

# NUTEK SYSTEMS, LTD. Unit B, 13/F., Universal Ind. Ctr., 23-25 Shan Mei Street,

Fo Tan, Shatin, N.T., Hong Kong.

Tel: (852) 2605 5736 Fax: (852) 2692 0798 E-mail: nutek@nuteksystems.com

TEST REPORT

TITLE

Testing of Pipe Clip

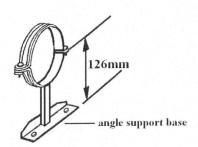
OUR REFERENCE NO.

J13615-1

DESCRIPTION OF SAMPLE

3" (80mm) Stainless steel pipe clips with angle support base, fabricated

by electrical welding method; for ductile pipes. Dimensions: ring - 32mmx3mm; angle support base - 28mm x 165mm x 3mm; screws & nuts - M8 x 25mm



SAMPLE SUBMITTED BY

Cheung's Engineering Co. G/F., 90 Tak Cheong Street,

Kowloon, Hong Kong. (web-site: http://www.pipe-clips.com)

**MANUFACTURER** 

Cheung's Engineering Co.

BRAND/LOGO

**COUNTRY OF ORIGIN** 

China

**TEST REQUIRED** 

Loading test

PERIOD OF TESTS

13th to 14th May 2009

**RESULTS: -**LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.

2. The concrete block was secured to the loading test frame. A new pipe clip was installed onto the concrete block by M8 anchor bolts. A ductile iron pipe with nominal size 80mm was then clamped by the pipe clip.

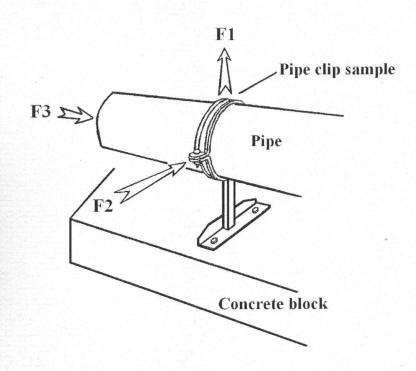


## **NUTEK SYSTEMS, LTD.**

TEST REPORT

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OUR REFERENCE NO.J13615-1 (P.2)



- 3. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
- 4. Steps 1 to 2 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
- 5. Steps 1 to 2 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.

#### 6. Result:

Vertical force F1 to detach the pipe clip from the concrete block	Horizontal force <b>F2</b> to result in a 20mm horizontal deflection	Horizontal force <b>F3</b> to slip the pipe by 20mm
(kgf)	(kgf)	(kgf)
880	380	330

Date: 4 June 2009

Authorized signature:

Nutek Systems is a testing agency, approved by the Water Authority and Government Supplies Department, for testing water supply fittings.

Samson W.K. Yiu

(Director)



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### TEST REPORT

TITLE

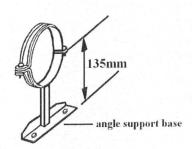
Testing of Pipe Clip

OUR REFERENCE NO.

J13615-2

**DESCRIPTION OF SAMPLE** 

4" (100mm) Stainless steel pipe clips with angle support base, fabricated by electrical welding method; for ductile pipes. Dimensions: ring - 32mmx3mm; angle support base - 28mm x 165mm x 3mm; screws & nuts - M8 x 25mm



SAMPLE SUBMITTED BY

Cheung's Engineering Co. G/F., 90 Tak Cheong Street,

Kowloon, Hong Kong. (web-site: http://www.pipe-clips.com)

**MANUFACTURER** 

Cheung's Engineering Co.

BRAND / LOGO

**COUNTRY OF ORIGIN** 

China

TEST REQUIRED

Loading test

PERIOD OF TESTS

13th to 14th May 2009

**RESULTS: -**

LOADING TEST

- 1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
- 2. The concrete block was secured to the loading test frame. A new pipe clip was installed onto the concrete block by M8 anchor bolts. A ductile iron pipe with nominal size 80mm was then clamped by the pipe clip.

