QUALITY CERTIFICATE

주식회사 휴스틸
HUSTEEL Co., Ltd.

HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG, KANGNAM-GU, SEOUL, KOREA
DANGJIN PLANT 131,:BUGOKGONGDAN STREET, SONGAK-EUP, DANGJIN-SI, CHUNGCHEONGNAM-DO, KOREA

P/O No. : 21328
L/C No. : M924868
ISSUED DATE : 2015.07.11
COMMODITY : E.R.W. STEEL PIPE
SPECIFICATION : API 5L X-42 PSL1/ASTM A53B

CERTIFICATE No. : 150635
MANUFACTURED No. : 14-09-003-0
SUPPLIER : HUSTEEL CO., LTD.
PLESA
CUSTOMER : ANAHUAC Y CIAS., S.A. DE C.V.

Original certificate can be verified through Official Application.

NO.	HEAT_NO	QUANTITY PCS	TYPE *1	NOMINAL SIZE	ORDER SIZE O.D inch	ORDER SIZE W.T inch	ORDER SIZE LENGTH ft	WEIGHT lb/ft	DIR. *3	TENSILE TEST TS PSI	TENSILE TEST YS PSI	TENSILE TEST EL %	TENSILE TEST YR %	TENSILE TEST WTS PSI
01	N52982	214	BPEB	10	10.750	0.250	20	28.06	T	71,855	54,593	42	75	75,661
02	310178	325	BPEB	10	10.750	0.250	20	28.06	T	72,371	54,242	41	75	75,996
03	302452	154	BPEB	10	10.750	0.365	20	40.52	T	71,501	52,936	38	74	75,706

CHEMICAL COMPOSITION(%)

NO.	DIV *5	C -2	Si -2	Mn -2	P -3	S -3	Cu -3	Ni -3	Cr -3	Mo -4	V -4	Nb -4	Ti -4	B -5	CEQ -3	PCM -3
01	H	17	1	84	17	6	17	10	20	0	0	150	10			
	P	17	2	85	15	5	17	11	20	10	14	150	9			
	P	16	3	77	11	5	17	12	20	10	10	146	9			
02	H	17	1	84	17	2	10	10	20	30	10	10	10			
	P	17	2	85	15	2	12	11	20	30	14	10	13			
	P	17	2	85	15	3	10	11	19	30	15	10	11			
03	H	16	2	83	14	3	10	10	10	40	10	10	10			
	P	16	3	85	15	2	11	12	20	40	16	10	6			
	P	16	5	80	15	2	10	11	20	41	16	11	6			

NO.	HYDROSTATIC TEST T.P PSI	HYDROSTATIC TEST H.T sec	HYDROSTATIC TEST RESULT *9	HEAT TREATMENT ℃ *10	ZINC COATING TEST WZC g/m² *11	ZINC COATING TEST CST TIMES *11	THREADS TPI *12	THREADS ETL mm *12	HARDNESS TEST HV	IMPACT TEST (0)℃ DIV *7	IMPACT TEST Energy (Ind. J)	IMPACT TEST SIZE *8
01	1657	5	GOOD	900								
02	1660	5	GOOD	900								
03	2420	5	GOOD	900								

*13 N・D・T (UT Or ECT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
GOOD	GOOD	GOOD	GOOD	GOOD
FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		

ORIGINAL

HARDNESS MAX 22 HRC AS PER NACE MR 0175
Latest edition per API 5L(45th,2013) ASTM(2012)

NOTE

*1.Type of Pipe Ends

BPE	Black Plain Ends	GPE	Galvanized Plain Ends
BPEB	BPE Bevelled	GPEB	GPE Bevelled
BTE	Black Threaded Ends	GTE	Galvanized Threaded Ends
BTC	BlackThreaded & Coupled	GTC	Galvanized Threaded& Coupled

*2. O.D : Outside Diameter, W.T : Wall Thickness *3. Direction- L : Longitudinal, T : Transverse
*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, Y.P method : 0.5% Underload
*5. H : Heat analysis, P : Product analysis *6. -2 : x1/100, -3 : x1/1000, -4 : x1/10000, -5 : x1/100000, Tr :Trace *7. B : Base Metal, W : Weld Line, H : Heat Affected Zone
*8. Specimen Size -A:10x10mm, B:10x7.5mm, C:10x6.6mm, D:10x5.0mm, Direction: Transverse *9. T.P : Testing Pressure, H.T : Holding Time *10. Heat Treatment Seam Normalizing
*11. WZC : Weight of Zinc Coating, CST : Copper Sulphate Test *12. TPI : Threads per Inch, ETL : Effective length of threads *13. NDT : UT Or ECT.

SURVEYOR

WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE ORDER AND ABOVE SPECIFICATION
THIS CERTIFICATE IS ISSUED ACCORDING TO EN 10204 3.1(ISO 10474 3.1 B)

Song Jun Park
MANAGER OF Q.A TEAM

본 검사증명서에 명기된 규격용도 외 사용시 안전상 문제가 발생할 수 있으며, 검사증명서 위・변조시 사문서 위조(형법231조)로 불이익을 당하실 수 있습니다.
HUSTEEL