

# MARATHON® M42

The All-Rounder for Small and Large Cross Sections



- ⚙ Product level 2
- 🪚 Hook tooth
- Solid materials
- ↕ Band width 13 x 0.65 - 80 x 1.6mm  
Band width 1/2 x 0.025 - 3-1/8 x 0.063 Inch

## Product Information

### MARATHON® M42 – The All-Rounder for Small and Large Cross Sections

The MARATHON® M42 is the epitome of the economical band saw blade and stands for a broad application spectrum with consistently high quality.

The bimetal band saw blade for service-oriented customers is optimized for more complex performance and support requirements in the sawing process, such as those required for industrial applications.

The high quality features of MARATHON® M42 are now even more flexible in applications thanks to the expansion of the product line and are thus available for small cross-sections up to large solid materials.

The superfinishing of the band saw blade and the sharp cutting edges increase the blade-life and improve the quality of the cut. The fine band surface protects the machine's guides and increases fatigue strength.

### Application Range

#### Application

- industrial applications

- medium-sized to large workpieces
- All metals up to 1000 N/mm<sup>2</sup> tensile strength
- Solid material
- Single, layer and bundle cutting
- Mixed operation

#### Advantages

- Long blade-life and high productivity due to excellent product characteristics
- Less frequent blade changes due to broad application spectrum
- Low noise levels due to highly smooth and quiet running
- Lower material allowances required due to straight cuts/line
- Reduced post-processing due to finer cutting surface
- Significant costs per cut savings

#### Features

- M42 cutting edge
- rake angle: positive (hook tooth)
- Constant or variable tooth pitch with standard setting

- High precision in straightness and planeness of the strip

## Technical Data (1/2)

| Dimensions        |                | Tooth pitch in ZpZ |        |         |          |          |           |
|-------------------|----------------|--------------------|--------|---------|----------|----------|-----------|
| Width x thickness |                | variable           |        |         |          |          |           |
| mm                | Inch           | 5-8                | 4-6    | 3-4     | 2-3      | 1.4-2    | 1-1.4     |
| 13 x 0.65         | 1/2 x 0.025    |                    |        |         |          |          |           |
| 13 x 0.90         | 1/2 x 0.035    |                    |        |         |          |          |           |
| 20 x 0.90         | 3/4 x 0.035    |                    |        |         |          |          |           |
| 20 x 1.10         | 3/4 x 0.042    |                    |        |         |          |          |           |
| 27 x 0.90         | 1-1/16 x 0.035 | K                  | K      | K       | K        |          |           |
| 34 x 1.10         | 1-3/8 x 0.042  | K                  | K      | K       | K        | K        |           |
| 41 x 1.10         | 1-5/8 x 0.042  |                    | K      | K       | K        | K        |           |
| 41 x 1.30         | 1-5/8 x 0.050  | K                  | K      | K       | K        | K        |           |
| 54 x 1.30         | 2-1/8 x 0.050  |                    | K      | K       | K        | K        |           |
| 54 x 1.60         | 2-1/8 x 0.063  |                    | K      | K       | K        | K        | K         |
| 67 x 1.60         | 2-5/8 x 0.063  |                    | K      | K       | K        | K        | K         |
| 80 x 1.60         | 3-1/8 x 0.063  |                    |        |         | K        | K        | K         |
| Contact length    | [mm]           | 30-60              | 50-100 | 80-170  | 150-300  | 250-550  | 500-1000  |
|                   | [Inch]         | 1.2-2.4            | 2-3.9  | 3.1-6.7 | 5.9-11.8 | 9.8-21.6 | 19.7-39.4 |

K = Hook tooth

\*Optimised superfinish:

With immediate effect, this dimension is now also converted to the new inline production. As a result, the saw band gains a high quality in the form of a glossy, smooth surface. The fine band surface protects the band guides of the machine and increases the fatigue strength.

## Technical Data (2/2)

| Dimensions            |                        | Tooth pitch in ZpZ    |                |                   |                    |                      |
|-----------------------|------------------------|-----------------------|----------------|-------------------|--------------------|----------------------|
| Width x thickness     |                        | variable              | constant       |                   |                    |                      |
| mm                    | Inch                   | 0.75-1.25             | 6              | 4                 | 3                  | 1.25                 |
| 13 x 0.65             | 1/2 x 0.025            |                       | K*             | K*                |                    |                      |
| 13 x 0.90             | 1/2 x 0.035            |                       | K*             | K*                | K*                 |                      |
| 20 x 0.90             | 3/4 x 0.035            |                       | K              | K                 | K                  |                      |
| 20 x 1.10             | 3/4 x 0.042            |                       |                |                   | K                  |                      |
| 27 x 0.90             | 1-1/16 x 0.035         |                       |                |                   |                    |                      |
| 34 x 1.10             | 1-3/8 x 0.042          |                       |                |                   |                    | K                    |
| 41 x 1.10             | 1-5/8 x 0.042          |                       |                |                   |                    |                      |
| 41 x 1.30             | 1-5/8 x 0.050          |                       |                |                   |                    |                      |
| 54 x 1.30             | 2-1/8 x 0.050          |                       |                |                   |                    |                      |
| 54 x 1.60             | 2-1/8 x 0.063          |                       |                |                   |                    |                      |
| 67 x 1.60             | 2-5/8 x 0.063          | K                     |                |                   |                    |                      |
| 80 x 1.60             | 3-1/8 x 0.063          | K                     |                |                   |                    |                      |
| <b>Contact length</b> | <b>[mm]<br/>[Inch]</b> | 700-1400<br>27.6-55.1 | 50-80<br>2-3.1 | 80-120<br>3.1-4.7 | 120-200<br>4.7-7.9 | 300-800<br>11.8-31.5 |

K = Hook tooth

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## Materials Overview



- Case-hardening steels, spring steels and ball-bearing steels
- Rust-proof and acid-resistant steels (ferretic)
- Nitrided steel, high-speed steel and tool steel
- Construction, deep-drawn and machining steels
- Carbon steels, and quenched and tempered steels
- Cast iron
- Aluminium / aluminium alloys
- Non-ferrous metals