ICS 71.100.30 SLOVENSKÁ TECHNICKÁ NORMA Február 2026

STN	**Výbušniny na civilné použitie Streliviny a pohonné hmoty Časť 5: Overenie bezpečnej funkcie tuhých pohonných hmôt používaných v malých raketových motoroch**	**STN EN 13938-5 66 8102**

Explosives for civil uses - Propellants and rocket propellants - Part 5: Verification of safe functioning of solid rocket propellants used in small rocket motors

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/26

Obsahuje: EN 13938-5:2025

Oznámením tejto normy sa ruší
STN EN 13938-5 (66 8102) z decembra 2005

141721

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13938-5

October 2025

ICS 71.100.30 Supersedes EN 13938-5:2004

English Version

Explosives for civil uses - Propellants and rocket propellants - Part 5: Verification of safe functioning of solid rocket propellants used in small rocket motors

Explosifs à usage civil - Poudres propulsives et propergols pour propulseurs - Partie 5 : Vérification du fonctionnement sûr des propergols solides pour propulseurs utilisés dans les petits moteurs fusées

Explosivstoffe für zivile Zwecke - Treibladungspulver und Raketentreibstoffe - Teil 5: Bestimmung von Lunkern und Rissen

This European Standard was approved by CEN on 29 September 2025.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 13938-5:2025) has been prepared by Technical Committee CEN/TC 321 “Explosives for civil uses”, the secretariat of which is held by UNE.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13938-5:2004.

EN 13938-5:2025 includes the following significant technical changes with respect to EN 13938-5:2004:

a) the document title has been changed from “Part 5: Determination of voids and fissures” to “Part 5: Verification of safe functioning of solid rocket propellants used in small rocket motors”;

b) the Introduction has been removed and the text has been moved to Clause 4;

c) the Scope has been revised to clarify that the document contains a test method for the verification of safe functioning of solid rocket propellants used in small rocket motors and that the non-destructive test methods for the determination of voids and fissures in solid rocket propellants in Annex A are given for information;

d) the normative references have been updated;

e) the terminology entries 3.1 to 3.7 have been removed;

f) the Clause 4 “Principle” has been added;

g) the Clause 5 “Apparatus” has been added and contains the revised specifications of former Subclause 5.2;

h) the Clause 6 “Preparation of test sample” has been added and contains the revised specifications of former subclause 5.1;

i) the Clause 7 “Procedure” has been added and contains the revised specifications of former subclauses 5.3 and 5.4;

j) the Clause 8 “Expression of results” has been added;

k) the Clause “Test report” does no longer require conformity with EN ISO/IEC 17025 and the information to be provided has been revised in accordance with the revised procedure;

l) the Annex A “Non-destructive test methods for the determination of voids and fissures in solid rocket propellants” has been added and contains the specifications of the former Clause 4;

m) the Annex ZA has been updated;

n) the Bibliography has been added and lists EN ISO/IEC 17025:2017.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

A list of all parts in the EN 13938 series, published under the general title *Explosives for civil uses — Propellants and rocket propellants*, can be found on the CEN website.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies a method for the verification of safe functioning of solid rocket propellants used in small rocket motors. The test method provides for an indirect assessment of the existence of unintentional voids and fissures of solid rocket propellants that could dangerously affect the functioning of rocket motors.

This document also provides an informative list of non-destructive testing (NDT) methods for detecting voids and fissures of solid rocket propellants used in large rocket motors containing.

This document does not apply to solid gun propellants, black powder or powder cakes.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10025-5:2019, *Hot rolled products of structural steels - Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 13857-1:2025, *Explosives for civil uses — Part 1: Vocabulary*

EN 13938-1:2025, *Explosives for civil uses — Propellants and rocket propellants — Part 1: Requirements*