



Fujian Hongwang Industrial Co.,Ltd.

Add: Shangyang, Fu'an, Fujian, China

Tel:+86-593-6296610

MILL TEST CERTIFICATE

URL: www.cnhwjt.com

Customer: KONTINENTAL LTD

Fax:+86-593-6600196

Product: COLD ROLLED STAINLESS STEEL COIL

Certificate No: 202202230001

Surface Finish: No.2B

Steel Grade: 304

Product ID	Heat NO	(mm) Dimension	(kg) Weight	Chemical Composition (%)									Tensile Test			Hardness Test	
				C	Si	Mn	P	S	Cr	Ni	N	0.2% Y.S (Mpa)	T.S (Mpa)	EL(%)	HRB	HV	
				Min.	Max.	0.070	0.75	2.00	0.045	0.030	17.50	8.00	0.100	205	520	40	90
BG21090538AY1WA	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WB	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WC	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WD	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WE	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WF	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WG	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WH	Y210728C26-2	1.00*1250*2500	2383	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
BG21090538AY1WI	Y210728C26-2	1.00*1250*2500	1987	0.053	0.44	1.05	0.035	0.001	18.19	8.04	0.048	269	656	59		179	
Total			21051	◆ Size tolerance : Acceptable									◆ Surface quality : Class 1				

Remarks:

- The material listed above has been tested and complies with the terms of ASTM-A240 standard.
- This certificate is valid with the original stamp of the quality assurance department.
- If any quality query, please clarify via phone call or fax, indicating the certificate number.

Typed by:	郑晓凤	
Ratifying:	李俊	
Date:	20220223	

MANGALAM ALLOYS LIMITED

MILL'S TEST CERTIFICATE

(En 10204 - 3.1)

Pressure Equipment Directive 2014/68/EU, Annex I, Section 4.3 and AD 2000-Merkblatt W 0 as well as EN 764-5, Para. 4.2
Certificate No.: DGR-0036-QS-W 565/2013/MUC Munich, April 18th, 2019 Valid through April 2022, Including W2 & W10



Customer		KONTINENTAL LTD 2, PROMZONA BZSK STREET, ZARECHNY TOWN, SVERDLOVSK REGION, 624251, RUSSIA							
Material Specification		STAINLESS STEEL BRIGHT ROUND BAR ASTM A276/ A479, NACE MR 0175 / ISO 15156 Part 3				TC No. & Date	MAL/TC/2004 28.02.2021		
Order No.		MAL-KL/20-21/057 DT: 30.06.2020				INV No. & Date	EXP/20-21/337 28.02.2021		
Supply Condition		Hot Rolled, Solution annealed, Ground & Polished							
Grade	Heat No.	Size (mm)	Bundle No	Pieces (Nos.)	Net Weight (MT)	Length (mm)	Tol (mm)	Color Code	Customer's Specific Requirement
AISI 316L	A4772	30mm	10506	27	0.914	6000-6100	h9	Red/Pink Tick	
AISI 316L	C580	60mm	766	8	1.086	6000-6100	h11	Red/Pink Tick	
AISI 316L	C573	70mm	762	5	0.926	6000-6100	h11	Red/Pink Tick	
AISI 316L	C573	70mm	767	5	0.926	6000-6100	h11	Red/Pink Tick	
AISI 316L	A4504	90mm	9988	5	1.075	4000-6000	h11	Red/Pink Tick	
Total:					4.927				

Heat No.	CHEMICAL COMPOSITION (%Wt):											
	C	Si	Mn	P	S	Ni	Cr	Mo	N2	Ni+2Mo	Cu	PREN
Min.	-	-	-	-	-	10.00	16.00	2.00	-	14.00	-	23.00
Max	0.030	1.00	2.00	0.045	0.030	14.00	18.00	3.00	0.1000	20.00	-	28.00
A4772	0.029	0.53	1.12	0.035	0.017	10.03	16.20	2.03	0.0654	14.09	-	23.95
C580	0.028	0.47	1.21	0.032	0.014	10.06	16.55	2.08	0.0653	14.22	-	24.46
C573	0.029	0.60	1.30	0.031	0.011	10.02	16.32	2.09	0.0643	14.20	-	24.25
A4504	0.028	0.39	1.21	0.035	0.016	10.03	16.63	2.04	0.0641	14.11	-	24.39

HEAT TREATMENT: Solution annealed at 1060°C for followed by water quenching

Heat No.	Size (mm)	Impact Test				Grain Size E112-10	MECHANICAL PROPERTIES (ASTM A370-12)				
		E23-07a					TENSILE TESTING ASTM E8-11				HARDNESS ASTM E10-2008
		V notch Test Piece			Avg		UTS Mpa	YS Mpa	EL %	%RA	
		1	2	3		485 Min	170 Min	30 Min	40 Min	236 BHN Max	
A4772	30mm	-	-	-	-	627	314	65	75	181-184	
C580	60mm	-	-	-	-	607	302	66	76	171-176	
C573	70mm	-	-	-	-	612	299	68	77	172-178	
A4504	90mm	-	-	-	-	605	293	67	76	167-172	

Macro Test	Microstructure	Surface Inspection (100% Bars)	Dimensional Inspection	Positive Material Identification Test (100% Bars)	Length Check (100% Bars)	Ultrasonic Test ASTM A388-11 (100% Bars)
	OK	OK	OK	OK	OK	OK

CaSi Treatment done

Process Route : Induction Melting, Ingot Casting

No welding performed on the material

Above material meets NACE MR 0175 / ISO 15156-3 : 2009 Part-3 requirements.

Values certified in the Test Certificate are based on our true records

We hereby certify that the material is manufactured according to specifications and order requirement.

Material is free from radioactive contamination

Material is free from mercury contamination

Material of Origin : INDIA

PREN = $W_p + 3.3(W_{mo} + 0.5 W_n) + 16 X W_c$

Intergranular corrosion Test : ASTM A262-10 (IGC Practice E) : OK

Place: Chhatral		 Authorized Signatory
Date: 28.02.2021		
Enclosure: Nil		

Plot No. : 3122/23/24/25/26/3246/3247, Phase-III, G.I.D.C., Chhatral, Dist. Gandhinagar, Gujarat, India-382729

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