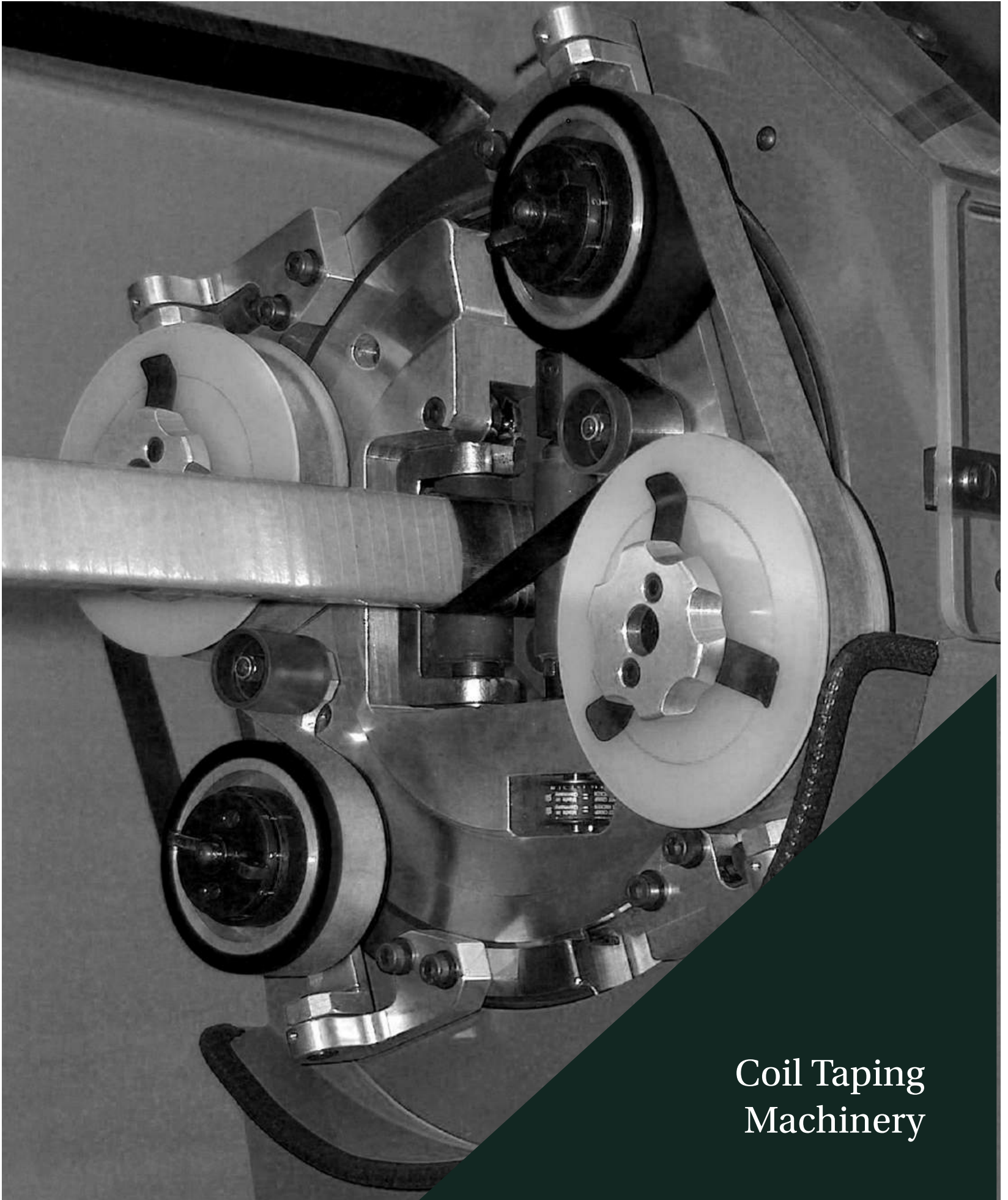




Ridgway Machines



Coil Taping
Machinery



More than building machines, helping to
provide innovative energy solutions for the world

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Ridgway are a specialised engineering company paving the way for bespoke, tailored machinery targeting a variety of engineering sectors from coil manufacturing, RTP and TCP taping machinery to Superconductor winding and taping machinery. Ridgway provide the all round service from design, manufacture, installation and any further assistance for the future.

