

SAHATHAI
S T E E L P I P E
MILL TEST REPORT

SAHA THAI STEEL PIPE PCL
78 Moo 3 Poochao Road,
Bangyapraek, Phrapradaeng,
Samuthprakarn 10130 Thailand.
Tel: +66 (0) 2385-9023

NO. EX23000075
DATE: 7 Mar 2023

TO:
SHIPPED TO: HOUSTON, TX USA
SHIPPED BY: MV. TOMORROW V.2306E

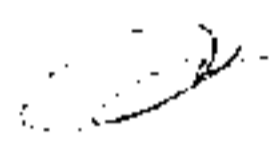
SHIPPING MARKS :
MASTER PIPE
SPEC.
SIZE
WEIGHT
LOT NUMBER
DESTINATION PORT
PCS / BUNDLE
BATCH NO.
BUNDLE NO.
MADE IN THAILAND

DESCRIPTION OF GOODS AND/OR SERVICES:

COVERING 100 PERCENT OF INVOICE VALUE OF GOODS AND/OR SERVICES DESCRIBED AS PRIME QUALITY ERW STEEL PIPE,
MANUFACTURED IN ACCORDANCE WITH ASTM A53/ASME SA53 GR.A EACH SET OF DOCUMENTS TO REFERENCE ONE OF THE FOLLOWING APPLICANT
PO NUMBERS: 5688 / 339513-01
CFR HOUSTON, TX USA

MATERIAL IS OF THAILAND ORIGIN. "COUNTRY OF MELT AND POUR : THAILAND"
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY SAHA THAI STEEL PIPE (PUBLIC) CO., LTD.




MISS NITTAYA SRAJIT
QUALITY ASSURANCE MANAGER

ISO 9001 Certification by Bureau Veritas (#TH019564)

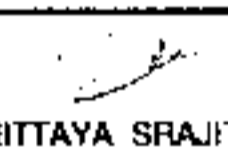
FOMQC-80/1-JAN-23



SAHATHAI STEEL PIPE MILL TEST REPORT

SAHATHAI STEEL PIPE PCL
78 Moo 3 Poochao Road,
Bangyapraek, Phrapradaeng,
Samuthprakarn 10131 Thailand.
Tel: +66 (0) 2385-9023

CERTIFICATE NO. : EX23000075
DATE : 7 Mar 2023
CUSTOMER :
CONTRACT (P/O) No. : 5688 / 339513-01
INSPECTION CERTIFICATE : ACCORDING TO EN 10204 : 2005 TYPE 3.1
COMMODITY : NEWLY PRODUCED, PRIME QUALITY ERW STEEL PIPE
SPECIFICATION : ASTM A53-2022 / ASME SA53-2021 GRADE A / ASTM A795 - 2021 UL/FM CERTIFIED

