



GLORIA MATERIAL TECHNOLOGY CORP. INSPECTION CERTIFICATE



Messrs:

Order No.: 2022007332-1
 File No.: 2023002153-B
 Grade: 316/316L
 Size: 8"
 Heat-Lot No.: SQ1302-30
 Condition: HF-Solution Annealed-Peeled

P.O.No.: P06930
 Date: 06/20/2023
 Weight: 1880KG 4145LB
 P'cs: 2

Chemical Composition (wt%)							
	C	Si	Mn	P	S	Ni	Cr
Min.			1.25		0.020	10.00	16.00
Max.	0.030	1.00	2.00	0.040	0.030	14.00	18.00
Result	0.028	0.41	1.58	0.032	0.030	10.27	16.53
	Mo	Cu	Co	N			
Min.	2.00						
Max.	3.00	0.75		0.10			
Result	2.06	0.36	0.12	0.08			

Mechanical Properties Spec.

	Hardness	Grain Size
		ASTM E112
	1/2R	T
Spec.Min.	140HBW	
Spec.Max.	241HBW	
Result	155HBW	3

	Corrosion Test
	ASTM A262 PRACTICE A&E
Spec.Max.	
Result	OK

	Tensile Test			
	Elongation(A)	Tensile Strength(Rm)	Yield Strength(0.2% Rp)	Reduction of Area(Z)
	1/2R L	1/2R L	1/2R L	1/2R L
	(Ave)	(Ave)	(Ave)	(Ave)
Unit	%	KSI	KSI	%
Min.	40	75	30	50
Max.				
Result	57.5	81.5	36.9	77

ACTUAL FORGING RATIO: 6.7:1



AS 9100
Autospaco



ISO 9001
Quality



Administered by PMI
ACCREDITED

Heat Treating
Material Testing Laboratory
Nondestructive Testing



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Our quality and environment management systems have been certified by AS9100, ISO9001 QMS, ISO14001 EMS, OHSAS18001 OHS, and NADCAP. We hereby certify that the material described herein has been manufactured and tested with satisfactory results in accordance with the requirement of the above material specification. Inspection Certificate comply with EN 10204 3.1.



台灣台南市新營區新中街35號 / NO.35, HSIN CHUNG RD., HSIN YING, TAINAN, TAIWAN
 TEL: 886-6-6520031 / FAX: 886-6-6230877
<http://www.gmtc.com.tw>



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Specification:

1. ASTM A182/A182M-20, A193/A193M-20 class 1 B8M, A276/A276M-17, A479/A479M-20
2. ASTM A262-15 ,A484/A484M-20b
3. ASTM A314-19
4. ASTM A320/A320M-18 class 1 B8M.
5. ASME SA182/SA182M-2021
6. ASME SA479/SA479M-2021
7. ASME SA 320/SA320-2021 B8M CL1.
8. ASME SA193/SA193M-2021 B8M CL1.
9. AMS 5648M
10. AMS 5653J
11. AMS QQS 763D
12. AMS-S-7720
13. NACE MR0175/ISO15156:2015(EXCEPT H2S TEST AND SURFACE HARDNESS).
14. NACE MR0103/ISO 17945-2015
15. DIN EN 10204-3.1(2005)
16. ENERGY SPEC. SS1 REV.5.3. Jan 13, 2016

Remark:

1. SOLUTION ANNEALING TEMPERATURE AND TIME : 1900 DEFREE F,WATER COOLED.
2. MATERIAL FREE FROM CONTINUOUS CARBIDE NETWORK.
3. MACRO/MICRO STRUCTURE : GOOD.
4. CORROSION TEST : PASSED PER ASTM A262 PRACTICE E.
5. MATERIAL FREE FROM KNOWN CONTACT WITH MERCURY & RADIUM.
6. MATERIAL FREE FROM WELDS OR WELD REPAIRS.
7. MELTING PROCESS : EAF+LHF+VOD or EAF+AOD.
8. NO PRODUCT THAT CONTAIN OR WERE MADE WITH ODC'S.
9. COUNTRY OF MELT AND MANUFACTURE:TAIWAN.
10. MATERIAL IS FREE FROM RADIATION.
11. GRAIN SIZE NO. PER ASTM E112.



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Lillian Sun
 Quality Manager
 Lillian Sun

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This report is a copy of the original Mill certificate and verifies that the product meets the requirements as originally ordered by

Date: 2023.4.25 Verified