

GATE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :51001 PIPING CLASS : A1A, A32A, A33A, A3A, A91A, A93A, A94A, A95A, A9A, B1A, B9A, D1A, D9A			STANDARD:	
RATING : 800 STANDARD : API 602/ ISO 15761			MFGRS CAT/FIG: (For category -II MRs only)	
SIZE RANGE : 0.25" TO 1.5" ENDS : SW 3000 TO B-16.11			RATING:	ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
BONNET	BOLTED	ASTM A 105		
STEM	RISING	13% CR.STEEL (NO CASTING)		
WEDGE DISC	SOLID	STELLITED		
BODY SEAT RING	RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP.WND SS316- GRAFOIL FILLER		
SPECIAL SERVICE CONDITIONS		MAX TEMP. 427 DEG. C.		
BACK SEAT & SHOULDER	INTEGRAL			
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG.	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.

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51001

GATE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :51501 PIPING CLASS : D1A, D9A RATING : 600 STANDARD : API 600/ ISO 10434 SIZE RANGE : 2.0" TO 24.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
WEDGE DISC	FLEXIBLE/SOLID	STELLITED		
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER		13% CR STEEL		
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.

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51501

GLOBE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :52001 PIPING CLASS : A1A, A32A, A33A, A3A, A91A, A93A, A94A, A95A, A9A, B1A, B9A, D1A, D9A RATING : 800 STANDARD : BS EN ISO 15761 SIZE RANGE : 0.25" TO 1.5" ENDS : SW 3000 TO B-16.11			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
BONNET	BOLTED	ASTM A 105		
STEM	RISING	13% CR.STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE	STELLITED		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER	INTEGRAL			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) ARE ALSO ACCEPTABLE.

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52001

GLOBE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :52501 PIPING CLASS : D1A, D9A			STANDARD:	
RATING : 600 STANDARD : BS-1873			MFGRS CAT/FIG:	
SIZE RANGE : 2.0" TO 12.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING:	ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE/BALL TYP	STELLITED		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION		MAX TEMP 427 DEG C.		
BACK SEAT & SHOULDER		13% CR STEEL		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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52501

CHECK VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :53001 PIPING CLASS : A1A, A32A, A33A, A3A, A91A, A93A, A94A, A95A, A9A, B1A, B9A, D1A, D9A RATING : 800 STANDARD : BS EN ISO 15761 SIZE RANGE : 0.25" TO 1.5" ENDS : SW 3000 TO B-16.11			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
COVER	BOLTED	ASTM A 105		
DISC/PISTON		STELLITED		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED		
DISC HINGE/HINGE PIN				
COVER STUD BOLT		ASTM A193 GR B7		
COVER NUT		ASTM A194 GR 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER		
TYPE	LIFT CHECK TYPE			
OTHERS				
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.		
WASHER,NUT,PIN				
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR				

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES SHALL BE OF STANDARD BORE DESIGN.
- 5 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) IS ALSO ACCEPTABLE .

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53001

CHECK VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :53501 PIPING CLASS : D1A, D9A RATING : 600 STANDARD : BS-1868 SIZE RANGE : 2.0" TO 24.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
COVER	BOLTED	ASTM A 216 GR.WCB		
DISC		STELLITED		
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED		
DISC HINGE		13% CR STEEL/A 216 GR WCB		
HINGE PIN		13% CR STEEL(NO CASTING)		
COVER STUD BOLT		ASTM A193 GR B7		
COVER NUT		ASTM A194 GR 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER		
BY PASSES				
TYPE	SWING CHECK TYPE			
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
OTHERS				
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG. C.		
WASHER,NUT,PIN		13% CR STEEL(NO CASTING)		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR				

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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53501

