



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

Magnetic Tensioners.

Providing stable & consistent tension control over long periods.

Wire tension is one of the critical parameters of any coil winding process, having an influence on product characteristics, particularly DC resistance. Tensioning devices are therefore required to ensure constant wire tension throughout the winding process.

One major disadvantage of mechanical tensioning devices is that the friction materials are in contact with each other, resulting in mechanical wear. Therefore the tension may change from the set value over time.

Key advantages of Magnetic Tensioners:

These magnetic tensioners use a permanent magnet as a non-contact method of generating a variable friction on the main wheel of the tensioner, maintaining wire tension at the set value for long periods with no requirement for adjustment.



The arm position provides feedback to the system, adjusting the main friction wheel to regulate and maintain constant tension during the winding cycle.

Felt pads provide pre-tension and remove dust and other debris from the wire.

Ceramic eyelets and roller guides at each point of contact protect insulation from mechanical damage, and guide the wire.

The performance of these units is exceptional given the low cost, providing outstanding value for money.

Magnetic Tensioners with tension release

| Model Type | Min Tension (grams) | Max Tension (grams) | Min Wire Gauge (mm) | Max Wire Gauge (mm) |
|------------|---------------------|---------------------|---------------------|---------------------|
| MTCSS | 4 | 40 | 0.03 | 0.07 |
| MTCS | 7 | 100 | 0.04 | 0.14 |
| MTCM | 15 | 500 | 0.06 | 0.25 |
| MTCL | 50 | 750 | 0.10 | 0.40 |

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.



www.coilwindingmachines.eu

Tel: +44(0)1684 273164 Fax: +44(0)1684 273171 Email: enquiry@ingridwest.co.uk by Ingrid West Machinery Ltd

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

Providing stable & consistent tension control over long periods.

Wire tension is one of the critical parameters of any coil winding process, having an influence on product characteristics, particularly DC resistance. Tensioning devices are therefore required to ensure constant wire tension throughout the winding process.

One major disadvantage of mechanical tensioning devices is that the friction materials are in contact with each other, resulting in mechanical wear. Therefore the tension may change from the set value over time.

Key advantages of Magnetic Tensioners:

These magnetic tensioners use a permanent magnet as a non-contact method of generating a variable friction on the main wheel of the tensioner, maintaining wire tension at the set value for long periods with no requirement for adjustment.

The arm position provides feedback to the system, adjusting the main friction wheel to regulate and maintain constant tension during the winding cycle.

Felt pads provide pre-tension and remove dust and other debris from the wire.

Ceramic eyelets and roller guides at each point of contact protect insulation from mechanical damage, and guide the wire.

The models shown here have a pneumatic cylinder (controllable from the winding machine) for tension release as required during pin wrapping operations.



| Model Type | Min Tension (grams) | Max Tension (grams) | Min Wire Gauge (mm) | Max Wire Gauge (mm) |
|------------|---------------------|---------------------|---------------------|---------------------|
| MTASS | 4 | 40 | 0.03 | 0.07 |
| MTAS | 7 | 120 | 0.04 | 0.14 |
| MTAM | 15 | 430 | 0.06 | 0.25 |
| MTAL | 50 | 750 | 0.10 | 0.40 |

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.