
sdata Documentation

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CONTENTS:

1	Tension test	3
1.1	References	3
2	Indices and tables	5

sdata.git

TENSION TEST

important Attributes for a tension test [ISO 6892-1:2016(E)]

- a_o [mm] ... original thickness of a flat test piece or wall thickness of a tube
- b_o [mm] ... original width of the parallel length of a flat test piece or average width of the longitudinal strip taken from a tube or width of flat wire
- d_o [mm] ... original diameter of the parallel length of a circular test piece, or diameter of round wire or internal diameter of a tube
- D_o [mm] ... original external diameter of a tube
- L_o [mm] ... original gauge length
- S_o [mm²] ... original cross-sectional area of the parallel length
- S_u [mm²] ... minimum cross-sectional area after fracture
- A [%] ... percentage elongation after fracture
- A_g [%] ... percentage plastic extension at maximum force, F_m
- A_{gt} [%] ... percentage total extension at maximum force, F_m
- A_t [%] ... percentage total extension at fracture
- dL_m [mm] ... extension at maximum force
- dL_f [mm] ... extension at fracture
- F_m [N] ... maximum force
- $e.L_e$ [1/s] ... strain rate

1.1 References

- TechReport (DIN6892-1) ISO 6892-1:2009, Metallische Werkstoffe – Zugversuch – Teil 1: Prüfverfahren bei Raumtemperatur 2009
- TechReport (DIN6892-2) ISO 6892-2:2009, Metallische Werkstoffe – Zugversuch – Teil 2: Prüfverfahren bei erhöhter Temperatur 2009
- ISO 6892-1:2016(E)

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`