Industry & Facilities Division



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INSPECTION REPORT IDD/B-09/093-02

BV Job nr: I	IDD/B-	09/093
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PROJECT: TPI for Seamless Carbon Steel Pipe	Ref: L/C NO: 0070609018	
BV Client: Chengdu Derbo Steel Co.,Ltd.	P/o nr: IDD/B-09/093 (client to BV)	
Manufacturer: Chengdu Derbo Steel Co.,Ltd.	P/o nr: HNGSPCG09028-TH-3 (client to Manufacturer)	
Inspection requested by: Chengdu Derbo Steel Co., L	td.	

SUPPLY / SUBJECT OF INSPECTION	MT	PCS
SEAMLESS PIPES AS PER ASTM A 106 GR.B		
168.3mmx5.56mmx5.8m	13.0	102
355.6mmx7.92mmx5.8m	80.0	204
406.4mmx9.53mmx5.8m	38.6	72
Total	131.6	378

DOCUMENTS OF REFERENCE : See continuation sheet for additional documents: ☐ Yes ☒ No

Title	Reference n°	Rev.	Approved by	Date
Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service	ASTM A 106		ASTM	
Sales Contract	<i>I</i>	1	1	7
INSPECTIONS:	Results of inspection	<u>n</u> : ⊠ Satis	factory Unsatis	sfactory
Inspection Place: Yanshan County,	Non Conformities Re	ports (NCI	<u>R):</u>	
Kind of inspection: ☐ Pre-inspection meeting ☐ Witnessing tests ☐ Final inspection ☐ Document review ☐ Expediting & vendor assessment ☐ Packing (for details see continuation sheet)	Main Conclusions & BV surveyor performe steel pipes listed about accordance with relative for more detail, pleas Next visit scheduled:	d the inspective. The institute requirer to in	ction for the seamle pection result is acc ments.	ss carbon

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Description of the inspections carried out:

§ Introduction

The inspector Shi Chao from Bureau Veritas Consulting Company performed Third Part Inspection for seamless carbon steel pipes under the requirement of Hunan Great Steel Pipe Co., Ltd. on Jul.06th-07th, 2009.

§ Scope of inspection

- 1. Visual inspection and dimensional control (Sample size: 10%)
- 2. Witness hydrostatic test (Sample size: 10%)
- 3. Witness chemical analysis and mechanical property tests (Sampling from each size)
- 4. Documents reviewing

§ Manufacturing Progress Status

When BV inspector arrived at the manufacturer' workshop, all the pipes listed above are finished.

§ Details of inspection activities carried out with respect to scope of work.

Surveillance with reference to ITP

1. Visual inspection and dimensional control:

* Visual inspection:

This inspection performed random at 10% rate. During inspection, BV inspector found all pipes were stacked on hypaethral ground, the surface of pipes were covered with black coating, few of pipes were painted marking,

Remark: The marking without completely finished, the manufacturer said they will finish it when loading.

Marking example: ASTM A 106 Grade B, 355.6MM*7.9MM*5.8M, 895449, HYDRO TEST

Photos on site:



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Visual inspection and marking example

* Dimensional inspection:

Dimension checking includes outside diameter, wall thickness and length.

This inspection was performed randomly at 10% rate. The result is acceptable.

Measurement values as below:

Type		Outside diameter	Wall thickness	Length
168.3X5.56mm	Required value	168.3 (+1.6/-0.8)	5.56 (+22.5%-12.5%)	5.8 m
100.3/3.3011111	Actual value	167.6-168.3	5.1-5.8	5.805-5.825
355.6X7.92mm	Required value	355.6 (+2.4/-0.8)	7.92 (+22.5%-12.5%)	5.8 m
333.687.9211111	Actual value	355-358	7.3-8.6	5.803-5.815
406.4X9.53mm	Required value	406.4 (+2.4/-0.8)	9.53 (+22.5%-12.5%)	5.8 m
400.479.55000	Actual value	406-407.5	8.4-9.6	5.84-5.85

Photos on site:







Outside diameter, wall thickness and length inspection

2. Witness hydrostatic test:

This hydrostatic test was witnessed by BV inspector at 10% rate random. After inspection the result is acceptable.

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Test values as below:

Туре	Test pressure	Duration	Result
168.3X5.56mm	10.0 Mpa		
355.6X7.92mm	6.5 Mpa	≥ 5 sec.	Acceptable
406.4X9.53mm	7.0 Mpa		- incorpitation

Photos on site:







Filling water

Pressurizing

pressure gauge

3. Witness chemical analysis and mechanical property tests:

For this test, BV inspector chose specimen from each type pipes (each Heat No.). Because the manufacturer didn't have lab. BV inspector requested the manufacturer to perform the test in the third party lab which was approved by government. BV inspector reviewed the test reports. The results were acceptable as per ASTM A106.

4. Documents reviewing:

Raw material quality certificates, chemical analysis and mechanical property tests reports, hydraulic test reports, Mill Test Certificate, IBR Form III-A files were provided by the manufacturer.

After reviewing by BV inspector, the result is acceptable.

§ Results of Inspection

Based on above evidence, the result of this inspection is satisfactory. BV stickers were on the sampling pipes.

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§ Problems pending/ Area of Concern

None

ANNEXES Yes (Total number of pages: 8)

☐ No

1. MTC

2. IBR Form III-A

Inspected by:

Name: Shi Chao

Signature:

Date of issue: Jul. 09th, 2009

Inspection centre: BV,ShangHai

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Distribution:
☐ CLIENT ☐ MANUFACTURER
☐

Checked by:

Name: Shiting Zhu

Signature:

BV OFFICE

Zhu