HULUDAO CITY STEEL PIPE
INDUSTRIAL CO.

MILL TEST CERTIFICATE

Add:Cishan Village,Longgang District,Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

Contract No.:NC-HLD121203

Certificate No.: 201304102

Standard: ASTM A500 GR.A

Date of Issue: Apr.27,2022

Description: TUBES ACCORDING TO ASTM A500

ORIGINAL

Shipping Mark:HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Dimension				Quantity			Heat Number	Chemical Composition												Mechanical Properties					Appearance and Dimension
Size	OD mm	Wall mm	Length m	Weight ton	Bdls	Pcs		C %	Si %	Mn %	P %	S %	Cu %	Cr %	Ni %	Mo %	V %	Ti %	Nb %	Y.S. Mpa	T.S. Mpa	Weld T.S. Mpa	El. %	bend /flattening	
1"	33.4	1.50	6	14.818	23	2093	13-1302	0.09	0.17	0.34	0.024	0.018	0.015	0.031	0.018	0.001	0.002	0.002	0.001	318	398	—	30.0	GOOD	GOOD
1"	33.4	2.00	6	29.595	35	3185	12-1212	0.10	0.13	0.35	0.021	0.022	0.017	0.038	0.024	0.002	0.002	0.002	0.001	295	410	—	27.0	GOOD	GOOD
1"	33.4	2.30	6	9.631	10	910	2100496	0.12	0.19	0.37	0.026	0.022	0.021	0.030	0.018	0.001	0.002	0.002	0.001	281	380	—	29.0	GOOD	GOOD
1-1/4"	42.2	1.50	6	9.909	17+1/60	1097	13-1302	0.09	0.17	0.34	0.024	0.018	0.015	0.031	0.018	0.001	0.002	0.002	0.001	305	400	—	29.0	GOOD	GOOD
1-1/4"	42.2	2.00	6	10.147	13+1/60	853	4143432	0.11	0.12	0.40	0.019	0.027	0.018	0.050	0.018	0.002	0.003	0.002	0.002	315	410	—	31.0	GOOD	GOOD
1-1/2"	48.3	1.50	6	15.206	24	1464	13-1302	0.09	0.17	0.34	0.024	0.018	0.015	0.031	0.018	0.001	0.002	0.002	0.001	298	382	—	27.0	GOOD	GOOD
1-1/2"	48.3	2.00	6	45.131	54	3294	12-1212	0.10	0.13	0.35	0.021	0.022	0.017	0.038	0.024	0.002	0.002	0.002	0.001	285	400	—	30.0	GOOD	GOOD
2"	60.3	1.50	6	10.140	21	777	4144432	0.11	0.15	0.38	0.018	0.026	0.011	0.022	0.017	0.001	0.002	0.002	0.002	295	390	—	29.0	GOOD	GOOD
2"	60.3	2.30	6	15.336	21	777	2100496	0.12	0.19	0.37	0.026	0.022	0.021	0.030	0.018	0.001	0.002	0.002	0.001	301	392	—	30.0	GOOD	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO., LTD.

QC Manager: 朱玉成

MILL TEST CERTIFICATE

HULUDAO CITY STEEL PIPE
INDUSTRIAL COMPANY

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSTOMER: DUFERCO SA

Standard: ASTM A500 GR.A

Certificate No.: 201304099

Description: STRUCTURAL SQUARE AND RECTANGULAR TUBES TO ASTM A500

Date of Issue: Apr.26,2022 ORIGINAL

Shipping Mark: HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Serial Number	Characteristic	Side H X B	Wall mm	Length m	Quantity Weight ton	Quantity Bdls	Quantity Pcs	Grade	Heat Number	Chemical Composition C %	Si %	Mn %	P %	S %
1	SQUARE	25*25	1.5	6	9.689	15	1500	A	12405440	0.10	0.15	0.35	0.018	0.027
2	SQUARE	40*40	1.5	6	20.327	19	1900	A	12405441	0.11	0.14	0.31	0.024	0.025
3	SQUARE	50*50	1.5	6	14.863	10+1/99	1099	A	12405440	0.10	0.15	0.35	0.018	0.027
4	RECTANGULAR	50*30	1.5	6	10.249	9+1/94	958	A	1130547	0.09	0.17	0.30	0.021	0.028

