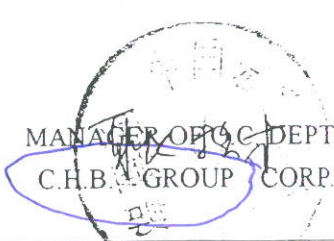


MATERIAL CERTIFICATE

DIN 50049/31B
ACC.TO EN 10204.3.1.B

CONSIGNEE:
CONTRACT NO:
DESTINATION:

NO.: 2003//12/25-1B
DATE: 2003/12/25

Commodity: TITANIUM SEAMLESS TUBE									
Specification: ASTM B861-95a GR.2					CONDITION: VACUUM ANNEALING				
Item No.	Size(mm)	Length (mm)	Quantity Meter/p'ces	Net Weight (Kg)	Heat No.	Lot No.			
1	O.D. 21.3 X W.T. 2.11	5800-6300	120.06 / 20	68	343-0378	XL17			
Item No.	Heat No. 343-0378	Chemical Composition, % (content in percent of weight)							
		Fe	C	N	O	H	Residuals element		Ti
	Requirements	Max 0.30	Max 0.10	Max 0.03	Max 0.25	Max 0.015	≤ 0.1	≤ 0.4	Balance
1		0.09	0.012	0.016	0.09	0.0006	< 0.1	< 0.4	"
Item No.	Heat No. 343-0378	Tensile Strength (MPa)		Yield strength 0.2% (MPa)		Elongation (%)			
	Requirements	Min 345		Min 275 / Max 450		Min 20			
1		490		360		35			
Item No.	Dimensional Inspection	Ultrasonic Test	Hydrostatic Test		Flattening Test		Bending Test		
	Acceptable	N/A	17.2 MPa 5sec						
1			Acceptable		Acceptable		Acceptable		
We hereby certify that the material described above has been tested and complies with the terms of the order confirmation. Inspection and dimensionai control meet the article of ASTM B861-95a without complaints.									
Note: 1. Visual inspection are passed. 2. Packing: in wooden case.									
 <p>MANAGER OF P.C. DEPT C.H.B. GROUP CORP.</p>									