



SECTION - AA



BF VALVE STANDARD

TECHNICAL REQUIREMENTS

1. MATERIAL: AUSTENITIC DUCTILE IRON CASTING TO ASTM A-439 TYPE D-2

CHEMICAL COMPOSITION		MECHANICAL PROPERTIES	
CARBON	3.00 % (MAX)	TENSILE STRENGTH (MIN)	4000 Kg/sq cm
SILICON	1.5 to 3.0 %	YIELD STRENGTH	2070 Kg/sq cm
MANGANESE	0.70 TO 1.25 %	ELONGATION IN 50mm	8.0% (MIN)
PHOSPHOROUS	0.08 % (MAX)	BRINELL HARDNESS (3000Kg)	139-272
NICKEL	18.00 TO 22.00 %		
CHROMIUM	1.75 TO 2.75 %		

2. THE DRG. SHOWS THE BODY IN FINISH M/CED CONDITION. THE DIMENSIONS SHOWN IN () ARE AS CAST DIMENSIONS.

3. THE TEST PIECES OF SUITABLE SIZES SHOULD BE CAST SEPARATELY FROM THE SAME AS THE CASTINGS THEY REPRESENT

4. ALL UNSPECIFIED RADI TO BE OF 6mm.

5.0 CASTING SHOULD BE SOUND & FREE FROM BLOW HOLES, CRACKS, HOT TEARS, COLD SHUTS ETC. FOUNDER TO NOTE THAT THE CASTING SHALL BE SUBJECTED TO HYDRAULIC PRESSURE TEST AT 10 kg/sq cm. FOR 10 MIN.

5.b QUALITY OF UN-MACHINED SURFACE : LEVEL - II OF A-987

6. TOLERANCES ON AS CAST DIMENSIONS TO BE AS PER BHFL CORP. STD. AA 0230402 CLASS-5.

7. CASTINGS SHALL BE MARKED WITH A IDENTIFICATION NO. (AT PLACE AS SHOWN) FROM WHICH IT CAN BE TRACED TO THE MELT & THE BATCH OF HEAT TREATMENT.

8. CASTING TO BE SUPPLIED IN HEAT TREATED CONDITION. TEST BARS SHALL ALSO BE HEAT TREATED ALONG WITH THE CASTINGS THEY REPRESENT.

9. M/CED SURFACES TO BE THE CASTINGS TO 100% DUT TEST AS PER BHFL CORP. STD. AA0890132, LEVEL - I.

10. PERMISSIBLE VARIATION FOR UNTOL. DIMENSIONS TO BE AS PER DRG. 3-200-00-48014.

11. COMPLETE TESTING/INSPECTION REQUIREMENTS, SHALL BE AS PER OUR ENQUIRY/P.O. SPECIFICATIONS.

12. WELD REPAIR OF CASTINGS IN ANY CASE IS NOT ALLOWED.