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INSPECTION REPORT

Report No.: MIL 1736-12
Issued on: Mar 16th, 2012
Inspection Time: Mar 12th-14th, 2012

P.O. No. 06951

Inspection Subject:	Seamless Casing Pipe		
Specification:	API 5CT K55, BTC	Inspector:	Lin Gaojie

Visit Summary:

Scope of Inspection
- Visual inspection.
- Dimension inspection.
- Packaging, quantity and marking inspection.
- Documents review.
- Part photo service.

Results of inspection to MIL 1736-12

- **Process Verification**

1. Visual Inspection

The pipes were manual varnished, and there are some imperfection being as followed:
Photo attachment as below

2. Dimension inspection

We had measured both pipe and coupling dimensions of casing by random taken.

The detailed data is in the following table.

2.1 244.5mm O.D.

1) Pipe dimension

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Heat No.	Pipe No.	OD of pipe (mm)	WT of pipe (mm)	Length of pipe (m)	No. of thread per in.	Stand off P (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Length: pipe end to triangle A1 (mm)
12B07106	0122AI02	246.1	9.3~ 9.5	7.62	5	0.40	-0.015	0.0610	122.6
12B07106	0123AI02	246.2	9.0~ 9.3	7.62	5	1.16	-0.015	0.0610	122.4
12B07106	0121AI02	245.7	8.8~ 9.5	7.61	5	1.10	-0.010	0.0620	122.7
22B00677	0211AJ02	245.9	9.5~ 9.7	7.61	5	1.50	-0.010	0.0620	122.3
22B00677	0212AJ02	245.2	9.0~ 9.5	7.61	5	1.96	-0.010	0.0630	122.4
22B00677	0213AJ02	245.5	9.0~ 9.5	7.39	5	1.58	-0.010	0.0640	122.1
22B00659	0270AT02	245.6	9.3~ 9.5	11.16	5	1.00	0	0.0610	122.3
22B00659	0269AT02	245.9	9.3~ 9.7	11.34	5	1.10	0	0.0620	122.1
22B00659	0268AT02	246.0	9.0~ 9.7	11.34	5	0.60	0	0.0620	122.5
22B00685	0409AU02	245.3	9.5~ 10.0	10.99	5	1.78	+0.010	0.0620	122.7
22B00685	0411AU02	245.3	9.2~ 9.7	10.81	5	1.68	0	0.0640	121.8

2) Coupling dimension

Heat No.	Pipe No.	OD of coupling (mm)	Length of coupling (mm)	No. of thread per in.	Stand off A (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Width of bearing face b (mm)
12B07106	0122AI02	270.8	271.4	5	4.0	0	0.0645	10.1
12B07106	0123AI02	271.9	272.8	5	4.6	0	0.0650	9.5
12B07106	0121AI02	270.8	272.6	5	4.7	+0.005	0.0645	9.8
22B00677	0211AJ02	270.2	270.3	5	5.0	-0.010	0.0640	10.2
22B00677	0212AJ02	270.0	270.3	5	4.8	-0.020	0.0635	10.6
22B00677	0213AJ02	269.7	270.2	5	3.6	-0.015	0.0620	9.7
22B00659	0270AT02	270.2	270.2	5	5.0	-0.010	0.0625	10.6
22B00685	0409AU02	272.0	272.1	5	4.9	0	0.0650	10.4

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22B00685	0410AU02	270.2	272.4	5	5.0	-0.005	0.0635	9.6
22B00685	0411AU02	270.6	270.3	5	4.9	+0.010	0.0635	10.3

2.3. 114.3mm O.D.

