

INSPECTION CERTIFICATE & MILL TEST CERTIFICATE EN 10204 -3.1

CUSTOMER :	Approved acc. To AD 2000-Markblatt W0 / W2		MTR NO.	993825/ 1
	and certified acc. To PED (97/23/EC) by		DATE	14.08.2015
	Certification Body for Pressure Equipment of		GRADE	1.4301 / 1.4307
	TUV NORD System (Notified body, reg. no. : 0045)		MATERIAL SPECIFICATION	EN 10088-3, EN 10088-5, EN 10272 & AD 2000 W2/W10
8680 SKANDERBORG DENMARK	STEEL MAKING ROUTE /		DIMENSIONAL SPECIFICATION	DIN 1017 / EN 10058
	INDUCTION MELTED / AOD/ CC		HOT ROLLED ANNEALED & PICKLED (1D) 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
1	60 X 8 MM	527.022	38169	36	0.694	0.018	1.14	0.38	0.018	0.036	18.45	8.09	0.30	0.49	0.002	0.15	0.080
2	120 X 15 MM	527.022	99199	4	0.325	0.030	1.08	0.46	0.022	0.038	18.30	8.08	0.26	0.56	0.002	0.15	0.078
3	20 X 5 MM	527.022	99399	132	0.554	0.022	0.72	0.43	0.024	0.035	18.26	8.08	0.24	0.64	0.002	0.14	0.073
4	120 X 20 MM	527.022	99410	4	0.385	0.019	1.01	0.37	0.021	0.040	18.40	8.04	0.29	0.68	0.003	0.15	0.075
5	100 X 12 MM	527.022	99442	11	0.633	0.027	1.10	0.30	0.020	0.037	18.28	8.03	0.44	0.53	0.002	0.17	0.080

MECHANICAL PROPERTIES(EN 10002-1)

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 (HBN) (EN 10003-1)
					Rp=0.2%	Rp=1.0%					1	2	3	
38169	890000161588	L	RT	658.00	309.00	350.00	45.00	56.00	55 x 10 x 7.5	RT	126	128	129	195
99199	890000161590	L	RT	658.00	309.00	349.00	46.00	57.00	55 x 10 x 10	RT	134	132	126	195
99399	890000159939	L	RT	681.00	320.00	361.00	45.00	56.00	55 x 10 x 5.0	RT	130	126	129	202
99410	890000161597	L	RT	654.00	308.00	350.00	46.00	57.00	55 x 10 x 10	RT	132	130	134	194
99442	890000161589	L	RT	664.00	312.00	354.00	45.00	56.00	55 x 10 x 10	RT	132	128	130	197

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.

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

CE 0045

VPL 2



SAURABH JAIN
WORKS INSPECTOR

MANUFACTURER'S SYMBOL

INSPECTOR STAMP

13 0045-CPR-1364