Serial Number	Heat Number	Mechanical Properties Body Y.S. (Mpa)	Body T.S. (Mpa)	El. %	Flattening	Seam Heat Treated	Appearance and Dimension
1	12405440	305	388	28	—	—	GOOD
2	12405441	310	392	27	—	—	GOOD
3	12405440	298	372	27	—	—	GOOD
4	1130547	322	405	29	—	—	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

辽宁葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO.,LTD

MILL TEST CERTIFICATE

HULUDAO CITY STEEL PIPE INDUSTRIAL COMPANY

Add: Cishan Village, Longgang District, Huludao City, Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSTOMER:DUFERCO SA **Standard:** ASTM A500 GR.C **Certificate No.:** 201304099-1

Description:STRUCTURAL SQUARE AND RECTANGULAR TUBES TO ASTM A500 ORIGINAL **Date of Issue:** Apr.26,2022

Shipping Mark: HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Serial Number	Characteristic	Side H X B	Wall mm	Length m	Quantity Weight ton	Quantity Bdls	Quantity Pcs	Grade	Heat Number	Chemical Composition C %	Si %	Mn %	P %	S %
1	SQUARE	40*40	2.5	6	19.456	14	1134	C	13KD0299	0.08	0.12	1.31	0.021	0.009
2	SQUARE	40*40	3.0	6	10.335	8	512	C	13KD0300	0.07	0.11	1.33	0.016	0.009
3	SQUARE	50*50	2.5	6	22.873	16+1/22	1046	C	13KD0299	0.08	0.12	1.31	0.021	0.009
4	SQUARE	50*50	3.0	6	20.256	16	784	C	13KD0302	0.07	0.10	1.33	0.022	0.011
5	SQUARE	60*60	2.5	6	10.418	8	392	C	13KD0299	0.08	0.12	1.31	0.021	0.009
6	SQUARE	60*60	3.0	6	9.258	6	294	C	13403099	0.12	0.29	1.05	0.017	0.016
7	SQUARE	70*70	2.5	6	39.86	26	1274	C	13KD0298	0.08	0.09	1.24	0.016	0.008
8	SQUARE	70*70	3.0	6	21.393	16	576	C	13KD0302	0.07	0.10	1.33	0.022	0.011
9	SQUARE	90*90	2.5	6	20.516	14	504	C	13KD0298	0.08	0.09	1.24	0.016	0.008
10	SQUARE	90*90	3.0	6	9.689	8	200	C	12JD0296	0.08	0.10	1.28	0.017	0.011

Serial Number	Heat Number	Mechanical Properties Body Y.S. (Mpa)	Body T.S. (Mpa)	El. %	Flattening	Seam Heat Treated	Appearance and Dimension
1	13KD0299	421	518	29	—	—	GOOD
2	13KD0300	411	506	27	—	—	GOOD
3	13KD0299	416	512	28	—	—	GOOD
4	13KD0302	431	505	27	—	—	GOOD
5	13KD0299	415	499	28	—	—	GOOD
6	13403099	412	524	26	—	—	GOOD
7	13KD0298	411	518	30	—	—	GOOD
8	13KD0302	415	499	28	—	—	GOOD
9	13KD0298	406	514	31	—	—	GOOD
10	12JD0296	392	496	29	—	—	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:
葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO.,LTD.

