



SILCOTUB SA

Quality and service
SRL BIRKAL VITEACU NO.8
4708 ZALAU
ROMANIA

MILL TEST CERTIFICATE
ACCORDING TO EN 10264.1.8

DATE: 11.08.2002

ORDER NO. PO 104338

BUYER: DUF EISCO SA
VIA BAKHITTA
P.O. BOX 1000
SUTZENLAND

SPECIFICATION: ASTM A 106/106M A576/A 576M

ORDER NO. PO 104338

MATERIAL: GRADE B

WAGON NO.:
SWAP BODY NO.:
TRACK NO.:

LOT: 4

ITEM: 4

NONDESTRUCTIVE TEST

No.	SIZE	HEAT NUMBER	NUMBER OF PIECES	NUMBER OF PIECES	LENGTH IN METERS	WEIGHT IN KG (METRIC TONS)	NUMBER OF SWOLLS	ITEM	LOT
1	2" SCH 80 (60.30 x 5.54 mm)	34292	637	637	4077.209	30.438	17	4	

DESCRIPTION: 403.414 TM. SEAMLESS PIPE A-538 B. SML. OUTSIDE VARNISHED WITH BLACK LAQUER (DUFERICO REF. NO 104338)

CHEMICAL COMPOSITION %

No.	Sample no.	C	Mn	SI	P	S	Cu	Ni	Mo	V	Nb	Ti	Al	N	O	As	Sb	Bi	Fe	Other	
																					Heating
1	34292	0.185	0.588	0.287	0.016	0.017	0.002	0.125	0.010	0.001	-	-	-	-	-	-	-	-	-	2500	
2	34292	0.188	0.588	0.287	0.016	0.017	0.003	0.125	0.010	0.001	-	-	-	-	-	-	-	-	-	2500	
2	34292	0.185	0.588	0.284	0.010	0.015	0.002	0.125	0.009	0.001	-	-	-	-	-	-	-	-	-	2500	

No.	HEAT	Sample no.	Dimensions Inch x Inch	Section Inch	Length Inch	Tensile Strength		Yield Strength		Elongation		CHARPY V-ACTION			TEMP.	SHEAR
						Min.	Max.	Min.	Max.	Result PSI	Min.	Max.	1	2		
1	34292	42217	0.50 x 0.23	0.12	2.00	64000	70444	35000	54292	22.00	33.80					
2	34292	42219	0.50 x 0.20	0.10	2.00	64000	71890	35000	52043	22.00	28.00					

MECHANICAL PROPERTIES

TENSILE

YIELD STRENGTH

ELONGATION

CHARPY V-ACTION

TEMP.

SHEAR

1. CONTROL THE MATERIAL FROM RECEIVED TO DELIVERY AND THE ORDER OF EXECUTION, AND THE TEST PROCEDURES CORRECTLY ACCORDING TO THE SPECIFICATION

SIGNATURE

QUALITY DEPT. CHIEF
ING. TIBERIU ENDEI

