

P/O No. : 21248
 L/C No. : M932868
 ISSUED DATE : 2015.08.26
 COMMODITY : E.R.W. STEEL PIPE
 SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

QUALITY CERTIFICATE



주식회사 휴스틸
HUSTEEL Co., Ltd.
 HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHE-DONG,
 KANGNAM-GU, SEOUL, KOREA
 DAEBUL PLANT 3RO; DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196
 MANUFACTURED No. : 15-07-204
 SUPPLIER : HUSTEEL CO., LTD.
 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V.



Original certificate
 can be verified through
 QReal Application.

NO.	HEAT_NO	QUAN- TITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
					inch	inch	ft			PSI	%	%	%	PSI		-2			-3			-4			-5	-3				
					*2		*3		*4			*5			*6															
01	N39573	78	BPEB	12 3/4	12.750	0.225	20	30.13	T	67,295	54,822	39	81	75,416	H	7	1	76	13	4	17	10	20	TR	10	140	10			
02	N39566	78	BPEB	12 3/4	12.750	0.225	20	30.13	T	68,600	54,387	39	79	75,126	P	7	2	78	13	4	16	6	20	10	9	168	7			
03	N52935	68	BPEB	12 3/4	12.750	0.225	20	30.13	T	68,165	54,532	40	80	75,416	P	7	2	78	12	4	16	5	19	10	8	161	7			
															H	7	2	76	11	6	18	10	20	TR	10	130	10			
															P	8	2	75	11	5	18	8	23	47	10	180	4			
															P	8	2	74	10	6	17	7	22	46	8	172	3			
															H	6	2	75	10	4	18	10	20	TR	10	140	10			
															P	8	2	76	14	5	19	9	22	37	10	184	5			
															P	8	2	75	13	4	18	9	20	35	8	167	4			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C							
	PSI	sec		g/m ²	TIMES	inch		HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
	*9			*10	*11	*12			*7		*8						
01	1270	5	GOOD	930													
02	1270	5	GOOD	930													
03	1270	5	GOOD	930													

ORIGINAL

N O T E

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends GPE Galvanized Plain Ends	*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	
BPEB BPE Bevelled GPEB GPE Bevelled	*5. H : Heat analysis, P : Product analysis	*6. -2 : x1/100, -3 : x1/1000, -4 : x1/10000, -5 : x1/100000, Tr : Trace
BTE Black Threaded Ends GTE Galvanized Threaded Ends	*7. B : Base Metal, W : Weld Line, H : Heat Affected Zone	
BTC Black Threaded & Coupled GTC Galvanized Threaded & Coupled	*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
	*11. WZC : Weight of Zinc Coating, CST : Copper Sulphate Test	*12. TPI : Threads per inch, ETL : Effective length of threads
		*13. NDT : UT
		*10. Heat Treatment Seam Normalizing Reference Standard 3.2 ⌀ Drilled Hole

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)

SURVEYOR _____ MANAGER OF Q.A TEAM *[Signature]*



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CERTIFICATE No. : 150826-196
 MANUFACTURED No. : 15-07-204
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 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



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 QR Application.

NO.	HEAT_NO	QUAN- TITY PCS	TYPE *1	NOMINAL SIZE	ORDER SIZE			WEIGHT lb/ft	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
					inch	inch	ft			PSI		%	%	PSI		-2			-3			-4			-5	-3				
					*2		*4					*3	*6																	
04	M64206	10	BPEB	12 3/4	12.750	0.225	20	30.13	T	69,325	55,257	36	80	69,470	H	5	2	75	16	4	24	10	20	TR	10	130	10			
05	N38113	64	BPEB	12 3/4	12.750	0.250	20	33.41	T	68,890	56,997	37	83	69,615	P	6	4	74	15	4	21	1	27	10	6	146	4			
06	306147	44	BPEB	12 3/4	12.750	0.250	20	33.41	T	69,760	48,005	38	69	76,722	P	6	4	74	14	4	21	1	26	10	5	139	4			
															H	7	1	76	15	7	15	10	20	TR	TR	150	10			
															P	6	1	79	15	5	12	1	18	10	7	176	4			
															P	6	1	78	14	5	11	1	16	10	5	160	3			
															H	16	2	80	12	2	10	10	10	50	10	10	10			
															P	17	2	75	10	5	17	8	23	45	8	75	3			
															P	17	2	74	10	5	16	7	21	42	7	61	2			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C			GOOD				
	PSI	sec		g/m ²	TIMES	inch	inch	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
	*9			*10	*11	*12			*7		*8						
04	1270	5	GOOD	930													
05	1410	5	GOOD	930													
06	1410	5	GOOD	930													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends	GPE Galvanized Plain Ends	
BPEB BPE Bevelled	GPEB GPE Bevelled	
BTE Black Threaded Ends	GTE Galvanized Threaded Ends	
BTC Black Threaded & Coupled	GTC Galvanized Threaded & Coupled	

