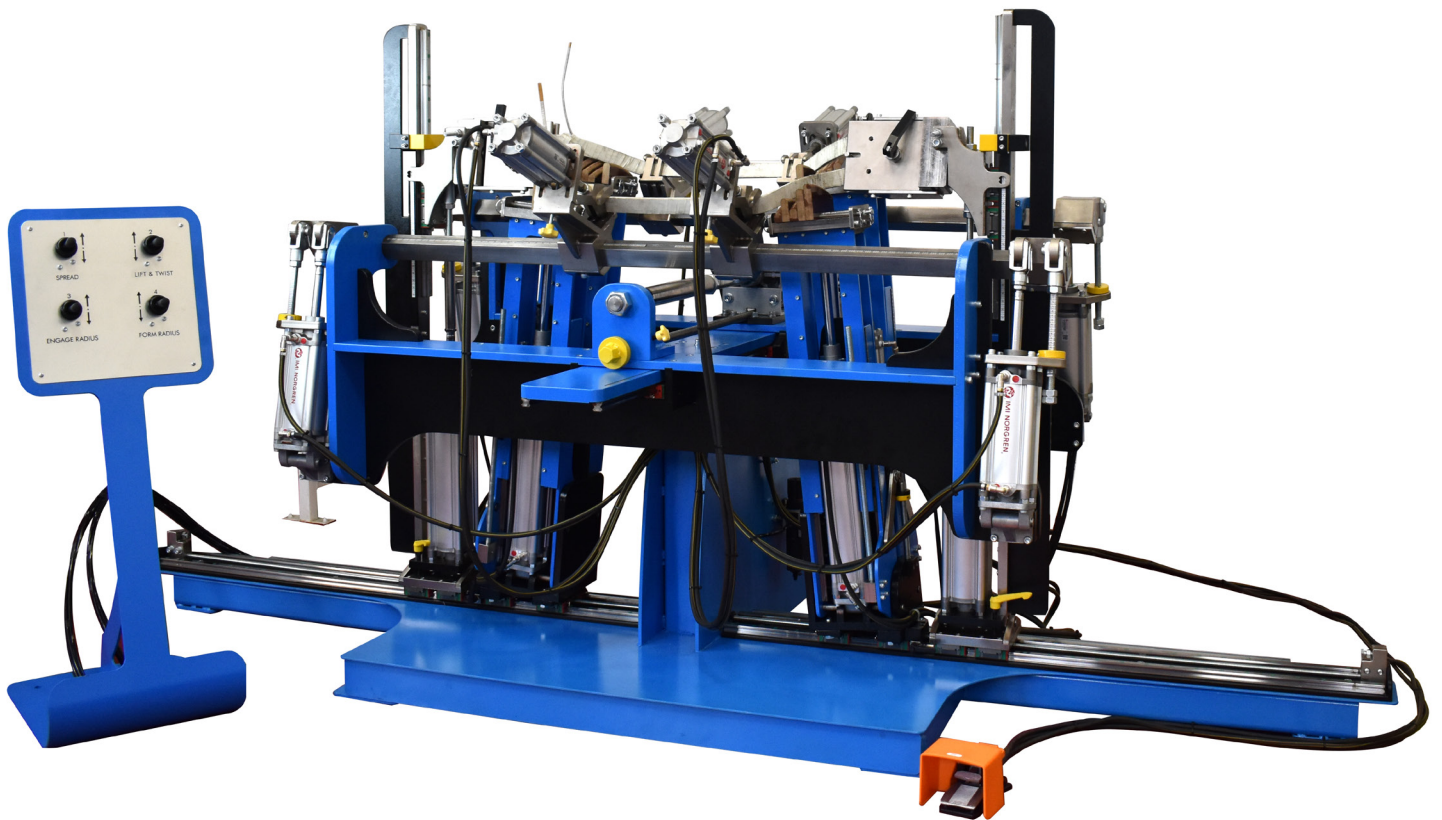


Coil Forming Equipment

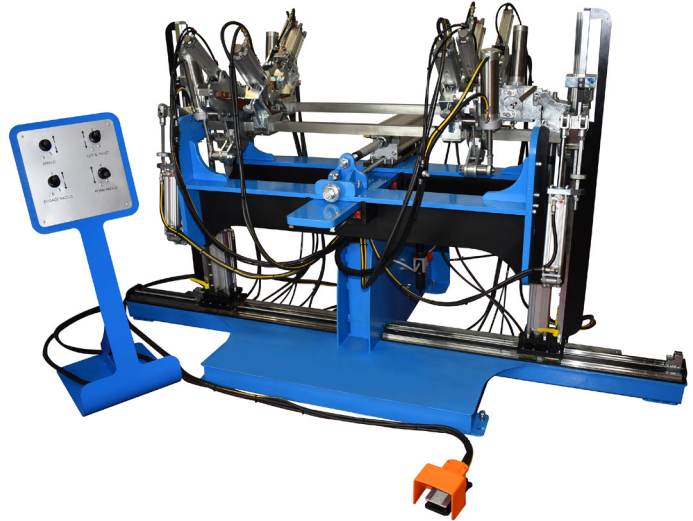


Coil Forming Equipment

The Rotary range of coil forming equipment offers everything your coil shop needs to produce consistent coils every time. All our equipment is made to order here in Sheffield to match your exact requirements.

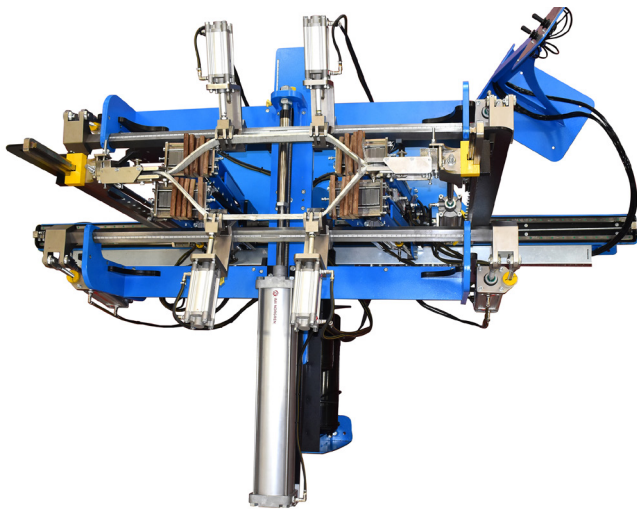
Our pneumatic coil forming equipment offers simple reliability whilst leading the way with modern design engineering. Most of our machines only require connection to a suitable clean, dry air supply and will give many years of trouble free operation. The addition of radius forming and automation gives you everything needed to produce consistent quality formed coils every time.

