INSPECTION CERTIFICATE

P/O No. : 28319
L/C No. : HU20110829001

ISSUED DATE : 2019.08.21

COMMODITY : E.R.W STEEL PIPE

SPECIFICATION : ASTM A500 GRADE-B HHSS

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. : 190821-223
MANUFACTURED No. : 19-06-209-0
SUPPLIER : HUSTEEL CO., LTD.
CUSTOMER : HUSTEEL USA INC.

Original certificate can be verified through QReal Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)																
				SIDE LENGTH	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	CE Pcm
		PCS		inch	inch	ft	lb/ft		PSI		%	%	PSI		-2			-3					-4				-5	-3	
		*1		*2				*3	*4					*5	*6															
01	SQ02961	39	BPE	12"X12"	0.500	40	76.08	L	79,187	66,424	32	84		H	15	1	125	13	3										
														P	14	2	124	14	4										
														P	15	1	124	14	4										
02	SQ02972	77	BPE	12"X12"	0.250	40	39.74	L	79,187	62,218	29	79		H	14	1	88	9	4										
														P	14	1	88	12	6										
														P	14	1	89	12	5										
03	SQ02987	51	BPE	12"X12"	0.375	40	57.97	L	83,393	68,165	32	82		H	15	1	88	13	3										
														P	15	1	90	12	5										
														P	14	1	90	12	5										

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST (0)℃			*13 N·D·T (UT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		DIV	J (AVE)	SIZE			GOOD		
	PSI	sec		℃	g/㎡	TIMES		mm	HV	*7		*8	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
	*9			*10	*11		*12										
01																	
02																	
03																	

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. **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, **Reference Standard** 3.2¢ Drilled Hole

SURVEYOR

WE HERYBY 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)

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

INSPECTION CERTIFICATE

P/O No. : 28319
L/C No. : HU20110829001

ISSUED DATE : 2019.08.21

COMMODITY : E.R.W STEEL PIPE

SPECIFICATION : ASTM A500 GRADE-B HHSS

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. : 190821-223

MANUFACTURED No. : 19-06-209-0

SUPPLIER : HUSTEEL CO., LTD.

CUSTOMER : HUSTEEL USA INC.

Original certificate can be verified through QReal Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)																
				SIDE LENGTH	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	CE Pcm
		PCS		inch	inch	ft	lb/ft		PSI		%	%	PSI		-2			-3					-4				-5	-3	
			*1	*2				*3	*4					*5	*6															
04	SQ02987	30	BPE	12"X12"	0.312	40	48.64	L	81,073	65,119	31	80		H	15	1	88	13	3											
														P	15	1	88	13	6											
														P	15	1	87	12	6											
05	SQ02961	28	BPE	12"X12"	0.625	40	93.49	L	79,477	67,875	35	85		H	15	1	125	13	3											
														P	16	1	127	16	4											
														P	16	1	126	16	4											
06	SQ02970	14	BPE	14"X14"	0.500	40	89.70	L	85,714	73,531	32	86		H	15	1	124	13	4											
														P	15	1	125	17	4											
														P	15	1	125	16	3											

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST (0)℃			*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		DIV	J (AVE)	SIZE			GOOD		
	PSI	sec		℃	g/㎡	TIMES		mm	HV	*7		*8	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
	*9			*10	*11		*12										
04																	
05																	
06																	

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. **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, **Reference Standard** 3.2ϕ Drilled Hole

SURVEYOR

WE HERYBY 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)

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.

INSPECTION CERTIFICATE

P/O No. : 28319
L/C No. : HU20110829001

ISSUED DATE : 2019.08.21

COMMODITY : E.R.W STEEL PIPE

SPECIFICATION : ASTM A500 GRADE-B HHSS

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. : 190821-223

MANUFACTURED No. : 19-06-209-0

SUPPLIER : HUSTEEL CO., LTD.

CUSTOMER : HUSTEEL USA INC.

Original certificate can be verified through QReal Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)																
				SIDE LENGTH	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	CE Pcm
		PCS		inch	inch	ft	lb/ft		PSI		%	%	PSI		-2			-3					-4				-5	-3	
			*1	*2				*3	*4					*5	*6															
07	SQ02979	21	BPE	14"X14"	0.375	40	68.15	L	77,157	60,768	31	79		H	14	1	89	11	3											
														P	15	1	85	13	4											
														P	15	1	83	12	3											
08	SQ02970	22	BPE	14"X14"	0.625	40	10.53	L	77,157	67,440	39	87		H	15	1	124	13	4											
														P	15	1	125	16	4											
														P	15	1	125	16	3											
09	SU32385	51	BPE	16"x16"	0.375	40	78.33	L	79,187	64,829	34	82		H	14	1	91	8	2											
														P	15	1	89	12	6											
														P	15	1	88	12	6											

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST (0)℃			*13 N·D·T (UT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		DIV	J (AVE)	SIZE			GOOD		
	PSI	sec		℃	g/㎡	TIMES		mm	HV	*7		*8	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
	*9			*10	*11		*12										
07																	
08																	
09																	

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. **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, **Reference Standard** 3.2¢ Drilled Hole

SURVEYOR

WE HERYBY 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)

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

INSPECTION CERTIFICATE

P/O No. : 28319
L/C No. : HU20110829001

ISSUED DATE : 2019.08.21

COMMODITY : E.R.W STEEL PIPE

SPECIFICATION : ASTM A500 GRADE-B HHSS

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. : 190821-223

MANUFACTURED No. : 19-06-209-0

SUPPLIER : HUSTEEL CO., LTD.

CUSTOMER : HUSTEEL USA INC.

Original certificate can be verified through QReal Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)																
				SIDE LENGTH	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	CE Pcm
		PCS		inch	inch	ft	lb/ft		PSI		%	%	PSI		-2			-3					-4				-5	-3	
			*1	*2				*3	*4					*5	*6															
10	SU33690	53	BPE	16"x16"	0.625	40	127.58	L	77,737	67,005	37	86		H	14	1	124	12	3											
														P	15	1	128	11	5											
														P	16	1	126	11	5											
11	SQ02583	46	BPE	16"x16"	0.500	40	103.31	L	82,378	68,600	34	83		H	15	1	126	15	4											
														P	15	1	127	17	4											
														P	15	1	127	16	4											

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

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. **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, **Reference Standard** 3.2¢ Drilled Hole

SURVEYOR

WE HERYBY 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)

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