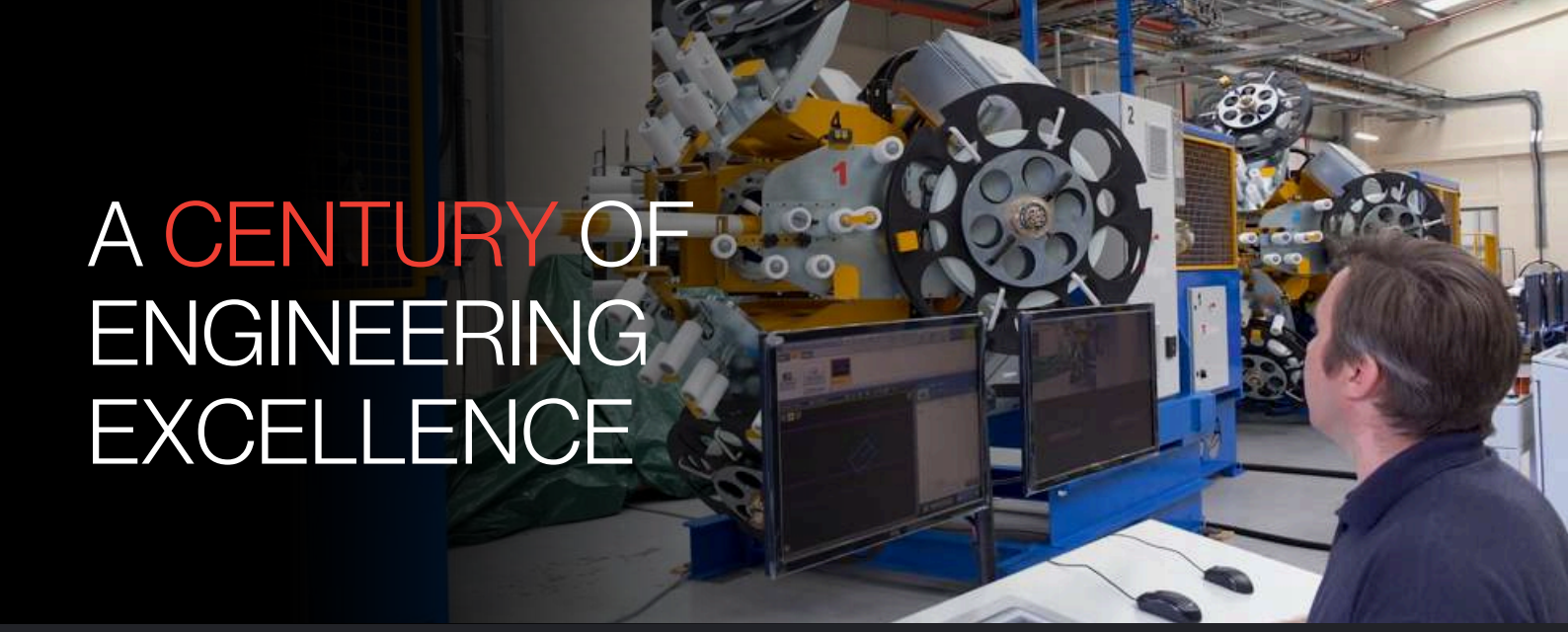
Ridgway Machines



RTP & TCP

PRODUCTION MACHINERY



A CENTURY OF ENGINEERING EXCELLENCE

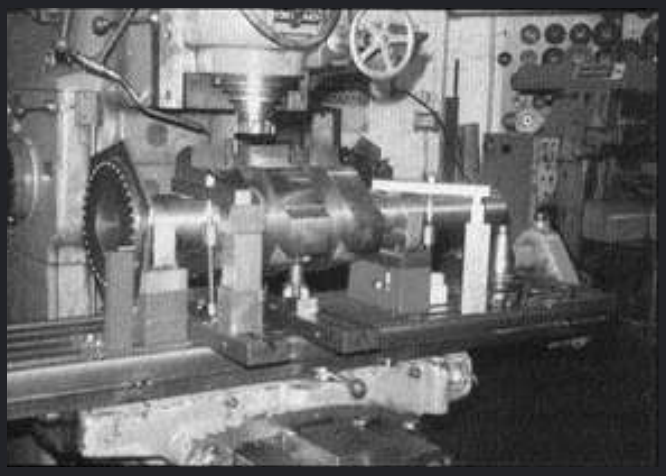
ABOUT RIDGWAY MACHINES

100+ YEARS

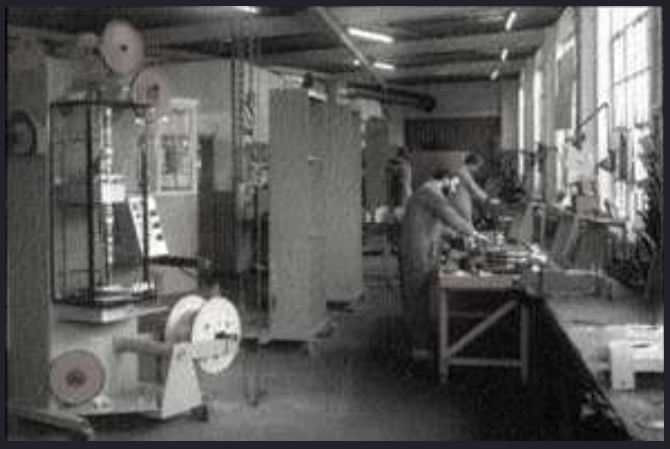
Founded in 1920 in Leicester, England, Ridgway Machines has built a global reputation for designing and manufacturing some of the most advanced winding, taping, and wrapping machines and manufacturing lines ever produced.
From our heritage of craftsmanship to our culture of innovation, we engineer solutions that deliver precision, reliability and performance where it matters most.

What began as a foundation in precision mechanical engineering has evolved into the global benchmark for engineering excellence.

For decades, our equipment has been trusted by industrial companies worldwide to eliminate risk and deliver absolute repeatability across high-value engineering assets. We don't just build machinery; we secure the mechanical integrity of the world's most critical infrastructure.







OUR MISSION AND AMBITION

Supplying solutions for the world's most demanding winding, taping and insulation applications.



OUR MISSION

To combine a century of engineering expertise with continuous innovation, delivering manufacturing systems that solve our customers' most complex challenges.

OUR AMBITION

To be the world's most trusted partner for advanced winding, taping and insulation technologies, enabling the future of electrification, superconductivity and fusion energy.

OUR RTP CAPABILITIES

RTP Tape Wrapping Systems

Precision tape wrapping solutions for efficient RTP production.

Composite Pipe Reinforcement

Advanced systems for high-strength pipe reinforcement.

Multi-Layer Tape Application

Consistent application of multiple reinforcement layers.

Precision Tension Control

Accurate tape tension and positioning for consistent quality.