HULUDAO CITY STEEL PIPE
INDUSTRIAL COMPANY

MILL TEST CERTIFICATE

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSTOMER:DUFERCO SA

Standard: ASTM A500 GR.C

ORIGINAL

Certificate No.: 201304099-2

Date of Issue: Apr.26,2022

Description:STRUCTURAL SQUARE AND RECTANGULAR TUBES TO ASTM A500

Shipping Mark: HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Serial Number	Characteristic	Side	Wall mm	Length m	Quantity			Grade	Heat Number	Chemical Composition				
		H X B			Weight ton	Bdls	Pcs			C %	Si %	Mn %	P %	S %
11	SQUARE	100*100	2.5	6	29.521	26	650	C	13KD0297	0.06	0.09	1.28	0.016	0.006
12	SQUARE	100*100	3.0	6	79.793	59	1475	C	13KD0301	0.08	0.13	1.31	0.017	0.006
13	SQUARE	100*100	4.0	6	29.558	26	416	C	13JD0287	0.06	0.13	1.31	0.018	0.011
14	SQUARE	100*100	6.0	6	25.113	27	243	C	13JD0288	0.06	0.12	1.30	0.018	0.012
15	SQUARE	100*100	6.0	12	29.764	36	144	C	13JD0296	0.08	0.11	1.30	0.016	0.009
16	SQUARE	120*120	4.0	6	10.076	13	117	C	J3100811	0.13	0.27	1.26	0.023	0.012
17	SQUARE	120*120	4.0	12	9.301	6	54	C	J3100811	0.13	0.27	1.26	0.023	0.012
18	SQUARE	200*200	7.0	12	30.068	30	60	C	13301304	0.14	0.30	1.28	0.025	0.027
19	SQUARE	220*220	7.0	12	19.94	18	36	C	13102802	0.14	0.31	1.26	0.021	0.021
20	SQUARE	260*260	9.0	6	10.057	12	24	C	J3200991	0.16	0.18	0.34	0.012	0.005

Serial Number	Heat Number	Mechanical Properties				Seam Heat Treated	Appearance and Dimension
		Body Y.S. (Mpa)	Body T.S. (Mpa)	El. %	Flattening		
11	13KD0297	393	492	30	—	—	GOOD
12	13KD0301	384	491	32	—	—	GOOD
13	12JD0287	406	488	32	—	—	GOOD
14	13JD0288	388	482	27	—	—	GOOD
15	13JD0296	419	500	29	—	—	GOOD
16	J3100811	402	512	30	—	—	GOOD
17	J3100811	402	512	30	—	—	GOOD
18	13301304	383	526	27	—	—	GOOD
19	13102802	410	521	29	—	—	GOOD
20	J3200991	394	555	36	—	—	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO., LTD.

MILL TEST CERTIFICATE

HULUDAO CITY STEEL PIPE
INDUSTRIAL COMPANY

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSTOMER: DUFERCO SA

Standard: ASTM A500 GR.C

Certificate No.: 201304100

Description: STRUCTURAL SQUARE AND RECTANGULAR TUBES TO ASTM A500

Date of Issue: Apr.26,2022

Shipping Mark: HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

ORIGINAL

Serial Number	Characteristic	Side H X B	Wall mm	Length m	Quantity Weight ton	Quantity Bdls	Quantity Pcs	Grade	Heat Number	Chemical Composition C %	Si %	Mn %	P %	S %
1	RECTANGULAR	50*30	2.5	6	10.569	8	616	C	13KD0299	0.08	0.12	1.31	0.021	0.009
2	RECTANGULAR	80*40	2.5	6	14.617	11	550	C	13KD0299	0.08	0.12	1.31	0.021	0.009
3	RECTANGULAR	100*50	2.5	6	35.122	58	1044	C	13KD0297	0.06	0.09	1.28	0.016	0.006
4	RECTANGULAR	100*50	3.0	6	59.71	83	1494	C	13KD0296	0.06	0.11	1.27	0.017	0.009
5	RECTANGULAR	100*50	4.0	6	19.423	20+1/12	372	C	J2207641	0.14	0.25	1.21	0.017	0.015
6	RECTANGULAR	120*60	3.0	6	20.056	23	414	C	13KD0300	0.07	0.11	1.33	0.016	0.009
7	RECTANGULAR	150*50	2.5	6	19.62	16	432	C	13KD0298	0.08	0.09	1.24	0.016	0.008
8	RECTANGULAR	150*50	3.0	6	20.449	14	378	C	13KD0300	0.07	0.11	1.33	0.016	0.009
9	RECTANGULAR	150*100	6.0	12	15.793	10	60	C	J2206318	0.14	0.22	1.25	0.022	0.014
10	RECTANGULAR	160*65	3.4	6	9.929	12	144	C	J2107273	0.13	0.24	1.25	0.017	0.010

Serial Number	Heat Number	Mechanical Properties Body Y.S. (Mpa)	Body T.S. (Mpa)	El. %	Flattening	Seam Heat Treated	Appearance and Dimension
1	13KD0299	422	506	28	—	—	GOOD
2	13KD0299	415	502	28	—	—	GOOD
3	13KD0297	402	498	27	—	—	GOOD
4	13KD0296	388	492	28	—	—	GOOD
5	J2207641	388	522	30	—	—	GOOD
6	13KD0300	405	502	28	—	—	GOOD
7	13KD0298	431	500	29	—	—	GOOD
8	13KD0300	406	498	39	—	—	GOOD
9	J2206318	375	515	29	—	—	GOOD
10	J2107273	385	522	30	—	—	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO., LTD.