BALL VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :54501 PIPING CLASS : D1A			STANDARD:	
RATING : 600 STANDARD : BS EN ISO 17292			MFGRS CAT/FIG:	
SIZE RANGE : 0.5" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGD/CAST	ASTM A 105 / A 216GR.WCB		
STEM	ANTI BLOWOUT	13% CR.STEEL/SS316; (NO CASTING)		
BALL	SOLID	13% CR.STEEL/SS304/SS316		
BODY SEAT		RPTFE WITH SECONDARY METAL TO METAL		
GLAND	BOLTED/ RETAINED BY NUT & WASHER	ASTM A105/13% CR STEEL/SS 316/SS 304		
STEM SEAL	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL/PTFE V-RINGS + GRAFOIL		
BODY SEAL		GRAFOIL/PTFE		
BODY STUD		ASTM A193 GR.B7		
BODY NUT		ASTM A194 GR 2H		
OTHERS				
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 204 DEG C.		
SPRING		INCONEL X-750		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVES CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API-6D. FOR API 6D VALVES,MIN BODY WALL THICKNESS SHALL BE PER ASME B16.34.
- ALL VALVES SHALL BE FIRE SAFE DESIGN.FIRE SAFE TEST SHALL BE AS PER (API 607 IV EDITION/ (API 607/ ISO 10497)/(BS 6755(PART II)/ BS EN ISO 10497) /API RP 6FA.
- TESTING SHALL BE AS PER BS EN 12266-1/API 6D.
- FOR TRUNNION MOUNTED BALL,BODY SEAT SHALL BE SPRING LOADED.
- ALL VALVES SHALL BE BIDIRECTIONAL.
- 10% VALVES IN EACH SIZE SHALL UNDERGO HYDROSTATIC TEST OF SEAT. SOFT SEAT SHALL BE REPLACED AFTER HYDROSTATIC TEST. AFTER THIS ALL VALVES (INCLUDING BALANCE 90%) SHALL BE AIR TESTED.
- 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.

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SHEET REV. NO.	0	1
DATE	24/10/2001	30/06/2009

54501

BUTTERFLY VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :56963 PIPING CLASS : D1A			STANDARD:	
RATING : 600 STANDARD : API-609/ BS EN 593			MFGRS CAT/FIG:	
SIZE RANGE : 3.0" TO 16.0" ENDS : WAFL TO B-16.5 WAF/125AARH			(For category -II MRs only)	
			RATING:	ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
DISC	CAST, TRIPLE OFFSET	ASTM A 216 GR.WCB/ASTM A 105/ASTM A 351 GR.CF8M/A351 GR.CF8/13% CR.STEEL		
SHAFT	ANTI STATIC.	17-4PH/A 479 XM19/13% CR.STEEL/ SS316/SS304(NO CASTING)		
DISK SEAL		RPTFE/UNS S31803(DUPLEX)+GRAPHITE/ SS316+GRAPHITE		
SHAFT BUSHING		PTFE/SS316		
BODY SCREWS/PIN		SS304/SS316		
BODY SEATS		13% CR.STEEL/SS304/SS316/STELLITED		
SHAFT SEAL		PTFE+GRAFOIL/GRAFOIL		
CLAMPING RINGS(IF REQD.)		ASTM A 515 GR.70/SS316/SS304/13% CR.STEEL		
GASKET		SP.WND SS316+GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 204 DEG.C.		
THRUST BEARING		SS316		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVE CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API 609, CATEGORY-B.
- VALVE TESTING SHALL BE AS PER BS EN 12266-1/API 598.
- VALVES SHALL BE HIGH PERFORMANCE TYPE, TIGHT SHUT-OFF AND BI-DIRECTIONAL.
- VALVE SHALL BE LUGGED WAFER TYPE(WAFL) AND VALVE ENDS TO SUIT B16.5 RF/125AARH.
- FACE-TO-FACE DIMENSIONS SHALL BE AS PER BS EN 558-2 (SERIES 20) FOR BS EN 593 VALVES AND AS PER CATEGORY-B VALVES FOR API 609 VALVES.
- VALVES SHALL BE SUITABLE FOR BOTH 'ON-OFF' AS WELL AS 'THROTTLING SERVICE' UNDER MAXIMUM DIFFERENTIAL PRESSURE FOR THE RATING.
- DISC STRENGTH TEST SHALL BE CONDUCTED AS PER CODE.
- 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.