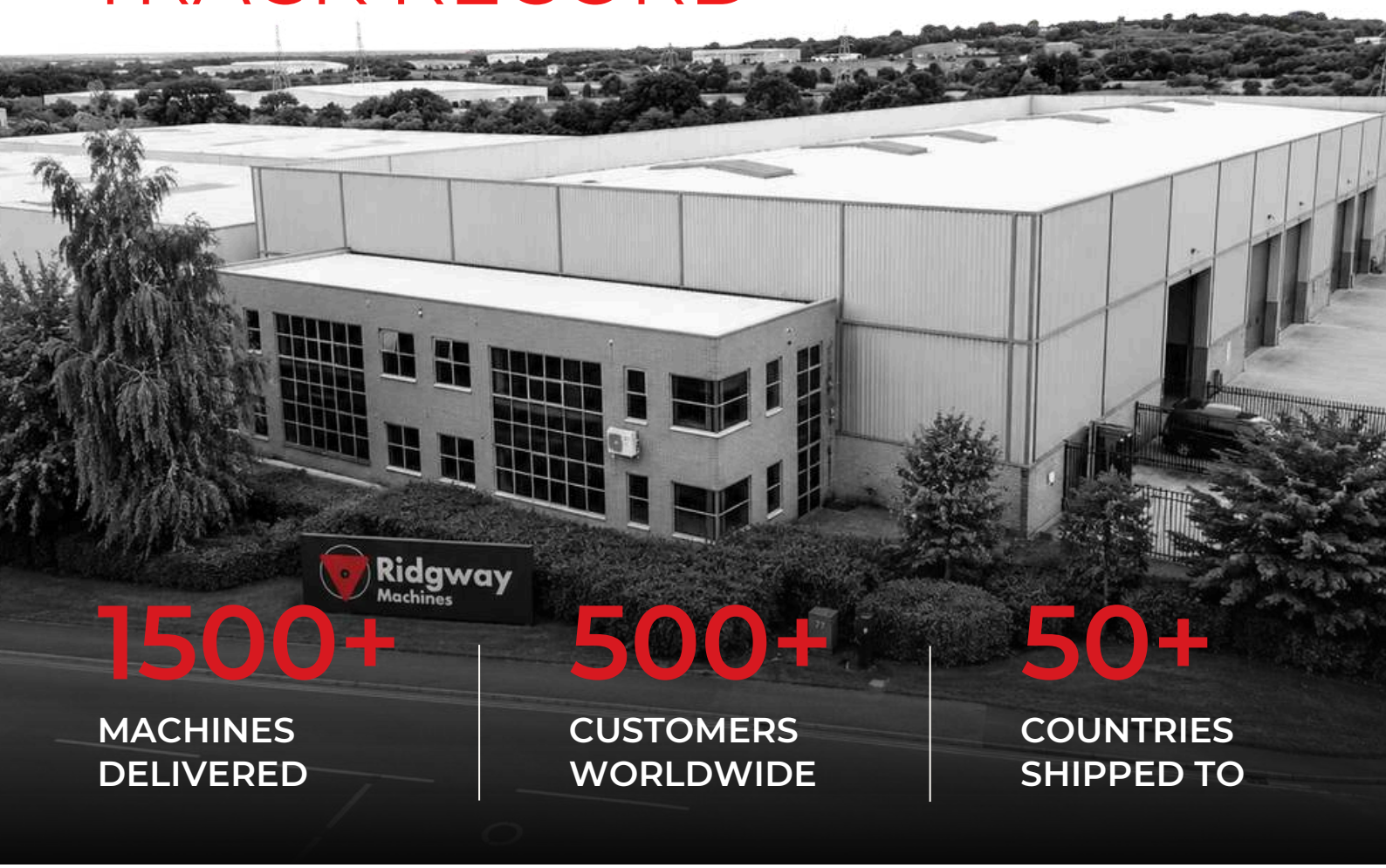
RTP Production Line Integration

Integrated wrapping, bonding , and processing solutions.

Custom RTP Machinery

Bespoke machinery tailored to specific production requirements.

OUR TRACK RECORD



1500+
MACHINES DELIVERED

500+
CUSTOMERS WORLDWIDE

50+
COUNTRIES SHIPPED TO

GLOBAL PRESENCE



Over 80% of the machines we build are exported worldwide.
Our machines operate in countries across the globe.

PARTNERS

MARKETS WE SERVE

OIL & GAS INDUSTRY



Our advanced RTP and TCP manufacturing equipment delivers precise tape application for high-performance composite pipelines used in demanding energy infrastructure, providing lightweight, corrosion-resistant alternatives for oil, gas and industrial applications.

OFFSHORE INDUSTRY



Our specialised winding and taping machinery supports the manufacture of subsea umbilicals and power cables designed for offshore energy, deep-water installations and harsh marine environments where long-term reliability is essential.

FUSION ENERGY



We develop next-generation machinery for superconducting magnets and conductors, supporting the commercialisation of fusion power through accurate, scalable manufacturing solutions.

AVIATION AND AEROSPACE



We manufacture precision machinery for advanced lightweight conductors, insulation systems and superconducting technologies that contribute to the next generation of electric aviation, aerospace and high-performance propulsion systems.

ADVANCED MANUFACTURING



Every Ridgway machine is engineered for precision, automation, and repeatability, helping manufacturers increase production efficiency while maintaining the highest standards of quality across complex winding, taping, and coil manufacturing processes.

POWER & GRID INDUSTRY



From transformers and generators to high-voltage cables and advanced conductors, our winding and taping systems help manufacturers improve precision, efficiency, and product quality across modern electrical infrastructure.

AI INFRASTRUCTURE



The rapid growth of AI demands higher-capacity electrical networks. Ridgway supports this transition by enabling the manufacture of advanced HTS cables and conductors that improve power transmission efficiency for next-generation data centre infrastructure.

MEDTECH INDUSTRY



Our precision manufacturing technologies enable advanced MRI magnet production and high-performance medical components, helping healthcare innovators deliver more accurate diagnostics, greater reliability and improved patient outcomes.