1) Pipe dimension

Heat No.	Pipe No.	OD of pipe (mm)	WT of pipe (mm)	Length of pipe without protector (m)	Tolerance of thread pitch (mm)	Stand off P (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Length: pipe end to triangle A1 (mm)
1201442	1756	114.9	6.37~ 6.48	7.025	+0.015	1.8	+0.02	0.0650	100.4
1201442	1757	114.9	6.19~6.64	7.430	+0.020	0.7	+0.02	0.0620	100.6
1201442	1755	115.0	6.27~ 6.50	7.020	+0.020	1.7	+0.03	0.0620	100.5
1201442	1759	115.0	6.12~ 6.48	7.025	+0.020	1.2	+0.02	0.0640	100.6
1201442	1754	115.0	6.25~ 6.96	7.300	+0.020	0.9	+0.02	0.0630	100.3
1201442	1753	115.0	6.35~ 6.94	7.005	+0.020	1.4	+0.02	0.0635	100.3
1201442	1750	114.9	6.16~ 6.60	7.455	+0.020	0.6	+0.02	0.0620	100.4
1201442	1758	114.7	6.37~ 6.50	7.005	+0.020	1.8	+0.02	0.0640	100.4
1201442	1752	114.9	6.27~ 6.60	6.985	+0.025	0.9	+0.02	0.0635	100.3
1201442	1751	115.0	6.32~ 6.42	7.030	+0.010	0.9	+0.02	0.0635	100.4

2)Coupling dimension

Heat No.	Pipe No.	OD of coupling (mm)	Length of coupling (mm)	Tolerance of thread pitch (mm)	Stand off A (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Width of bearing face b (mm)
1201442	1756	127.6	227.5	-0.010	2.3	-0.020	0.0640	4.1
1201442	1757	127.3	227.2	0	2.2	0	0.0635	4.6
1201442	1755	127.7	227.2	-0.010	2.2	-0.020	0.0640	4.1
1201442	1759	127.5	227.1	0	2.2	-0.020	0.0630	4.5
1201442	1754	127.5	227.2	0	2.2	-0.020	0.0620	4.4
1201442	1753	127.6	227.5	0	2.4	-0.020	0.0620	4.7

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1201442	1750	127.6	227.3	+0.010	2.3	-0.020	0.0620	4.2
1201442	1758	127.9	227.3	0	2.2	-0.010	0.0625	4.2
1201442	1752	127.6	2270	-0.010	2.4	-0.010	0.0620	4.4
1201442	1751	127.7	227.0	0	2.2	-0.020	0.0625	4.3

- **Cargo 2**

1) Pipe dimension

Heat No.	Pipe No.	OD of pipe (mm)	WT of pipe (mm)	Length of pipe without protector (m)	Tolerance of thread pitch (mm)	Stand off P (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Length: pipe end to triangle A1 (mm)
1201444	1156	114.9	6.4~ 6.6	7.340	-0.010	0.7	-0.010	0.0635	99.5
1201444	1157	115.0	6.6~6.9	7.030	-0.010	0.9	-0.010	0.0630	99.3
1201444	1158	115.0	6.2~ 6.8	7.385	-0.010	0.6	-0.010	0.0645	99.4
1201444	1154	115.0	6.5~ 6.8	7.330	-0.010	0.8	-0.010	0.0630	99.7
1201444	1152	114.9	6.6~ 6.8	6.885	0	0.9	0	0.0640	99.6
1201444	1151	115.0	6.5~ 6.9	7.250	-0.010	0.6	0	0.0635	99.5
1201444	1159	114.9	6.6~ 7.0	7.010	-0.010	0.7	-0.010	0.0640	99.7
1201444	1153	114.9	6.8~ 7.0	7.055	-0.010	0.6	-0.010	0.0650	99.8
1201444	1155	115.1	6.5~ 6.7	7.400	-0.010	0.7	-0.010	0.0630	99.5
1201444	1160	115.1	6.4~ 6.6	7.310	0	0.6	0	0.0635	100.0

2) Coupling dimension

Heat No.	Pipe No.	OD of coupling (mm)	Length of coupling (mm)	Tolerance of thread pitch (mm)	Stand off A *See Note* (mm)	Tolerance of tooth depth (mm)	Taper (in./in.)	Width of bearing face b (mm)
1201444	1156	127.6	226.7	-0.010	/	0	0.0630	4.4
1201444	1157	127.1	227.0	+0.010	/	-0.010	0.0640	3.7
1201444	1158	127.1	227.0	-0.020	/	-0.015	0.0635	4.1

