

TRANSDUCERS



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K1726A-3 \*REVISED\*  
FEB 21 2014

Roller Alloys Quality Assurance

+UPDATED SPECIFICATION REVISIONS 02-20-14

Customer: ROLLED ALLOYS  
125 WEST STERN ROAD  
TEMPERANCE, MI, USA  
48182

MATERIAL CERTIFICATION

P72910-1N

PAGE 1 OF 1

Attn.:

Customer Order No.	Order Date	Cert Date	Shop Order	Alloy
L05844	04/15/2013	06/18/2013	P72910-1	625 (UNS N06625)

Specification(s): +AMS 5666G, ASTM-B-446-03(2008) GRADE 1, ASME-SB-446-2011a GR. 1  
+S400 01/30/14, +S-1000 12/04/13, RR9000: SABRe, +NACE MRO175/ISO 15156-3:2ndED

Quantity (Pcs./Wt.): 1 BDL / 2122 LBS	Size or Dwg. Number: 3.250" RD. X 10'- 14'R/L
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Heat Number: K172617-3

Melt Method: VIM/ESR

Chemical Analysis: Remelt Ingot

Raw Material Source: Melted at Outokumpu VDM USA/FP

C	Mn	Si	P	S	Cr	Ni	Co	Mo	Nb + Ta
0.031	0.06	0.104	0.005	0.001	22.31	60.20	0.04	8.97	3.49
Ti	Al	Fe	Nb	Ta					
0.32	0.22	4.18	3.48	0.006					

Chemistry source: Outokumpu VDM USA T5985, 306 Columbia Turnpike, Florham Park, NJ 07932-1217

Mechanical and Metallurgical Tests:

Condition	Temp. (F)	UTS (ksi)	YS (.2%) (ksi)	%EL.	%R.A.
A	RT (LONG)	142.0	85.5	48.0	60.0

Tensile test specimen was machined and tested by  
Element Materials Technology T4707, 15062 Bolsa Chica, Huntington Beach, CA 92649

MILL THERMAL TREATMENT (AS SHIPPED CONDITION)

A.) 1700F, 1 hour, water quench (hot rolled, annealed and centerless ground)

Grain size: Uniform ASTM No. 9.5, 5% isolated ASTM No. 7.0, ALA ASTM No. 6.5

Micro No.: NN933U Etchant No. 23

Hardness: 248 HBW

Grain size determined in accordance with ASTM-E-112-12

Material is free of mercury, radium and alpha source material contamination

Hardness and metallography performed by Outokumpu VDM USA/Reno T5978

Mill certification in accordance with EN 10204:2004 Type 3.1

The metal produced by Outokumpu VDM USA for this order was melted and manufactured in the United States or a qualified country as defined in DFARS 252.225.7014 Alt. 1

No weld or weld repair was performed on material.

Conforms to specification requirements.

NAFTA Country of Origin - US

*Donald Artieri* 2/20/14  
Donald Artieri / Senior Quality Supervisor

The test results shown above are certified to be true and in accordance with specification requirements and records maintained in our files. The recording of false, fictitious, or fraudulent statements or entries on the certificate may be punished as a felony under federal law. The test report shall not be reproduced except in full, without the written approval of Outokumpu VDM USA, LLC

TRACER #

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