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Third edition
2017-12

Plastics pipes and fittings — Butt fusion jointing procedures for polyethylene (PE) piping systems

Tubes et raccords en matières plastiques — Modes opératoires d'assemblage par soudage bout à bout de tubes et raccords en polyéthylène (PE)



Reference number
ISO 21307:2017(E)

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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.

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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*.

This third edition cancels and replaces the second edition (ISO 21307:2011), which has been technically revised.

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

- Added calculation of gauge pressure in 4.7;
- Included normative non-destructive joint integrity testing (visual examination with requirements) in 6.3;
- Updated process parameters in Tables 1, 2, A.1, B.1 and C.1.

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Introduction

With the increasing use of polyethylene (PE) pipes of larger diameters and wall thicknesses there is a need for this document which provides details on three butt fusion procedures. This document is developed for the benefit of countries without a national standard or technical specification for butt fusion procedures of PE pipes. High quality butt fusion welds can be obtained with all three butt fusion procedures mentioned in this document. The choice for one of these three procedures can depend on experience, on the practical trials of the three butt fusion procedures and on availability of equipment.