



**Inspection Order No. :** IN-NJ-5401-11013  
**Page No. :** 1 of 6  
**Date of issue:** 2.APRIL,2011

**INSPECTION REPORT  
(Non-Negotiable)**

- **Description and Quantity of Commodity:** GPU16-650 11.9m 310 pcs  
GPU26-650 11.9m 230 pcs
- **Name & Address of Buyer:**
- **Name & Address of Seller:** NANJING GRAND STEEL PILING CO.,LTD  
181 HUNAN ROAD NANJING JIANGSU  
CHINA
- **Inspection Date & Place:** 2nd.April,2011  
Nanjing city, Jiangsu Province P. R. China
- **L/C No.:** N/A
- **P/I No.:** GPZ11011402 (Date of issue: 2011-1-14)
- **Nature Of Inspection:**
  1. Dimension check
  2. Visual check
  3. Packing and marking check
  4. Sample selection for mechanical property test
  5. Document review
- **Inspector:** Kevin Zhang

This is to report that we, SGS-CSTC Nanjing Branch on 2nd.April, 2011 at the request of Grand Piling conducted the following inspection:

**Disclaimer**

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



**Instrument checklist**

During the inspection, the following instrument calibration status has been checked for inspection:

No.	INSTRUMENT DESCRIPTION	CALIBRATION STATUS	CERTIFICATE NO.
1	Vernier caliper(0~300mm)/J1604971	Valid on Dec.5,2011	00292392
2	Tape measuring rule(0~30m)/#01	Valid on Sept.26,2011	00282417-001
3	Tape measuring rule(0~5m)/#01	Valid on Jan.24,2012	00297148
	Steel rule (0~500) #01	Valid on Nov.17,2011	00290742

**Inspection Finding:**

**1. Randomly dimension check**

13pcs sheet piles were randomly selected from GPU16-650 sheet piles to check the dimension according to ANSI/ASQ Z1.4-2008 S-4. The detail inspection result as follow table:

Unit: mm

Item	Width	Height	Length	Thickness	Result	Remark
	690±13	265±6	11900±50	8±0.29	OK	
1	689	266	11892	8.14	OK	
2	694	265	11920	8.08	OK	
3	691	265	11908	8.10	OK	
4	690	270	11915	8.18	OK	
5	692	265	11889	8.16	OK	
6	690	267	11896	8.24	OK	
7	685	267	11903	8.28	OK	
8	687	267	11918	8.12	OK	
9	685	267	11899	8.08	OK	
10	685	268	11906	8.10	OK	
11	685	268	11899	8.10	OK	
12	688	267	11911	8.08	OK	
13	689	267	11905	8.12	OK	

13pcs sheet piles were randomly selected from GPU26-650 sheet piles to check the dimension according to ANSI/ASQ Z1.4-2008 S-4. The detail inspection result as follow table.

Unit: mm

Item	Width	Height	Length	Thickness	Result	Remark
	697±13	297.5±6	11900±50	10±0.32	OK	
1	700	297	11882	10.04	OK	

2	705	297	11902	9.98	OK	
3	703	297	11907	10.04	OK	
4	699	295	11905	9.96	OK	
5	699	295	11902	9.98	OK	
6	701	301	11895	9.98	OK	
7	705	300	11886	10.04	OK	
8	697	298	11912	10.08	OK	
9	705	298	11902	10.04	OK	
10	702	299	11908	10.04	OK	
11	699	296	11812	10.08	OK	
12	704	297	11905	9.98	OK	
13	701	298	11908	10.02	OK	

Remark: The tolerances refer to the standard EN10249-2:1996

## 2. Visual check

13pcs GPU16-650 sheet piles were randomly selected to check the visual according to ANSI/ASQ Z1.4-2008 S-4. No found obvious defect except some burrs at the sheet cutting edge.

13pcs GPU26-650 sheet piles were randomly selected to check the visual according to ANSI/ASQ Z1.4-2008 S-4. No found obvious defect except some burrs at the sheet cutting edge.

