



Sandvik Materials Technology

Product Area Tube
P.O. Box 1220
Scranton
PA USA 18501
570-585-7500

MATERIAL CERTIFICATE

Cert#: 201000491

www.smt.sandvik.com
www.smt.sandvik.com/nafta

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Sold To: 632580
SANDVIK DE MEXICO
TLALNEPANTLA, EDO MEXICO
Customer Order No: 750906
Sandvik Order No: 90572/17
Work Order/Lot: 523610

Ship To:
GAISA FORWARDING INC
LAREDO TX
Certification Date: 20100106

ASTM A312-08a, ASME SA-312, ASTM A376-06, ASME SA-376, ASME Section II
2007 Edition, 2009 Addenda, NACE MR0175 / ISO 15156
First edition 2003-12-15, (Austenitic)

Hot Finished PROCESS ANNEALED AND PICKLED Seamless Pipe
Type TP316/TP316L (UNS S31600/S31603) Size: 2" SCH 10
Heat: 518851

Material Manufacturer: Pennsylvania Extruded Tube Co. USA

ANALYSIS %

Table with 8 columns: Element (C, Si, Mn, P, S, Cr, Ni, Fe, Mo, Cu, Al, Pb), Heat, Prod. Values for each element.

Mechanical Tests:

Table with 5 main columns: Yield Strength (0.2%, 1.0%), Tensile Strength, Elongation (E2", E10", E4d, E5d), Reduction of Area. Values in psi and MPa.

Hardness Test Results: 78HRB, 81HRB
Hydrostatic Test (psi): 1500

Flattening Test per ASTM A999: Acceptable
Tensile Test sample width (1=Full-Size 2=1/2" Strip): 2
This Material complies with DFARS 252.225-7014 & Alternate 1
Corrosion Test per ASTM A262 Pr.E: Acceptable
Country Of Origin: United States
This Material complies with FAR BAA (FAR 52.225-7001)
This Material complies with DFARS BAA (DFARS 252.225-7001)
and FAR TAA (FAR 52.225-5)
All material subjected to a final solution annealing heat
treatment with material at a temperature of 1900 deg. F
minimum followed by rapid quenching.
The material has not come in contact with Mercury or Mercury
containing compounds.
No welding has been performed on this material.
Material has been manufactured/supplied in accordance with
Sandvik Materials Technology Quality Manual-Standard
Products Revision 11 dated Nov 09, 2009. Quality system
has been approved to ISO 9001:2000.

Certificate produced in accordance with EN 10204 3.1
(formerly EN 10204 3.1.B)
Melt Source: AB Sandvik MT, Sweden
Melt Method: Electric Arc Furnace-AOD Refining
This is to certify that the contents of this certificate

Stamp: PLEASA ANAHUAC Y CIAS. S.A. DE C.V. CONTROL DE CALIDAD. Date: 22 Feb 2010. Signature: Enrique Ruiz.

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are correct and accurate as contained in Sandvik's records, and that all above test results and operations performed are in compliance with the requirements of the purchase order and the specification(s) listed above.

Electronically Generated Certificate-Valid without signature
Audrey Kakareka, Quality Engr.
10 (STKA312/376 R29) (32) (US36542)