

ISO 7121:2016-04 (E)

Steel ball valves for general-purpose industrial applications

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Pressure/temperature ratings	3
4.1	Valve rating	3
4.2	Shell rating	3
4.3	Seat and seal rating	3
5	Design	4
5.1	Flow passageway	4
5.2	Body	5
5.2.1	Body wall thickness	5
5.2.2	Flanged ends	8
5.2.3	Butt-welding ends	8
5.2.4	Socket welding ends	8
5.2.5	Threaded ends	9
5.2.6	Body openings	9
5.2.7	Anti-static design	9
5.2.8	Anti-blow-out stem	10
5.2.9	Ball-stem construction	10
5.2.10	Ball construction	10
5.2.11	Operating means	10
5.2.12	Glands	11
5.2.13	End flange facing interruptions	11
5.2.14	Shell joints	12
5.2.15	Packing gland bolting	13
6	Materials	13
6.1	Shell	13
6.2	Shell material repair	14
6.3	Trim	14
6.4	Identification plate	14
6.5	Bolting	14
6.6	Seals	14
6.7	Threaded plugs	14
7	Marking	14
7.1	Legibility	14
7.2	Body marking	14
7.3	Ring joint marking	15
7.4	Identification plate	15
7.5	Special marking for unidirectional valves	15
8	Testing and inspection	16
8.1	Pressure tests	16

8.1.1	General	16
8.1.2	Shell test	16
8.1.3	Closure tightness test	16
8.2	Inspection	17
8.3	Examination	17
8.4	Supplementary examination	18
9	Preparation for despatch	18
Annex A (informative)	Information to be specified by the purchaser	19
Annex B (informative)	Identification of valve parts	20
Bibliography	22