18
1.4 to 1.5	Alloy steel & tool steel low to medium	<260	<26	<850	32	24	18 - 24
1.6	High alloy steel	>340	>36	>1200	32	24	24
2.1	Stainless steels	<290	<30	<1000	32	24	28
3.1	Grey cast iron	<300	-	-	24 - 32	18 - 24	18
6.1	Asbestos and copper	-	-	<500	24 - 32	18 - 24	18
6.3	Brass and bronze	-	-	<500	24 - 32	18 - 24	18
7.1	Aluminium	-	-	<500	24 - 32	18 - 24	18
8.1	Hard plastic	-	-	-	24 - 32	18 - 24	18

HSS All Hard Hacksaw Blades

Fully hardened for extra long tooth life and maximum straightness of cut. For use where workpiece is held securely in place. Made to BS 1919 : Part 1: 1993.



Improved re-usable packaging

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10"	1/2"	.025	18T	1.40kg	-3130K
10"	1/2"	.025	24T	1.40kg	-3250K
12"	1/2"	.025	14T	1.70kg	-3510K
12"	1/2"	.025	18T	1.70kg	-3630K
12"	1/2"	.025	24T	1.70kg	-3750K
12"	1/2"	.025	32T	1.70kg	-3870K

Junior Hand Saw Blades

Designed for use across a wide range of ferrous and non-ferrous materials. Suitable for mini hand saws and junior hacksaws. Made to BS 6271 : 1990.



Type	Length	TPI	Pack Quantity	Weight per 100	Order Code KEN-040
Metal	150mm (6")	32	10	420g	-0620K



Tile Saw Blades

For cutting and shaping ceramic tiles.



Length	Grit Size	Pack Qty	Order Code KEN-040
150mm (6")	Medium	1	-1400K