

## TEST REPORT

No. : SHIN170903159CCM

Date : Oct. 09, 2017

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CUSTOMER NAME: NANJING GUHUA METALWORK CO., LTD.  
ADDRESS: XIONGZHOU INDUSTRIAL PARK, LUHE DISTRICT, NANJING, P. R  
CHINA

Sample Name : RINGLOCK STEEL PLANK  
Product specification : 3.072M×0.32M  
Manufacturer : NANJING GUHUA METALWORK CO., LTD.  
Material and Mark : Q235

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

Test Required : Drop test  
Test Method : EN 12810-2:2003 Annex B  
SGS Ref. No. : NJIN1709003931ML  
Date of Receipt : Sep. 26, 2017  
Testing Start Date : Sep. 26, 2017  
Testing End Date : Oct. 09, 2017  
Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services ( Shanghai ) Co., Ltd.

Joyce Li  
Authorized signatory



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### Summary of Result(s):

No.	Test Item	Test Method	Result	Conclusion
1	Drop test	EN 12810-2:2003 Annex B	The ball can be retained after test	Pass

Note: Pass: Meet the requirements;  
 Fail: Does not meet the requirements;  
 /: Not Apply to the judgment.

### Original Sample Photo(s):



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1. Test item: Drop test

Test method: EN 12810-2:2003 Annex B

Test condition:

Platform unit size: 3070mm×320mm (Length × Width)

Frame size: 3070mm×1400mm (Length × Width)

Drop height: 2.5m

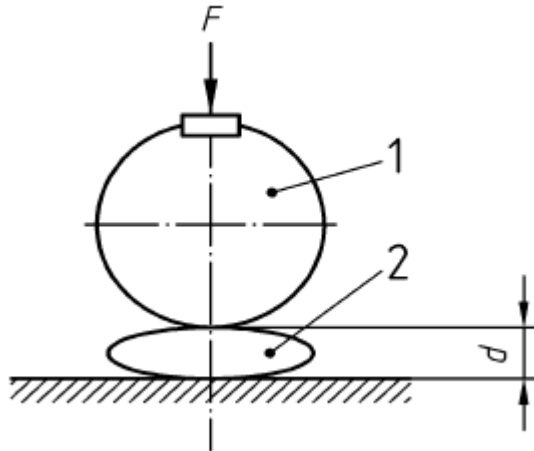
Steel ball:  $\Phi 50\text{mm}$ , 100kg

1.1 Damping pillow stiffness characteristics test:

Dimensions of damping pillow: 500mm×500mm×250mm (Length × Width × Thickness)

Material: Foam

Diagram of test



1-ball, 2-damping pillow

Apply a compression load via the steel ball to the damping pillow till the displacement up to 80mm, check whether the displacement-load curve meet the permitted curve below or not.