ITEM NO.	TYPE OF PIPE END	DIMENSION		NUMBER OF BUNDLES	NUMBER OF PIECES	H/N (STS)	CHEMICAL COMPOSITION %											MECHANICAL PROPERTIES			Pb %	WEIGHT OF ZINC COATING G/m ²	HYDRO-STATIC TEST (PSI)	
		NPS	Thickness /sch.no.				Length FT.	C	SI	Mn	P	S	Cu	V	NI	Cr	Mo	Nb	TS. PSI	YP. PSI				EL %
1	BPE	1-1/4"	40	21	65	2,730	82653	0.077	0.015	0.108	0.014	0.007	0.008	0.011	0.016	0.018	0.003	0.023	54422	48110	31.36	-	-	1200
							82662	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52000	44603	33.04	-	-	1200
							82666	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52167	46663	34.44	-	-	1200
							82673	0.065	0.010	0.110	0.016	0.003	0.007	0.012	0.014	0.016	0.001	0.016	53104	44773	32.33	-	-	1200
							82675	0.065	0.010	0.110	0.016	0.003	0.007	0.012	0.014	0.016	0.001	0.016	53654	44934	32.94	-	-	1200
							82678	0.068	0.008	0.106	0.018	0.004	0.005	0.010	0.014	0.017	<0.001	0.014	54536	48707	36.34	-	-	1200
							82686	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	51636	44873	60.09	-	-	1200
							82689	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	49071	41745	65.03	-	-	1200
							82691	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	55813	48116	30.46	-	-	1200
							82696	0.063	0.009	0.104	0.013	0.005	0.007	0.009	0.016	0.020	0.002	0.016	52066	46148	33.99	-	-	1200
2	BPE	1-1/4"	40	21	1	27	82662	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52000	44603	33.04	-	-	1200
							82710	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53591	46437	33.27	-	-	1200
3	BPE	1-1/2"	40	21	30	1,080	82711	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53892	44138	32.69	-	-	1200
							82712	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	55091	44737	32.61	-	-	1200
							82715	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	57999	50235	28.90	-	-	1200
							82725	0.069	0.014	0.115	0.016	0.008	0.012	0.008	0.019	0.022	0.002	0.017	59828	49944	29.09	-	-	1200
							82726	0.052	0.009	0.124	0.017	0.007	0.007	0.008	0.015	0.023	0.003	0.016	57139	48775	33.96	-	-	1200
							82738	0.060	0.007	0.133	0.020	0.007	0.007	0.010	0.017	0.024	0.003	0.014	50243	41923	34.38	-	-	1200
SUB TOTAL		: 5688 / 339513-01			96	3,837																		
NONDESTRUCTIVE TEST EDDY CURRENT		HEAT TREATMENT (WELD SEAM)		FLATTENING TEST		BENDING TEST		VISUAL & DIMENSON		WE CONFIRM THAT MATERIAL IS MERCURY AND LEAD FREE STS USES 99.9% PURE ZINC WITH MAX. OF 0.03% Pb (LEAD CONTENT)														
GOOD						GOOD		GOOD																
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.											 NITTAYA SRAJIT QUALITY ASSURANCE MANAGER													

ISO 9001 Certification by Bureau Veritas (#TH019654)

FOMQC-80/1-JAN-23



SAHATHAI
S T E E L P I P E
MILL TEST REPORT

SAHA THAI STEEL PIPE PCL
78 Moo 3 Poochao Road,
Bangyapraek, Phrapradaeng,
Samuthprakarn 10130 Thailand.
Tel: +66 (0) 2385-9023

NO. EX23000075
DATE: 7 Mar 2023

TO:
SHIPPED TO: HOUSTON, TX USA
SHIPPED BY: MV. TOMORROW V.2306E


SHIPPING MARKS :
MASTER PIPE
SPEC.
SIZE
WEIGHT
LOT NUMBER
DESTINATION PORT
PCS / BUNDLE
BATCH NO.
BUNDLE NO.
MADE IN THAILAND

DESCRIPTION OF GOODS AND/OR SERVICES:

COVERING 100 PERCENT OF INVOICE VALUE OF GOODS AND/OR SERVICES DESCRIBED AS PRIME QUALITY ERW STEEL PIPE,
MANUFACTURED IN ACCORDANCE WITH ASTM A53/ASME SA53 GR.A EACH SET OF DOCUMENTS TO REFERENCE ONE OF THE FOLLOWING APPLICANT
PO NUMBERS: 5688 / 339513-01
CFR HOUSTON, TX USA

MATERIAL IS OF THAILAND ORIGIN. *COUNTRY OF MELT AND POUR : THAILAND*
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MISS NITTAYA SRAJIT
QUALITY ASSURANCE MANAGER

ISO 9001 Certification by Bureau Veritas (#TH019664)

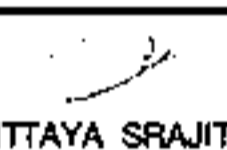
FOMQC-80/1-JAN-23



SAHATHAI STEEL PIPE MILL TEST REPORT

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76 Moo 3 Poochao Road,
Bangyapraek, Phrapradaeng,
Samuthprakarn 10131 Thailand.
Tel: +66 (0) 2385-9023

CERTIFICATE NO. : EX2300075
DATE : 7 Mar 2023
CUSTOMER :
CONTRACT (P/O) No. : 5688 / 339513-01
INSPECTION CERTIFICATE : ACCORDING TO EN 10204 : 2005 TYPE 3.1
COMMODITY : NEWLY PRODUCED, PRIME QUALITY ERW STEEL PIPE
SPECIFICATION : ASTM A53-2022 / ASME SA53-2021 GRADE A / ASTM A795 - 2021 UL/FM CERTIFIED

