



Unit 5L, Delta Drive, Tewkesbury, Glos. GL20 8HB. United Kingdom.

Range of Expandable Mandrels - ROUND STYLE For Heavy Duty Winding Machines

Customers often need to wind foil or wire onto a mandrel which can be expanded during the winding process and then collapsed to allow the finished coil to be removed. Iron cores or laminations can then be inserted later in the production process.

Shown below are some examples of the previous designs we have made.



As can be seen in the photos, the expanding mandrel are finished with aluminium bars and wood mounted on the outer diameter. Each mandrel has a built in gearbox which is driven by a pneumatic hand tool, which expands the mandrel for winding and then collapses it for easy removal of the coil at the end of the winding process. Larger versions can be provided with an expanding and contracting mechanism that is powered by hydraulics.

TYPICAL TECHNICAL CHARACTERISTICS.

Diameter		Length
Min	Max.	
140	200	1100
250	425	1800
400	650	1800
500	820	2000
820	1300	2000

However, please do note that this is only a representative range, and nearly 90% of these mandrels are made to customer order and specifications.



We aim to be much more than a machinery supplier. Our team has a vast range of winding experience and is able to offer help and advice on all aspects of coil winding, from tooling design to machine choice and set-up.

~ Coil winding solutions you can rely on ~



Working with local partners in the following countries;

Austria, Czech Republic, Germany, Hungary, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.



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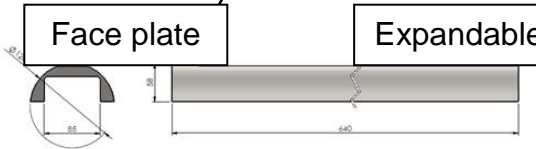
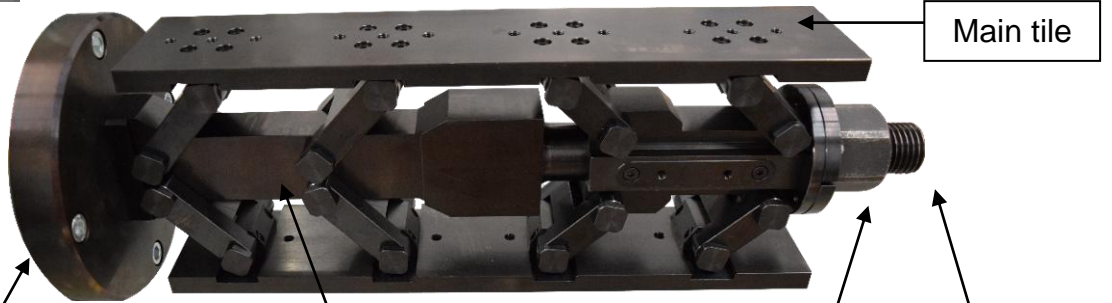
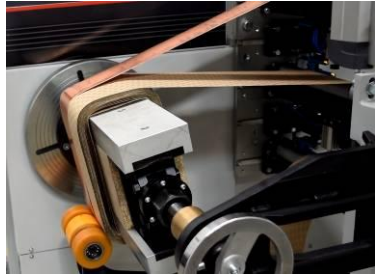
Range of Expandable Mandrels - RECTANGULAR STYLE For Heavy Duty Winding Machines

The new generation of expandable mandrels provide the possibility of winding with rectangular, circular or ovoid shape coils, without changing mandrel.

Allows winding with round & flat / profile wires as well as foil.

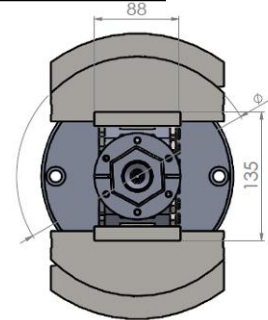
Over the main tile the customer can assemble supplements with geometries according to the application.

Simple manual opening & can be mounted in cantilever or between points.



Both the main body and tiles are made of treated steel which ensures robustness and protection against rust and corrosion.

Wide range of opening add to its' versatility.

