

Efficient, affordable automation technology.

Our new range of multi-spindle machines are available with four to twelve spindles, depending on the production volume required.

The machines are provided with an industrial PC and advanced multi-axis motion control card for fast simultaneous axis movement and high precision during the winding process.

Powerful AC servo motors operate the X,Y, and Z axes, and the spindles can be driven at speeds of up to 18,000 rpm.

Wires are terminated by wrapping either radial or axial pins, and the wire nozzle movement is programmable through 0° and 90° angles.

The package includes a video camera that provides a close-up view of the machine movements, together with a teach-in mode for fast and efficient programming.

Optional accessories include pneumatic wire cutters for larger wire sizes, and a skeining unit that can twist multiple strands of fine wire together to reinforce the wire in the termination section.

For maximum efficiency, an optional unload bar and safety screen can be fitted to allow an operator to load a fresh set of empty bobbins while the machine is winding.



CWIEME 2013 tickets available now at www.coilwindingmachines.eu



IWM are gearing up for the biggest and busiest coil winding show of the year, with live demonstrations of new products and exciting new concepts to improve the efficiency of your winding operation.

Don't forget to call in and see us — you'll find us upstairs in Hall 1.2, stand number 1123.



Ingrid West Machinery Ltd, Unit 5L, Delta Drive, Tewkesbury, Glos, GL20 8HB

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Fully automatic air coil machines

IWM "AutoAir" - an economic production tool for air coils using thermo-plastic coated wire

Wire is wound onto the former, and the turns are bonded together by means of a controlled stream of hot air. The former is then removed and the finished coil is ejected from the machine. The machine is equipped with a CNC controller, clamp/cut unit, coil eject and tool cleaning system for fully automatic operation.

Suitable products include: RFID coils. laser heads, voice coils, magnet coils, sensor coils, vibrator coils and pancake motor coils.

Main features:

- Automatic clamp/cut system, layer winding, material unloading and cleaning of the tool during each cycle, dispensing oil release agent if required.
- Fine programmable pitch control enabling precise layer winding.
- LCD screen for easy setup, with options for PC link.
- Wire tensioner with magnetic braking provides constant tension.
- Synchronous tailstock drive ensures precise tool alignment and allows for smaller core ID's.
- Temperature of the hot air system is freely programmable.
- A highly compact machine with small "footprint".





See the live demo CWIEME Hall 1.2 Stand 1123

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New! - the "Dual Servo" wire tensioner



The microprocessor-controlled CWF2000 offers **unrivalled levels of precision** for control and monitoring of wire tension.

This unique device is provided with two servo drives. The first drive is used to remove wire from the supply spool, the second to apply the braking force to the wire.

This method enables the unit to compensate for undesirable frictions in the wire feed system, and provides a perfectly constant tension at the workpiece at all times. The device can used to reduce **wire stretch** and **wire breakage**, especially when

working with fine wires.

Maximised winding speeds and acceleration improve production output, ensuring a

- Simple integration into automated winding systems
- An ideal "retro fit" to upgrade existing machines
- · Optional control unit (right) can control up to 100 devices
- Controls wire stretch and therefore DC resistance
- · Measures length of wire used

quick return on the capital investment.

- · Full statistics capture for quality control and process monitoring
- LCD display is easily readable—even in poor light
- Ergonomic keys for quick and easy setting

See the live demo CWIEME Hall 1.2 Stand 1123

Working with local partners throughout Europe
Austria, Czech Republic, Germany, Hungary, Poland, Portugal,
Romania, Slovakia, Slovenia, Spain, Sweden

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The new E-1200 "Servotech"

The 2013 model E-1200 "Servotech" sets new standards in power, control and energy efficiency in winding

machines for large power distribution transformers.



Two-speed gearbox with **electronic gear change** — provides maximum versatility for fast winding at high speed, whilst smoothly delivering the necessary torque at lower speeds.

Colour touch screen—for fast and simple setup, dust proof for reliability. The **powerful computer** provides the user with a choice of up to 5 different operating languages. The logically arranged programming screens clearly display every function that the operator might need.





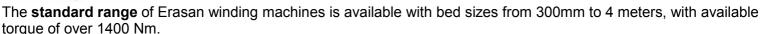
See the live demo

Our range of large wire tensioning systems (right) reduce the possibility of damage to the



insulation by applying the braking force to the supply spool rather than the wire itself — essential when working with large wires under high tension. Small units are available for mounting single spools, and larger versions can mount up to thirty two spools to assemble more complex wire "packets".

Expanding mandrels (left) are available for all types of foil and strip, including copper and aluminum. Custom built to our own designs, these are optimised for speed and ease of operation in the workplace.



We are happy to build **special machines** according to our customers' specifications and requirements.



Foil Winding Machines

Computer controlled foil winding machines for Low Voltage applications.

A full colour touch screen with graphical user interface and sophisticated "teach-in" functions provide easy programming of automated work cycles for maximum output and productivity.

Foil tension is provided by powerful geared servo motor systems, monitored and synchronised by the advanced industrial PC-based control system.

Electronic sensors detect the position of the foil and paper edges, feeding a continuous stream of data to the control computer to ensure precise alignment throughout the winding process.

Design flexibility provides for various combinations of conductors, interleaved insulation and edge fillers, together with a choice of cold pressure or TIG welding of terminals.



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Bench-top coil winding machines — Manufacturing with low capital cost

IWM are the exclusive European partner of Wey Hwang. We've been working together for over 14 years, and this close co-operation between our two companies has produced many improvements in design and quality of our bench top winding solutions.

With improving market conditions come new challenges. Many businesses find that they require increased manufacturing flexibility - the ability to respond to changes in demand quickly, and to exploit new opportunities when they arise.

IWM's range of semi-automatic bench-top machines provide manufacturers with an entry route into new and developing markets with a capital expenditure that is often less than the cost of tooling and setup for an automatic machine.

We keep most popular machines in stock in our UK warehouse ready for immediate despatch, and we can assist with design and manufacture of tooling. IWM even supply machines fully tooled and programmed - "ready to wind", straight out of the box.

So next time you have a new product to manufacture, consider using one of our cost-efficient bench-top solutions to reduce your time to market and stay one step in front of your competitors.

| Model | 764 | 800i | 751 | 752 |
|-------------------------|----------------------------------|---|--|-----------------|
| | | | | |
| No. Spindles | 4 | 1 or 2 | 1 | 2 |
| Max Wire size (mm) | 0.6 | 0.6 | 3.0 | 1.6 |
| Max pitch (mm) | 10 | 10 | 20 | 10 |
| Max winding width (mm) | 100 | 110 | 300 | 110 |
| Max bobbin dia. (mm) | 100 | 110 | 200 | 110 |
| Max speed (rpm) | 6000 | 6000 / 3000 / 1600 (choice on order) | 1600 / 400 (belt changeover) 3000 (optional single ratio) | 3000 |
| Power | AC 230 / 110 V ± 10%, 50 – 60 Hz | | | |
| Dimensions (mm) | 1000 x 500 x 1000 | 760 x 680 x 720 | 950 x 520 x 600 | 600 x 480 x 900 |
| Net weight approx (kgs) | 60 | 37 | 68 | 55 |

Ingrid West Machinery offer a sampling service. Send us a bobbin and wire, and we can wind it, establish accurate cycle times, and then return the wound sample to you for your evaluation of winding quality.

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