

INSPECTION CERTIFICATE acc to
EN 10 204 3.1.B

SANDVIK DE MEXICO S.A. DE C.V.
VIA GUSTAVO BAZ 352
COL.LA LOMA
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CP 54060 MEXICO

INSPECTION STAMP
QA-TUBE

Customer References	Customer order	Sandvik References	Order No.	Subs No.	ABSMT Dispatch note
560-00991	2004-04-07	300-52126	80278	68	19873/54

Material description	Steel/material Designations
SEAMLESS STAINLESS COLD FINISHED PIPE	Sandvik 3R65 AISI TP316/TP316L
Steel making process Electric furnace	

Technical requirements
ASTM A-312-01A, ASME SA-312-ED-01 AD-03
NACE MR 01-75

EXTENT OF DELIVERY

It	Product designation	Heat	Lot	Pieces.	Kg	M
17	TST-316L-1/2-SCH40	502221	52595	32	254.0	204.83
	21.34 X 2.77					
		Total		32	254.0	204.83

TEST RESULTS

Chemical composition (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
502221	0.013	0.40	1.66	0.036	0.012	16.72	11.21	2.09
	Co	Cu	N					
502221	0.10	0.28	0.068					

Tensile test at room temperature

Lot	Yield strength N/mm2 Rp0.2	Tensile strength N/mm2 Rm	Elongation %
52595	290 285	607 599	58 60

Leak test: Eddy current test acc to Practice E426 with drilled hole as reference standard on all tubes, with the exception of those lots which have been hydrostatically tested.



CERTIFICATE

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Hardness test

Lot	Min HRB	Max HRB
52595	74.0	80.0

Following controls/tests have been satisfactorily performed:

- Flattening test
- Intergranular corrosion test acc to ASTM A-262 PR.E
- Material Identification.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

The number of tests are based on the size of the manufacturing lot before cutting to finished lengths.

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