

ISO 16486-6:2023-10 (E)

Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 6: Code of practice for design, handling and installation

Contents	Page
Foreword.....	v
Introduction.....	vii
1 Scope.....	1
2 Normative references.....	1
3 Terms, definitions and abbreviated terms.....	2
3.1 Terms and definitions.....	2
3.2 Symbols and abbreviated terms.....	3
4 Design.....	4
4.1 General and regional requirements.....	4
4.1.1 General.....	4
4.1.2 Regional requirements.....	4
4.2 Materials, components and jointing equipment.....	5
4.3 Maximum operating pressure.....	5
4.3.1 General.....	5
4.3.2 Maximum operation pressure based on long-term hydrostatic strength.....	5
4.3.3 Maximum operation pressure based on rapid crack propagation.....	5
4.4 Assembly techniques.....	6
4.5 Squeeze-off properties.....	6
5 Construction.....	7
5.1 Competence.....	7
5.2 Storage, handling and transport.....	7
5.2.1 General.....	7
5.2.2 Storage.....	7
5.2.3 Handling.....	8
5.2.4 Transport.....	9
5.3 Jointing.....	9
5.4 Laying.....	9
5.4.1 General.....	9
5.4.2 Trench.....	10
5.4.3 Drag forces.....	10
5.4.4 Valves.....	11
5.4.5 Connection to existing systems.....	11
5.4.6 Backfilling.....	11
5.4.7 Non-conventional installation.....	12
5.5 Pressure testing and commissioning.....	12
6 Quality control.....	12
6.1 General.....	12
6.2 Inspection prior to laying.....	12
6.3 Inspection during laying.....	13
6.3.1 Laying.....	13
6.3.2 Joint integrity.....	13
Annex A (normative) Butt fusion jointing procedure.....	20
Annex B (normative) Electrofusion jointing.....	25
Annex C (normative) Mechanical jointing.....	31
Annex D (informative) Squeeze-off and re-rounding.....	32

Annex E (normative) Derating coefficients for various operating temperatures35
Annex F (informative) Regional requirements for CEN member countries36
**Annex G (informative) Additional information for demonstrating the fitness of PA-U piping
systems for non-conventional installation techniques37**
Bibliography.....39