*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP 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, Reference Standard 3.2 ⌀ Drilled Hole

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NO.	HEAT_NO	QUAN-TITY PCS	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT lb/ft	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D. inch	W.T. inch	LENGTH ft		DIR.	TS PSI	YS %	EL %	YR %	WTS PSI	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
					*2		*3		*4		*5		*6			-2			-3			-4			-5			-3		
07	N52935	9	BPEB	12 3/4	12.750	0.312	20	41.48	T	68,600	59,173	38	86	76,142	H	6	2	75	10	4	18	10	20	TR	10	140	10			
08	N56677	8	BPEB	12 3/4	12.750	0.312	20	41.48	T	69,180	58,738	38	85	78,172	H	6	2	74	10	5	18	6	21	34	6	164	4			
09	N55609	3	BPEB	12 3/4	12.750	0.312	20	41.48	T	68,455	57,577	42	84	76,577	H	6	1	73	10	5	17	5	19	25	3	152	3			
															P	7	1	73	10	5	15	8	28	39	6	159	1			
															P	7	1	74	13	5	14	7	26	30	4	145	1			
															H	7	1	71	12	6	15	10	20	TR	TR	130	10			
															P	8	2	74	14	6	18	8	22	35	7	169	2			
															P	8	1	73	14	6	16	8	20	28	4	162	2			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C							
	PSI	sec			g/m ²	TIMES	inch	inch		HV	DIV	Energy (Ind, J)					
	*9			*10	*11		*12			*7		*8	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
07	1760	5	GOOD	930													
08	1760	5	GOOD	930													
09	1760	5	GOOD	930													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends	GPE Galvanized Plain Ends	
BPE Bevelled	GPE Bevelled	
BTE Black Threaded Ends	GTE Galvanized Threaded Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP method : 0.5% Underload
BTC Black Threaded & Coupled	GTC Galvanized Threaded & Coupled	*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, Reference Standard 3.2 ⌀ Drilled Hole

SURVEYOR

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MANAGER OF Q.A TEAM



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SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

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 KANGNAM-GU, SEOUL, KOREA

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 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196

MANUFACTURED No. : 15-07-204

SUPPLIER : HUSTEEL CO., LTD.

CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



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NO.	HEAT_NO	QUANTITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																															
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM															
					inch	inch	ft																								PSI	%	%	PSI	-2			-3			-4			-5	-3
					*2																										*3	*4				*5	*6								
10	N54576	52	BPEB	12 3/4	12.750	0.312	20	41.48	T	67,440	54,822	42	81	74,256	H	7	2	90	13	3	16	10	20	TR	10	130	10																		
11	N43522	36	BPEB	16	16.000	0.500	20	82.85	T	72,516	61,203	40	84	83,103	P	8	2	84	14	3	14	5	23	23	5	135	2																		
12	N41648	8	BPEB	16	16.000	0.500	20	82.85	T	69,035	57,287	40	83	76,287	P	8	2	83	14	3	13	5	21	13	3	121	1																		
															H	7	1	76	13	3	13	10	20	TR	TR	210	10																		
															P	8	2	76	14	3	15	6	19	30	6	244	2																		
															P	9	2	76	14	3	14	6	19	27	6	241	2																		
															H	6	1	78	11	4	15	10	20	TR	10	240	10																		
															P	6	2	78	12	4	11	6	20	10	10	290	9																		
															P	6	1	77	12	4	10	6	19	10	8	285	8																		