Manufactured with a robust steel frame, high quality European cylinders, linear bearings and precision machined parts, our machines are robust and reliable. Set up is achieved by manually adjusting colour coded controls to the scales on the machine. When set up is complete a full set of coils can be formed reliably with excellent consistency. The machine is controlled by pneumatic switches from a portable control stand.

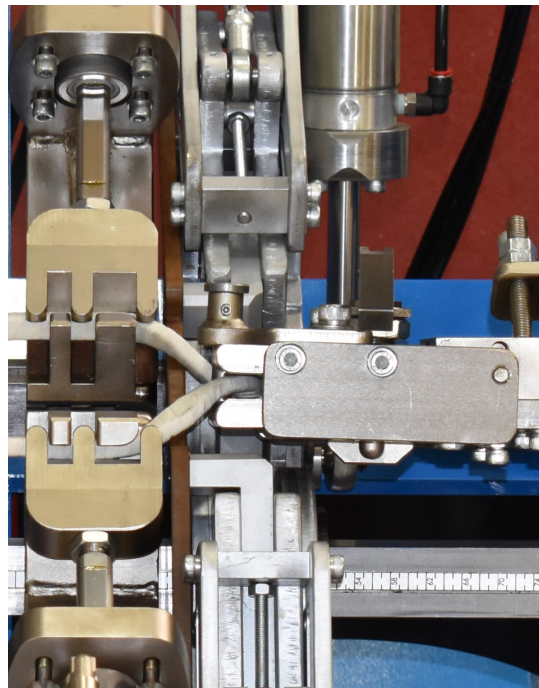


Radius Forming

At Rotary we have developed radius forming solutions for both large and small loops. Our machines have a cleverly designed holder for your forming pads which means that new pads can easily be manufactured at site to suit every coil design.