MILL TEST CERTIFICATE

HULUDAO CITY STEEL PIPE
INDUSTRIAL COMPANY

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSTOMER:DUFERCO SA **Standard:** ASTM A500 GR.C **Certificate No.:** 201304100-1

Description:STRUCTURAL SQUARE AND RECTANGULAR TUBES TO ASTM A500 ORIGINAL **Date of Issue:** Apr.26,2022

Shipping Mark: HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Serial Number	Characteristic	Side	Wall mm	Length m	Quantity			Grade	Heat Number	Chemical Composition				
		H X B			Weight ton	Bdls	Pcs			C %	Si %	Mn %	P %	S %
11	RECTANGULAR	160*65	3.4	12	9.653	7	70	C	J2107273	0.13	0.24	1.25	0.017	0.010
12	RECTANGULAR	180*65	4.0	6	9.505	9	108	C	J2106589	0.14	0.35	1.28	0.012	0.010
13	RECTANGULAR	180*65	4.0	12	10.561	6	60	C	J2106589	0.14	0.35	1.28	0.012	0.010
14	RECTANGULAR	200*70	4.5	6	30.084	23	276	C	J3100812	0.12	0.25	1.24	0.019	0.009
15	RECTANGULAR	200*70	4.5	12	60.168	69	276	C	J3100812	0.12	0.25	1.24	0.019	0.009
16	RECTANGULAR	220*90	4.5	12	10.077	10	40	C	13JD0287	0.06	0.12	1.33	0.018	0.010
17	RECTANGULAR	220*90	4.5	12	10.077	10	40	C	13JD0287	0.06	0.12	1.33	0.018	0.010
18	RECTANGULAR	220*90	4.5	12	10.077	10	40	C	13JD0287	0.06	0.12	1.33	0.018	0.010

Serial Number	Heat Number	Mechanical Properties				Seam Heat Treated	Appearance and Dimension
		Body Y.S. (Mpa)	Body T.S. (Mpa)	El. %	Flattening		
11	J2107273	385	522	30	—	—	GOOD
12	J2106589	422	535	27	—	—	GOOD
13	J2106589	422	535	27	—	—	GOOD
14	J3100812	366	506	31	—	—	GOOD
15	J3100812	366	506	31	—	—	GOOD
16	13JD0287	386	482	28	—	—	GOOD
17	13JD0287	386	482	28	—	—	GOOD
18	13JD0287	386	482	28	—	—	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO.,LTD.

HULUDAO CITY STEEL PIPE
INDUSTRIAL CO.,LTD

MILL TEST CERTIFICATES

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China **Post code:** 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