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C							
	PSI	sec		g/m²	TIMES	inch	inch	HV	Energy (Ind. J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST				
	*9			*10	*11	*12			*7	*8							
10	1760	5	GOOD	930													
11	2240	5	GOOD	950													
12	2240	5	GOOD	950													

ORIGINAL

*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	Black Threaded & 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, YP 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, Reference Standard 3.2 ⌀ Drilled Hole

SURVEYOR

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NO.	HEAT_NO	QUAN- TITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																									
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM									
					inch	inch	ft																								PSI	%	%	PSI	-2	-3	-4	-5	-3
					*2																										*4					*6			
13	N46149	5	BPEB	18	18.000	0.375	20	70.65	T	66,424	56,562	40	85	70,485	H	6	1	74	12	5	13	10	20	TR	TR	230	10												
14	N44227	2	BPEB	18	18.000	0.375	20	70.65	T	70,340	57,432	38	82	75,996	P	7	2	75	13	6	16	6	19	36	9	286	5												
15	N41546	2	BPEB	18	18.000	0.375	20	70.65	T	69,760	56,997	41	82	72,806	P	7	2	75	12	5	13	7	22	33	9	254	5												

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM															
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C	DIV	Energy (Ind, I)						SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST	GOOD	GOOD	GOOD	GOOD							
	PSI	sec																								°C	g/m²	TIMES	inch	HV	*7	*8
	*9																									*10	*11	*12				
13	1500	5	GOOD	950																												
14	1500	5	GOOD	950																												
15	1500	5	GOOD	950																												

ORIGINAL

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	Black Threaded & 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, YP 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, Reference Standard 3.2 ⌀ Drilled Hole

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 can be verified through
 QReal Application.

NO.	HEAT_NO	QUAN- TITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D inch	W.T inch	LENGTH ft		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
																*2			*3	*4				*5			*6			*4
					PCS	*1	lb/ft		*3	PSI	%	%	PSI	*5	-2			-3			-4			-5			-3			
16	N27688	3	BPEB	18	18.000	0.375	20	70.65	T	69,760	55,112	40	79	71,355	H	7	2	75	11	5	16	10	20	TR	TR	240	10			
															P	6	2	77	12	7	16	9	28	10	8	266	8			
17	N21778	1	BPEB	18	18.000	0.375	20	70.65	T	69,180	55,112	40	80	72,516	H	6	1	76	17	6	30	10	30	TR	10	240	10			
															P	6	1	74	16	7	31	13	31	18	7	234	7			
18	N21775	2	BPEB	18	18.000	0.375	20	70.65	T	69,180	53,517	42	77	72,226	H	6	1	75	15	8	31	10	30	TR	10	230	10			
															P	6	2	75	16	7	32	13	32	18	8	241	8			
															P	6	1	75	16	7	31	13	31	19	7	239	8			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C	GOOD	GOOD	GOOD				
	PSI	sec	°C	g/m²					TIMES					inch	HV	Energy (Ind, J)	SIZE
	*9			*10	*11		*12		*7	*8							
16	1500	5	GOOD	950													
17	1500	5	GOOD	950													
18	1500	5	GOOD	950													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends GPE Galvanized Plain Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP method : 0.5% Underload	*5. H : Heat analysis, P : Product analysis
BPE BPE Bevelled GPE GPE Bevelled	*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
BTE Black Threaded Ends GTE Galvanized Threaded Ends	*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
BTC Black Threaded & Coupled GTC Galvanized Threaded & Coupled	*11. WZC : Weight of Zinc Coating, CST : Copper Sulphate Test	*10. Heat Treatment Seam Normalizing
	*12. TPI : Threads per inch, ETL : Effective length of threads	*13. NDT : UT, Reference Standard 3.2 ♂ Drilled Hole

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)

MANAGER OF Q.A TEAM _____

P/O No. : 21248
 L/C No. : M932868

ISSUED DATE : 2015.08.26

COMMODITY : E.R.W. STEEL PIPE

SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

QUALITY CERTIFICATE



주식회사 휴스틸
HUSTEEL Co., Ltd.

HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG,
 KANGNAM-GU, SEOUL, KOREA

DAEBUL PLANT 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196

MANUFACTURED No. : 15-07-204

SUPPLIER : HUSTEEL CO., LTD.

CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



NO.	HEAT_NO	QUANTITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)															
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
					inch	inch	ft			PSI		%	%	PSI		-2			-3			-4			-5	-3				
					*2		*4						*6																	
19	N21772	5	BPEB	18	18.000	0.375	20	70.65	T	69,615	53,372	39	77	75,706	H	7	1	76	15	6	20	10	20	TR	10	240	10			
20	N03633	1	BPEB	18	18.000	0.375	20	70.65	T	71,646	56,417	38	79	76,722	P	5	2	75	15	6	28	12	31	23	8	255	8			
21	N47836	8	BPEB	18	18.000	0.375	20	70.65	T	70,775	53,227	39	75	79,187	P	6	1	75	15	7	27	12	29	19	7	249	7			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C			GOOD	GOOD	GOOD	GOOD	GOOD
	PSI	sec		g/m²	TIMES	inch	inch	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
	*9			*10	*11	*12			*7		*8						
19	1500	5	GOOD	950													
20	1500	5	GOOD	950													
21	1500	5	GOOD	950													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends GPE Galvanized Plain Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP 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
BPE BPE Bevelled GPE GPE Bevelled	*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, Reference Standard 3.2 ⌀ Drilled Hole
BTE Black Threaded Ends GTE Galvanized Threaded Ends		
BTC Black Threaded & Coupled GTC Galvanized Threaded & Coupled		

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)

MANAGER OF QA TEAM

P/O No. : 21248
 L/C No. : M932868
 ISSUED DATE : 2015.08.26
 COMMODITY : E.R.W. STEEL PIPE
 SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

QUALITY CERTIFICATE



HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG,
 KANGNAM-GU, SEOUL, KOREA
 DAEBUL PLANT 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196
 MANUFACTURED No. : 15-07-204
 SUPPLIER : HUSTEEL CO., LTD.
 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



NO.	HEAT_NO	QUAN-TITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
																inch		ft		PSI		%		PSI		-2			-3	
					*2				*3		*4			*5						*6										
22	N55486	15	BPEB	18	18.000	0.375	20	70.65	T	71,646	58,738	38	82	75,996	H	7	1	75	15	5	16	10	20	TR	10	250	10			
23	N52363	11	BPEB	20	20.000	0.500	20	104.23	T	76,867	65,844	35	86	78,027	H	6	2	75	17	6	17	9	23	35	9	297	6			
24	N52136	12	BPEB	20	20.000	0.500	20	104.23	T	69,470	58,013	42	84	70,920	H	6	18	103	10	2	23	10	20	TR	10	370	30			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C			GOOD	GOOD	GOOD	GOOD	GOOD
	PSI	sec		g/m ²	TIMES	inch	inch	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
	*9			*10	*11	*12			*7		*8						
22	1500	5	GOOD	950													
23	1900	10	GOOD	950													
24	1900	10	GOOD	950													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends	GPE Galvanized Plain Ends	
BPE Bevelled	GPE Bevelled	
BTE Black Threaded Ends	GTE Galvanized Threaded Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP method : 0.5% Underload
BTC Black Threaded & Coupled	GTC Galvanized Threaded & Coupled	*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, Reference Standard 3.2 ⌀ Drilled Hole

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) _____ MANAGER OF QA TEAM

P/O No. : 21248
 L/C No. : M932868
 ISSUED DATE : 2015.08.26
 COMMODITY : E.R.W. STEEL PIPE
 SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

QUALITY CERTIFICATE



주식회사 휴스틸
HUSTEEL Co., Ltd.
 HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG,
 KANGNAM-GU, SEOUL, KOREA
 DAEBUL PLANT 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196
 MANUFACTURED No. : 15-07-204
 SUPPLIER : HUSTEEL CO., LTD.
 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



