

Customer

Sandvik Materials Technology Canada Tube Production Unit

425 McCartney Street Arnprior, Ontario, Canada K7S 3P3 (613) 623-6501 Fax:(613) 623-7243

Certified Material Test Report

Ship To

SANDVIK MATERIALS TECH. NAFTA GRANDE PRAIRIE VALVE FITTING 21808 16007 #100, 11025 89 AVENUE 982 GRIFFIN POND ROAD **Mill Order** CLARKS SUMMIT, PA 18411 GRAND PRAIRIE, AB T8V 5B9 00054913 CANADA บร **Customer Order and Item** Specifications 00054197 1 ASTM A213-14/A269-14/A511-12 ASME SA213-15 ED EAW SWINST316-R27 NACE MR0175 Tag **GRANDE PRAIRIE VALVE & FITTING Y12870** GRAND PRAIRIE **ABT8V 5B9** PRODUCT ID : D2PJR0062 Location Material TP316/TP316L MT316/MT316L amless Stainless Steel Tubing /4" Avg OD X .035" Avg Wall 6.35 mm Avg OD X .89 mm Avg Wall Net Total Weight UOM No Of Pieces UOM Work Order/ Heat No **Total Length** 275 5,500.00 FT 203.17 KG 386210 543386 **Heat Analysis** S Ti A Heat No С Si Mn P Cr Ni Mo Co Cu N .032 .010 17.17 13.10 2.57 .094 .30 .036 .003 .003 543386 .022 38 1.65 Melt Source: Sandvik, Sweden Melt Method: **Electric Furnace** Melt Process: AOD **Product Analysis** 543386 .023 .41 1.66 .032 .010 17.24 13.15 2.58 .095 .31 047 .003 .003 **Mechanical Tests** HARDNESS RB 80MAX Work Order ASTM E8 0.2%YS(205MI ASTM E8 ULT. (515 MI ASTM E8 %EL 2" (35MI HRBW 75 ksi min. test 30 ksi min. KSI KSI 386210 41 87 54 76 76 **Additional Tests** ASTM A1016 FLARE - Acceptable ASTM A1016 FLATTENING - Acceptable sitive Material Identification (PMI) - Acceptable. Eddy Current Examination - Acceptable Visual Surface Condition - Acceptable

Capability of Passing ASTM A262E

Seamless, Cold Finished, Bright (Solution) Annealed & Atmospheric Quenched

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Item Number

Sales Order



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SO: 21808 MO: 00054913

Material is free from radioactive contamination Traceability is through Work Order number linemarked on tubes Country of origin: Canada This material has not come in contact with mercury or mercury-containing compounds This certification affirms that the contents of the report are correct and accurate and that all test results and operations performed by Sandvik Materials Technology Canada or our subcontractors are in compliance with

the material specification The material is manufactured according to a quality system, approved and registered to ISO 9001:2008 certificate number GBG0000511 which expires November 30, 2016

Certified Material Test Report acceptable to EN 10204 3.1

No weld repair has been performed on this material

No unauthorized alterations. The contents of this Certified Material Test Report may not be modified or revised in any way without the prior written approval of Sandvik Materials Technology Canada. Unauthorized alterations to the Certified Material Test Report, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both. This Certified Material Test Report may be copied only in the manner and for the purposes specified in Section 6 of EN 10204. Contravention of this notice will be prosecuted to the fullest extent of applicable law.

nis certificate is produced electronically and is valid without signature

Quality Assurance: Bonnie Hamilton, Quality Assurance Group Leader Clare Kavanagh, Certificate

Revisions 06/12/15