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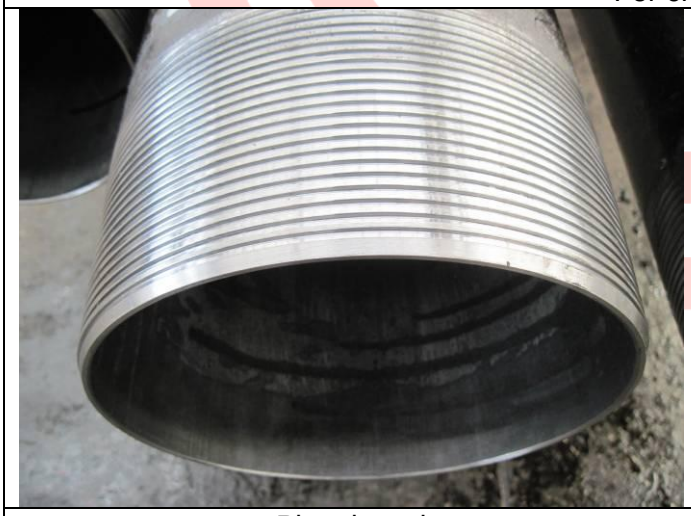
1201444	1154	127.5	227.0	-0.010	/	-0.020	0.0630	4.1
1201444	1152	127.0	226.9	-0.010	/	-0.010	0.0630	3.8
1201444	1151	127.5	226.9	0	/	-0.005	0.0640	3.4
1201444	1159	127.3	226.8	-0.010	/	-0.010	0.0625	4.0
1201444	1153	127.1	227.1	-0.020	/	-0.010	0.0630	3.9
1201444	1155	127.6	226.9	+0.010	/	-0.020	0.0630	3.8
1201444	1160	127.2	226.8	-0.020	/	-0.020	0.0635	3.8

Photo attachment as below

For checking



Pipe thread

Coupling

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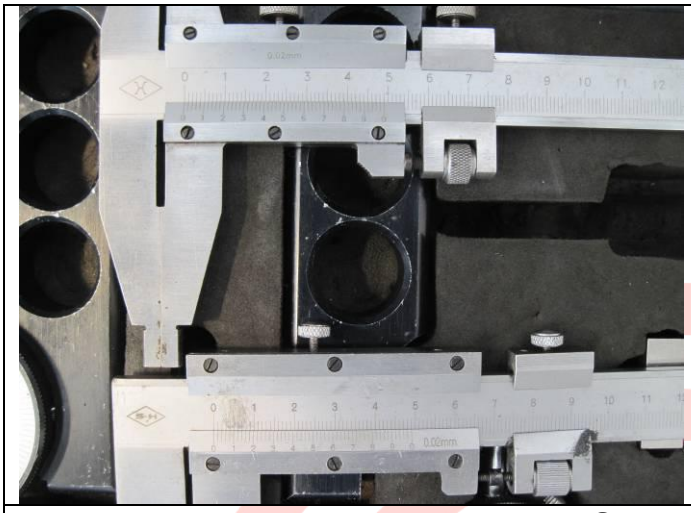
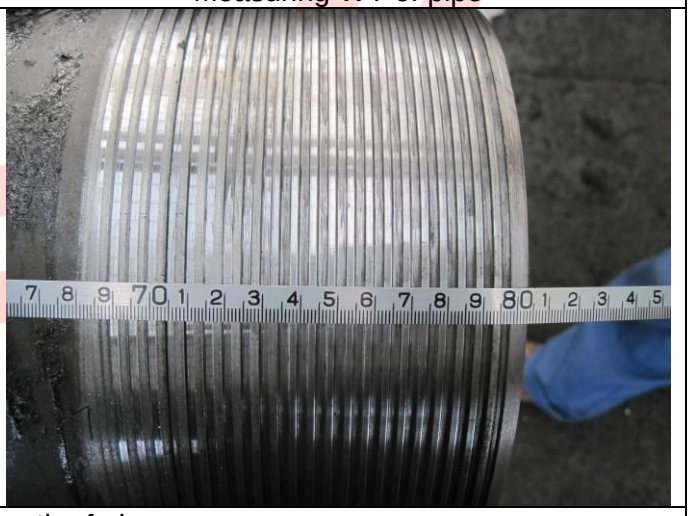