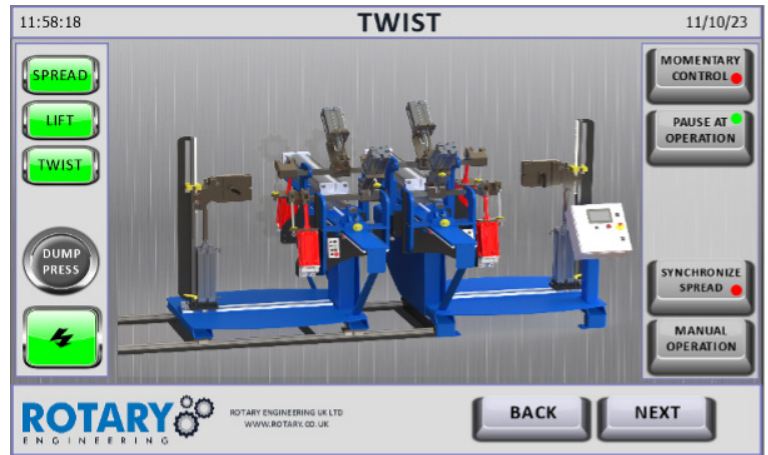
Radius forming in small coils presents some challenges but Rotary have developed a compact, robust radius forming solution for smaller loops. Mounted on the swivel bar, the radius forming system can be positioned close to the slot holders.



Automation

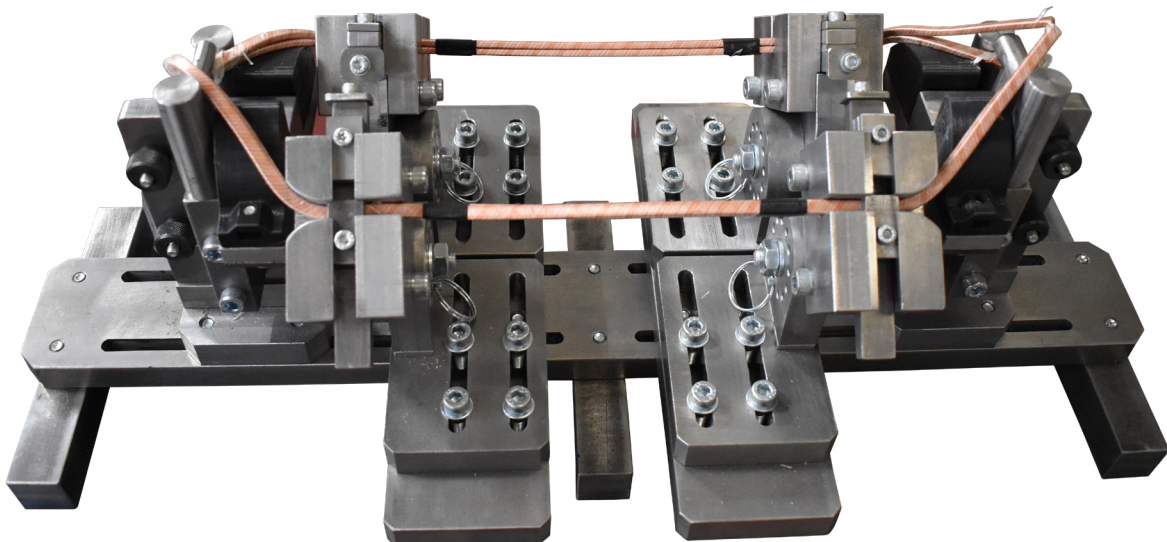
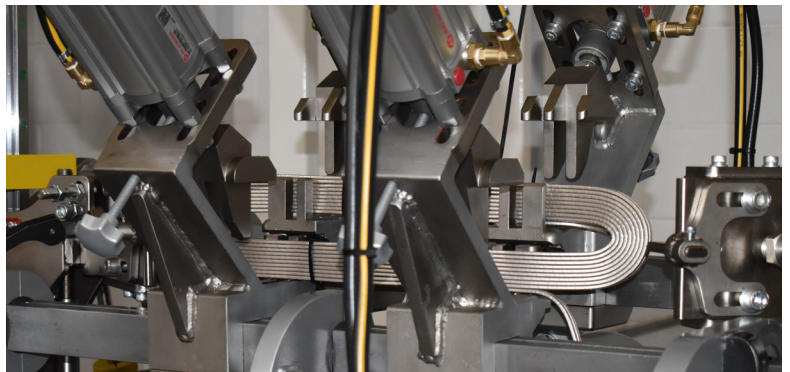
With a continuing research and development programme we have introduced automated sequence control for coil forming. The addition of an HMI based electro-pneumatic control system to a spreader allows the following improvements compared with our manual coil formers.

