BRIST SPECIAL STEEL INDUSTRY CO.,LTD

152 TONGNAN ROAD NINGHE T&E AREA

NINGHE TIANJIN CHINA 301500

CERTIFICATE OF QUALITY

BRIST

CONTRACT No. : DFSD-2008-12
PRODUCT: SEAMLESS ALLOY STEEL TUBES
GRADE: GR.C ACC. TO: ASME SA210/210M
TOLERANCE ACC.TO: ASME SA450/A450M
WITH MINIMUM WALL THICKNESS, TOLERANCE

DOCUMANT No. : 080635-02
PURCHASE ORDER No. :
BRIST ORDER No. : BT080393
DISPATCH NOTE No:
SHIPPER NO.

INSPECTION No. :BQC08226
MANUFACTURER:B4
MANUFACTURER'S BRAND:BRIST
INSPECTOR'S STAMP:02
STEELMAKING PROCESS: EAF+VOD

SPECIFICATION: ASME SA210/210M
STEEL GRATE: GR.C
DIMENSIONS-TOLERANCE: ASME SA450/450M
DELIVERY CONDITION: NORMALIZED AND TEMPERED NORMALIZED 820℃-840℃/40MIN , AIR COOLING
PRODUCT MARKING: BRIST ASME SA210 GR.C -NDE OD51.00mmxWT10.00mm 334106 080573 04L20Y68C-TA
BRIST ASME SA210 GR.C -NDE OD38.00mmxWT8.00mm 334106 080574 04L20Y68C-TA

Item	Number of pcs	Dimensions mm	Length/pcs m	Weight kg	Heat No.	Pro.No	Number of bundle	total Lengths m
1	280	Φ51.00*10.00	6.0	16986.80	334106	080573	8	1680
1	300	Φ38.00*8.00	6.0	10658.20	334106	080574	6	1800

CHEMICAL COMPOSITION (%)

ELEMENT	C	P	S	Mn	Si	Ni	Cr	Mo	Cu	Al	Ti	V	W	B	Nb
	*1000			*100						*1000				*1000	
SPECIFICATION	≦350	≦35	≦35	29-106	≧10	--	--	--	--	--	--	--	--	--	--
HEAT ANALYSIS	180	11	14	83	32	--	--	--	--	--	--	--	--	--	--

SPECIMEN No. TENSILE TEST AT ROOM TEMPERATURE/ Yield strength(σ_S) Mpa / Tensile strength(σ_S) Mpa / Elongation %

TECHNICAL PROPERTIES/ FLATTENING / FLARING / BEND / HARDNESS TEST (HB) MIN / MAX

SPECIMEN No.	Yield strength(σ_S) Mpa	Tensile strength(σ_S) Mpa	Elongation %	FLATTENING	FLARING	BEND	HARDNESS TEST (HB) MIN	MAX
01	295	515	28	ok	ok	ok	160	170
02	305	525	25	ok	ok	ok	160	170

Following controls/tests have been satisfactorily performed:
- Flattening test
- Drift test
- Flaring test
- Material Identification
- Ultrasonic test acc. to ASME SA450M & SE213
- Leak test :Eddy current test acc. to ASME SA450M & SE309
- Visual inspection and dimensional control

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 quality system, approved and registered to ISO9001:2000.
The Mill's inspection to be final in accordance with EN10204 3.1
The certificate is produced with EDP and valid without signature.

We hereby certify that the materials described in this table have manufactured, inspected and tested in Accordance with the customer's specification(s), and that they content the requirements.

Manager of Inspection Sec

04l20y68c