
Cevni sistemi iz polimernih materialov za oskrbo s plinastimi gorivi - Cevni sistemi iz nemehčanega poliamida (PA-U) z zvari in mehanskimi spoji - 5. del: Ustreznost sistema namenu (ISO 16486-5:2021)

Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 5: Fitness for purpose of the system (ISO 16486-5:2021)

Kunststoff-Rohrleitungssysteme für die Gasversorgung - Rohrleitungssysteme aus weichmacherfreiem Polyamid (PA-U) mit Schweißverbindungen und mechanischen Verbindungen - Teil 5: Gebrauchstauglichkeit des Systems (ISO 16486 5:2021)

Systèmes de canalisations en matières plastiques pour la distribution de combustibles gazeux - Systèmes de canalisations en polyamide non plastifié (PA-U) avec assemblages par soudage et assemblages mécaniques - Partie 5: Aptitude à l'emploi du système (ISO 16486-5:2021)

Ta slovenski standard je istoveten z: EN ISO 16486-5:2021

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83.140.30	Polimerne cevi in fittingi za snovi, ki niso tekočine	Plastics pipes and fittings for non fluid use

SIST EN ISO 16486-5:2021**en,fr,de**

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Plastics piping systems for the supply of gaseous fuels -
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fusion jointing and mechanical jointing - Part 5: Fitness for
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Systèmes de canalisations en matières plastiques pour
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canalisations en polyamide non plastifié (PA-U) avec
assemblages par soudage et assemblages mécaniques -
Partie 5: Aptitude à l'emploi du système (ISO 16486-
5:2021)

Kunststoff-Rohrleitungssysteme für die Gasversorgung
- Rohrleitungssysteme aus weichmacherfreiem
Polyamid (PA-U) mit Schweißverbindungen und
mechanischen Verbindungen - Teil 5:
Gebrauchstauglichkeit des Systems (ISO 16486
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European foreword

This document (EN ISO 16486-5:2021) has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" in collaboration with Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

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 November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

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16486-5Second edition
2021-05

**Plastics piping systems for the supply
of gaseous fuels — Unplasticized
polyamide (PA-U) piping systems
with fusion jointing and mechanical
jointing —****Part 5:
Fitness for purpose of the system**
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*Systèmes de canalisations en matières plastiques pour la distribution
de combustibles gazeux — Systèmes de canalisations en polyamide
non plastifié (PA-U) avec assemblages par soudage et assemblages
mécaniques —*

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Partie 5: Aptitude à l'emploi du système

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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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 4, *Plastics pipes and fittings for the supply of gaseous fuels*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16486-5:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- for transition fittings, reference is made to ISO 17885;
- new [Clause 5](#), Design Coefficient, has been added;
- [Annex A](#) refers to ISO 11414 for test piece assemblies by butt fusion and has been brought in line with ISO 12176-1 for butt fusion equipment.
- [Annex A](#) has been brought in line with ISO 21307, with a definition of PA fusion parameters for the single low-pressure and the single high-pressure butt fusion jointing procedures (the dual low-pressure procedure is not investigated for PA-U so far);
- in [Table A.2](#) for the single low-pressure butt fusion procedure, the pressure, p_1 , has been changed from $(0,3 \pm 0,1)$ MPa to $(0,3 \pm 0,05)$ MPa to raise the minimum pressure from 0,2 MPa to 0,25 MPa;
- [Annex B](#) refers to ISO 11413 for test piece assemblies by electro fusion and to ISO 12176-2 for electro fusion equipment;
- Annex C of ISO 16486-5:2012, Assessment of fitness for purpose of transition fittings, has been deleted;
- new [Annex C](#), Derating coefficients for operating temperatures, has been transferred from ISO 16486-6;

- new [Annex D](#), Rapid crack propagation (RCP) resistance of pipe at temperature less than 0 °C, has been added.

A list of all parts in the ISO 16486 series can be found on the ISO website.

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