ITEM NO.	TYPE OF PIPE END	DIMENSION			NUMBER OF BUNDLES	NUMBER OF PIECES	K/N (STS)	CHEMICAL COMPOSITION %										MECHANICAL PROPERTIES			Pb %	WEIGHT OF ZINC COATING G/m ²	HYDRO-STATIC TEST (PSI)				
		NPS	Thickness /sch.no.	Length FT.				C	Si	Mn	P	S	Cu	V	Ni	Cr	Mo	Nb	TS. PSI	YP. PSI				EL %			
1	BPE	1-1/4"	40	21	65	2,730	82653	0.077	0.015	0.108	0.014	0.007	0.008	0.011	0.016	0.018	0.003	0.023	54422	48110	31.36	-	-	1200			
							82662	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52000	44603	33.04	-	-	1200			
							82666	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52167	46663	34.44	-	-	1200			
							82673	0.065	0.010	0.110	0.016	0.003	0.007	0.012	0.014	0.016	0.001	0.016	53104	44773	32.33	-	-	1200			
							82675	0.065	0.010	0.110	0.016	0.003	0.007	0.012	0.014	0.016	0.001	0.016	53654	44934	32.94	-	-	1200			
							82678	0.068	0.008	0.106	0.018	0.004	0.005	0.010	0.014	0.017	<0.001	0.014	54536	48707	36.34	-	-	1200			
							82686	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	51636	44873	60.09	-	-	1200			
							82689	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	49071	41745	65.03	-	-	1200			
							82691	0.069	0.008	0.105	0.014	0.004	0.008	0.009	0.016	0.021	0.002	0.014	55813	48116	30.46	-	-	1200			
							82696	0.063	0.009	0.104	0.013	0.005	0.007	0.009	0.016	0.020	0.002	0.016	52066	46148	33.99	-	-	1200			
2	BPE	1-1/4"	40	21	1	27	82662	0.064	0.006	0.093	0.015	0.008	0.005	0.011	0.010	0.016	0.003	0.021	52000	44603	33.04	-	-	1200			
3	BPE	1-1/2"	40	21	30	1,080	82710	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53591	46437	33.27	-	-	1200			
							82711	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53892	44138	32.69	-	-	1200			
							82712	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	55091	44737	32.61	-	-	1200			
							82715	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	57999	50235	28.90	-	-	1200			
							82725	0.069	0.014	0.115	0.016	0.008	0.012	0.008	0.019	0.022	0.002	0.017	59828	49944	29.09	-	-	1200			
							82726	0.052	0.009	0.124	0.017	0.007	0.007	0.008	0.015	0.023	0.003	0.016	57139	48775	33.96	-	-	1200			
							82738	0.060	0.007	0.133	0.020	0.007	0.007	0.010	0.017	0.024	0.003	0.014	50243	41923	34.38	-	-	1200			
SUB TOTAL		: 5688 / 339513-01			96	3,937																					
NONDESTRUCTIVE TEST EDDY CURRENT GOOD		HEAT TREATMENT (WELD SEAM)			FLATTENING TEST			BENDING TEST			VISUAL & DIMENSION			WE CONFIRM THAT MATERIAL IS MERCURY AND LEAD FREE. STS USES 99.9% PURE ZINC WITH MAX. OF 0.03% Pb (LEAD CONTENT)													
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.															 NITTAYA SRAJIT QUALITY ASSURANCE MANAGER												

ISO 9001 Certification by Bureau Veritas (#TH019664)

FOMQC-80/1-JAN-23



SAHATHAI
S T E E L P I P E
MILL TEST REPORT

SAHA THAI STEEL PIPE PCL
78 Moo 3 Poochao Road,
Bangyapraek, Phrapradaang,
Samuthprakarn 10130 Thailand.
Tel: +66 (0) 2385-9023

NO. EX23000100
DATE: 29 Mar 2023

SHIPPED TO: HOUSTON, TX USA
SHIPPED BY: MV. CHIPOL YONGAN V.15

DESCRIPTION OF GOODS AND/OR SERVICES:


COVERING 100 PERCENT OF INVOICE VALUE OF GOODS AND/OR SERVICES DESCRIBED AS PRIME QUALITY ERW STEEL PIPE,
MANUFACTURED IN ACCORDANCE WITH ASTM A53/ASME SA53 GR. A EACH SET OF DOCUMENTS TO REFERENCE ONE OF THE FOLLOWING APPLICANT
PO NUMBERS: 5698 / 342354-01
CFR HOUSTON, TX USA

SHIPPING MARKS :
MASTER PIPE
SPEC.
SIZE
WEIGHT
LOT NUMBER
DESTINATION PORT
PCS / BUNDLE
BATCH NO.
BUNDLE NO.
MADE IN THAILAND

MATERIAL IS OF THAILAND ORIGIN. "COUNTRY OF MELT AND POUR : THAILAND"
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY SAHA THAI STEEL PIPE (PUBLIC) CO., LTD.



