SILCOTUB SA
Quality and Service
BD. MIHAI VITEAZU NO.86
4700 ZALAU
ROMANIA

MILL TEST CERTIFICATE

ACCORDING TO EN 10204/3.1.B

DATE	ORDER NO.		No.	PAGE
11.08.2006	ORDER NO. PO 167030		3	1 OF 1

BUYER:	SPECIFICATION	MATERIAL	
DUFERCO SA VIA BAGUTTI 9 6900 LUGANO SWITZERLAND	ASTM A 106/2006; ASTM A 53/2006;	GRADE B	WAGGON NO. : SWAP BODY NO. : TRUCK NO. :

No.	SIZE	HEAT NUMBER	NUMBER OF PIECES	NUMBER OF PIECES	LENGTH IN METERS	WEIGHT IN MT	NUMBER OF BUNDLESS	ITEM	LOT
1	2" X 0.154 (60.30 x 3.91 mm)	33722	898	1055	6431.280	34.933	30	3	
		99932	157						

DESCRIPTION

199.714MT OF SEAMLESS STEEL TUBING ORDER CONFIRMATION 167030
(DUFERCO REF.NO. 167030)

PRODUCT ANALYSES

No.	HEAT	Sample no.	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	V		Flattening	Bending	Flaring	Hardness	Hidrostatic PSI	NONDESTRUCTIVE TEST
			CHEMICAL COMPOSITION %											OTHER TESTS					
1	33722	37282	0.170	0.522	0.229	0.012	0.009	0.143	0.164	0.012	0.212	0.004		-	GOOD	-	-	2500	-
	33722	37283	0.169	0.522	0.229	0.012	0.008	0.143	0.164	0.012	0.213	0.004							
2	33722	37284	0.170	0.526	0.231	0.012	0.009	0.143	0.163	0.012	0.214	0.004		-	GOOD	-	-	2500	-
	33722	37285	0.169	0.524	0.228	0.012	0.008	0.143	0.165	0.012	0.213	0.004							
3	99932	38455	0.267	0.741	0.207	0.012	0.009	0.150	0.106	0.019	0.208	0.001		-	GOOD	-	-	2500	-
	99932	38456	0.265	0.735	0.208	0.012	0.009	0.150	0.106	0.019	0.207	0.001							

MECHANICAL PROPERTIES

No.	HEAT	Sample no.	TEST SPECIMEN: Dimensions inch x inch	Section inch²	Length inch	TENSION / TRACTION: Tensile Strenght Required Min.	Tensile Strenght Required Max.	Tensile Strenght Result PSI	Yield Strenght Required Min.	Yield Strenght Required Max.	Yield Strenght Result PSI	Elongation Required Min.	Elongation Result %	CHARPY V-NOTCH 1	2	3	Average	TEMP. °F	SHEAR %
1	33722	37282	0.47 x 0.16	0.08	2.00	60000		65661	35000		52895	20.00	30.40						
2	33722	37284	0.47 x 0.16	0.08	2.00	60000		65571	35000		52282	20.00	26.80						
3	99932	38456	0.75 x 0.16	0.13	2.00	60000		79657	35000		53836	20.00	29.90						

I CERTIFY THAT THE MATERIAL HEREIN DESCRIBED HAS BEEN MANUFACTURED WITH THE ORDERED SPECIFICATION AND THAT THE TEST INFORMATION IS CORRECT AND CONTAINED IN THE RECORDS OF THE COMPANY

SIGNATURE

QUALITY DEPT. CHIEF
Ing. TIBERIU ERDEI

S.C. SILCOTUB S.A.
CONTROL TEHNIC
Zalau-România