Ridgway aim to be the world leader in precision taping, winding, coil manufacturing and reinforced thermoplastic pipe (RTP) machinery for the Electrical Energy, Electrical Power, Superconductor, Aerospace/Military, Renewable Energy and Oil & Gas industries.

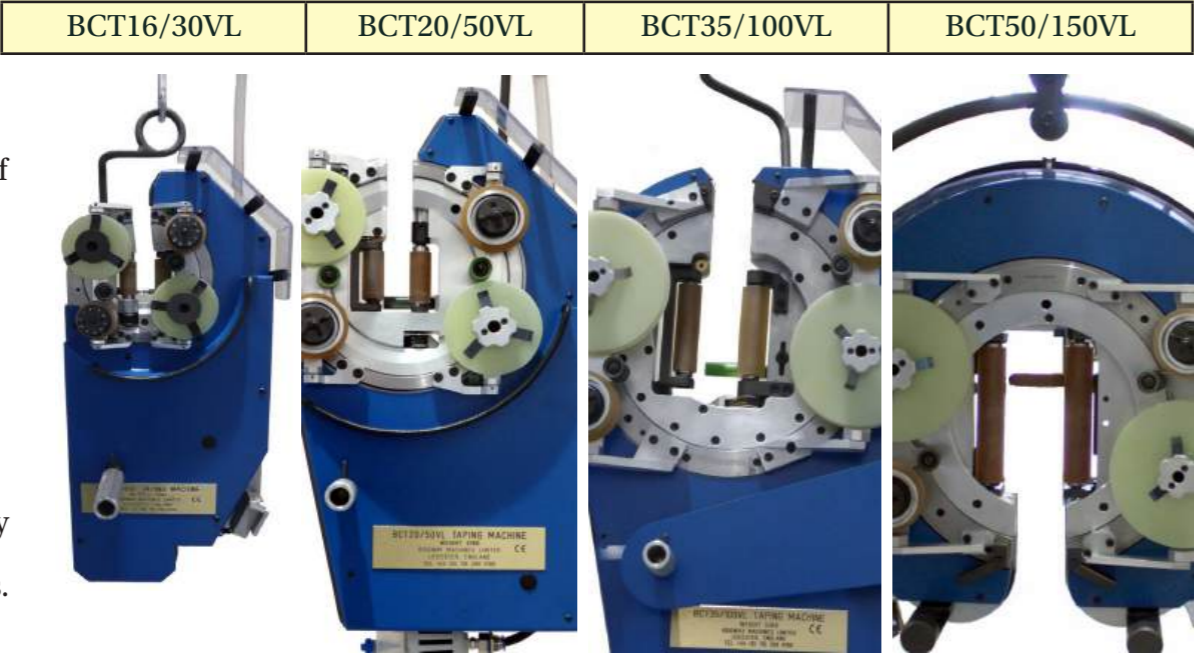
Based on innovative added value designs and highly specialised experience Ridgway produce excellent quality products. By having a close understanding of the customer's operational and service needs and remaining flexible in our approach, Ridgway aim to be the preferred supplier of choice.

Ridgway work within a culture that embraces continuous improvement, and remain passionate about quality, customer service and innovation.