- Recipe storage to aid with repeatability of machine setup
- Automatic sequencing allows a coil to be formed in a single button press. This can vastly improve production times as well as ease of use.
- Automated reverse of operation for fast ejection of a formed coil.
- Increased level of safety due to emergency stop system / E-Stops.
- Optimum level of automation.
- Controlled via intuitive 7" HMI.
- 2 x control pendants located within arm's reach of the coil clamps for ease of loading a loop.
- Sensors integrated to give feedback on whether each operation has reached full travel and thus formed a coil successfully. This data can be exported to CSV or PDF report for your QA records.



Small High Voltage Coils

Recently we have noticed an increased requirement for small high voltage coils which are too small for our standard range of coil formers. Our team have designed and produced a full range of solutions from full pneumatic forming to manual forming options. Our range can also accommodate small coils with a large coil cross section where extra force is required to pull the coil into shape. Contact us to discuss your small coil forming requirements with our experienced engineers.



Coil Forming Equipment

Production Machines

We also offer machines specifically designed for producing large numbers of identical coils. These machines are aimed at production facilities where the geometry of the coil is fixed, rather than repair shops where adjustability is key.

We have a modular design for production machines that maximises production efficiency and significantly reduces takt time. Our design is particularly well suited to small coils designed for high power density applications. Contact us for more details and to discuss your specific requirements.



