

TPI guidelines based on material thickness

SOLIDS



RECTANGULAR solids
(use width)



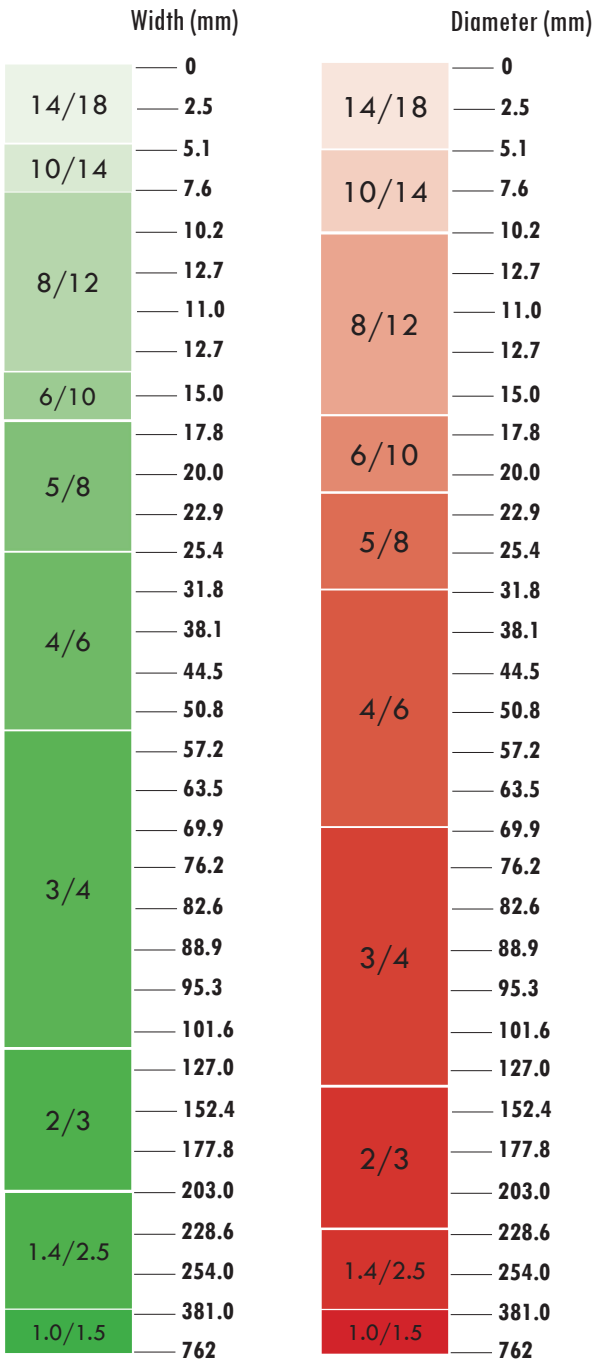
ROUND solids
(use diameter)

Pipe/Tubing/Structurals



(use wall thickness)

METAL CUTTING BLADES



SELECTING THE RIGHT TPI

By selecting the right TPI (teeth per inch) you will maximise your productivity by cost per cut & speed per minute.

Also consider:

1. **Material:** Thinner section requires a finer TPI and thicker section requires a coarser TPI.

2. Production vs Finish:

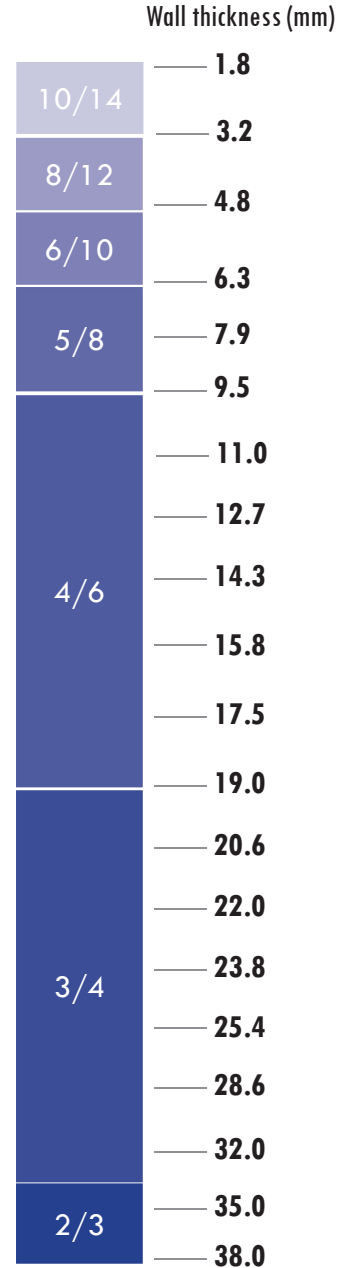
Where material size falls closer to any of the lines on the chart, use the coarser TPI if speed is more important or a finer TPI if the finish is more important.

BUNDLED/STACKED CUTS

To select the proper number of teeth for bundled or stacked materials, find the recommended TPI for a single piece and choose one pitch coarser i.e. if recommended TPI for a single piece is 4/6 TPI then choose 3/4 TPI.

SPECIALTY CUTTING

Requesting heavy set (wider set teeth), special tooth geometry or increased band/tooth strength for hard to cut materials (e.g. structural, stainless steel, hard spots, iron bar etc), will help increase the life of the blade.



TPI	Material Thickness
32	1 - 2 mm
24	2 - 3 mm
18	3 - 4 mm
14	4 - 6 mm
10	6 - 8 mm
6	8 - 13 mm
4	13 - 19 mm
3	20 - 25 mm
2	25 - 50 mm
1	50 - 80 mm

WOOD CUTTING BLADES

TO OBTAIN DESIRED RESULTS -

- 1 - 3 TPI should be used for resawing wood and thicker materials.
- 18 to 32 TPI for thinner metals and plastics under 6mm.
- For general cutting of wood 6 TPI will provide a fast cut and 14 TPI will cut slow, but leave a smoother finish.
- At least three teeth must be in the workpiece—the TPI chart to the left is a guide only.
- When cutting curves, the narrower the blade the tighter the spots you can cut.