## 3. Packing and marking check

15pcs or 16pcs sheet piles were stacked as per one bundle without lashing. Manufacturer stated they will load in the container as that status. See photo 1~2.

No found any marking on the sheet pile or each bundle which shows the products name, quantity and size, materials grade and heat number, manufacturer stated the marking were not required.

## 4. Sample selection for mechanical property test

1pc sample was picked under SGS inspector witness from the GPU16-650 sheet piles and was sent to SGS lab to perform mechanical property test. See photo 8.

1pc sample was picked under SGS inspector witness from the GPU26-650 sheet piles and was sent to SGS lab to perform mechanical property test.

## 5. Document review

Manufacturer submitted 3pcs copy mill certificates for review and stated they only have the copy certificates.

The mill certificates of raw material covered 10 heat numbers, the specification is MSXY07-006 and grade is MDB350 instead of S355 which was required on purchase order. The detail as follow table.

Certificates table

Item	Size(mm) T×W	Certificate No	Cover Heat No	Remark
1	10×1140	BGSAI1102110009600	128038, 128040,	



2	10×1140	BGSAI1102110012200	128041, 128041,128042, 128043, 128044
3	10×1140	BGTMI1102250008100	113642, 113643, 113646, 113647

Remark: Manufacturer stated that the specification MSXY07-006 MDB350 is enterprise standard BAOSHAN IRON & STEEL CO., LTD who manufactured the raw material. But manufacturer did not provide this specification, SGS inspector review the certificates according to the standard EN 10249:2006.

Chemical and mechanical property table

Heat No	C ×10 <sub>2</sub>	Si ×10 <sub>2</sub>	Mn ×10 <sub>2</sub>	P ×10 <sub>3</sub>	S ×10 <sub>3</sub>	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (A %) G.L=5.65SQ RT	Impact Test (J) 20°C		
Require values S355	≤23	≤60	≤170	≤50	≤50	490~630	≥355	≥22	≥27		
128038	7	22	126	11	6	535	452	27	242	241	240
128040,	8	23	128	9	6	528	441	29	238	230	222
128041	7	23	131	11	5	542	458	28	240	218	226
128042	8	25	128	8	5	531	442	29	238	240	240
128043	7	25	132	10	5	530	441	31	228	236	222
128044	8	25	130	8	5	525	429	31	248	240	242
113642, ,	11	21	78	14	6	525	430	24	97	83	94
113643,	12	22	77	14	6	510	410	23.5	109	124	113
113646	13	21	77	14	7	505	405	24.0	152	163	157
113647	13	20	76	15	8	520	425	24.0	68	83	72

Related Photos:



Photo 1: Sheet piles were stacked in the shop



Photo 2: Sheet piles were stacked in the shop



Photo 3: Measured the wall thickness



Photo 4: Measured the wall thickness



Photo 5: Measured the height



Photo 6: Measured the width

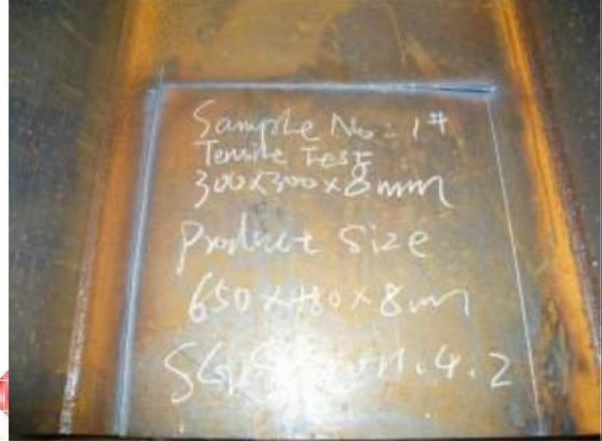


Photo 7: Measured the length

Photo 8: Pick sample for test

**THIS REPORT ONLY REFLECTED OUR ACTUAL FINDINGS. THE INSPECTION WAS DONE TO THE BEST OF OUR KNOWLEDGE AND ABILITY AND WITH DUE CARE. THE FINDINGS ARE VALID AS FOR TIME AND PLACE OF INSPECTION.**

**DRAFT**