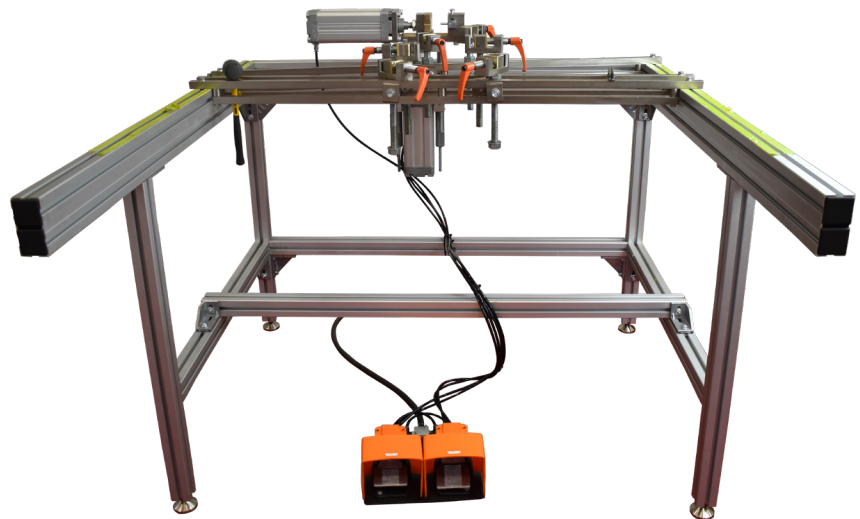
Coil Jig

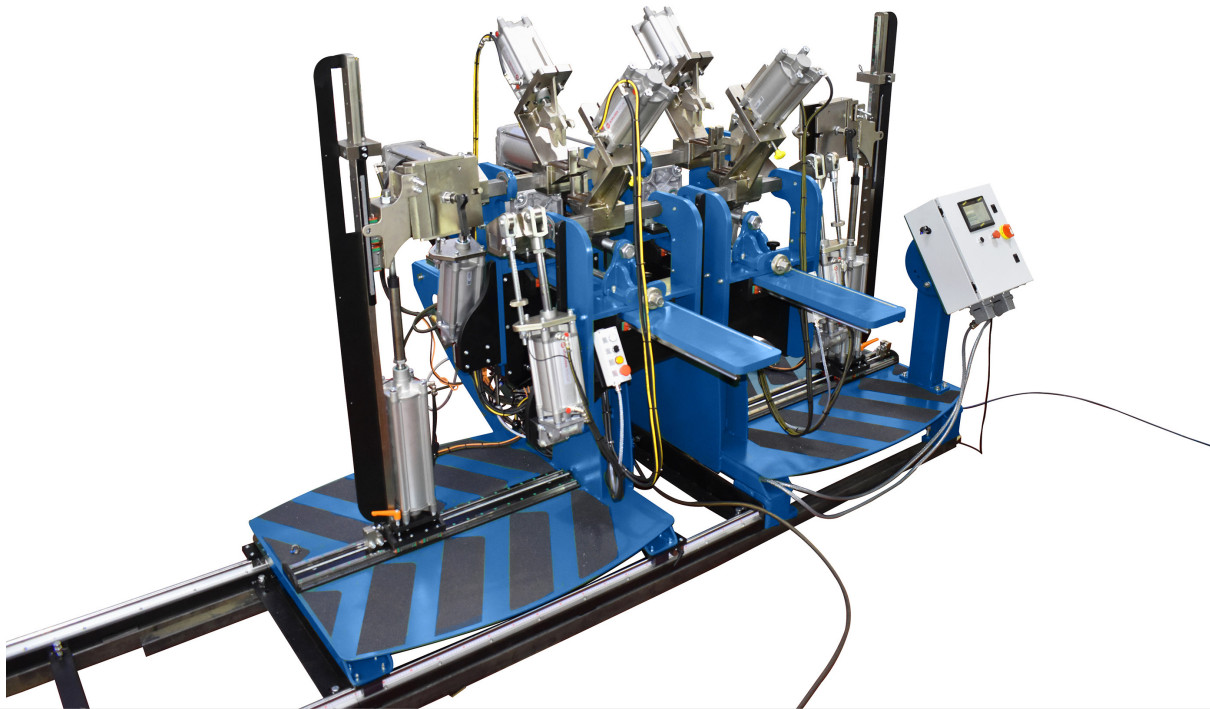
Unique to Rotary is the Coil Jig. Developed with the UK's top coil makers, this new piece of equipment enables you to check the geometry of a coil without the need to manufacture a coil former for each design you produce. In addition, the jig is sufficiently robust to allow for final coil shaping in situ if required. The Coil Jig also features location points for customer's own coordinate measuring equipment, allowing precise inspection of the finished coil geometry.

