

# ISO 4437-5:2024-02 (E)

## Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 5: Fitness for purpose of the system

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
3.1	Terms related to geometry .....	2
3.2	Terms related to material .....	3
3.3	Terms related to material characteristics .....	3
3.4	Terms related to service conditions .....	4
3.5	Terms related to joints .....	4
4	Symbols and abbreviated terms .....	5
4.1	Symbols .....	5
4.2	Abbreviated terms .....	6
5	Fitness for purpose of the system .....	6
5.1	Method of preparation of assemblies for testing .....	6
5.1.1	General .....	6
5.1.2	Butt fusion joints .....	6
5.1.3	Electrofusion joints .....	7
5.1.4	Mechanical joints .....	7
5.1.5	Socket fusion joints .....	7
5.2	Requirements for fitness for purpose .....	7
5.2.1	General .....	7
5.2.2	Fitness for purpose of the system for butt fusion joints .....	7
5.2.3	Fitness for purpose of the system for electrofusion joints .....	8
5.2.4	Fitness for purpose of the system for mechanical joints .....	9
5.3	Conditioning .....	10
5.4	Requirements .....	10
5.5	Testing of pipe with coextruded layers .....	11
6	Design coefficient .....	11
Annex A (informative)	Derating coefficients for operating temperatures .....	12
Annex B (normative)	Rapid crack propagation resistance of pipe at operating temperature less than 0 °C .....	13
Bibliography .....		14