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NOTES

- 12 BOLTINGS FOR TAPPED HOLES IN BODY, IF ANY, SHALL BE SUPPLIED BY VENDOR IN MATERIAL ASTM A 193 GR.B7/A 194 GR.2H
- 13 VALVES SHALL BE PROVIDED WITH POSITION INDICATOR AND LOCKING DEVICE AT ANY POSITION.
- 14 CROSS-SECTIONAL DETAIL OF BODY SEAT/SEAL ARRANGEMENT SHALL BE SUBMITTED ALONG WITH THE OFFER.
- 15 VENDOR SHALL SUBMIT VALVE DRAWING FOR APPROVAL.
- 16 VALVE SHALL BE CERTIFIED SUITABLE FOR THE SERVICE AND SERVICE CONDITIONS SPECIFIED IN THE DATA SHEET FOR BUTTERFLY VALVES (FORMAT NO. 3-1643-0092).
- 17 BUTTERFLY VALVES WITH SEAL RINGS BUILT INSIDE THE BODY ARE ALSO ACCEPTABLE. IN SUCH CASE THE SEAL RING MATERIAL SHALL BE SS316+GRAPHITE AND THE DISC EDGE COMING IN CONTACT WITH THE SEAL RING SHALL BE STELLITED.
- 18 ALL VALVES SHALL BE FIRE SAFE DESIGN. FIRE SAFE TEST SHALL BE AS PER API 607/(BS 6755(PART II)/ BS EN ISO 10497) /API RP 6FA, AS APPLICABLE.
- 19 BIDDER TO FURNISH DISK SEAL/SOFT BODY SEAT DETAILS AND TYPE, GRADE & CLASS SELECTED FOR RPTFE FROM ASTM D4745 WITH MANUFACTURER'S RECOMMENDATIONS LIKE PRESSURE-TEMPERATURE RATING CURVE/TABLE.
- 20 SHAFT SEAL MATERIAL(GRAFOIL) SHALL BE PROVIDED WITH CORROSION INHIBITOR.
- 21 DISK SEAL/BODY SEAL MATERIAL SHALL BE SOFTER THAN THE MATING SEAT/DISC MATERIAL RESPECTIVELY.
- 22 VALVES AS PER BS-5155 SHALL ALSO BE ACCEPTABLE WITH TESTING AS PER BS-6755 PART-I AND FACE TO FACE DIMENSIONS AS PER BS 5155 (WAFER SHORT/ WAFER MEDIUM).

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GATE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :51301 PIPING CLASS : A1A, A32A, A94A, A9A RATING : 150 STANDARD : API 600/ ISO 10434 SIZE RANGE : 2.0" TO 42.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
WEDGE DISC	SOLID/FLEXIBLE	13% CR STEEL FACING/13% CR. STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS 316		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 371 DEG.C.		
BACK SEAT & SHOULDER		13% CR STEEL		
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- GATE VALVES OF SIZE 26" AND ABOVE SHALL BE IN ACCORDANCE WITH ANSI B-16.34 WITH TESTING AS PER API 598 AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.
- 5% VALVE CASTINGS UPTO 24" AND 100% VALVE CASTINGS 26" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- FOR VALVE SIZE UPTO 24", VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.
- GATE VALVES OF SIZE 26" & ABOVE AS PER BS-1414 ARE ALSO ACCEPTABLE WITH TESTING AS PER BS 6755 (PART-I) AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.

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51301

GLOBE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :52301 PIPING CLASS : A1A, A94A, A9A			STANDARD:	
RATING : 150 STANDARD : BS-1873			MFGRS CAT/FIG:	
SIZE RANGE : 2.0" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE/BALL TYP	13% CR STEEL FACING/13% CR STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR STEEL		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/ CORRUGATED SS316		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION		MAX TEMP 371 DEG. C.		
BACK SEAT & SHOULDER		13% CR STEEL		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- TESTING SHALL BE AS PER BS EN 12266-1.
- 5% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION
- VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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52301

CHECK VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :53301 PIPING CLASS : A1A, A32A, A94A, A9A			STANDARD:	
RATING : 150 STANDARD : BS 1868			MFGRS CAT/FIG:	
SIZE RANGE : 2.0" TO 24.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
COVER	BOLTED	ASTM A 216 GR.WCB		
DISC		FACED WITH 13% CR.STEEL/13% CR.STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR STEEL		
HINGE PIN		13% CR STEEL(NO CASTING)		
DISC HINGE		13% CR STEEL/A216 GR WCB/A515 GR 70		
COVER STUD BOLT		ASTM A193 GR B7		
COVER NUT		ASTM A194 GR 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS316		
BY PASSES				
TYPE	SWING CHECK TYPE			
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
OTHERS				
SPECIAL SERVICE CONDITIONS		MAX TEMP 371 DEG. C.		
WASHER,NUT,PIN		13% CR STEEL(NO CASTING)/SS410/SS304		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR				

