

# What is bevelling? Why would you use an automatic bevelling machine?

## What is bevelling?



Bevelling is the process where an angle is formed between the edge of the end of a plate or tube and a plane perpendicular to the surface. A standard bevel angle for welding is 30 degrees. Other angles and special forms such as J-Bevels can also be produced on the ends of plates or pipes using [automatic beveling machines](#).

## Why bevel?

Bevelling of plates or tubes is most commonly used to prepare the ends for welding. It can also be used for deburring the cut ends for safety and aesthetic reasons.

## Why companies automate beveling?

- Save time – bevelling machines are many times faster than other methods such as hand grinding, flame cutting, hand held bevellers, or loading into a lathe.
- No more dirty operations such as hand grinding or torching.
- Consistent accurate bevels each time, will face the end of the pipe square or plate and bevel or deburr it as needed.
- Cycle time normally in the 5 to 20 second range depending on size
- Eliminates ergonomic issues from operator handling hand tools
- Safer than hand grinding or torching, all chips are contained within the machine.
- Low operating cost, uses mostly industry standard carbide tooling
- Easily bevels stainless and materials not suitable for torching.
- Special forms such as J-bevels are easily produced.
- Can be operated by a non skilled operator once setup.



Automated [bevelling machines](#) from CEVISA will provide a safer, more accurate, and more repeatable bevel than any manual method. Check out all our [bevelling machines](#) and explore the full range of bevelling solutions from CEVISA.