



# GLORIA MATERIAL TECHNOLOGY CORP.

1FL., RD. 35, HSIN CHUNG RD., HSIN YING,  
TAINAN, TAIWAN, ROC

## INSPECTION CERTIFICATE

TEL: (06)6520000  
FAX: (06)6520088

Messrs: EARLE M. JORGENSEN COMPANY

Order No: 2006000606

Grade: 316/316L 509382

P.O.NO.: P865528-423

FILE NO: 2006004538-C

Size: 11"

Date: 07/26/2006

HEAT-Lot No: U0571-30

Weight: 1925.0KG 4243.89LB

P'cs: 1

Condition: HF-Solution Annealed-Turned

### Chemical Composition (wt%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N
Min.			1.25		0.023	10.00	16.00	2.00		
Max.	0.030	1.00	2.00	0.040		14.00	18.00	3.00	1.00	0.10
Result	0.026	0.39	1.61	0.029	0.026	10.48	16.99	2.12	0.45	0.05

### Mechanical Properties Spec.

	Hardness	Grain Size	Carbide Dist.
Condition	1/2R		
Spec. Min.			
Spec. Max.	229HBW		
Result	144HBW	5.5	OK

### Tensile Test

	Elongation (A)	Tensile Strength (Rm)	Yield Strength (Rp)	Reduction of Area (Z)
Condition				
Min.	30%	75KSI	30KSI	50%
Max.				
Result	64%	80KSI	38KSI	74%

### Specification:

1. ASTM A276-05a, A479-05, ASME SA479 B04.
2. AMS-QQ-S 763A, AMS 5648K, AMS 5653F.

### Remark:

1. MANUFACTURING PROCESS: BAR+LHF+VOD, FORGED OR HOT ROLLED.
2. SOLUTION TREATMENT: 1900°F > 80 MIN/INCH, WATER COOLED.
3. MATERIAL IS FREE FROM MERCURY CONTAMINATION.
4. MATERIAL IS FREE FROM WELDS OR WELD REPAIRS.
5. MACRO STRUCTURE OK.
6. MICRO STRUCTURE OK.
7. ULTRASONIC TEST: OK.
8. CORROSION TEST: PASSED PER ASTM A262 PRACTICE E.
9. REDUCTION RATIO: 6:1.



Mars Wang
QA SECTION
<i>Mars Wang</i>

Our quality and environment management systems have been certified by ISO9001 QMS and 14001EMS.  
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with the requirement of the above material specification. We hereby Inspection Certificate comply with EN10204 3.1.B.