



## 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 $\frac{1}{2}$ ')                |
| 14  | 6 to 19mm ( $\frac{1}{4}$ " to $\frac{3}{4}$ ')   |
| 10  | 8 to 25mm ( $\frac{5}{16}$ " to 1")               |
| 6   | 13 to 38mm ( $\frac{1}{2}$ " to $1\frac{1}{2}$ ') |
| 4   | 19mm and above ( $\frac{3}{4}$ " 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.

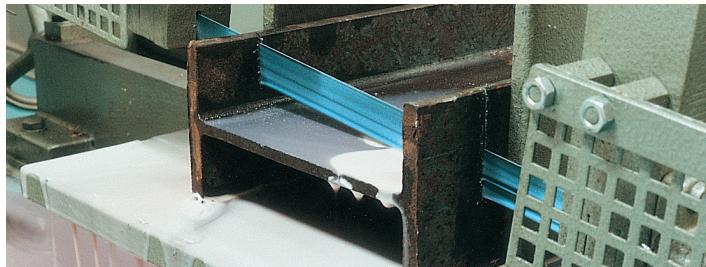
#### Operating Recommendations

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 | Price/1 THB |
|--------|------------------|-----------|-----|---------------|--------------------|-------------|
| 12"    | $\frac{5}{8}$ "  | .032"     | 18T | 0.36kg        | -4630K             | 271.00      |
| 12"    | 1"               | .050"     | 10T | 0.78kg        | -5030K             | 330.00      |
| 12"    | 1"               | .050"     | 14T | 0.79kg        | -5040K             | 330.00      |
| 14"    | 1"               | .050"     | 10T | 0.93kg        | -5130K             | 354.00      |
| 14"    | 1"               | .050"     | 14T | 0.80kg        | -5140K             | 354.00      |
| 14"    | $1\frac{1}{2}$ " | .062"     | 6T  | 1.30kg        | -5200K             | 483.00      |
| 14"    | $1\frac{1}{4}$ " | .062"     | 10T | 1.30kg        | -5220K             | 483.00      |
| 14"    | $1\frac{1}{4}$ " | .062"     | 14T | 1.30kg        | -5230K             | 483.00      |
| 16"    | $1\frac{1}{4}$ " | .062"     | 6T  | 1.40kg        | -5390K             | 525.00      |
| 16"    | $1\frac{1}{4}$ " | .062"     | 10T | 0.90kg        | -5410K             | 525.00      |
| 16"    | $1\frac{1}{4}$ " | .062"     | 14T | 1.60kg        | -5420K             | 525.00      |
| 16"    | $1\frac{1}{2}$ " | .062"     | 4T  | 2.20kg        | -5490K             | 672.00      |
| 16"    | $1\frac{1}{2}$ " | .062"     | 6T  | 2.20kg        | -5500K             | 672.00      |
| 17"    | $1\frac{1}{4}$ " | .062"     | 10T | 1.80kg        | -5530K             | 767.00      |
| 18"    | $1\frac{1}{4}$ " | .062"     | 6T  | 1.90kg        | -5550K             | 777.00      |
| 18"    | $1\frac{1}{4}$ " | .062"     | 10T | 1.60kg        | -5570K             | 777.00      |
| 18"    | $1\frac{1}{2}$ " | .075"     | 6T  | 2.55kg        | -5650K             | 767.00      |
| 19"    | $1\frac{3}{4}$ " | .088"     | 6T  | 3.80kg        | -5720K             | 1323.00     |
| 20"    | $1\frac{1}{2}$ " | .075"     | 6T  | 3.20kg        | -5750K             | 1533.00     |
| 21"    | $1\frac{1}{2}$ " | .075"     | 6T  | 3.00kg        | -5770K             | 1670.00     |
| 21"    | $1\frac{1}{2}$ " | .075"     | 10T | 3.00kg        | -5790K             | 1806.00     |
| 21"    | $1\frac{3}{4}$ " | .088"     | 6T  | 5.30kg        | -5820K             | 1869.00     |
| 24"    | 2"               | .100"     | 6T  | 6.30kg        | -5960K             | 2079.00     |

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

| Group 80mm | Materials  | Brinell Hardness HB | Rockwell Hardness HRC | Tensile Strength N/mm <sup>2</sup> | 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<br><340        | >26<br><36            | >850<br><1200                      | 18 - 28             | 40 - 60         | 14  | 10 - 6   | 6 - 4    | 4 - 3 |
| 1.6        | Heat treated high alloy steels and castings                | >340<br><450        | >36<br><48            | >1200<br><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 |