SLOVENSKI STANDARD
SIST EN 18205:2027

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Kvalifikacija postopkov varjenja za polimerne materiale

Qualification of Welding Procedures for Plastic Materials

Qualifizierung von Schweißverfahren für Kunststoffe

Qualification des modes opératoires de soudage des matières plastiques

Sample Document

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ICS:

25.160.10	Varilni postopki in varjenje	Welding processes
83.080.01	Polimerni materiali na splošno	Plastics in general

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 18205

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ICS 25.160.10

English Version

Qualification of welding procedures for plastic materials

Qualification des modes opératoires de soudage des matières plastiques

Qualifizierung von Schweißverfahren für Kunststoffe

This European Standard was approved by CEN on 11 October 2026.

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European foreword

This document (EN 18205:2026) has been prepared by Technical Committee CEN/TC 249 “Plastics”, the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by May 2027 and conflicting national standards shall be withdrawn at the latest by May 2027.

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Introduction

This document covers the principles to be observed in the qualification testing of welding procedures for thermoplastic materials.

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1 Scope

This document specifies a procedure to qualify a preliminary welding procedure specification (pWPS) by welding procedure tests to produce a qualified welding procedure specification (WPS).

NOTE 1 The application of this document ensures that the qualification of the pWPS is carried out according to a uniform test procedure.

NOTE 2 The primary purpose of a welding procedure qualification is to demonstrate that the joining process proposed for construction is capable of producing joints having the required mechanical properties for the intended application.

This document applies to the following thermoplastic welding processes:

— hot gas welding: round nozzle, speed, wedge;

— extrusion welding;

— heated tool welding: butt, socket, wedge.

This document applies to the welding of the following products:

— sheet;

— pipe (unreinforced, solid wall only);

— fittings (unreinforced only);

— lining membrane/

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This document covers the welding of the following groups of materials:

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a) for sheets, pipes and fittings:

   — PVC (PVC-U, PVC-C);

   — PP (PP-B, PP-H, PP-R);

   — PE;

   — PVDF;

   — ECTFE, PFA and FEP;

b) for lining membranes:

   — PVC-P;

   — PE;

   — ECB;

   — PP;

c) for pipes and fittings only:

   — PA-U (PA-U 11, PA-U 12).

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