Contract No.:NC-HLD121203

Certificate No.: 201304101

Standard: ISO R65 II

Date of Issue: Apr.27,2022

Description:GALVANISED TUBES WITH THREADED AND SOCKET END

ORIGINAL

Shipping Mark:HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Designation of thread	Dimension			Type	Quantity			Heat Number	Chemical Composition					Mechanical Properties					Hydro Test 50 bar	NDT	NPT Thread	Zinc	Appearance and Dimension
	OD mm	Walt mm	Length m		Weight ton	Bdls	Pcs		C %	Si %	Mn %	P %	S %	Y.S. MPa	T.S. MPa	El. 2in	Bend test	Flattening test					
1/2"	21.0-21.4	2.00	6	GTC	20.269	28	3556	2100746	0.10	0.15	0.33	0.025	0.024	338	382	27	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
3/4"	26.4-26.9	2.30	6	GTC	9.762	12+1/87	1179	2101442	0.11	0.14	0.32	0.025	0.018	318	375	25	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
1"	33.2-33.8	2.60	6	GTC	20.529	18+1/90	1728	12-1171	0.12	0.13	0.37	0.021	0.023	332	406	27	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
1-1/4"	41.9-42.5	2.60	6	GTC	29.748	32	1952	12-1172	0.11	0.17	0.42	0.019	0.025	308	395	28	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
1-1/2"	47.8-48.4	2.90	6	GTC	40.136	33+1/58	2071	12411938	0.12	0.18	0.35	0.027	0.013	342	426	24	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
2"	59.6-60.2	2.90	6	GTC	20.024	22	814	208	0.10	0.12	0.31	0.018	0.026	328	403	38	GOOD	—	GOOD	—	GOOD	GOOD	GOOD
2-1/2"	75.2-76.0	3.20	6	GTC	20.179	31	589	13401672	0.12	0.12	0.30	0.020	0.018	370	460	30	—	GOOD	GOOD	—	GOOD	GOOD	GOOD
3"	87.9-88.7	3.20	6	GTC	20.096	26	494	12411946	0.13	0.20	0.34	0.020	0.018	408	494	28	—	GOOD	GOOD	—	GOOD	GOOD	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO., LTD.

MILL'S TEST CERTIFICATE

HULUDAO CITY STEEL PIPE
INDUSTRIAL CO.,LTD

Add: Cishan Village, Longgang District, Huludao City,
Liaoning Province, China Post code: 125003
Tel: 86 429-2058666 Fax: 86 429 -2058333

CUSOMER: DUFERCO SA

Contract No.:NC-HLD121206

ORIGINAL

Certificate No.: 201304094

Standard:API 5L B PSL1

Date of Issue: Apr.26,2022

Description:SCH 40 TUBES

SHIPPING MARK:HLD/SPEC/SIZE/PCS PER BUNDLE/HEAT NO.

Serial Number	Pipe Types	Dimension			Quantity			Grade	Heat Number	Chemical Composition											
		OD mm	Wall mm	Length m	Weight ton	Bdls	Pcs			C %	Si %	Mn %	P %	S %	Cu %	Cr %	Ni %	Mo %	V %	Ti %	Nb %
1	ERW	60.3	3.9	6	12.042	10	370	B	J2207405	0.14	0.24	0.66	0.016	0.014	0.015	0.015	0.013	0.002	0.003	0.002	0.001
2	ERW	114.3	6.0	6	79.8	83	830	B	12410317	0.10	0.23	0.33	0.021	0.025	0.016	0.060	0.014	0.002	0.003	0.002	0.001
3	ERW	168.3	7.1	6	117.513	99	693	B	J3200575	0.14	0.15	0.22	0.016	0.011	0.011	0.016	0.011	0.001	0.004	0.001	0.001
4	ERW	219.1	8.2	6	39.568	31	155	B	12411332	0.14	0.19	0.34	0.021	0.016	0.024	0.048	0.015	0.002	0.002	0.001	0.003

Serial Number	Heat Number	Mechanical Properties						Impact test		Hydro Test 5sec (kPa)	NDT		Seam Heat Treated	Appearance and Dimension
		Body Y.S. (Mpa) L/T	Body T.S. (Mpa) L/T	El. 2in %	Weld T.S. (Mpa) T	Bend 12D 90°	Flattening 1/2D, 1/3D,C	Size of Sample (mm): Body 0℃ (J)	Weld 0℃ (J)		Eddy	U.T N10		
1	J2207405	402	445	30.0	—	—	GOOD	—	—	17000	—	GOOD	GOOD	GOOD
2	12410317	366	441	30.4	—	—	GOOD	—	—	15500	—	GOOD	GOOD	GOOD
3	J3200575	344	428	36.4	—	—	GOOD	—	—	12400	—	GOOD	GOOD	GOOD
4	12411332	359	466	39.2	490	—	GOOD	—	—	11000	—	GOOD	GOOD	GOOD

We hereby certify that the material described has been manufactured,inspected and tested in accordance with above standard & specification,and satisfied with the requirements.

QC Manager:

葫芦岛市钢管工业有限公司
HULUDAO CITY STEEL PIPE INDUSTRIAL CO., LTD.