



## YOUR GUIDE TO TUBE MANIPULATION OUR ELECT52 BENDING MACHINE

SALES@BARRETTTUBES.COM | 0121 601 5000

**BARRETTSTEEL.COM** 



At Barrett Steel Tubes we are excited to share with you all the capabilities of our Elect 52 tube bender. At our centre of processing excellence in Dudley we offer a wide range of laser processing and tube manipulation solutions from one dedicated site for nationwide delivery.

Whether you require laser cut excellence or need material bent to exacting specifications our experienced account managers are there to support your project at every step. As a business we understand our customers' needs and work hard to ensure parts we produce arrive with you on a just in time service to ensure smoothness in your supply chain.



## Enhancing our service through technology

The new programming software we're using allows us to tackle the latest technological challenges. Using an upgraded graphical user interface, a wealth of features are designed to make machine programming practical and simple, allowing user-friendly programming.

The technology allows us to simulate your job from scratch before we even pick the material, that way, we can impart any additional design advice before we even begin. We can preview images, customize your jobs and filter back by numerous methods. This ensures work is streamlined and quick! We can now advise on theoretical co-ordinates, spring back, material elongation, bending feasibility, and provide you with the best design advice to get the part right first time. Our 3D simulator can be used to show feasibility once the part has been programmed and the geometric deformations are corrected.

Scratches, wrinkles, incorrectly bent tube angles... we can eliminate them.

The range of material we can bend is from min 10mm o/d –50mm o/d. We can offer numerous Centre Line Radii and remain happy to discuss your design needs.



Technical characteristics	ELECT52	Profile	OD (mm)	CLR (mm)
Maximum round tube bending capacity	Ø 50,8 X 2,0 mm (2.00" x .08")	Round	15.88	50
Maximum round tube bending capacity (Max Power)	Ø 50,8 X 3,0 mm (2.00" x .12")	Round	19.05	38.1
Controlled axes	9	Round	22.22	50
X axis accuracy	± .05 mm (.002")	Square	25.4	76
Y axis accuracy	± 0,05°	Round	25.4	50.8
Z axis accuracy	± 0,05°		25.4	
axis speed (brushless motor)	1,450 mm/s (57 in/s)		25.4	
Maximum X axis speed (Booster)	650 mm/s (26 in/s)	Round	31.75	50.8
Max bending radius*	180 mm (7.08")	nouriu		_
Min. bending radius**	35 mm (1.37")	_	31.75	65
Machine bed length* - from tool post to collet	2,030 mm (79.92")	Round	35	90
- from tool post to mandrel retraction	3,640 mm (143.31")	Round	38.1	76.2
Machine bed length with longer bending head* - from tool post to collet - from tool post to mandrel retraction	-	Round	40	80
Max bore through carriage	53 mm (2.09")			
Bending direction	convertible left or right			
Automatic mandrel lubrication	yes			
Number of mandrel rods and diameter	3 (ø 10 mm; ø 16 mm; ø 24 mm) (.39"; .63"; .94")			
Installed power	12,5 kW			
Average consumption	4,5 KW			
Noise level	65 dB(A)			
Machine and CNC weight	3,300 Kg (7,276 lb)			
Machine dimensions***	4,280 x 1,475 x 1,600 mm (14.1' x 4.9' x 5.3')			
Machine dimensions with longer bending head***	-			

## Key benefits of our Elect52 include:

This state-of-the-art machinery is fast and efficient. Not only in part production but also in use by our operators ensuring your order passes smoothly through our facility and straight to you.

The parts produced are right first time! The Elect52s strength is in producing high repeatable excellence in finish. Our machine offers aesthetically perfect parts with minimum ovalisation on all bends. This includes tight bends with small radiuses. You can always count on repeatability and geometric precision of the bent part, regardless of material imperfections. Using special programs that can be selected by the operator, ELECT compensates for variations in material quality and dimensional accuracy.

Whether you require fixed or variable bend radiuses our machine can produce these on tubes with any cross section. The Elect52 machine does not leave straight sections between bends and offers unlimited manufacturing possibilities.

## Our Elect 52 is the perfect tool to product parts for a wide range of sectors including but not limited to:



**Educational Furniture** 



Agricultural







**Heating & Ventilation** 



**Yellow Goods** 









SALES@BARRETTTUBES.COM 0121 601 5000

BARRETTSTEEL.COM