Gage calibration

Measuring OD of pipe

Measuring WT of pipe



Measuring Length of pipe

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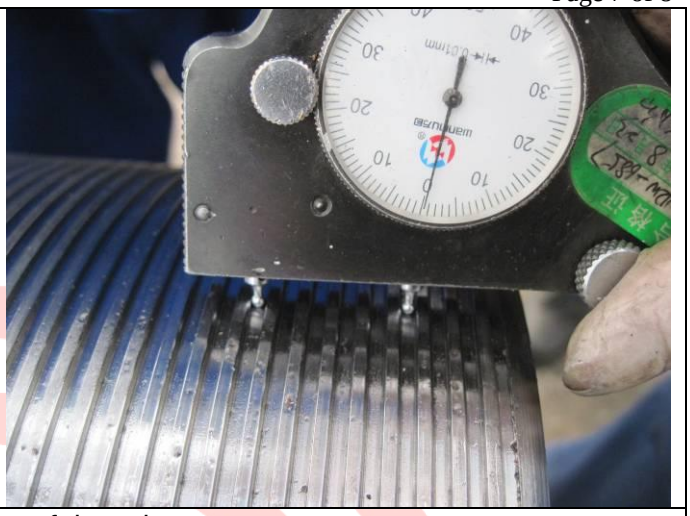
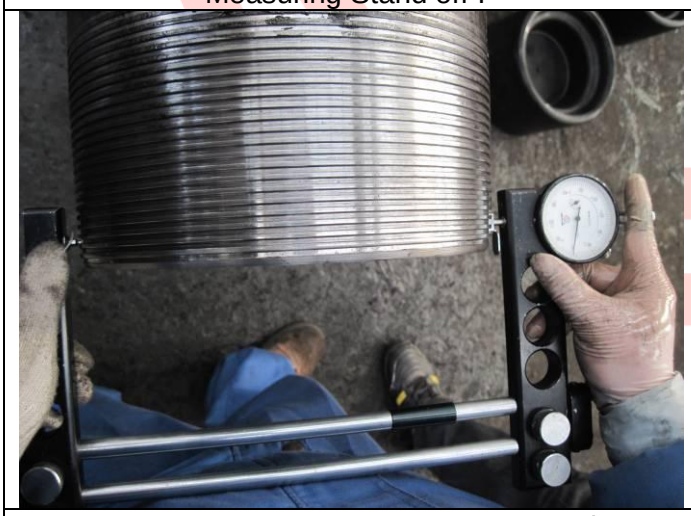


Measuring No. of thread

Measuring Stand off P

Measuring Tolerance of tooth depth



Measuring Taper of pipe thread

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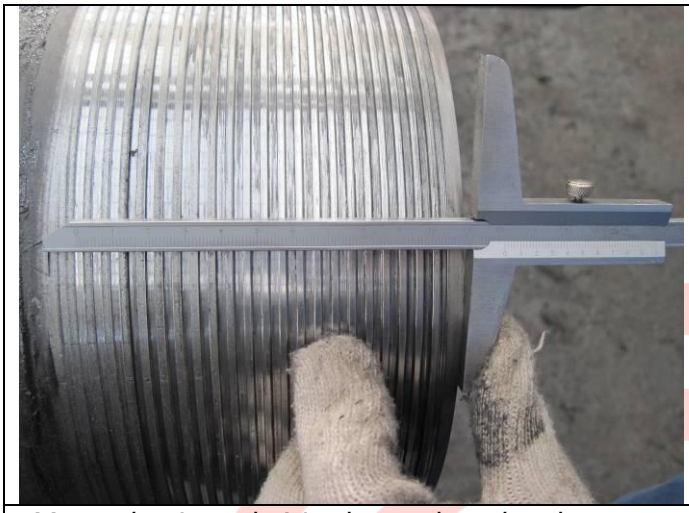
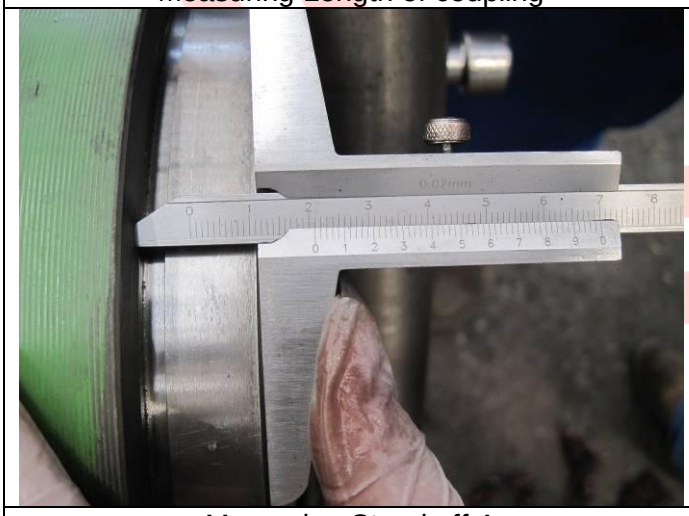
	
