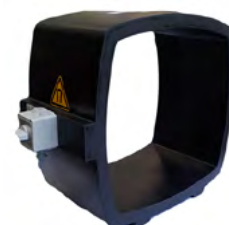


# ETT Series

## Tabletop Demagnetisation Tunnels

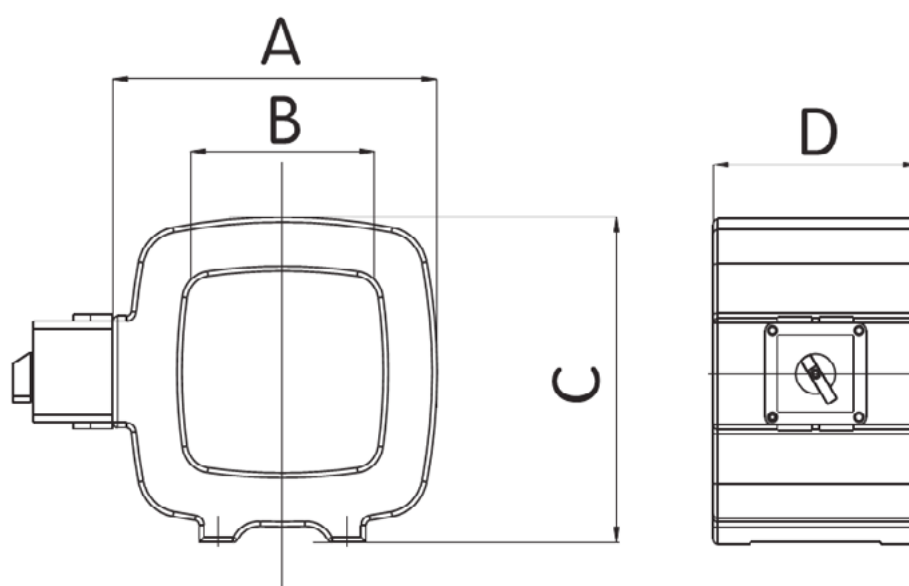
The demagnetisation tunnels of the ETT series are designed for tabletop use. The spool current is activated by an ON/OFF switch. The saturation depth of the 50 Hz alternating field is approx. 2mm. The ETT series conforms to IEC Protection Class II (double insulated).



### PRODUCT PROPERTIES AND PART NUMBERS

#### STANDARD MODEL

		ETT 150	ETT 250	ETT 350	ETT 450	ETT 550
<b>Part number</b>		101150	101250	101350	101450	101550
<b>Field strength</b>	kA/m	11	9	8	6.5	5.4
<b>Mains connection</b>	V	230	230	230	230	230
<b>Current consumption</b>	I (A)	1.85	5.5	10	14	16.5
<b>Power consumption</b>	kVA	0.5	1.2	2.2	3.1	3.6
<b>Frequency</b>	Hz	50	50	50	50	50
<b>Measurement A</b>	mm	260	390	480	580	680
<b>Measurement B</b>	mm	150	250	350	450	550
<b>Measurement C</b>	mm	260	390	475	577	695
<b>Measurement D</b>	mm	166	173	339	330	332



# ETT Series

## REINFORCED MODEL

		ETT 150	ETT 250	ETT 350	ETT 450	ETT 550
<b>Part number</b>		101155	101255	101355	101455	101555
<b>Field strength</b>	kA/m	13.5	10	10	8	6.2
<b>Mains connection</b>	V	400	400	400	400	400
<b>Current consumption</b>	I (A)	1.6	4.4	8.5	11	12
<b>Power consumption</b>	kVA	0.7	1.8	3.4	4.5	4.7
<b>Frequency</b>	Hz	50	50	50	50	50
<b>Measurement A</b>	mm	260	390	480	580	680
<b>Measurement B</b>	mm	150	250	350	450	550
<b>Measurement C</b>	mm	260	390	475	577	695
<b>Measurement D</b>	mm	166	173	339	330	332

Demagnetisation is an important component of electromagnetic crack testing. Residual magnetism in test samples is an issue for many users and the industry demands increasingly better demagnetisation values.

Where workpieces are subjected to a magnetic field due to a magnetisation process - as part of a testing method, processing, or from magnetic lifting equipment - a residual magnetic field will remain in the component after the field-generating source has been disabled (remanence), which must be neutralised. Eliminating this magnetic residue will help avoid negative effects during later processing or when using the workpieces.

The demagnetisation of AC-supplied spools that have a frequency of 50 Hz, occurs by way of the slow retraction of the test object from the field-filled space of the demagnetisation spool, in direction of the spool axis.

At the start of demagnetisation, the field strength must be at least equal to the field strength of the magnetisation. Similarly, the entire area for demagnetisation must be captured. While a field saturation depth of approx. 2mm can be expected in magnetic particle testing with alternating magnetic field, for components that were manipulated with lifting equipment, the entire cross section of the test object must be covered. In the latter case, demagnetisation is achieved with an increased field saturation depth, whereby the field intensity is decreased with low-frequency AC or reversing DC current.

The most important basis for achieving good demagnetisation results is:

- for parts that were **AC**-magnetised: demagnetisation at 50 or 60 Hz AC or low-frequency AC.
- for parts that were **DC**-magnetised: demagnetisation with low-frequency AC only (e.g. 16 2/3 Hz).