

# FINAL DRAFT International Standard

## **ISO/FDIS 18953**

Steel structures — Structural bolting — Test methods to determine loss of pretension from faying surface coatings

Structures en acier — Boulonnerie de construction métallique — Méthodes d'essai pour déterminer la perte de précontrainte due aux revêtements de surface

ISO/TC 167

Secretariat: SN

Voting begins on: **2025-09-09** 

Voting terminates on: 2025-11-04

ISO/FDIS 18953

https://standards.iteh.ai/catalog/standards/iso/4c1573c2-b00d-48df-9c3a-a9a50ccca515/iso-fdis-18953

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

### ISO/FDIS 18953:2025(en)

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

#### ISO/FDIS 18953

https://standards.iteh.ai/catalog/standards/iso/4c1573c2-b00d-48df-9c3a-a9a50ccca515/iso-fdis-18953



## **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/FDIS 18953:2025(en)

Contents  Foreword  Introduction							
				1	Scor	De	1
				2	•	mative references	
3		ns and definitions					
4		eral					
	4.1	Principles					
	4.2	Significant variables					
	4.3	Pretension loss over time					
5	Test	equipment and preparation	3				
	5.1	Test instrumentation					
		5.1.1 General					
		5.1.2 Bolt strain gages					
	= 0	5.1.3 Donut load cell					
	5.2	Test plate preparation					
	5.3	Test execution					
	5.4	Data acquisition	5				
6		assemblies					
	6.1	General					
	6.2	Test A (Single-bolt test assembly)					
		6.2.1 General					
		6.2.2 Geometric configuration					
	6.3	6.2.3 Bolting requirements					
	0.3	Test B (Multiple bolt test assembly)  6.3.1 General					
		6.3.2 Geometric configuration					
		6.3.3 Bolt pretensioning					
	6.4	Test results					
	6.5	Test report.					
Anne		nformative) Bolt pretension measurements					
	•	· · · · · · · ·					
Riblic	grap	hy					