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- TESTING SHALL BE AS PER BS EN 12266-1.
- 5% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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53301

BALL VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :54301 PIPING CLASS : A1A, A94A, A9A RATING :150 STANDARD : BS EN ISO 17292 SIZE RANGE : 0.5" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGD/CAST	ASTM A 105 / A 216GR.WCB		
STEM	ANTI BLOWOUT	13% CR.STEEL/SS316; (NO CASTING)		
BALL	SOLID	13% CR.STEEL/SS304/SS316		
BODY SEAT		RPTFE WITH SECONDARY METAL TO METAL		
GLAND	BOLTED/ RETAINED BY NUT & WASHER	ASTM A105/13% CR STEEL/SS 316/SS 304		
STEM SEAL	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL/PTFE V-RINGS+GRAFOIL		
BODY SEAL		GRAFOIL/PTFE		
BODY STUD		ASTM A193 GR.B7		
BODY NUT		ASTM A194 GR 2H		
OTHERS				
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 204 DEG C.		
SPRING		INCONEL X-750		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVES CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API-6D. FOR API 6D VALVES,MIN BODY WALL THICKNESS SHALL BE PER ASME B16.34.
- ALL VALVES SHALL BE FIRE SAFE DESIGN.FIRE SAFE TEST SHALL BE AS PER (API 607 IV EDITION/ (API 607/ ISO 10497))/ (BS 6755(PART II)/ BS EN ISO 10497)/API RP 6FA.
- TESTING SHALL BE AS PER BS EN 12266-1/API 6D.
- FOR TRUNNION MOUNTED BALL,BODY SEAT SHALL BE SPRING LOADED.
- ALL VALVES SHALL BE BIDIRECTIONAL.
- 5 % VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.

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54301

NOTES

- 10 BIDDER'S STAMPING ON THE VALVE SPECIFICATION SHEET SHALL BE CONSTRUED TO MEAN BIDDER'S ACCEPTANCE OF SUITABILITY OF VALVE AND VALVE SHEETS FOR SERVICE AND 'SPECIAL SERVICE CONDITIONS' MENTIONED IN THE VALVE SPECIFICATION SHEETS.
- 11 STEM SEAL/BODY SEAL MATERIALS SHALL BE PROVIDED WITH CORROSION INHIBITOR.
- 12 VALVES AS PER BS-5351 AND TESTING AS PER BS 6755 (PART-1) IS ALSO ACCEPTABLE.

SHEET REV. NO.	2	3	4	5	6
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54301

PLUG VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :55301 PIPING CLASS : A1A, A94A, A9A RATING : 150 STANDARD : BS-5353 SIZE RANGE : 0.5" TO 24.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED/CAST	ASTM A 105 / A 216GR.WCB		
COVER	BOLTED	ASTM A 105/ASTM A 216 GR.WCB		
PLUG & STEM	TAPER	ASTM A 105/A 216GR.WCB, HARDENED / SS304		
GLAND	BOLTED	ASTM A 105/A216 WCB		
STEM SEAL/GLAND PACKING	RENEWABLE	GRAFOIL RINGS		
LUBRICANT SCREW	WITH CHECK VALVES	SS 410/ASTM A105		
COVER BOLTS		ASTM A 193 GR. B7		
COVER NUTS		ASTM A 194 GR. 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER		
OTHERS	LUBRICATED TYPE			
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		HYDROCARBON, MAX. TEMP 250 DEG. C.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- PLUG VALVES IN ACCORDANCE WITH API-599 / API-6D ARE ALSO ACCEPTABLE.
- FOR API 6D STD VALVE MIN. BODY WALL THICKNESS SHALL BE AS PER API 599/BS 5353.
- TESTING SHALL BE AS PER BS EN 12266-1/API 598/API 6D AS CALLED OUT IN RESPECTIVE DESIGN STANDARDS.
- FOR WRENCH OPERATED VALVES, SEPARATE WRENCH REQUIRED FOR EACH VALVE.
- VALVE POSITION INDICATOR SHALL BE PROVIDED.
- VALVES SHALL BE FIRE-SAFE DESIGN AS PER (BS 6755 PART-II/ BS EN ISO 10497) / (API 607 IV EDITION/ (API 607/ ISO 10497)/ API-6FA.
- VENDOR SHALL CONFIRM SUITABILITY OF LUBRICANT WITH RESPECT TO SERVICE AND SERVICE CONDITIONS SPECIFIED.
- BIDDER TO SUPPLY LUBRICANT FOR TWO YEARS OF NORMAL OPERATION.
- 5% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- UNLESS OTHERWISE SPECIFIED IN MR, VALVES SHALL BE SHORT PATTERN TYPE UPTO 12" AND VENTURI TYPE ABOVE 12" SIZE.
- GLAND PACKING MATERIAL SHALL BE PROVIDED WITH CORROSION INHIBITOR.

