FLOW TECHNOLOGY LTD
TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINAL

MATERIAL TEST CERTIFICATE

ANOOP FORGINGS PVT. LTD.
(An ISO 9001: 2008 Certified Co.)
Factory:
J-56, Add. MIDC, Village- Kudawali, Tal. Murbad, Dist. Thane 421401 (India)
PH (Factory) : ++ 9423839547 / 9423839587
Fax : 91-22-2164 1741 E-mail :anoopforgings@vsnl.com / anoopforgings@sancharnet.in

CUSTOMER:	**PED 97/23/EC and AD 2000 -Merkblatt W0**	MTR NO.	26/EXP/12-13
FLOW TECHNOLOGY LTD	**Certificate No. 07 202 1423 WZ 0847/10**	DATE	26.07.2012
HALF HOUSE LANE,	**Directive 97/23/EC, Annex 1, Sect 4.3,**	MATERIAL SPECIFICATION	ASTM A182
HOVE EDGE, WEST YORKSHIRE		GRADE	F 316L
BRIGHOUSE. HD6 2PH, UK		DIMENSIONAL SPECIFICATION	As per your Drawing
		Stainless Steel Forgings - Tees & Elbows	

ORDER NO.: 005236 DT. 03.12.2011

CHEMICAL ANALYSIS

Sr. No.	Item Description	Heat No. /Lot No.	Qty	C%	Mn%	Si%	S%	P%	Ni%	Cr%	Mo%	Ti%	N2%
	STAINLESS STEEL FORGINGS - TEES & ELBOWS												
1	7/8" 90 Deg. Elbow Forging (S2322)	HS-5329/2844	508	0.024	1.650	0.400	0.014	0.043	10.060	16.730	2.060	--	0.0540
2	3/4" 90 Deg. Elbow Forging (S2386)	HS-5329/2844	1000	0.024	1.650	0.400	0.014	0.043	10.060	16.730	2.060	--	0.0540
3	1-1/16" 90 Deg. Elbow Forging(S2310)	HS-5329/2844	1028	0.024	1.650	0.400	0.014	0.043	10.060	16.730	2.060	--	0.0540
4	1-1/16" TEE Forging (S2311)	HS-54752854	483	0.022	1.800	0.390	0.024	0.044	10.060	16.780	2.050	--	0.0562

MECHANICAL PROPERTIES

Heat No. /Lot No.	Item Description	Tensile Strength (N/mm2)	Proof Stress Rp=0.2% (N/mm2)	Proof Stress Rp= 1% (N/mm2)	% Elongation %L0=5D	% Reduction Area	Test Temp Deg. C	Impact Test Charpy V-Notch (Joules) I	II	III	Avg.	Hardness BHN
HS-5329/2844	7/8" 90 Deg. Elbow Forging (S2322)	548.33	308.44	390.69	48.57	65.01	20°	146.00	184.00	162.00	164.00	153.00
HS-5329/2844	3/4" 90 Deg. Elbow Forging (S2386)	548.33	308.44	390.69	48.57	65.01	20°	146.00	184.00	162.00	164.00	153.00
HS-5329/2844	1-1/16" 90 Deg. Elbow Forging(S2310)	548.33	308.44	390.69	48.57	65.01	20°	146.00	184.00	162.00	164.00	153.00
HS-54752854	1-1/16" TEE Forging (S2311)	524.49	379.14	396.24	54.29	67.73	20°	175.00	201.00	182.00	186.00	156.00

ANOOP FORGINGS PVT. LTD. Mumbai

INSPECTORS STAMP

WORKS AUTHORISED INSPECTOR

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MELTING PROCESS	:	ELECTRIC FURNACE & REFINING THROUGH AOD
HEAT TREATMENT	:	SOLUTION ANNEALED AT 1050° C AND WATER QUENCHED
DIMENSIONS	:	CONFIRM WITH THE SPECIFICATIONS
SURFACE INSPECTION	:	SATISFACTORY
PMI	:	NO OBJECTION (100% TESTED)
INTER GRANULAR CORROSION TEST	:	PASSED IGC TEST IN ACCORDANCE WITH A262 PRACTICE E
MICRO OBSERVATION	:	NO CARBIDE PRECIPITATION OBSERVED ON THE GRAIN BOUNDARIES
RADIOACTIVITY TEST	:	ALL THE ABOVE MATERIAL ARE TESTED FOR RADIOACTIVITY AND FOUND THAT THERE IS NO RADIO ACTIVE CONTAMINATION.

WE CERTIFY THAT THE MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE ORDER/CONTRACT AND IS OF INDIAN ORIGIN.
After Solution Annealing Hardness found less than HRC 22 (237 BHN) according to "NACE MR-01.75-2002"

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