

**MILL TEST CERTIFICATE
(INSPECTION CERTIFICATE)**
In Accordance with EN 10204 :2004 Type 3.1

ORIGINAL

CUSTOMER :JSL Global Commodities Pte. Ltd
CITY :Singapore
OA NO :32562
SALES ORDER NO. :0568005609
PROFORMA INVOICE NO. :6130013345

CERTIFICATE NO. :JSL-JRD/QA/2020-21/EXP/00037413
DATE :11.12.2020
NET WT(MT) :56.005
COMMERCIAL INV. NO. :J20202161634

Material Description/Product
COLD ROLLED STAINLESS STEEL COILS

Material Specifications
EN 10088-4:10/EN 10028-7:16/ EN 10088-2:14/ASTM
A240/A 240M-20/ASME SA240/SA240M-19 SEC.II Part A/AD2000
W0/W2/W10.PED 2014/68/EU.

Process-Route
EAF-AOD-LRF-CCS

Dimension Tolerance specification
As per OA/PO Agreement.

PHYSICAL DESCRIPTION

SR NO	BATCH NO	HRC/PLATE NO.	PKT/PALLET NO	WEIGHT (MT)	NO OF PCS	HEAT NO	GRADE	THK (mm)	WIDTH (mm)	LENGTH (mm)	FINISH	EDGE	QUALITY
1	E046880802	0000630624		9.300		22001356	1.4404/1.4401/316L/316	2.000	1,500.00	COIL	2B	TE	PRIME
2	HU47169603	0000636282		9.530		12003229	1.4404/1.4401/316L/316	3.000	1,500.00	COIL	2B	TE	PRIME
3	H047217403	0000636368		10.950		12003222	1.4404/1.4401/316L/316	1.500	1,250.00	COIL	2B	TE	PRIME
4	E046880803	0000630624		8.840		22001356	1.4404/1.4401/316L/316	2.000	1,500.00	COIL	2B	TE	PRIME
5	E046916402	0000630621		8.980		22001356	1.4404/1.4401/316L/316	2.500	1,500.00	COIL	2B	TE	PRIME
6	Q046869404	0000630688		8.405		12002942	1.4404/1.4401/316L/316	3.000	1,250.00	COIL	2B	TE	PRIME

CHEMICAL ANALYSIS (LADLE)

SR NO.	HEAT NO	GRADE	C%	Mn%	S%	P%	Si%	Ni%	Cr%	N%	Mo%	Cu%	Ti%	Nb/Cb%	Al%
1	22001356	1.4404/1.4401/316L/316	0.023	1.70	0.004	0.043	0.38	10.05	16.64	0.056	2.04				
2	12003229	1.4404/1.4401/316L/316	0.023	1.71	0.005	0.045	0.40	10.07	16.57	0.051	2.03				
3	12003222	1.4404/1.4401/316L/316	0.022	1.70	0.005	0.045	0.35	10.03	16.75	0.062	2.03				
4	22001356	1.4404/1.4401/316L/316	0.023	1.70	0.004	0.043	0.38	10.05	16.64	0.056	2.04				
5	22001356	1.4404/1.4401/316L/316	0.023	1.70	0.004	0.043	0.38	10.05	16.64	0.056	2.04				
6	12002942	1.4404/1.4401/316L/316	0.022	1.77	0.004	0.044	0.39	10.07	16.58	0.061	2.04				

MECHANICAL PROPERTIES:SAMPLE DIRECTION - TRANSVERSE

Sr No.	Batch No.	Thk mm	Rp 0.2/ YS Mpa	Rp 1.0 Mpa	Rm/ TS Mpa	%EL A 50 mm	%EL 5AS / 50GL mm	Hardness HRC	Bend Test
1	E046880802	2.00	301	331	636	52		78 / 79	
2	HU47169603	3.00	335	370	587	53	58	78 / 79	
3	H047217403	1.50	303	338	580	51		81 / 82	
4	E046880803	2.00	301	331	636	52		78 / 79	
5	E046916402	2.50	334	364	639	52		80 / 81	
6	Q046869404	3.00	312	345	587	51	56	80 / 81	

ADDITIONAL INFORMATION

- 1)-THE ABOVE GRADE EN 1.4404 PRODUCTS ARE CERTIFIED AND CONFIRMED AS PER THE REQUIREMENTS OF DIN EN 10088-4:2010 UNDER CONSTRUCTION PRODUCTS REGULATION-305/2011 VIA CERTIFICATE NO: 0045-CPR-1752, YEAR 2014.
- 2)-The DOP(Declaration of performance) No: JSLO/1.4404/CR.
- 3)-APPROVED ACCEPTANCE TO AD 2000-MERKBLATT W0,W2,W10 AND CERTIFIED ACCEPTANCE TO PED (2014/68/EU) BY CERTIFICATION BODY FOR PRESSURE EQUIPMENT OF TUV NORD SYSTEM (NOTIFIED BODY.REG. NO.0045).
- 4)-MATERIAL ANNEALED IN ACCORDANCE WITH REQUIREMENTS AS LAID IN 10088-4:10, TABLE A.4.
- 5)-MATERIAL ANNEALED AT MINIMUM 1040 °C & QUENCHED IN WATER AT A SUFFICIENT RATE TO PREVENT RE-PRECIPIATION OF CARBIDES.
- 6)-MATERIALS ALSO FULFILL THE REQUIREMENT OF ASTM A480/A480M-20 & ASME SA480/SA480M SEC. II PART A, ED.2019.
- 7)-IGC TEST AS PER EN ISO 3651-2 METHOD A/ASTM A262 P-E & AFTER EXPOSURE THE SPECIMENS WERE BENT(1t ; 180 °) AND INSPECTED AT MAGNIFICATION OF 20X AND FOUND WITHOUT ANY CRACKS.
- 8)-ALL MATERIALS HAVE BEEN CHECKED FOR PMI TESTING BY PORTABLE XRF & FOUND SATISFACTORY.
- 9)-MATERIALS CONFORM TO REQUIREMENT AS PER NACE MR 0175/ISO 15156-2015.
- 10)-DIMENSIONAL TOLERANCE COMPLY AS PER DIN EN ISO 9445-2.

Under EDGE COLUMN "TE" stands for "TRIM EDGE"

The material supplied under this Test Certificate is free from any radioactive contamination as checked by procedures established by Jindal Stainless Limited as per the recommendations provided by AERB .

This is hereby certified that the material was manufactured, sampled, tested & inspected in accordance with requirements of the material specification and has been found to meet the requirements of order.

QMS:ISO 9001-2015
EMS:ISO 14001-2015
ISO 45001:2018
CERTIFIED COMPANY

This document is digitally signed

Bibhuti Bhusan Jena
17 December 2020 10