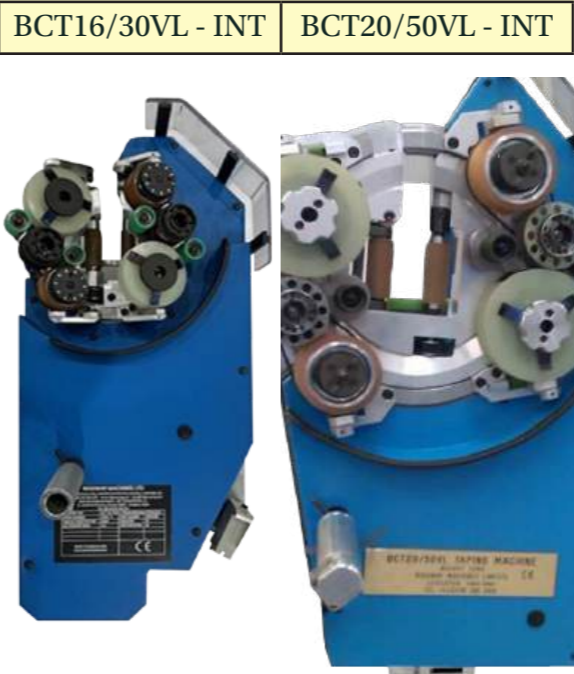
BCT TAPING MACHINES

Designed for the fast, precision application of tape insulation systems to a wide variety of components, including motor and generator stator coils and bars.

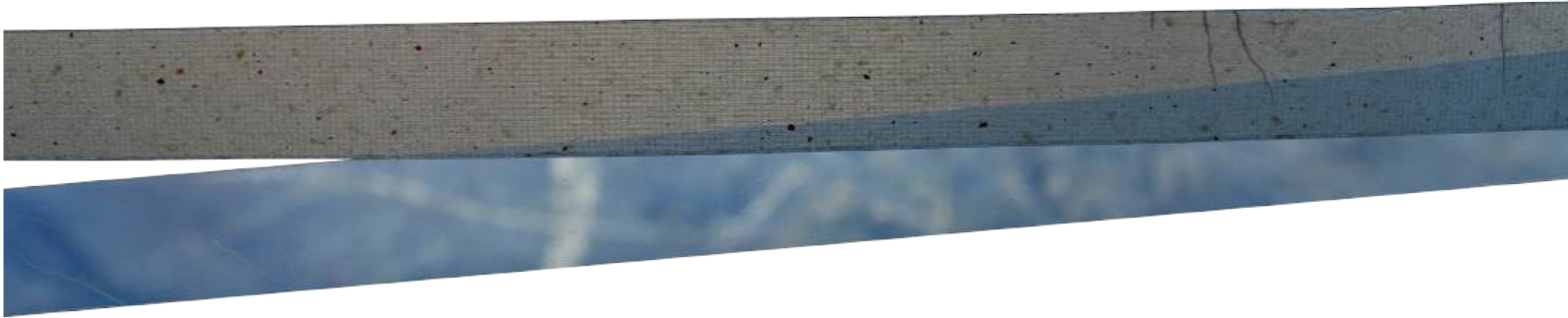
BCT Suspended Coil Taping Machines provide the ultimate solution to dramatically improve your production capabilities.



CAPACITY	Min. Max.	5mm x 10mm	10mm x 18mm	15mm x 30mm	25mm x 45mm
Cross section of conductor to be taped		16mm x 30mm	20mm x 50mm	35mm x 100mm	50mm x 150mm
TAPE WIDTH		15mm or 20mm	20mm or 25mm	20mm or 25mm	20, 25 or 30mm
LAP		Variable	Variable	Variable	Variable
TAPE SPOOL Core Outside Diameter		Ø 25mm Ø 80mm or 90mm	Ø 25mm Ø 110mm	Ø 25mm or 55mm Ø 170mm	Ø 25mm or 55mm Ø 170mm
TAPE TENSION		0.5kg - 6.0kg			1.0kg - 7.0kg
TAPING SPEED		250 rpm	240 rpm	200 rpm	150 rpm
AIR SUPPLY	Max.	5.5 bar			
Recommended Min. Bore		Ø 12 mm			
Free air use @ full speed		18 litres/sec.			26 litres/sec.
BENCH-MOUNTED		BCT 16/30 VLDM	BCT 20/50 VLDM	-	



BCT's with Interleave Tape Collection



BCT coil taping machines are in service worldwide. Quality of tape application is assured by the powered drive roller and traverse reversing gearbox arrangement guaranteeing consistent tape overlap. Both the tape overlap and tape tension settings are variable and easily adjusted by the operator if required. The BCT taping machines are capable of simultaneously applying 2 layers of tape. Interleave tape collection can be accommodated if required.



