MILL'S QUALITY CERTIFICATES

CERTIFICATE NO : HIE2007-00266 PAGE : 1

DATE OF ISSUE : Aug. 31, 2007

L/C NO (P/O NO) : 1103051406

COMMODITY : 577.245MT SQUARE AND RECTANGULAR PRIME STEEL PIPES/GRADE:ASTM A 500B. AS PER FOLLOWING BREAKDOWN

SPECIFICATION : ASTM A500 GR.B

CUSTOMER : DUFERCO SA

HISTEEL CO., LTD.

405-310

HEAD OFFICE & INCHON PLANT : 89BLOCK 4LOT, GOZANDONG, NAMDONG-KU, INCHON, KOREA
TEL : (032)815-6386~8
FAX : (032)815-6389

100-013

SEOUL OFFICE : 57-8, CHUNGMU-RO 3-GA, JUNG-KU , SEOUL, KOREA
TEL : (02)2273-2141~3
FAX : (02)2273-2157

TYPE OF PIPE END	DIMENSION (OUTDIA. × THICK. × LENGTH)	QUAN-TITY	WEIGHT	HYDRO-STATIC TEST		HEAT-NO.	PHYSICAL PROPERTIES			CHEMICAL COMPOSITION																IMPACT TEST (0 ℃)		REMARK
				Kg/㎠ PSI	※5		YIELD STREN-GTH	TENSILE STRENGTH B ※6	TENSILE STRENGTH W ※7	(EL)		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Nb	V	Ti	B	HARDNESS	Ceq	ENERGY	SHEAR-VALUE	(HARDNESS)
※1	※2 ※3 ※4	(PCS)	(KG)				PSI			%	※8	× 100			× 1000		× 100			× 1000					HV	× 1000	JOULE	%	
BPE	NB 3"X3" X 0.250" X 40'	826	131,925			SR27017	48,572	67,856		24	H	17	1	30	12	5												
	TOTAL	826	131,925																									

※9 P. S. A	※10 VISUAL & DIMENSION TEST	※11 FLATTENING (B) TEST	※12 WELD DUCTILITY TEST	※13 NONDESTRUCTIVE TEST (U.T)	※14 DRIFT TEST	※15 FLARING TEST	※16 CRUSH TEST	※17 REVERSE FLATTENING TEST
	GOOD							

NOTE 1 ※1 Type of pipe End

BPE :Black Plain End Square-cut	GPE :Galvanized Plain End Square-cut
BPEB :Black Plain End Beveled	GPEB :Galvanized Plain End Beveled
BTC :Black Threaded & Coupled	GTC :Galvanized Threaded & Coupled
BVJ :Black Victaulic Joint	GVJ :Galvanized Victaulic Joint
ETC :Enameled Threaded & Coupled	

※ 2 NB:Norminal Bore, OD:Outside Diameter
※ 3 Unit (M:mm, I:Inch)
※ 4 Unit (M:Meter, F:Feet, I:Inch)
※ 5 G:Good
※ 6 Base Metal
※ 7 W : Weld Part
※ 8 H:Heat (Ladle) Analysis, P:Product Analyics
※ 9 POST SEAM ANNEALING
※10 Visual & Dimension Test
※11 Flattening or Bending Test
※12 Weld Ductility Test
※13 Nondestructive Test
※14 Drift Test
※15 Flaring Test
※16 Crush Test
※17 Reverse Flattening Test

ORIGINAL

HISTEEL CO LTD.

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN ACCEPED IN ACCORDANCE WITH THE PRESCRIBED SPECIFICATION AND ORDER

SUPERVISOR

INSPECTION MANAGER

J. K. UM / PRESIDENT