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55301

NOTES

15 FOR BS-5353 VALVES, VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

SHEET REV. NO.	3	4	5	6	7	55301
DATE	14/12/2000	14/12/2001	20/02/2002	01/03/2005	30/06/2009	

PLUG VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :55315 PIPING CLASS : A1A RATING : 150 STANDARD : SIZE RANGE : 0.5" TO 36.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED/CAST	ASTM A 105 / A 216GR.WCB		
COVER	BOLTED	ASTM A 105/ASTM A 216 GR.WCB		
PLUG & STEM	INVERTED, TAPER	ASTM A 105/A 216GR.WCB, CASE HARDENED & BONDED WITH LOW FRICTION COATING / SS304		
GLAND	BOLTED	ASTM A 105/A216 WCB		
STEM SEAL/GLAND PACKING	RENEWABLE	GRAFOIL RINGS		
LUBRICANT SCREW	WITH CHECK VALVES	SS 410/ASTM A105		
COVER BOLTS		ASTM A 193 GR. B7		
COVER NUTS		ASTM A 194 GR. 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER		
OTHERS	LUBRICATED, PRESSURE BALANCED			
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		HYDROCARBON, MAX. TEMP 250 DEG. C.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- PLUG VALVES IN ACCORDANCE WITH API-599 / API-6D ARE ALSO ACCEPTABLE. PLUG VALVES OF SIZE 26" AND ABOVE SHALL BE DESIGNED IN ACCORDANCE WITH API 6D AND FLANGED ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47B SERIES.
- FOR API 6D STD VALVE MIN. BODY WALL THICKNESS SHALL BE AS PER API 599/BS 5353. FOR PLUG VALVES OF SIZE 26" AND ABOVE, MIN. BODY WALL THICKNESS SHALL BE AS PER ASME B16.34.
- TESTING SHALL BE AS PER BS EN 12266-1/API 598/API 6D AS CALLED OUT IN RESPECTIVE DESIGN STANDARDS.
- FOR WRENCH OPERATED VALVES, SEPARATE WRENCH REQUIRED FOR EACH VALVE.
- VALVE POSITION INDICATOR SHALL BE PROVIDED.
- VALVES SHALL BE FIRE-SAFE DESIGN AS PER (BS 6755 PART-II/ BS EN ISO 10497) / (API-607, IV EDITION)/(API 607/ ISO 10497)/ API-6FA.

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55315

NOTES

- 10 VENDOR SHALL CONFIRM SUITABILITY OF LUBRICANT WITH RESPECT TO SERVICE AND SERVICE CONDITIONS SPECIFIED.
- 11 BIDDER TO SUPPLY LUBRICANT FOR TWO YEARS OF NORMAL OPERATION.
- 12 5% VALVE CASTINGS UPTO 24" AND 100% VALVE CASTINGS 26" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 13 UNLESS OTHERWISE SPECIFIED IN MR, VALVES SHALL BE SHORT PATTERN TYPE UPTO 12" AND VENTURI TYPE ABOVE 12" SIZE.
- 14 GLAND PACKING MATERIAL SHALL BE PROVIDED WITH CORROSION INHIBITOR.
- 15 FOR BS-5353 VALVES, VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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55315

GATE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. : 51401 PIPING CLASS : B1A, B9A			STANDARD:	
RATING : 300 STANDARD : API 600/ ISO 10434			MFGRS CAT/FIG:	
SIZE RANGE : 2.0" TO 24.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
WEDGE DISC	FLEXIBLE/SOLID	13% CR STEEL FACING/13% CR. STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER		13% CR STEEL		
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 10% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.