Measuring Length A1: pipe end to triangle stamp	Measuring OD of coupling
Measuring Length of coupling	Measuring No. of thread
	
Measuring Stand off A	Measuring Tolerance of tooth depth

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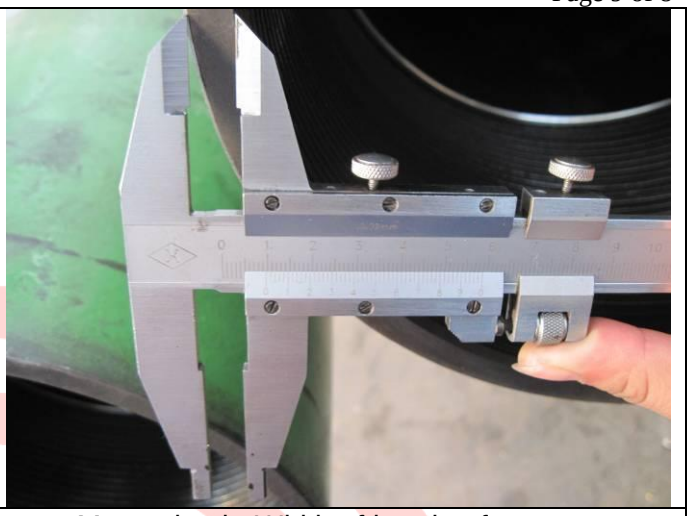
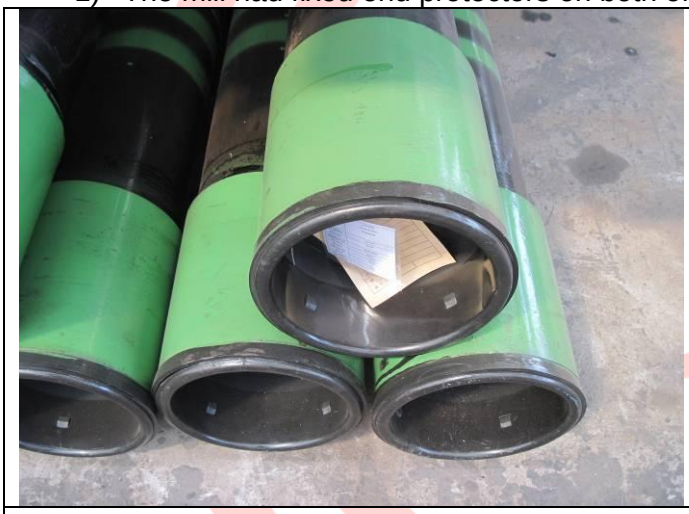
Measuring Taper of coupling thread