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MISS NITTAYA SRAJIT
QUALITY ASSURANCE MANAGER

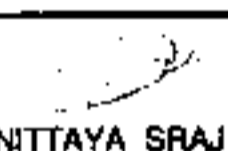
FOMQC-80/1-JAN-23



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Tel: +66 (0) 2385-9023

CERTIFICATE NO. : EX23000100
DATE : 29 Mar 2023
CUSTOMER :
CONTRACT (P/O) No. : 5698 / 342354-01
INSPECTION CERTIFICATE : ACCORDING TO EN 10204 : 2005 TYPE 3.1
COMMODITY : NEWLY PRODUCED, PRIME QUALITY ERW STEEL PIPE
SPECIFICATION : ASTM A53-2022 / ASME SA53-2021 GRADE A / ASTM A795 - 2021 UL/FM CERTIFIED

ITEM NO.	TYPE OF PIPE END	DIMENSION			NUMBER OF BUNDLES	NUMBER OF PIECES	H/N (STS)	CHEMICAL COMPOSITION %										MECHANICAL PROPERTIES			Pb %	WEIGHT OF ZINC COATING G/m ²	HYDRO-STATIC TEST (PSI)	
		NPS	Thickness /sch.no.	Length FT.				C	Si	Mn	P	S	Cu	V	Ni	Cr	Mo	Nb	TS. PSI	YP. PSI				EL %
1	BPE	1/2"	40	21	10	1,200	78633	0.061	0.003	0.291	0.015	0.006	0.017	0.004	0.017	0.037	0.002	0.017	52127	45439	35.68	-	-	1200
							78673	0.057	0.001	0.268	0.015	0.007	0.016	0.004	0.016	0.034	0.004	0.017	55855	50240	37.03	-	-	1200
							78686	0.056	0.002	0.263	0.009	0.005	0.009	0.003	0.012	0.018	0.003	0.016	54491	52167	35.62	-	-	1200
							78689	0.056	0.002	0.263	0.009	0.005	0.009	0.003	0.012	0.018	0.003	0.016	57901	53667	34.84	-	-	1200
2	BPE	1-1/4"	40	21	2	84	83946	0.178	0.010	0.252	0.008	0.005	0.003	0.010	0.015	0.015	0.001	0.015	65983	53323	31.54	-	-	1200
							82710	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53591	46437	33.27	-	-	1200
3	BPE	1-1/2"	40	21	52	1,872	82711	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	53892	44138	32.69	-	-	1200
							82715	0.076	0.026	0.135	0.020	0.004	0.004	0.009	0.013	0.024	0.003	0.018	57999	50235	28.90	-	-	1200
							82718	0.069	0.014	0.115	0.016	0.008	0.012	0.008	0.019	0.022	0.002	0.017	60347	53123	28.59	-	-	1200
							82722	0.069	0.014	0.115	0.016	0.008	0.012	0.008	0.019	0.022	0.002	0.017	55929	50031	31.06	-	-	1200
							82725	0.069	0.014	0.115	0.016	0.008	0.012	0.008	0.019	0.022	0.002	0.017	59828	49944	29.09	-	-	1200
							83687	0.162	0.047	0.163	0.017	0.005	0.005	<0.001	0.015	0.024	0.001	0.018	62233	47188	37.92	-	-	1200
SUB TOTAL		: 5698 / 342354-01			64	3,156																		
NONDESTRUCTIVE TEST EDDY CURRENT		HEAT TREATMENT (WELD SEAM)			FLATTENING TEST			BENDING TEST			VISUAL & DIMENSON			WE CONFIRM THAT MATERIAL IS MERCURY AND LEAD FREE. STS USES 99.9% PURE ZINC WITH MAX. OF 0.03% Pb (LEAD CONTENT)										
GOOD								GOOD			GOOD													
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.																		 NITTAYA SRAJIT QUALITY ASSURANCE MANAGER						

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