

DIN EN ISO 10434:2020-12 (E)

Bolted bonnet steel gate valves for the petroleum, petrochemical and allied industries (ISO 10434:2020)

Contents		Page
European foreword		4
Foreword		5
Introduction		6
1 Scope		7
2 Normative references		7
3 Terms and definitions		8
4 Pressure/temperature ratings		9
5 Design		10
5.1 Body wall thickness		10
5.2 Bonnet wall thickness		11
5.3 Body dimensions		12
5.3.1 Flanged ends		12
5.3.2 Butt-welding ends		13
5.3.3 Body seats		15
5.4 Bonnet dimensions		16
5.5 Bonnet-to-body joint		17
5.6 Gate		18
5.7 Yoke		19
5.8 Stem and stem nut		19
5.9 Packing and packing box		21
5.10 Bolting		22
5.11 Operation		22
5.12 Auxiliary connections		23
6 Materials		25
6.1 Materials other than trim materials		25
6.2 Trim materials		26
6.3 Welding for fabrication and repair		28
7 Testing, inspection and examination		29
7.1 Pressure tests		29
7.1.1 General		29
7.1.2 Shell test		29
7.1.3 Closure tightness test		29
7.1.4 Optional backseat tightness test		31
7.1.5 Optional closure tightness test		31
7.1.6 Fugitive emission testing		31
7.2 Inspection		32
7.2.1 Extent of inspection		32
7.2.2 Site inspection		32
7.3 Examination		32
7.4 Supplementary examination		32
8 Marking		32
8.1 Legibility		32
8.2 Body marking		33

8.2	Body marking	33
8.3	Ring joint marking	33
8.4	Identification plate marking	33
8.5	Special marking for unidirectional valves	33
9	Preparation for despatch.....	34
	Annex A (informative) Information to be specified by the purchaser	35
	Annex B (informative) Identification of valve terms.....	36
	Annex C (informative) Valve material combinations.....	38
	Bibliography	42