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51401

GLOBE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :52401 PIPING CLASS : B1A, B9A			STANDARD:	
RATING : 300 STANDARD : BS-1873			MFGRS CAT/FIG:	
SIZE RANGE : 2.0" TO 12.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR.STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE/BALL TYP	13% CR STEEL FACING/13% CR STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR STEEL		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER		13% CR STEEL		
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

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52401

BALL VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :54401 PIPING CLASS : B1A, B9A			STANDARD:	
RATING : 300 STANDARD : BS EN ISO 17292			MFGRS CAT/FIG:	
SIZE RANGE : 0.5" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING:	ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGD/CAST	ASTM A 105 / A 216GR.WCB		
STEM	ANTI BLOWOUT	13% CR.STEEL/SS316; (NO CASTING)		
BALL	SOLID	13% CR.STEEL/SS304/SS316		
BODY SEAT		RPTFE WITH SECONDARY METAL TO METAL		
GLAND	BOLTED/ RETAINED BY NUT & WASHER	ASTM A105/13% CR STEEL/SS 316/SS 304		
STEM SEAL	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL/PTFE V-RINGS + GRAFOIL		
BODY SEAL		GRAFOIL/PTFE		
BODY STUD		ASTM A193 GR.B7		
BODY NUT		ASTM A194 GR 2H		
OTHERS				
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 204 DEG C.		
SPRING		INCONEL X-750		
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVES CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API-6D. FOR API 6D VALVES,MIN BODY WALL THICKNESS SHALL BE PER ASME B16.34.
- ALL VALVES SHALL BE FIRE SAFE DESIGN.FIRE SAFE TEST SHALL BE AS PER (API 607 IV EDITION/ (API 607/ ISO 10497)/(BS 6755(PART II)/ BS EN ISO 10497) /API RP 6FA.
- TESTING SHALL BE AS PER BS EN 12266-1/API 6D.
- FOR TRUNNION MOUNTED BALL,BODY SEAT SHALL BE SPRING LOADED.
- ALL VALVES SHALL BE BIDIRECTIONAL.
- BIDDER'S STAMPING ON THE VALVE SPECIFICATION SHEET SHALL BE CONSTRUED TO MEAN BIDDER'S ACCEPTANCE OF SUITABILITY OF VALVE AND VALVE SHEETS FOR SERVICE AND 'SPECIAL SERVICE CONDITIONS' MENTIONED IN THE VALVE SPECIFICATION SHEETS.

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NOTES

- 10 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 11 STEM SEAL/BODY SEAL MATERIALS SHALL BE PROVIDED WITH CORROSION INHIBITOR.
- 12 VALVES AS PER BS-5351 AND TESTING AS PER BS 6755 (PART-1) IS ALSO ACCEPTABLE.

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54401

BALL VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :54445 PIPING CLASS : B1K, B21K RATING : 300 STANDARD : BS EN ISO 17292 SIZE RANGE : 0.5" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			STANDARD: MFGRS CAT/FIG: (For category -II MRs only) RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST / FORGED	ASTM A 351 GR.CF8 / ASTM A 182 GR.F304		
STEM	ANTI BLOWOUT	SS 304/SS 316; (NO CASTING)		
BALL	SOLID	SS 304/SS 316		
BODY SEAT		RPTFE WITH SECONDARY METAL TO METAL		
GLAND	BOLTED/ RETAINED BY NUT & WASHER	SS 304 / SS 316		
STEM SEAL	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL/PTFE V-RINGS + GRAFOIL		
BODY SEAL		GRAFOIL/PTFE		
BODY STUD		ASTM A 193 GR.B7		
BODY NUT		ASTM A 194 GR.2H		
OTHERS				
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF GEAR RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX. TEMP 204 DEG. C.		
SPRING		INCONEL X-750		
HYDROSTATIC TEST PRESSURE	BODY : 1100 PSIG	SEAT : 800 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVES CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API-6D. FOR API-6D VALVES, MIN BODY WALL THICKNESS SHALL BE AS PER ASME B16.34.
- ALL VALVES SHALL BE FIRE SAFE DESIGN.FIRE SAFE TEST SHALL BE AS PER (API 607 IV EDITION/ (API 607/ ISO 10497))/(BS 6755(PART II)/ BS EN ISO 10497) /API RP 6FA
- TESTING SHALL BE AS PER BS EN 12266-1/API 6D.
- FOR TRUNNION MOUNTED BALL, BODY SEAT SHALL BE SPRING LOADED.
- ALL VALVES SHALL BE BIDIRECTIONAL.
- 10% VALVES SHALL UNDERGO HYDROSTATIC TEST OF SEAT . SOFT SEAT SHALL BE REPLACED AFTER HYDROSTATIC TEST. AFTER THIS ALL VALVES (INCLUDING BALANCE 90%) SHALL BE AIR TESTED.

