VIRAJ PROFILES LTD.

INSPECTION CERTIFICATE & MILL TEST CERTIFICATE EN 10204 -3.1

CUSTOMER :

DAMSTAHL A/S
DANMARKSVEJ 28
8680 SKANDERBORG
DENMARK

Approved acc. To AD 2000-Markblatt W0 / W2 and certified acc To PED (97/23/EC) by Certification Body for Pressure Equipment of TUV NORD System (Notified body, reg no. 0045)

STEEL MAKING ROUTE / INDUCTION MELTED / AOD/ CC

MTR NO	986955/ 5
DATE	15.03.2015
GRADE	1 4401 / 1.4404
MATERIAL SPECIFICATION	EN 10088-3 , EN 10088-5 , EN 10272 & AD 2000 W2/W10
DIMENSIONAL SPECIFICATION	DIN 1017 / EN 10058
HOT ROLLED ANNEALED & PICKLED (ID) FLAT BAR	

CHEMICAL ANALYSIS (%)

SR. NO	ITEM DESCRIPTION	ORDER NO	HEAT NO	PIECES	QTY(MT)	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Ti	Co	N
14	100 X 30 MM	516989	98160	3	0.365	0 029	1 60	0.31	0.025	0 040	16.80	10 08	2 01	0.39	0 002	0.20	0.064
15	100 X 10 MM	522.302	97323	9	0.366	0 021	1 61	0.35	0 024	0.036	16.80	10 08	2 01	0 40	0 003	0 14	0 080
16	100 X 12 MM	522.302	97966	11	0.549	0 026	1 74	0.44	0 020	0.036	16.52	10 03	2 04	0 45	0 002	0 19	0 080

MECHANICAL PROPERTIES(EN 10002-1) / IMPACT TEST (EN 10045-1)

HEAT NO	SAMPLE NUMBER	DIRECTION	TEST TEMP (Deg C)	TENSILE STRENGTH (MPa)	PROOF STRENGTH (MPa)		% ELONGATION	% REDUCTION AREA	SPECIMEN SIZE	TEST TEMP (Deg. C)	CHARPY V-NOTCH (JOULES)				HARDNESS (BHN) (EN 10003-1)
					Rp=0 2%	Rp=1.0%	Lo=4D				1	2	3	AVG	
98160	890000146612	L	RT	641 00	301 00	343 00	47 00	58.00	55 x 10 x 10	RT	130	128	132	130	190
97323	890000137468	L	RT	668 00	314 00	356.00	44 00	56 00	55 x 10 x 10	RT	130	132	128	130	198
97966	890000142171	L	RT	654 00	308.00	350 00	46.00	57 00	55 x 10 x 10	RT	130	128	126	128	194

NACE CERT	MATERIAL CONFORMS TO NACE MR0175/ISO 15156-2009 & NACE MR0103-2010
MARKING	SIZE, GRADE, HEAT NO., LOGO & INSPECTOR STAMP
HEAT TREATMENT	SOLUTION ANNEALED AT 1050°C AND WATER QUENCHED
DIMENSIONS	CONFORM TO THE SPECIFICATION
ORIENTATION/LOCATION	STRIP SAMPLE FROM 1/3rd OF FLANGE END
SURFACE INSPECTION	SATISFACTORY
PMI	NO OBJECTION(100% TESTED WITH MOBILE SPECTRO)
INTER GRANULAR CORROSION TEST	PASSED IGC TEST IN ACCORDANCE WITH DIN EN ISO 3651-2
MICRO OBSERVATION	NO CARBIDE PRECIPITATION OBSERVED ON GRAIN BOUNDARIES
RADIO ACTIVITY TEST	MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION
USES	CORROSION RESISTANT STEEL ANGLE/ FLAT/CHANNEL FOR BUILDING CONSTRUCTION OR CIVIL ENGINEERING
REGULATED SUBSTANCE	NO PERFORMANCE DETERMINED
REMARKS	MATERIAL IS FREE FROM MERCURY CONTAMINATION ,WELDING & WELD REPAIRS

0001221058

OTHER APPLICABLE SPECIFICATION'S
ASTM A276/A479, ASME SA276/SA479

WE CERTIFY THAT THE MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE SPECIFICATION & REQUIREMENTS OF ORDER/CONTRACT AND IS OF INDIAN ORIGIN

VPL 2

CE 0045

13

MANUFACTURER'S SYMBOL | INSPECTOR STAMP | 0045-CPR-1364

SAURABH JAIN
WORKS INSPECTOR

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