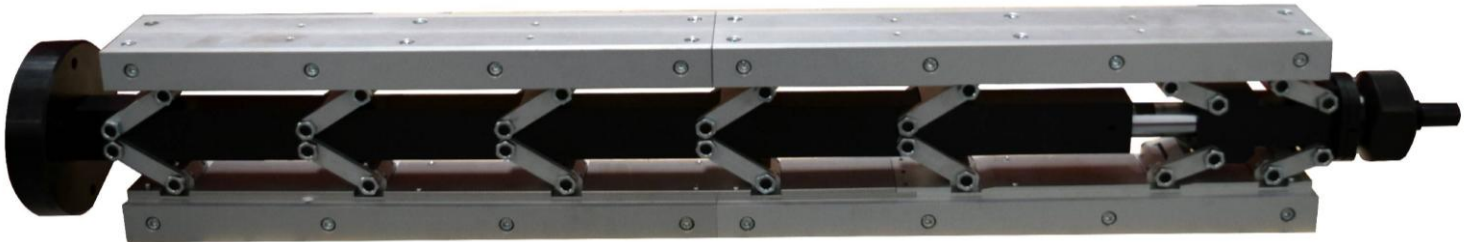
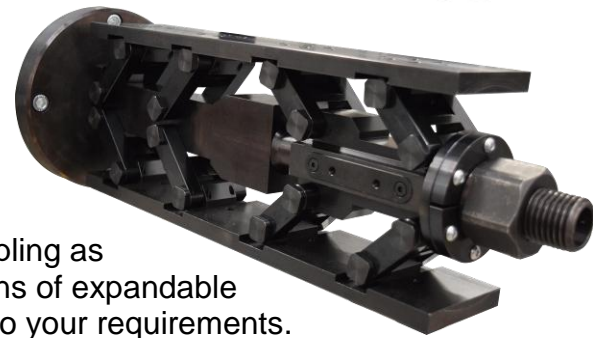


Additional supplements can be mounted on the main mandrel to allow a variety of rectangular or ovoid cores to be wound.



Strong and robust design leads to high loading capacity

Faceplate & Tailstock coupling as well as the main dimensions of expandable mandrel are configurable to your requirements.



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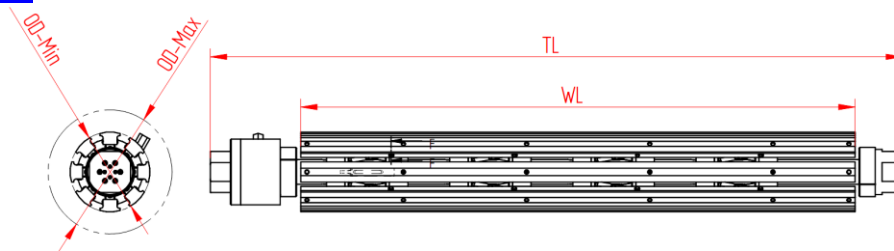
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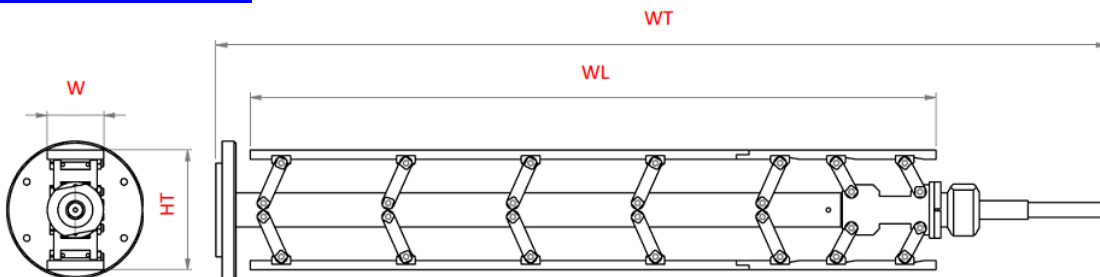
Expandable Mandrels - ENQUIRY FORM

Round Mandrels: -Please tell us your requirements; to formalise an offer we require the following information.



Item	Units	Mandrel 1 Value	Mandrel 2 Value	Mandrel 3 Value
Winding Length - WL	(mm)			
Total Length (distance between centres) - TL	(mm)			
OD Min	(mm)			
OD Max	(mm)			
No bars / arms	(No.)			
Max finished coil Weight (loading)	(KG)			
Qty required				

Rectangular Mandrels



Item	Units	Mandrel 1 Value	Mandrel 2 Value	Mandrel 3 Value
Winding length (WL)	mm.			
Total length (TL)	mm.			
Distance between faces-Height (HT)	mm. min110			
Width (W)	mm. min 75mm			
Weight of the coil	(ton)			
Qty required				

Finally regarding connection to your machine, we would need a drawing or photo to confirm the cost of a custom adapter... or we can just leave as round ends, depending if your machine has a standard chuck system.

For further information, the links below show typical mandrels in action.

Video showing open/close action of typical mandrel- http://www.coilwindingmachines.eu/heavy_duty_winding_machines/expanding_mandrel_video.html

Typical mandrel on a machine-http://www.coilwindingmachines.eu/heavy_duty_winding_machines/stripfoil_winding_machine_with_tig_welding_system_video.html

Video open/close action of large mandrel http://www.coilwindingmachines.eu/heavy_duty_winding_machines/expanding_mandrel_to_hold_coil_during_winding_video.html

Video rectangular mandrel - coil unloading http://www.coilwindingmachines.eu/heavy_duty_winding_machines/square_expanding_mandrel_video.html

Video rectangular mandrel - foil winding http://www.coilwindingmachines.eu/heavy_duty_winding_machines/compact_foil_winding_machine_video_tour.html

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