NO.	HEAT_NO	QUANTITY PCS	TYPE *1	NOMINAL SIZE	ORDER SIZE			WEIGHT lb/ft	TENSILE TEST					CHEMICAL COMPOSITION(%)																	
					O.D. inch	W.T. inch	LENGTH ft		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM	
					*2		*4			PSI		%		PSI		-2			-3			-4			-5	-3					
25	N47834	1	BPEB	20	20.000	0.500	20	104.23	T	69,035	58,448	40	85	75,271	H	6	1	75	11	6	12	10	20	TR	TR	220	10				
26	N41423	4	BPEB	20	20.000	0.500	20	104.23	T	68,890	56,852	43	83	75,126	H	6	1	79	11	6	11	3	19	10	7	268	6				
27	586916	1	BPEB	20	20.000	0.500	20	104.23	T	68,745	47,715	43	69	72,226	H	6	1	79	11	6	11	3	19	10	7	268	6				
															P	6	1	75	9	4	11	1	18	10	8	258	7				
															P	6	1	75	9	4	11	2	17	10	8	247	7				
															H	16	2	82	18	2	10	10	10	40	10	10	10				
															P	12	2	83	17	3	7	5	14	10	10	30	7				
															P	12	2	83	16	2	7	4	14	10	9	25	7				

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		W.ZC	C.S.T	T.P.I	ETL		(0) °C							
	PSI	sec		°C	g/m²	TIMES	TPI	inch	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		GOOD
25	1900	10	GOOD	950									GOOD	GOOD	GOOD	GOOD	GOOD
26	1900	10	GOOD	950									FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
27	1900	10	GOOD	950													

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends GPE Galvanized Plain Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP 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
BPEB BPE Bevelled GPEB GPE Bevelled	*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. W.ZC : Weight of Zinc Coating, C.S.T : Copper Sulphate Test *12. T.P.I : Threads per inch, E.T.L : Effective length of threads *13. N.D.T : UT, Reference Standard 3.2 ♂ Drilled Hole
BTE Black Threaded Ends GTE Galvanized Threaded Ends		
BTC Black Threaded & Coupled GTC Galvanized Threaded & Coupled		

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) _____ MANAGER OF Q.A TEAM

P/O No. : 21248
 L/C No. : M932868
 ISSUED DATE : 2015.08.26
 COMMODITY : E.R.W. STEEL PIPE
 SPECIFICATION : API 5L X42 PSL-1/ASTM A53B

QUALITY CERTIFICATE



주식회사 휴스틸
HUSTEEL Co., Ltd.
 HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG,
 KANGNAM-GU, SEOUL, KOREA
 DAEBUL PLANT 3RO; DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
 YEONGAM-GUN, JEOLLANAM-DO, KOREA

CERTIFICATE No. : 150826-196
 MANUFACTURED No. : 15-07-204
 SUPPLIER : HUSTEEL CO., LTD.
 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V



NO.	HEAT_NO	QUANTITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					O.D	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
					inch	inch	ft			PSI	%	%	%	PSI		-2			-3			-4			-5	-3				
28	N53734	22	BPEB	24	24.000	0.250	20	63.47	T	66,569	55,982	39	84	66,569	H	6	1	74	11	5	16	10	10	TR	10	170	10			
29	N43421	87	BPEB	24	24.000	0.250	20	63.47	T	68,455	58,303	40	85	75,126	P	8	2	74	13	6	17	8	20	36	10	231	13			
															P	8	2	73	13	6	16	7	18	28	9	217	12			
															H	6	1	75	10	4	23	10	20	TR	TR	140	10			
															P	6	2	78	10	4	21	6	21	10	11	200	7			
															P	6	2	77	10	4	21	7	20	10	9	193	6			

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N - D - T (UT)	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C							
	PSI	sec			g/m²	TIMES	inch	inch		HV	DIV	Energy (Ind, J)					
28	790	10	GOOD	930									GOOD	GOOD	GOOD	GOOD	GOOD
29	790	10	GOOD	930									FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		

ORIGINAL

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse
BPE Black Plain Ends GPE Galvanized Plain Ends	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP 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
BPEB BPE Bevelled GPEB GPE Bevelled	*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, Reference Standard 3.2Ø Drilled Hole
BTE Black Threaded Ends GTE Galvanized Threaded Ends		
BTC Black Threaded & Coupled GTC Galvanized Threaded & Coupled		

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) _____ MANAGER OF Q.A TEAM