RESEARCH & DEVELOPMENT



We collaborate with research organisations, universities and technology leaders to develop bespoke machinery that accelerates innovation in superconductors, electrical systems and future energy technologies.

RTP TAPING LINES

Ridgway supply reinforcement taping lines for bonded and unbonded RTP / TCP pipes for use in the Oil, Gas, Hydrogen and Carbon Capture industries. Liner pipe is pulled from a large drum by caterpillars. Tapes are wound around the pipes and then the reinforced pipe is wound onto another large drum. Bonding ovens can be supplied to fully bond the tape layers to each other and the liner pipe.









Control systems enable the production line to be operated from a single point. ‘Recipes’ can be created, saved and loaded to enable rapid changeover from one pipe size/type to another.

Quality assurance systems include active tape gap measurement and control, precise tape tension control and data capture.

Camera systems enable viewing of the pipe being unwound, tapes being applied, heating systems and pipe winding.

TAPE HEAD ROTATION SPEED	Up to 25 rpm
TAPE PAD DIAMETER	1200mm maximum
TAPE PAD WIDTH	70mm to 210mm
TAPE PAD BORE	152mm
TAPE PAD QUANTITY	2 or 4
TAPE MATERIALS	Polymer with glass, aramid or carbon fibre reinforcement

CATERPILLARS, HEATING UNITS & DRUM STANDS



CATERPILLARS

Self-centring to accommodate a range of pipe diameters, the caterpillars pull the pipe through the line at a controlled speed. This provides a speed signal for synchronised tape application.

BONDING OVENS

Supplied complete with precision temperature control systems to bond the tapes to the liner pipe and each other.



DRUM STANDS

Large drum stands (up to 5.5m diameter capacity) are required at each end of the line for the spooling and unwinding applications.

UMBILICAL'S



This umbilical taping machine is designed to apply an array of plastic based tapes to umbilicals. As the umbilical passes through the machine, the rotating tape head produces spiral wraps onto the umbilical. The machine is fitted on rails to allow for tape package changes without the need to stop the production line.

TAPE PAD DIAMETER	Up to 600mm
TAPE PAD WIDTH	50mm to 80mm
TAPE PAD MAX WEIGHT	35kg
TAPE PAD BORE	76mm or 152mm
TAPE PAD QUANTITY	1, 2, 3 or 4
ROTATING SPEED	0 to 50rpm max



WHY CHOOSE RIDGWAY?

For over a century, Ridgway has partnered with industry leaders to deliver precision winding, taping and automation solutions that power the world's most demanding applications. Every system is engineered to maximise performance, reliability and long-term value.

HIGH PRECISION

Engineered for exceptional accuracy, repeatability and consistent quality in every application.

FLEXIBLE & MODULAR

Solutions built around your needs; from standalone machines to complete lines.

RELIABLE & PROVEN

More than 100 years of engineering excellence and innovation in mission-critical industries.

GLOBAL SUPPORT

Expert service and support, wherever you operate in the world.

BESPOKE SOLUTIONS FOR UNIQUE CHALLENGES

TURNKEY SYSTEMS

TRUSTED BY INDUSTRY LEADERS

ENGINEERED AROUND YOUR PROCESS

1 CONSULT

We understand your production challenges, goals and technical requirements.

2 DESIGN

Our engineers develop bespoke solutions tailored to your application.

3 BUILD

Manufactured in the UK to the highest standards of quality, precision and reliability.

4 SUPPORT

Installation, training and lifetime technical support to keep your operations moving.



BUILDING THE TECHNOLOGIES OF TOMORROW

From fusion energy and superconductors to advanced electrical and AI infrastructure, we are committed to develop precision manufacturing systems that enable the world's most innovative industries to evolve, decarbonise and create a sustainable future.

PEOPLE OF RIDGWAY



Mike Allen
Managing Director



Jack Witherington
Technical Director



Tony Hart
Operations Director



Andy Clarke
Sales and Marketing Director



Rupinder Bassi
Financial Controller



Richard Glanville
Sales Manager



Victoria Lewis
Production Manager



Gareth Jenkins
Engineering Manager



Sanjay Mistry
Quality Manager

We Industrialise What Others Prototype



Ridgway Machines

More Solutions



Wire & Cable Taping Machinery



Superconductor Cable & Coil Machinery



Coil Taping Machinery



Coil Manufacturing Machinery



Iris Guides

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