



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)

MTR NO

978999/ 1

DATE

06 10 2014

GRADE

1 4301 / 1 4307

MATERIAL SPECIFICATION

EN 10088-3 , EN 10088-5 , EN 10272 & AD 2000 W2/W10

DIMENSIONAL SPECIFICATION

DIN 1017 / EN 10058

STEEL MAKING ROUTE /
INDUCTION MELTED / ADD/ CC

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
1	70 X 10 MM	509925	93778	9	0.258	0.021	0.87	0.50	0.028	0.038	18.15	8.09	0.28
2	60 X 20 MM	509925	94063	11	0.567	0.022	1.07	0.52	0.024	0.037	18.08	8.02	0.28
3	50 X 8 MM	509925	96621	28	0.480	0.027	1.11	0.37	0.021	0.040	18.30	8.08	0.19
4	150 X 12 MM	509925	96691	4	0.296	0.023	1.22	0.35	0.023	0.040	18.45	8.01	0.27
5	70 X 8 MM	509925	96889	42	0.984	0.020	1.10	0.46	0.020	0.037	18.03	8.06	0.30

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 Lo=4D	% REDUCTION AREA	SPECIMEN SIZE	TEST TEMP (Deg C)	CHARPY V-NOTCH (JOULES)				HARDNESS (BHN) (EN 10003-1)			
					Rp=0.2%	Rp=1.0%					1	2	3	AVG				
93778	890000095003	L	RT	664.00	312.00	353.00	45.00	57.00	55 x 10 x 10	RT	132	134	128	131	197			
94063	890000131946	L	RT	651.00	306.00	348.00	46.00	57.00	55 x 10 x 10	RT	132	134	130	132	193			
96621	890000130304	L	RT	654.00	308.00	348.00	45.00	56.00	55 x 10 x 7.5	RT	130	132	134	132	194			
96691	890000131936	L	RT	658.00	309.00	350.00	46.00	57.00	55 x 10 x 10	RT	130	128	132	130	195			
96889	890000131926	L	RT	664.00	312.00	354.00	45.00	56.00	55 x 10 x 7.5	RT	128	132	134	131	197			

NACE CERT

MATERIAL CONFORMS TO NACE MR0175/ISO 15156-2:2009 & NACE MR0103-2010

MARKING

SIZE, GRADE, HEAT NO, LOGO, CE STAMP & 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

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

MANUFACTURER'S SYMBOL

INSPECTOR STAMP

0045-CPR-1364

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SAURABH JAIN

WORKS INSPECTOR