BCT 20/50VLDM

BCT Taping Machines

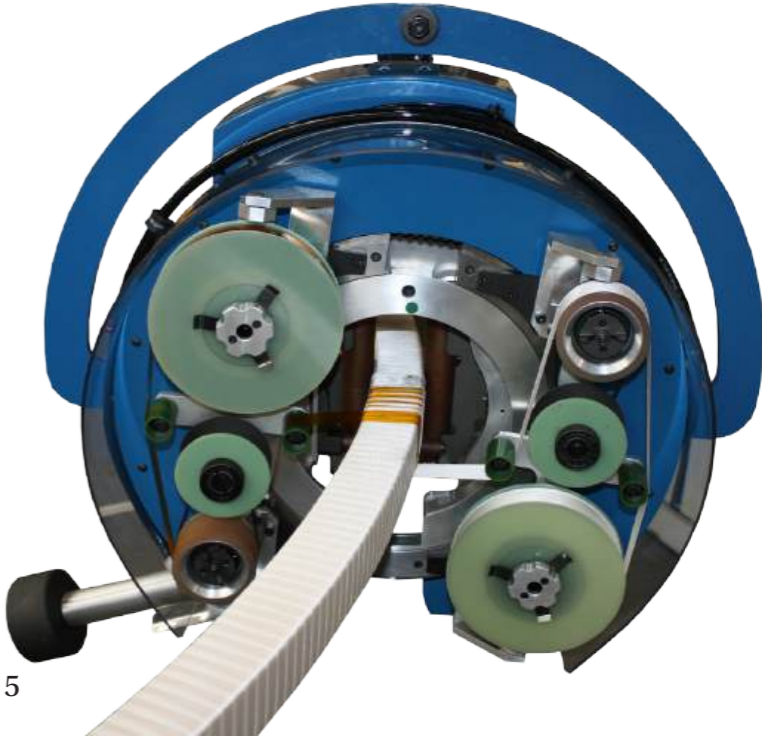
- Designed for the fast, precision application of tape insulation systems
- Effortlessly tape up to 8 times faster than traditional methods
- Simultaneously apply 2 layers of tape
- Apply tape in both directions
- Easy to use
- Variable tape overlap
- A wide variety of tapes can be used
- Pneumatically driven - No complex electrical systems

BCT Bench Taping Machines

- BCT is easily removed from the workbench to allow gantry suspension
- Operation of the BCT bench models is via foot pedals

Used to apply a wide range of materials including...	For manufacturing...
Mica	AC stator coils
Nomex ®	AC stator bars
Kapton ®	DC armature coils
Glass yarn	DC armature bars
Mylar ®	Traction Coils
Paper	Compensating bars
Polyester/Aluminium	Busbars
Film/Foil Laminates	Cable harnesses
Resin Rich	Bespoke products