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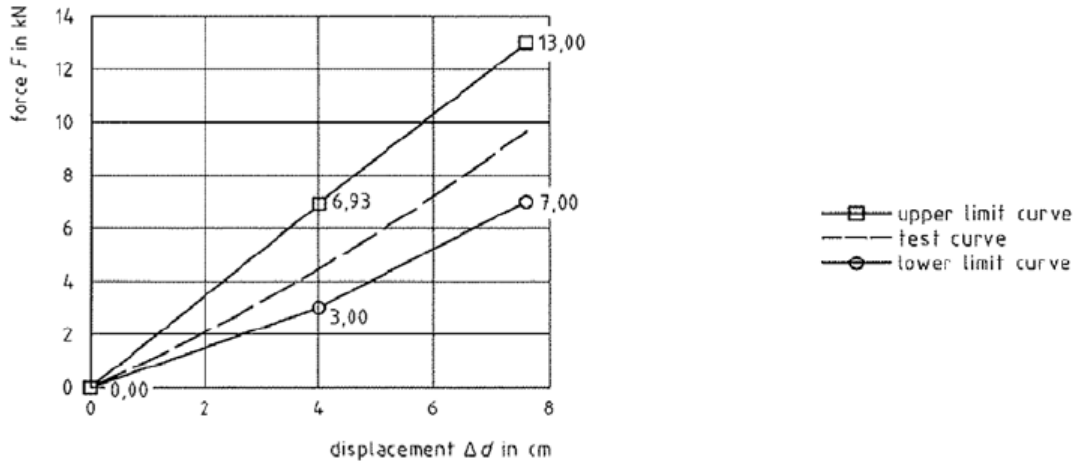
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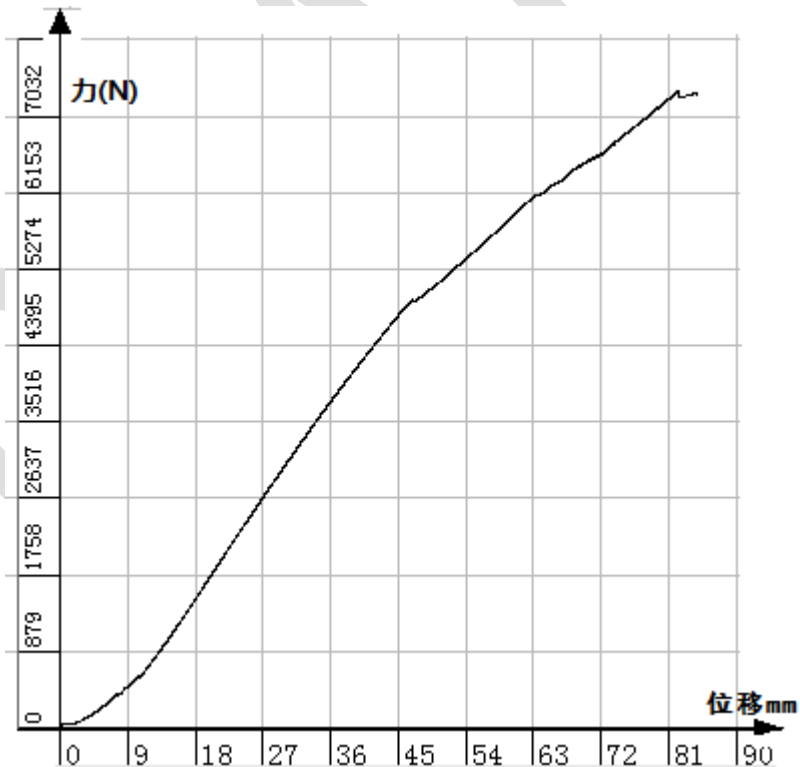
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The test curve:



Displacement-load curve of damping pillow



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The test curve above shows that the foam meet the requirement of permitted curve in EN 12810-2:2003.

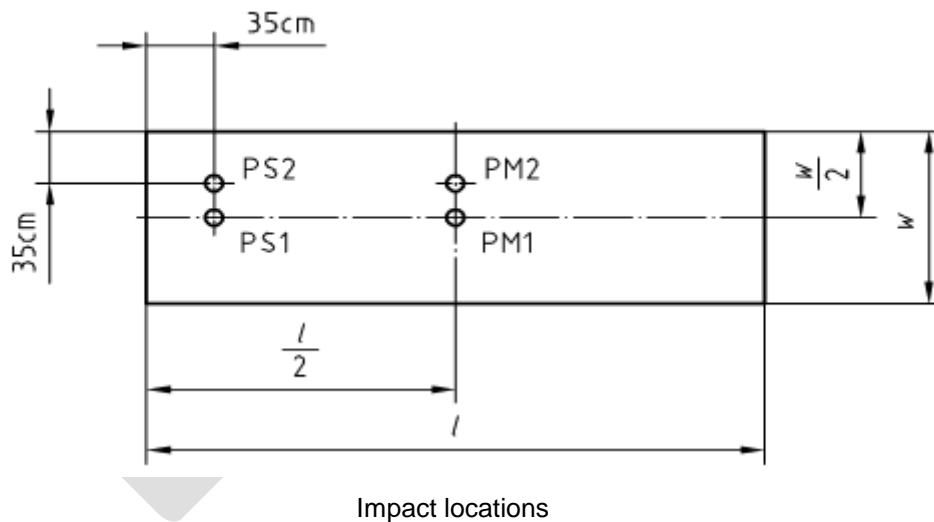
## 1.2 Test procedure

### Test arrangement

The steel plank units, their supports and the adjacent vertical components shall be set up in conformity with the instruction manual. Side protection components shall be set up on all four sides to prevent the ball from rolling off the platform.

### Test procedure:

Release the ball of 100kg from the specified height 2.5m to impact at the locations as shown in the following figure according to the client's requirement through a damping pillow. The ball's diameter is 500mm and the damping pillow's size is 500mm×500mm×250mm (Length × Width × Thickness). After release the ball, check the sample for any signs of damage and measure the maximum deflection, make sure whether the deck can retain the ball or not.



