

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 245

AIRCRAFT LOCKWIRE

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BRIEF HISTORY

The ISO Recommendation R 245, *Aircraft Lockwire*, was drawn up by Technical Committee ISO/TC 20, *Aircraft*, the Secretariat of which is held by the British Standards Institution (B.S.I.).

Work on this question by the Technical Committee began in 1958 and led, in 1959, to the adoption of a Draft ISO Recommendation.

In August 1960, this Draft ISO Recommendation (No. 400) was submitted to all the ISO Member Bodies for enquiry. It was approved, subject to some editorial amendments, by the following Member Bodies:

Australia	France	Portugal
Belgium	Iran	Spain
Canada	Israel	Sweden
Chile	Italy	Turkey
Colombia	Japan	United Kingdom
Czechoslovakia	Netherlands	U.S.S.R.
Finland	New Zealand	

One Member Body opposed the approval of the Draft: Germany.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in February 1962, to accept it as an ISO RECOMMENDATION.

AIRCRAFT LOCKWIRE

1. Aircraft lockwire should be made from one of the materials listed in Table 1.

TABLE 1

Material	Condition	Finish	Tensile strength	
			kgf/mm ²	tonf/in ²
Steel	soft, heat treated	zinc coated	30 minimum	19 minimum
Brass	cold drawn or rolled and annealed	tin coated	30 minimum	19 minimum
Corrosion-resisting steel	softened by heat treatment	—	75 maximum	48 maximum

2. The dimensions of the range of lockwires and the holes for which they are suitable are given in Table 2.

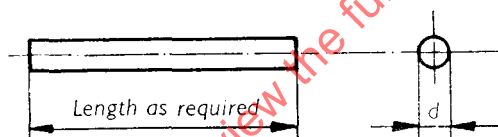


TABLE 2

Diameter of wire d		Tolerance on d		Minimum hole diameter	
mm	in	mm	in	mm	in
0.50	0.020	± 0.04	± 0.0015	0.6	0.024
0.63	0.025			0.7	0.028
0.80	0.032			0.9	0.035
1.00	0.040	± 0.05	± 0.002	1.1	0.043
1.25	0.050			1.4	0.055

3. At room temperature the finished wire should withstand, without breaking or cracking, bending through 180° and return, nine times over a mandrel of the relevant diameter quoted in Table 3.

TABLE 3

Lockwire	Diameter of mandrel
Steel	5 × wire diameter
Brass	4 × wire diameter
Corrosion-resisting steel	1 × wire diameter