Manual Coil Spreader

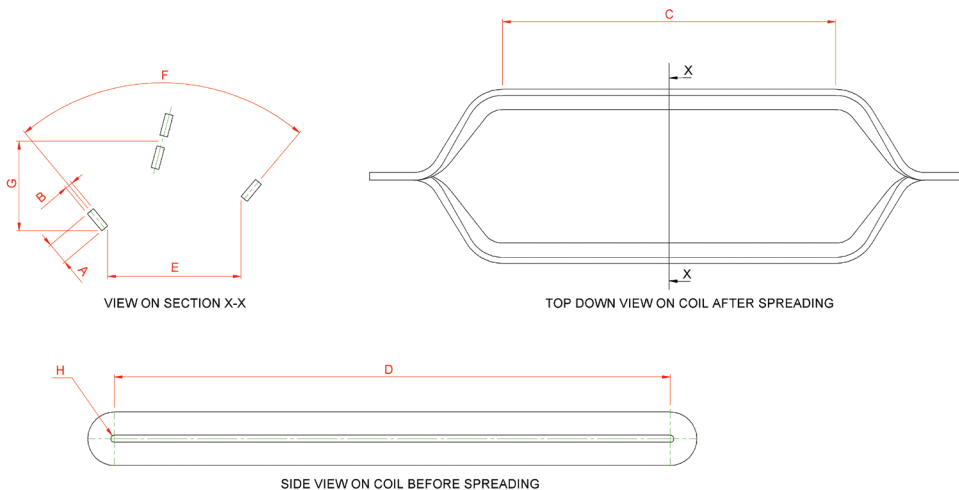
This machine is designed to assist in the coil forming of open ended and 'frog' leg coils. It has pneumatic actuated clamping at the pin and manual clamping along the length of the coil. It can be adjusted quickly to suit many shapes of coil.

MANUAL COIL SPREADER DATA	
Length:	2000 mm
Depth:	1800 mm
Height:	1200 mm
Weight:	300kg
Air Pressure:	6.2 – 6.9bar (90 – 100psi)
Air Supply fitting:	¼" BSP
Coil section – max:	38 mm x 19 mm
Coil section – min:	No Minimum
Slot length - min:	150 mm
Slot length - max:	800 mm
Loop length:	1500 mm
Spread:	1200 mm





COIL SPREADER TECHNICAL SPEC TABLE									
TECHNICAL PARAMETERS	CS15	CS20A	CS20B	CS25A	CS25B	CS25C	CS53	Wind Turbine Coil Former	
Coil Height (A)	35 mm	35 mm	35 mm	60 mm	60 mm	60 mm	75 mm	Contact us to discuss your coil specification	
Coil Width (B)	18 mm	18 mm	18 mm	30 mm	30 mm	30 mm	40 mm		
Slot Length (C)	Min	130 mm	130 mm	130 mm	135 mm	135 mm	135 mm		300 mm
	Max	760 mm	1015 mm	1220 mm	1220 mm	1525 mm	1525 mm		4300 mm
Maximum Loop Length (D)	1500 mm	2000 mm	2000 mm	2500 mm	2500 mm	2500 mm	5300 mm		
Minimum Loop Length with Radius Forming Attachment	300 mm	300 mm	300 mm	650 mm	650 mm	650 mm	1060 mm		
Spread (E)	at 0° TWIST	400 mm	400 mm	400 mm	400 mm	400 mm	790 mm		1100 mm
	at 90° TWIST	520 mm	520 mm	520 mm	520 mm	520 mm	910 mm		1260 mm
	at 170° TWIST	650 mm	650 mm	650 mm	650 mm	650 mm	1040 mm		1460 mm
Inclusive Twist Angle (F)	170°	170°	170°	170°	170°	170°	170°		
Lift (G)	250 mm	250 mm	250 mm	250 mm	250 mm	340 mm	380 mm		
Pin Diameter (H)	12 mm	12 mm	12 mm	12 mm	12 mm	12 mm	20 mm		
Air Pressure	6 - 7 BAR (90 - 100 PSI)								
Air Supply Connection	¼" BSP								





Rotary Engineering works in partnership with clients worldwide, manufacturing a range of equipment and offering everything from a one off piece of equipment to an entire workshop.

Our experienced team are happy to provide specialist advice, respond to tenders and support our contacts around the world.

Rotary's origins can be traced back to 1896 when W.E Burnand first made industrial equipment from our workshop here in Sheffield. Today the business has evolved to become Rotary Engineering UK Ltd, proudly established as an innovative specialist UK manufacturer supplying the motor rewind and coil manufactures in addition to the design, manufacture and repair of electromagnets.



Designed and manufactured in the UK



Specialist advice and support available



Option to configure specifications to meet individual requirements



Easy to operate, cost effective equipment



Worldwide service and support