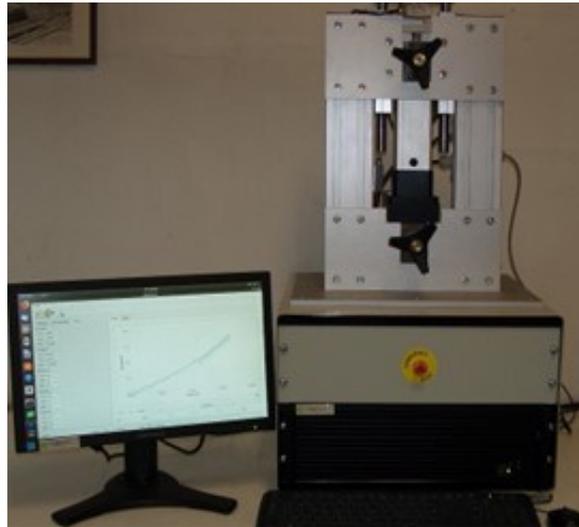# Low Stress Elongation Tester

Model LSE, LSE-PC

Model LSE

Model LSE-PC

Test procedure

To determine the wire's softness

Take three samples of enameled wire 40 cm (15") in length, handling them carefully, avoiding deformation, which will false the final test result. You must place the sample between two jaws at a distance of 26 cm (10"), a pre-load of 51.75 N/mm2. The comparator used to measure the softness must be zeroed, double the test weight (103.5 N/mm2) for a time of 30", take out the doubled weight, read on comparator the Dall value, then calculate the low-stress elongation value with the following formula:

$$L.S.E = \frac{D\ all}{10''} \times 100$$

Calculate then the average of three measurements.

A high LSE value indicates that the wire has greater formability and is better able to absorb bends and twists during motor and coil winding operation. A low LSE value (with reference to the same wire diameter) indicates a harder wire with more springiness.

System description

Model LSE

- Suitable for wire diameter ranging from 0.10 to 2.50 mm (38–10 AWG). (Other range upon request)
- Meets ASTM D-1676 requirements
- High accuracy load cell and measurement repeatability
- Very slow translation speed with high-precision ball-bearing screw
- User-friendly also for unskilled personnel; it doesn't need pre-load and load weights, and you do not need to conduct complicated calculations for their value
- Keypad input and LCD display.

Model LSE-PC

- Suitable for wire diameter ranging from 0.10 to 2.50 mm (38–10 AWG) (Other range upon request)
- Meets ASTM D-1676 requirements
- High accuracy load cell and measurement repeatability
- Very slow translation speed with high precision ball bearing screw
- Computerised version, which shows the graphical representation of low-stress elongation
- Network capability
- User-friendly also for unskilled personnel; it doesn't need pre-load and load weights, and you do not need to conduct complicated calculations for their value
- You can print all results included the calculation of minimum, maximum, average, and standard deviation values
- Easy calibration procedure

Specifications

Model	LSE	LSE-PC
LSE, LSE-PC		
Dimensions		
Dimensions (WxDxH)	550x500x620 mm	550x500x620 mm
Weight	25 kg / 55 lb	27 kg / 59.4 lb
Power supply		
Volt	230V	230V
Hertz	50/60Hz 1 phase	50/60Hz 1 phase
Volt-amperes	100VA	150VA
Standards		
ASTM	D1676-99	D1676-99

Data sheet LSE_LSE-PC V02.00.00
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DSE Test Solutions A/S
Sverigesvej 19
DK-8700 Horsens
Denmark

+45 7561 8811
www.dsetestsolutions.com
dse@dse.dk