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Test result:

Sample No.	Test Location	Deflection after test (mm)	Visual check	Requirement	Conclusion
1	PM1	72	The ball can be retained after test	For a successful test, the test assembly is still capable of carrying the static load of the steel ball. Local damage and permanent deformation are acceptable.	Pass
	PS1	46	The ball can be retained after test		Pass
	PM2	89	The ball can be retained after test		Pass
	PS2	56	The ball can be retained after test		Pass
2	PM1	61	The ball can be retained after test		Pass
	PS1	27	The ball can be retained after test		Pass
	PM2	91	The ball can be retained after test		Pass
	PS2	25	The ball can be retained after test		Pass
3	PM1	61	The ball can be retained after test		Pass
	PS1	39	The ball can be retained after test		Pass
	PM2	88	The ball can be retained after test		Pass
	PS2	24	The ball can be retained after test		Pass



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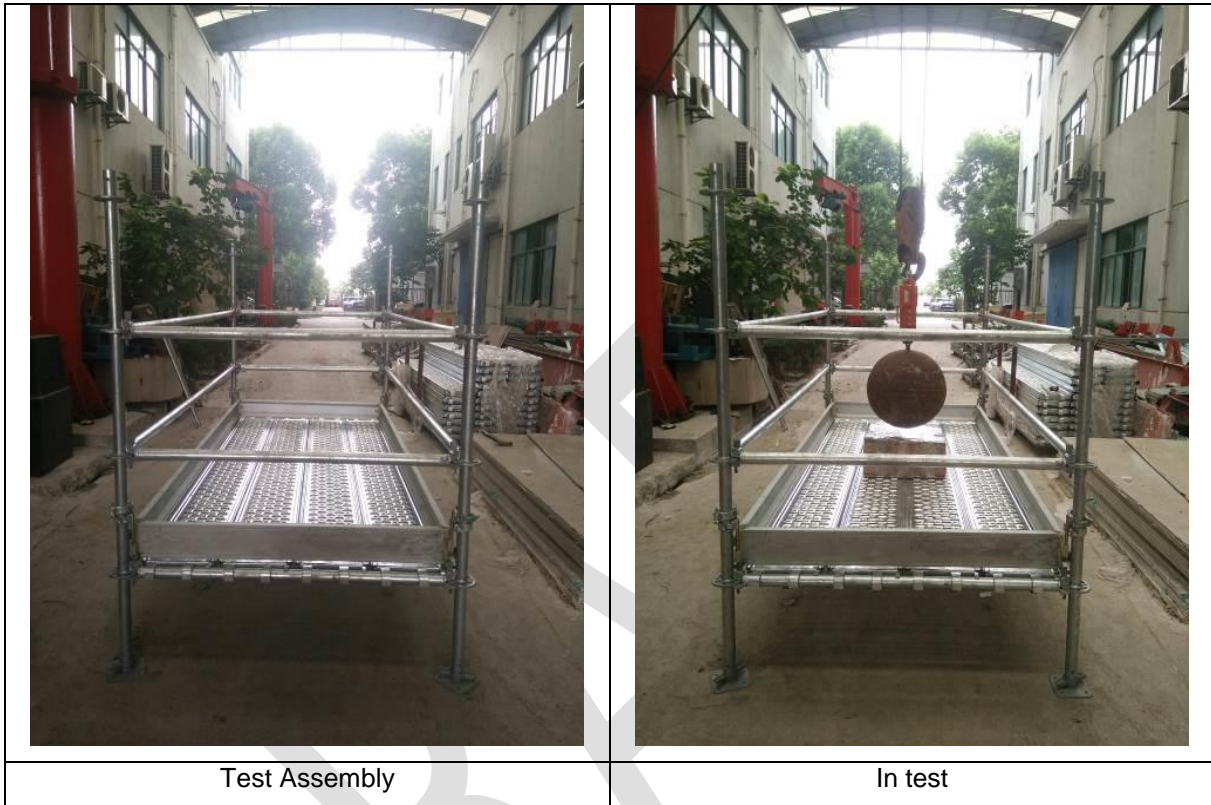
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Test photos:



Test Assembly

In test



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After test

\*\*\*\*\* End of report\*\*\*\*\*



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