

ISO 6892-4:2015-10 (E)

Metallic materials - Tensile testing - Part 4: Method of test in liquid helium

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and designations	4
5	Principle	4
6	Apparatus	4
7	Test piece	7
7.1	General	7
7.2	Standard round bar test piece	7
7.3	Alternatives	7
7.4	Sub-size test pieces	7
7.5	Sampling	7
8	Testing conditions	8
8.1	Test piece installation	8
8.2	Cooling procedure	8
8.3	Rate of testing	8
8.3.1	Rate limit	8
8.3.2	Rate selection	8
9	Procedure	9
9.1	Determination of original cross-sectional area (S_0)	9
9.2	Marking of the original gauge length (L_0)	9
9.3	Determination of percentage elongation after fracture (A)	9
9.4	Determination of the 0,2 % proof-strength, plastic extension ($R_{p0,2}$)	9
9.5	Discontinuous yielding strength (R_i)	10
9.6	Tensile strength (R_m)	10
9.7	Reduction of area (Z)	10
10	Test report	10
11	Measurement uncertainty	10
Annex A (informative) Examples of test pieces for tensile testing in liquid helium		11
Bibliography		13