

ISO 17292:2015-11 (E)

Metal ball valves for petroleum, petrochemical and allied industries

Contents		Page
Foreword		v
Introduction		vii
1	Scope	1
2	Normative references	1
3	Terms and definitions	3
4	Pressure/temperature ratings	4
4.1	Valve rating	4
4.2	Shell rating	4
4.3	Seat and seal rating	4
5	Design	5
5.1	Flow passageway	5
5.2	Body	5
5.2.1	Body wall thickness	5
5.2.2	Flanged ends	7
5.2.3	Butt-welding ends	7
5.2.4	Socket welding ends	8
5.2.5	Threaded ends	10
5.2.6	Body openings	10
5.2.7	Anti-static design	11
5.2.8	Anti-blow-out stem	11
5.2.9	Ball-stem construction	11
5.2.10	Ball construction	11
5.2.11	Operating means	11
5.2.12	Glands	12
5.2.13	End flange facing interruptions	12
5.2.14	Shell joints	13
5.2.15	Packing gland bolting	14
5.2.16	Fluid thermal expansion	14
6	Materials	15
6.1	Shell	15
6.2	Shell material repair	15
6.3	Trim	15
6.4	Identification plate	15
6.5	Bolting	15
6.6	Seals	15
6.7	Threaded plugs	15
6.8	Low temperature service	15
6.9	Hydrogen sulfide environment	15
7	Marking	16
7.1	Legibility	16
7.2	Body marking	16
7.3	Ring joint marking	16
7.4	Identification plate	16
7.5	Special marking for unidirectional valves	17

8	Testing and inspection	17
8.1	Pressure tests	17
8.1.1	General	17
8.1.2	Shell test	17
8.1.3	Closure tightness test	18
8.2	Inspection	19
8.2.1	Extent of inspection	19
8.2.2	Site inspection	19
8.3	Examination	19
8.4	Supplementary examination	19
9	Preparation for despatch	20
Annex A (informative) Information to be specified by the purchaser		21
Annex B (informative) Identification of valve parts		23
Bibliography		25