

# International Standard

ISO 16650

**Bead wire** 

Fil d'acier pour tringle

Second edition 2025-08

iTeh Standards (https://standards.iteh.ai) Document Preview

<u>180 16650:2025</u>

https://standards.iteh.ai/catalog/standards/iso/f1a6f1e6-31d1-48f6-9347-8dd27bae1685/iso-16650-2025

# iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 16650:2025

https://standards.iteh.ai/catalog/standards/iso/fla6fle6-31dl-48f6-9347-8dd27bael685/iso-16650-2025



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

# ISO 16650:2025(en)

Contents Foreword			Page
			iv
1	Scor	pe	
2	•	mative references	
3		ms and definitions	
<b>4 5</b>	Classification		
		ignation and ordering	
	5.1 5.2	DesignationInformation to be supplied by the purchaser	
6		uirements	
6	6.1	Chemical composition of steel	
	6.2	Metallic coating	
	6.3	Cumar weight	
	6.4	Mechanical properties	
		6.4.1 General	
		6.4.2 Tensile test results	
	6.5	6.4.3 Torsion test	
	0.5	6.5.1 General	
		6.5.2 Coating thickness	
	6.6	Delivery conditions	
		6.6.1 Unit package	5
		6.6.2 Welds	
		6.6.3 Wire straightness	6
	(7	6.6.4 Residual torsion	
	6.7	Dimensions and tolerances	
		6.7.2 Requirements for adhesion	
_	Tr 4	•	
7 https://	71	ting and inspection	
	7.1 7.2	Programme for specific inspection	
	7.3	Test procedures	
	,,,	7.3.1 Chemical composition	
		7.3.2 Tensile test	
		7.3.3 Torsion test	
		7.3.4 Diameter and out-of-roundness	
		7.3.5 Straightness	
		7.3.6 Residual torsions	
	7.4	Retests	
0			
8 Anno		rking, labelling, packaging and shelf life	
	_	nformative) Adhesion testing	
Annex B (informative) Pulling out test clamp			
Annex C (informative) Spool			
Dibli	ogran	hv.	15

### ISO 16650:2025(en)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <a href="https://www.iso.org/patents">www.iso.org/patents</a>. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 17, *Steel wire rod and wire products*.

This second edition cancels and replaces the first edition (ISO 16650:2004), which has been technically revised.

The main changes are as follows:

- ISO 16650:2025
- the terms and definitions clause (Clause 3) has been revised;
- super tensile strength has been added in <u>Clause 4</u>;
- the table of chemical composition (former Table 1) of steel has been deleted and subsequent tables have been renumbered;
- metallic coating (6.2) has been revised;
- cumar weight (6.3) has been added;
- the mechanical properties (6.4) has been revised;
- surface quality (<u>6.5</u>) has been revised;
- delivery conditions (6.6) has been revised;
- torsion test (6.4.3) has been revised;
- adhesion testing (<u>Annex A</u>) has been revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.