



SILCOTUB SA

Quality and Service
DR. JEREMIASZ
PO BOX 27140
BOZEMAN,
MONTANA

MILL TEST CERTIFICATE
ACCORDING TO EN ISO 24118

DATE
11.06.2002

ORDER NO. PO 18380

SPECIFICATION
ASTM A 199/199M; ASTM A 519/519M

MATERIAL
GRADE B

NO. 5

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DUFERCO SA
VIA MARIOTTI 1
8100 LUGANO
SWITZERLAND

ASTM A 199/199M; ASTM A 519/519M

NO.	SIZE	HEAT NUMBER	NUMBER OF PIECES	NUMBER OF PIPES	LENGTH IN METERS	WEIGHT IN TON (NET G. TON)	NUMBER OF PIPES	ITEM	LOT
1	3" SCH 80 (88.90 X 7.62 mm)	21544	203	415	2058.531	40.579	22	5	
		22346	95						
		99934	57						

DESCRIPTION
403411TM SEAMLESS PIPE A-SGR B SRL. OUTSIDE VARNISHED WITH BLACK LAQUER (DUFERCO REF. NO 18380)

PRODUCT ANALYSES

No.	HEAT	Sample No.	CHEMICAL COMPOSITION %										OTHER TESTS			Hidrostatic PSI	NONDESTRUCTIVE TEST
			C	Mn	Si	P	S	Cr	Ni	Mo	Cu	V	Flaming	Hardness			
1	21544	38828	0.153	0.622	0.257	0.027	0.016	0.111	0.077	0.013	0.178	0.007				2500	
	21544	38828	0.152	0.625	0.257	0.027	0.016	0.112	0.077	0.013	0.178	0.007				2500	
2	22346	38634	0.163	0.591	0.289	0.020	0.019	0.108	0.124	0.018	0.292	0.001				2500	
	22346	38635	0.162	0.506	0.291	0.020	0.019	0.108	0.123	0.018	0.280	0.001				2500	
3	99934	38636	0.261	0.771	0.260	0.022	0.027	0.181	0.131	0.021	0.260	0.003				2500	
	99934	38637	0.260	0.771	0.260	0.022	0.027	0.181	0.131	0.021	0.260	0.003				2500	

MECHANICAL PROPERTIES

No.	HEAT	Sample no.	TENSILE			YIELD STRENGTH			ELONGATION			CHARPY V-NOTCH			TEMP.	BEND
			Reqd.	Act.	Result	Reqd.	Act.	Result	Reqd.	Act.	Result	1	2	3		
1	21544	38825	0.77 X 0.30	0.23	2.00	60000	69687	33000	47753	23.00	37.80					
2	22346	38634	0.76 X 0.31	0.24	2.00	60000	67659	33000	64939	23.00	38.80					
3	99934	38636	0.76 X 0.29	0.22	2.00	60000	72226	33000	59390	23.00	38.00					

I CERTIFY THAT THE ABOVE TESTS WERE PERFORMED IN ACCORDANCE WITH THE CORRESPONDING SPECIFICATION AND THAT THE TEST RESULTS CONFORM TO THE REQUIREMENTS SPECIFIED IN THE ORDER OF THE CUSTOMER.

SIGNATURE

QUALITY DEPT. CHIEF
ING. TIBERIU ERDEI

