

CERTIFICATE

002/003
No. A/10-954505 Rev U1
 Date 2010-04-12 Page 1/2
 Rev.date 2010-07-19

INSPECTION CERTIFICATE acc to
 EN 10 204 3.1

SANDVIK MATERIALS TECHNOLOGY
 P O BOX 1220
 SCRANTON, PA 18501
 USA

524296

Customer References P271009 450-00991 EARLE M. JORG Customer order 2009-12-01	Sandvik References Order No. Subs No. ASSMT Dispatch note 89077 37874/53 ASSMT No. C.Code 284-54082 03																																				
Material description HOT WORKED STAINLESS BAR STEEL FORGED ANNEALED & STRAIGHTENED PEEL TURNED AND POLISHED Steel making process E + AOD	Steel/material Designations Sandvik SANMAC 316/SANMAC 316L AISI UNS 316/316L S31600/S31603																																				
Technical requirements ASME SA-479-07 ED, ASTM A-479-08, ASME SA-276-04 ED ASTM A-276-08A, AMS 5648K, AMS 5653F, AMS-QQ-S-763. NACE MR0175/ISO 15156-3:2003																																					
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Quality assurance - Helena Höglblad/QA-manager Primary Products																																					

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No. A/10-954505 ^{003/003} Rev 01
Date 2010-04-12 Page 2/2
Rev.date 2010-07-19

Grain size

Lot	Avg
00781	7.5

Following controls/tests have been satisfactorily performed:

- Intergranular corrosion test acc to ASTM A-262 PR.E
- Material Identification with spectroscope.

Heat treatment:

Solution annealed condition per ASTM A-479. Material heated to 1900 deg.F minimum and rapidly cooled at 1750 deg.F minimum immediately after hot rolling.

Free from radioactive contamination.

NAFTA - No

Country of origin: Sweden

Material free from mercury contamination.

No welding or weld repair.

This material fulfils macro etch test requirements.

This material complies fully with the chemical analysis and mechanical properties of ASTM A-182 and ASME SA-182 Grade F316L

The delivered products comply with the specifications and requirements of the order.

The material is manufactured according to a Quality system, approved and registered to ISO 9001.

The certificate is produced with EDP and valid without signature.