

**BENDING CAPABILITIES:**  
**CNC Pipe**  
**Bending**



Your Complete Manufacturing Solution

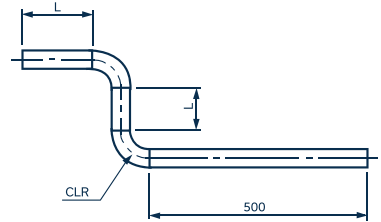
## CNC PIPE BENDING

**Tube OD.** = Outside diameter of pipe **Wall Th.** = Wall thickness of pipe **CLR. Factor** = This factor is used to get the Centre line radius **CLR.** = Centre line radius **Min L.** = Minimum length before and after each bend

Minimum length required for clamping: 500 mm

### Machine Specifications:

9-axis CNC tube bending machine that accommodates 6m long round- and square tubes. The machine is capable of bending tubes with **OD 6.0 mm to 80.0 mm**, with tube gauges varying from **1.5 mm to 3.05 mm**. The bending process is mandrel-assisted and can also perform push-pull bending for longer continuous bends.



### Available Tooling:

(Please note that our capabilities are not limited to the below tooling)

| Thin Walled Pipe (Stainless Steel)               |               |             |           |             |
|--|---------------|-------------|-----------|-------------|
| Tube OD. (mm)                                    | Wall Th. (mm) | CLR. Factor | CLR. (mm) | Min. L (mm) |
| 25.4   | 1.5           | 2           | 50.8      | 65          |
| 31.75  | 1.5           | 1.5         | 47.63     | 70          |
| 38.1   | 1.5           | 1.5         | 57.15     | 80          |
| 50.8   | 1.5           | 1.5         | 76.2      | 110         |
| 63.5   | 1.5           | 1.74        | 110       | 130         |
| 2.0 mm Walled Pipe (Mild Steel)                  |               |             |           |             |
| Tube OD. (mm)                                    | Wall Th. (mm) | CLR. Factor | CLR. (mm) | Min. L (mm) |
| 60.3   | 2.00          | 1.263       | 76.2      | 185         |
| 2.7 mm Walled Pipe (Stainless Steel, Mild Steel) |               |             |           |             |
| Tube OD. (mm)                                    | Wall Th. (mm) | CLR. Factor | CLR. (mm) | Min. L (mm) |
| 33.4   | 2.77          | 1.5         | 50.1      | 100         |
| 42.16  | 2.77          | 1.127       | 47.51     | 150         |
| 48.26  | 2.77          | 1.5         | 72.39     | 100         |
| 60.3   | 2.77          | 1.263       | 76.2      | 185         |
| 3.0 mm Walled Pipe (Mild Steel)                  |               |             |           |             |
| Tube OD. (mm)                                    | Wall Th. (mm) | CLR. Factor | CLR. (mm) | Min. L (mm) |
| 60.3   | 3.0           | 1.263       | 76.2      | 185         |

### Considerations

- ✓ The construction of the machine can limit the direction, length and angle of the pipe.
- ✓ The machine can be programmed manually or a bending program can be generated.
- ✓ Bending simulations can be used to determine the manufacturability of a pipe design.

### Requirements

To generate a program for manufacturing or simulation a 3D CAD file (.igs/.x\_t) is needed of the pipe only without any features added to the pipe.