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NOTES

- 10 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 11 BIDDER'S STAMPING ON THE VALVE SPECIFICATION SHEET SHALL BE CONSTRUED TO MEAN BIDDER'S ACCEPTANCE OF SUITABILITY OF VALVE AND VALVE SHEETS FOR SERVICE AND 'SPECIAL SERVICE CONDITIONS' MENTIONED IN THE VALVE SPECIFICATION SHEETS.
- 12 ALL CASTINGS SHALL BE SOLUTION HEAT TREATED.
- 13 WELD REPAIRS ,IF ANY, SHALL BE CARRIED OUT BEFORE SOLUTION HEAT TREATMENT.
- 14 STEM SEAL/BODY SEAL MATERIALS SHALL BE PROVIDED WITH CORROSION INHIBITOR.
- 15 VALVES AS PER BS-5351 AND TESTING AS PER BS 6755 (PART-1) IS ALSO ACCEPTABLE.

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BALL VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :54501 PIPING CLASS : D1A			STANDARD:	
RATING : 600 STANDARD : BS EN ISO 17292			MFGRS CAT/FIG:	
SIZE RANGE : 0.5" TO 16.0" ENDS : FLGD TO B-16.5 RF/125AARH			(For category -II MRs only)	
			RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGD/CAST	ASTM A 105 / A 216GR.WCB		
STEM	ANTI BLOWOUT	13% CR.STEEL/SS316; (NO CASTING)		
BALL	SOLID	13% CR.STEEL/SS304/SS316		
BODY SEAT		RPTFE WITH SECONDARY METAL TO METAL		
GLAND	BOLTED/ RETAINED BY NUT & WASHER	ASTM A105/13% CR STEEL/SS 316/SS 304		
STEM SEAL	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL/PTFE V-RINGS + GRAFOIL		
BODY SEAL		GRAFOIL/PTFE		
BODY STUD		ASTM A193 GR.B7		
BODY NUT		ASTM A194 GR 2H		
OTHERS				
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 204 DEG C.		
SPRING		INCONEL X-750		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- ONLY IN THE CASE OF CATEGORY - II MRs,BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- VALVES CAN ALSO BE SUPPLIED IN ACCORDANCE WITH API-6D. FOR API 6D VALVES,MIN BODY WALL THICKNESS SHALL BE PER ASME B16.34.
- ALL VALVES SHALL BE FIRE SAFE DESIGN.FIRE SAFE TEST SHALL BE AS PER (API 607 IV EDITION/ (API 607/ ISO 10497)/(BS 6755(PART II)/ BS EN ISO 10497) /API RP 6FA.
- TESTING SHALL BE AS PER BS EN 12266-1/API 6D.
- FOR TRUNNION MOUNTED BALL,BODY SEAT SHALL BE SPRING LOADED.
- ALL VALVES SHALL BE BIDIRECTIONAL.
- 10% VALVES IN EACH SIZE SHALL UNDERGO HYDROSTATIC TEST OF SEAT. SOFT SEAT SHALL BE REPLACED AFTER HYDROSTATIC TEST. AFTER THIS ALL VALVES (INCLUDING BALANCE 90%) SHALL BE AIR TESTED.
- 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.

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