

521540

ATI Flat Rolled Products	Certificate of Test		 <small>Stephen Wolff - Director, Corporate Quality Assurance</small>
	Mill Information	Customer Information	
500 Green Street Washington, PA 15301	Cert Number 0127835-01 Sales Order 50-034-006 Cert Date Nov-21-2014	Name CORROSION MATERIALS INC PO P00034082 PO Date Mar-03-2014	

Sold to: CORROSION MATERIALS INC 2262 GROOM ROAD BAKER, LA 70714	Ship to: CORROSION MATERIALS 2262 GROOM ROAD BAKER, LA 70714
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Material Information

"ATI 400" NICKEL ALLOY PMP HOT ROLLED PLATE ANNEALED PICKLED COMMERCIAL CUT EDGE	
ASME-SB-127 ED 2013 QQ-N-281D & AM 2 CLASS A FORM 6 NACE MR0175/ISO 15156-3:10-2009	ASTM-B-127-05 R2009 UNS N04400 NACE MR0103

Piece Information

Gauge	Width	Length					Total Wt	
Pcs	(in)	(in)	(in)	Heat #	Piece ID	Section Id	Lot #	(lbs)
Item: 002	Cust-Id:	Govt-Contract-#:		Govt-DO-Rating:				
	Cust-Job:	Schedule B:						
1	.7500	96.0000	272.0000	521540	AB44376	---	433383	6435

Chemistry Testing

Element (wt %)	Requirements		Final Heat Analysis	
	Min	Max	521540	Loc
C	---	.2	.1	LO
MN	---	2.00	1.52	LO
P	---	.02	< .01	LO
S	---	.015	.001	LO
SI	---	.50	.09	LO
NI	63.00	70.00	63.94	LO
AL	---	.5	.2	LO
CU	28.0	34.0	32.0	LO
CO	---	---	.03	LO
SN	---	.006	.001	TC
PB	---	.006	.001	TC
FE	---	2.50	2.09	LO
ZN	---	.02	< .01	TC
NCO	63.0	70.0	64.0	--



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Customer Information

Name CORROSION MATERIALS INC
PO PO0034082
PO Date Mar-03-2014

Chemistry Testing

Allegheny Ludlum performs chemical analysis by the following techniques:
C, S by combustion/infrared; N, C, H by inert fusion/thermal conductivity;
Mn, P, Si, Cr, Ni, Mo, Cu, Co, V, by WDXRF; Pb, Bi, Ag by GFAA;
B by OES; Al and Ti (>=0.10%) by WDXRF, otherwise by OES.

511540 - Material was produced by EF melting with AOD refining.

NCC = Ni + Co

Mechanical Testing

LOT 433383			
Condition:	ANNEALED		
Direction:	TRANSVERSE		
Temperature:	ROOM TEMP		
Spec:			
Test Limit	Units	Result	Loc
YIELD 0.2%	psi	35200.	TC
TENSILE	psi	79000.	TC
ELONGATION	%	50.	TC
RED OF AREA	%	78.	TC
HARDNESS	---	154. HBW	TC

When hardness is measured using the Brinell scale, the indentation measuring device is Type A.

Mechanical Property Requirements

Condition:	ANNEALED		
Direction:	TRANSVERSE		
Temperature:	ROOM TEMP		
Spec:			
Test Limit	Units	Min	Max
YIELD 0.2%	psi	28000.	---
TENSILE	psi	70000.	---
ELONGATION	%	35.	---
RED OF AREA	%	---	---



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	Cert Number	0127835-01	Name	CORROSION MATERIALS INC
	Sales Order	50-034-006	PO	PO0034082
	Cert Date	Nov-21-2014	PO Date	Mar-03-2014

Mechanical Property Requirements

Condition:	ANNEALED		
Direction:	TRANSVERSE		
Temperature:	ROOM TEMP		
Spec:			
Test Limit	Units	Min	Max
HARDNESS	---	---	---

Certification Statements

Material was solution annealed at 1350F (732C) minimum for a time commensurate with thickness.

Allegheny Ludlum does not use mercury in the testing or production of its products.

Material is of USA melt and manufacture.

No welds/weld repairs performed.

Knowingly and willfully recording any false, fictitious or fraudulent statement or entry on this document may be punished as a felony under Federal Statutes, including Federal Law, Title 18, Chapter 47.

DIN EN 10204:2005 3.1 Certificate

General Statements

TESTING WAS PERFORMED AT THE FOLLOWING LOCATIONS
 LO = ATI FLAT ROLLED PRODUCTS; Route 981 North; Latrobe, PA 15650
 TC = ATI FLAT ROLLED PRODUCTS; 1300 Pacific Avenue; Natrona Heights, PA 15065

WARNING: Processing that makes fumes, dust, or solutions may cause lung disease. Please see MSDS for further information which has been supplied to your Purchasing Department. For an additional copy, please refer to our web site at www.atimetals.com/businesses/business-units/ludlum/Pages/msds.aspx.

For access to online Certifications of Test, please register at MyATI.ATIMetals.com

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