BCT 50/150VL with Interleave



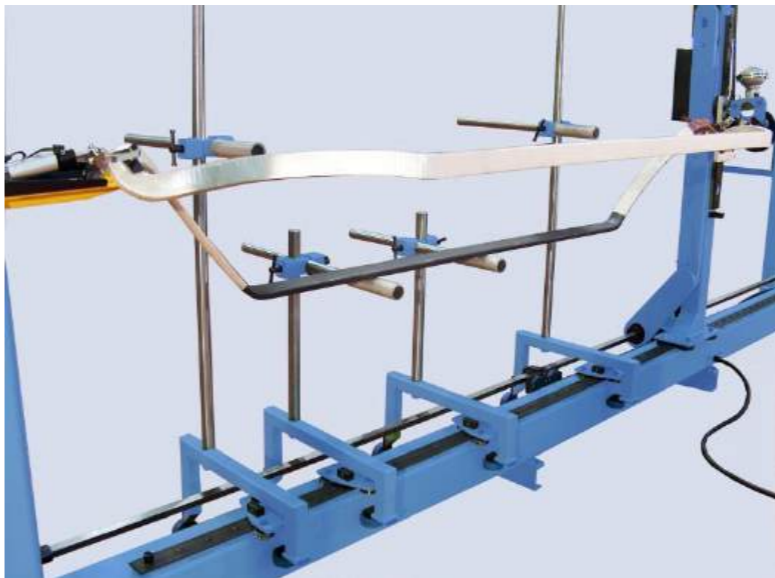


CTU-Coil Turnover Units

- ▼ Designed to provide a complete, flexible and easy to operate coil handling solution
- ▼ Only one set up required to tape both coil sides
- ▼ Coil rotation and work height adjustment easily achieved
- ▼ Coil securely held by two pneumatic clamps actuated via a foot pedal
- ▼ Adjustable mechanical stops ensure repeat rotational positioning
- ▼ CTU mounted coil supports available
- ▼ Rear coil supports and retractable front coil supports available



CTU - Coil Turnover Unit



CTU Mounted Coil Supports

CTU Mounted Coil Supports

Used in conjunction with the CTU, additional rail mounted coil supports can be provided depending on the width or geometry of the coil design.

MODEL	CTU2500	CTU3000	CTU4000	CTU5000
GANTRY REQUIRED	3.5m	4.0m	5.0m	6.0m
MAX. COIL LENGTH	2500mm	3000mm	4000mm	5000mm

Increase your production effectiveness by complementing the range of BCT taping machines with Ridgway's selection of dedicated handling equipment.

Used to provide fast, accurate and consistent methods of Operator guided tape application with virtually no preparation or set up time required.

Gantries

- ▼ Designed as a workstation to weightlessly suspend BCT taping machines
- ▼ The gantry range accommodates the CTU coil handling systems
- ▼ A free running carriage mounted to linear rails ensures smooth lateral motion of the taping head
- ▼ Multiple carriages can be added to allow a variety of taping machines to be used
- ▼ Quick and easy connection of the taping machine to the pneumatic circuit
- ▼ Manufactured in a range of sizes

Rear Supports

Free standing rear support designed for quick and easy operation. Manual vertical adjustment.

Retractable Front Supports

Free standing retractable front support designed for quick and easy operation. Comprising of an air cylinder with an adjustable soft top, enabling the desired work height to be achieved. Cylinder up and down movement is actuated via a foot pedal.



Free Standing Coil Supports

18M Gantry



Bespoke BCT Gantries

For larger projects Ridgway can design and manufacture bespoke gantry systems.

Free standing supports can be utilised to complement the bespoke gantries.

Portable Holding Fixtures

Larger components can be supported by portable pneumatic holding fixtures. To enable continuous taping, the clamping arms of the fixtures can be lowered to enable free passage of the taping machine. Foot pedals on the base of the fixtures will enable the clamp to open and close and to raise and lower the clamping arm.



- ▼ The clamps are free standing and are height adjustable
- ▼ Clamping pressure is adjustable
- ▼ Pneumatic operation is controlled manually by the operator via a foot pedal

Bench Support Gantry

A simple coil support gantry with pneumatic coil clamping workstations. Can be configured from 1 to 6 individual operator workstations. Multiple BCT coil taping machines can be suspended from free running carriages mounted on overhead linear rails. Virtually no preparation or set up time required. Clamping of the coil is via pneumatic clamps operated by a foot pedal.



