

DIN EN 10253-1:2026-10 (E)

Butt-welding pipe fittings - Part 1: Wrought carbon steel for general use and without specific inspection requirements

Contents	Page
European foreword	4
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	8
4 Symbols and abbreviations	8
5 Classification and designation	10
5.1 Classification of grades	10
5.2 Designation of steel grades	10
5.3 Designation of fittings	10
5.3.1 General	10
5.3.2 Elbows and return bends	10
5.3.3 Reducers	10
5.3.4 Tees	10
5.3.5 Caps	10
6 Information to be supplied	11
6.1 Mandatory information	11
6.2 Options	11
6.3 Examples of an order	11
6.3.1 Example 1	11
6.3.2 Example 2	11
6.3.3 Example 3	11
7 Resistance to internal pressure	12
8 Manufacturing process	12
8.1 Steelmaking process	12
8.2 Product making process for fittings and heat treatment	12
8.2.1 Product making process	12
8.2.2 Welding	13
8.2.3 Heat treatment condition	13
9 Technical requirements	13
9.1 General	13
9.2 Chemical composition	14
9.3 Mechanical properties	14
9.4 Weldability	14
10 Appearance (delivery conditions)	14
10.1 Definitions of surface imperfections	14
10.2 Appearance	15
11 Dimensions and tolerances	16
11.1 Dimensions	16

11.1.1	General	16
11.1.2	Elbows	16
11.1.3	Tees	17
11.1.4	Reducers	18
11.1.5	Caps	19
11.1.6	Diameters and wall thicknesses	20
11.2	Dimensional tolerances	20
11.2.1	Diameter	20
11.2.2	Out of roundness	21
11.2.3	Wall thickness tolerances	21
11.2.4	Tolerances on specific dimensions and form	21
11.3	Performance of the end bevelling	22
12	Inspection	23
12.1	Type of inspection	23
12.2	Inspection documents	23
12.2.1	Type of inspection documents	23
12.2.2	Content of inspection documents	23
12.3	Summary of inspection and testing	24
13	Sampling	24
13.1	Frequency of tests	24
13.2	Preparation of samples and test pieces for mechanical tests	24
14	Test methods	25
14.1	Chemical analysis	25
14.2	Tensile test on the base material at room temperature	25
14.3	Hardness test	25
14.4	Dimensional testing	25
14.5	Visual testing (VT)	25
14.6	Non-destructive testing (NDT)	26
14.6.1	Personnel	26
14.6.2	NDT of the weld	26
15	Marking	26
16	Protection and packaging	27
Annex A (normative) Dimensions		28
Bibliography		33