Measuring b: Width of bearing face

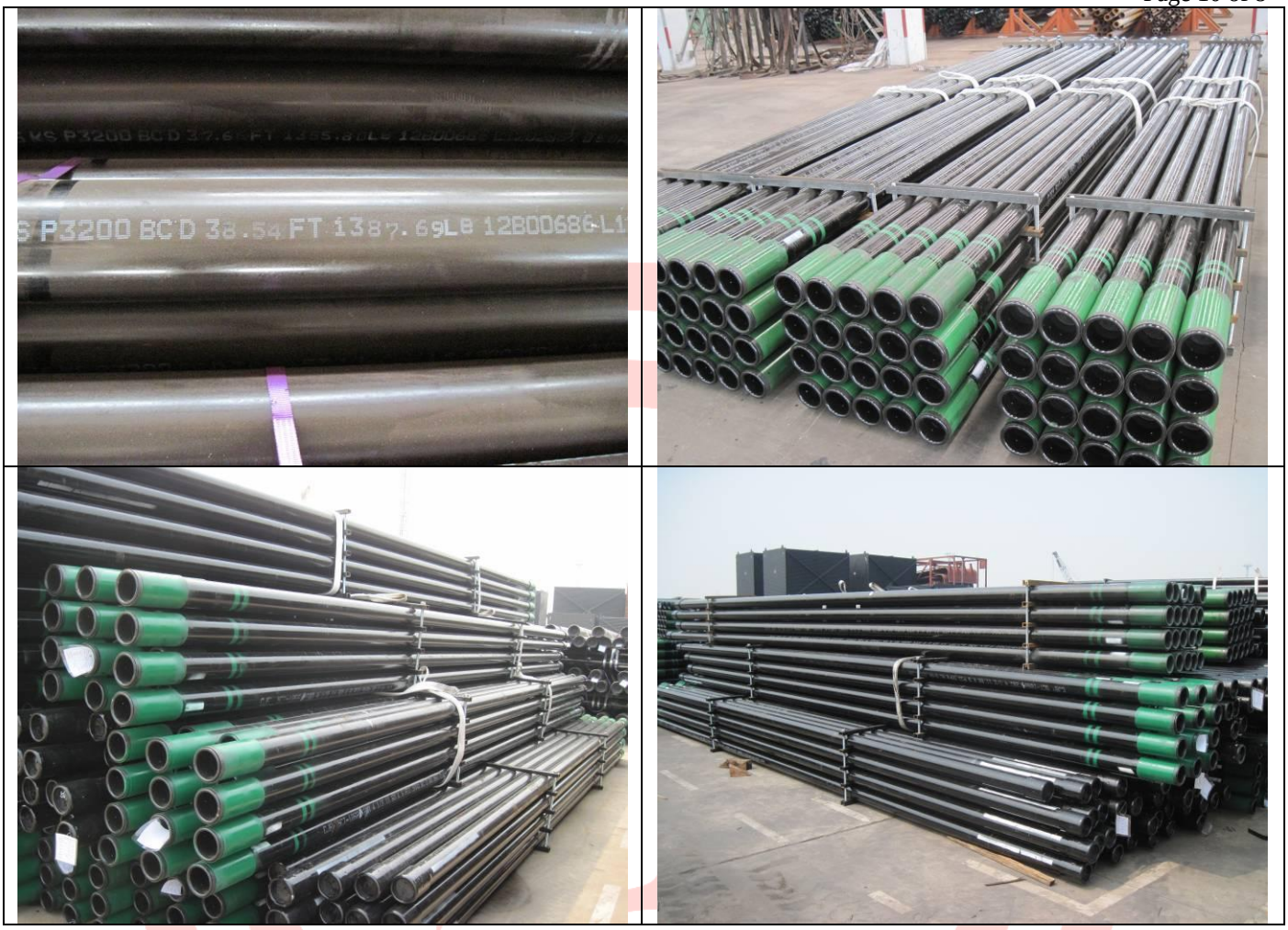
1. Packaging, quantity and marking inspection

1) The mill had fixed end protectors on both of pipe ends;



End protectors

Marking



- **Review of Documentation**

Raw Material Test Certificate including pipes and couplings.

Material Test Certificate of thread compounds.

Hydrostatic Test Report.

Threaded connection Drift Test Report.

Physical and Chemical Testing Report.

Inspection Report of Finished product.

- **Conclusions:**

The inspection results shows that the casing pipe are in full compliance with latest API 5CT specification and client's requirements.