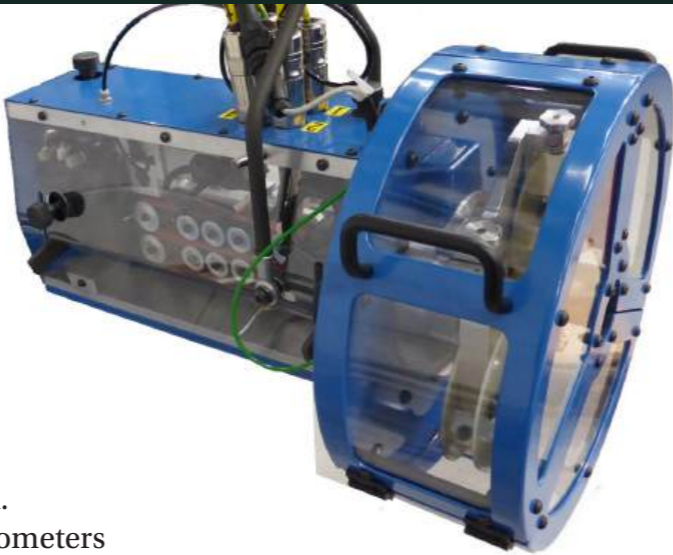
Multi Position BCT Gantry

STT-Squirrel Turn Taper

The STT offers a simple solution to dramatically reduce the overall coil manufacturing time of turn taped coils.

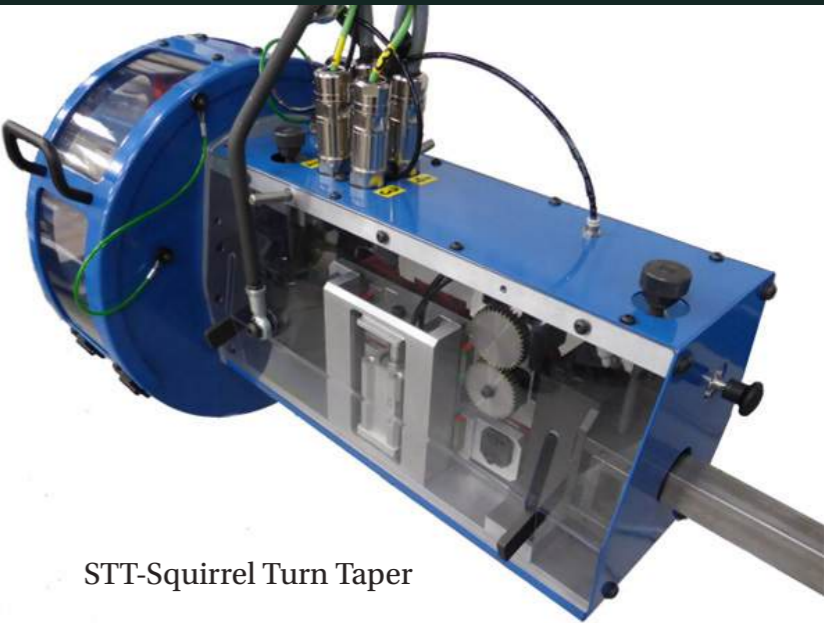
Designed for the efficient taping of multiple conductors as they pass between the drum stand, gathering box and loop winding beam during the loop winding process.

- Variable tape overlap
- Simultaneously apply 2 layers of tape
- Operation is via a control panel mounted on a pedestal.
Rotational and linear speeds are adjustable via potentiometers



The conductor stack is fed through the STT and centralised using roller boxes. The machine has guarding that is fitted with sensors. If the guard is open, it will prevent the machine from operating.

- The machine is driven by twin caterpillar belts, powered by a synchronised servo motor
- To ensure consistent adhesion to the conductor stack, the machine is fitted with a pneumatic traction control system
- The STT is freely suspended from its own support gantry. Gantries are manufactured to match exact requirements



STT-Squirrel Turn Taper

CAPACITY	
Max Cross section of conductor to be taped	20mm x 30mm
TAPE WIDTH	20mm
LAP	Variable
TAPE SPOOL	
Core	Ø 25mm
Outside Diameter	Ø 110mm
TAPE TENSION	0.5kg - 4.0kg
TAPING SPEED	250 rpm



Loop Winder Turn Taper Line



Turn Taped Coil



Ridgway Machines



Other Solutions



Wire & Cable
Taping Machinery



Coil Taping
Machinery



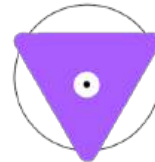
Superconductor
Cable & Coil Machinery



Coil Manufacturing
Machinery



RTP & TCP Taping
Machinery



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