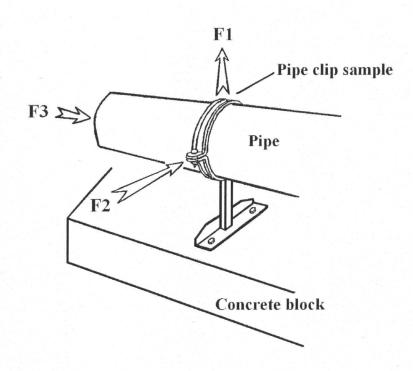


### NUTEK SYSTEMS, LTD. Unit B, 13/F., Universal 23-25 Shan Mei Street,

TEST REPORT

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Fo Tan, Shatin, N.T., Hong Kong.
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OUR REFERENCE NO.J13615-2 (P.2)



- 3. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
- 4. Steps 1 to 2 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
- 5. Steps 1 to 2 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.

#### 6. Result:

Vertical force <b>F1</b> to detach the pipe clip from the concrete block	Horizontal force <b>F2</b> to result in a 20mm horizontal deflection	Horizontal force <b>F3</b> to slip the pipe by 20mm
(kgf)	(kgf)	(kgf)
880	320	330

Date: 4th June 2009

\_Authorized signature :

Samson W.K. Yiu

approved by the Water Authority and Government Supplies Department, for testing water supply fittings.

(Director)



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### TEST REPORT

Testing of Pipe Clip

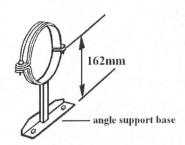
OUR REFERENCE NO.

J13615-3

DESCRIPTION OF SAMPLE

6" (150mm) Stainless steel pipe clips with angle support base, fabricated

by electrical welding method; for ductile pipes. Dimensions: ring - 32mmx3mm; angle support base - 28mm x 215mm x 3mm; screws & nuts - M8 x 25mm



SAMPLE SUBMITTED BY

Cheung's Engineering Co. G/F., 90 Tak Cheong Street,

Kowloon, Hong Kong.

(web-site: http://www.pipe-clips.com)

MANUFACTURER

Cheung's Engineering Co.

BRAND / LOGO

**COUNTRY OF ORIGIN** 

China

**TEST REQUIRED** 

Loading test

PERIOD OF TESTS

13th to 14th May 2009

RESULTS: -LOADING TEST

- 1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
- 2. The concrete block was secured to the loading test frame. A new pipe clip was installed onto the concrete block by M8 anchor bolts. A ductile iron pipe with nominal size 80mm was then clamped by the pipe clip.

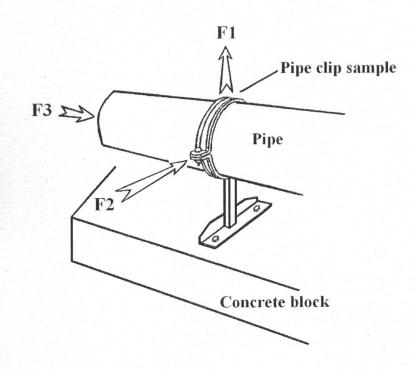


# **NUTEK SYSTEMS, LTD.**

TEST REPORT

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OUR REFERENCE NO.J13615-3 (P.2)



- 3. The vertical pulling force F1 applied to detach the pipe clip from the concrete block was measured.
- 4. Steps 1 to 2 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
- 5. Steps 1 to 2 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.

#### 6. Result:

Vertical force F1 to detach the pipe clip from the concrete block	Horizontal force <b>F2</b> to result in a 20mm horizontal deflection	Horizontal force <b>F3</b> to slip the pipe by 20mm
(kgf)	(kgf)	(kgf)
860	230	330

Date: 4th Time 2009

Authorized signature:

Samson W.K. Yiu

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(Director)