

SPECIFICATIONS / TERMS & CONDITIONS OF SUPPLY

The stainless steel ordinary and Bellow Sealed Globe valves of following specifications and sizes are required that conform to the chemical composition as below:

i. Miscellaneous Details:

Sr. #	Description	Specifications	Reference std.
<i>Valve Specifications</i>			
1	Type	Z type	----
2	Ends	0.06 Raised Face Flanged	Sch 40
3	Operating Temperature	150 C	----
4	Operating Pressure	10 bar	----
5	Rating	150 lb	ASME B16.34-2004 Table 2-2.3
6	Material:		
6.1	Body, Disc, Bonnet, Stem, Nuts, Bolts, Washer & Wheel Handle	F316L	ASTM A 182/A 182M - 04
6.2 (a)	Seat And Stem Packing (Globe Valves)	15% R-PTFE	----
6.2 (b)	Seat and Stem (Bellow Sealed Globe Valves)	15% R-PTFE & F316L Bellow Seal	----
7	Valve Dimensions	----	ASME B16.34-2004 Section 6
<i>Flanges and Nut/Bolts Specifications</i>			
8	Type (Counter Flanges)	Welding Neck (Butt Weld) , 0.06 Raised Face	Sch 40
9	Rating	150 lb	ASME B16.5-2009 Table 2-2.3
10	Dimensions	-----	ASME B16.5-2009

3/4

Annexure "C" (3)

ii. Bill Of Quantities:

Sr. #	Sizes	Unit	Quantity
Raised Face, SS 316 L Ordinary Globe Valves, including Counter welding neck raised face flanges and nut/bolts			
1	DN 25	No	75
2	DN 40	-	25
3	DN 50	-	25
4	DN 65	-	25
Raised Face, SS 316 L Bellow Sealed Globe Valves, including Counter welding neck raised face flanges and nut/bolts			
5	DN 15	No	50
6	DN 50	-	25

iii. Chemical Composition_F-316L:

Sr. #	Element	Composition %
1	Carbon	0.03
2	Manganese	2.00
3	Phosphorus	0.045
4	Sulfur	0.03
5	Silicon	1.00
6	Nickle	10.0-15.0
7	Chromium	16.0-18.0
8	Molybdenum	2.0-3.0

iv. Required Material Tests:

Sr. #	Description	Reference std.
1	Corrosion Testing	ASTM Standard A 262-02a Practice C
2	Pressure Testing	ASME B16.34-2004. Section 7 (Valve Testing) ASME B16.5-2009 Section 8 (Flange Testing)

v. Product Marking:

Each valve shall be marked with the section 20 of ASTM standard A 961 - 04 as:

- i. ASTM Specification no. , Grade and rating, identification no. , rating, and heat no.
- ii. Name/mark of manufacturer

vi. Finish and Appearance:

The finished parts shall conform to the dimensions and finish as specified on the order. Regarding Surface finishing, product shall conform to the requirements of ASTM standard A 961 - 04.

vii. Packaging:

Supplier should use adequate cushioning material for packaging, and packaging must be able to protect against vibration, compression or any other environmental effects that can disturb the future operation of the items.

viii. Mill Test Certificate:

Product certification must be complied with section 19 of ASTM standard A 961 - 04 and section 16 of ASTM Standard A 182/A 182M - 04. All Test reports, as mentioned against each, shall be furnished to the purchaser.

**** Prices should be quoted on C&F Karachi basis with freight charges mentioned clearly.**