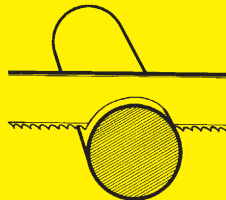


## Choice of suitable cuts for different materials.

At least three teeth should be engaged at one time.



| Material               | Cutting data              |                                       | No. of teeth per inch for material thickness |             |             |             |              |            |
|------------------------|---------------------------|---------------------------------------|----------------------------------------------|-------------|-------------|-------------|--------------|------------|
|                        | Stroke rate<br>stroke/min | Cutting speed. <sup>1)</sup><br>m/min | 0-10<br>mm                                   | 10-20<br>mm | 20-50<br>mm | 50-75<br>mm | 75-100<br>mm | 100-<br>mm |
| Aluminium              | 80-115                    | 31-45                                 | 10-14                                        | 6-10        | 4-6         | 3-4         | 2-3          | 2          |
| Copper                 | 90-120                    | 31-45                                 | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Bronze                 | 80-115                    | 31-45                                 | 14                                           | 10          | 6           | 4           | 3-4          | 2          |
| Brass                  | 80-115                    | 31-45                                 | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Malleable cast iron    | 80                        | 31                                    | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Carbon steel, soft     | 110-150                   | 31-45                                 | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Tool steel, unblued    | 40                        | 16                                    | 14                                           | 10-14       | 6-10        | 4-6         | 3-4          | 3          |
| Tool steel, blued      | 60                        | 22                                    | 14                                           | 10          | 6           | 4           | 3-4          | 2          |
| Structural steel, soft | 80                        | 31                                    | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Hardened alloys        | 35-75                     | 16                                    | 10                                           | 10          | 6           | 4           | 3-4          | 3          |
| High speed steel       | 40                        | 16                                    | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Stainless steel        | 40-60                     | 16-22                                 | 14                                           | 10          | 6           | 4           | 3            | 2          |
| Titanium alloys        | 50-70                     | 22                                    | 14                                           | 10          | 6           | 4           | 3-4          | 2          |
| Nickel alloys          | 30-60                     | 16-22                                 | 10                                           | 10          | 6           | 4           | 3-4          | 3          |

<sup>1)</sup> At 200 mm stroke length.

Select the faster speeds when cutting thin materials and the slower speeds when cutting the thick materials.