

Test Report No. S08MEC06429-01-CORR01-CLC
dated 12 FEB 2009



PSB Singapore

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SUBJECT:

Testing of steel conduit

TESTED FOR:

Many Folk Enterprises Ltd
Flat F, 13/F, Golden Plaza
745-7 Nathan Road, Kowloon
Hong Kong

Attn: Mr Ray Lee

SAMPLE SUBMISSION DATE

22 Oct 2008




TEST METHOD:

IEC 61386-1 : 1996 Conduit system for cable management – Part 1: General requirements
IEC 61386-1 : 2008 Conduit system for cable management – Part 1: General requirements
IEC 61386-21 : 2002 Conduit system for cable management – Part 21: Particular requirements – Rigid
conduit systems

CLASSIFICATION:

Class 4 – Heavy protection both inside and outside

SPRAYED MARKING ON THE STEEL CONDUITS:

- 1)  20mm conduit BS 4568 part 1 : 1970 class 4 heavy / IEC 61386-21:2002
- 2)  25mm conduit BS 4568 part 1 : 1970 class 4 heavy / IEC 61386-21:2002
- 3)  32mm conduit BS 4568 part 1 : 1970 class 4 heavy / IEC 61386-21:2002

SAMPLE DESCRIPTION:

Three samples of steel conduit pipe Ø20mm, Ø25mm, and Ø32mm with "COT" brand (refer to Appendix)
were submitted for the following tests:

1. Marking & Documentation
2. Visual inspection of construction
3. Dimensional measurements
4. Bend
5. Corrosion resistance refer to S08MEC06429-02-EKH-CORR02



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Laboratory:
TÜV SÜD PSB Pte. Ltd.
Testing Services
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223
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TEST RESULTS:

| Sample Reference | Avg outside Diameter | Avg wall thickness | Avg length of full thread |
|------------------|----------------------|--------------------|---------------------------|
| COT-C20-S-HDG | 19.9 mm | 1.7 mm | 14.5 mm |
| COT-C25-S-HDG | 24.8 mm | 1.6 mm | 16.0 mm |
| COT-C32-S-HDG | 31.9 mm | 1.7 mm | 19.5 mm |

(1) Test for Durability & Legibility of Marking

| Sample Reference | "COT" Brand | IEC 61386-1 : 1996 Requirements (Clause 7.6) |
|------------------|------------------------|---|
| | Results of observation | |
| Dia.20mm (S1) | Passed | Durability shall be checked by rubbing the marking by hand for 15 seconds with a piece of cloth soaked with water and again for 15 seconds with a piece of cloth soaked with petroleum spirit. After the test the marking shall be legible. |
| Dia.20mm (S2) | Passed | |
| Dia.20mm (S3) | Passed | |
| Dia.25mm (S1) | Passed | |
| Dia.25mm (S2) | Passed | |
| Dia.25mm (S3) | Passed | |
| Dia.32mm (S1) | Passed | |
| Dia.32mm (S2) | Passed | |
| Dia.32mm (S3) | Passed | |

(2) Construction

| Sample Reference | "COT" Brand | IEC 61386-1 : 2008 Requirements (Clause 9.1) |
|------------------|------------------------|--|
| | Results of observation | |
| Dia.20mm (S1) | Passed | Within the conduit system, there shall be no sharp edges, burrs or surface projections which are likely to damage insulated conductors or cables, or inflict injury on the installer or user |
| Dia.20mm (S2) | Passed | |
| Dia.20mm (S3) | Passed | |
| Dia.25mm (S1) | Passed | |
| Dia.25mm (S2) | Passed | |
| Dia.25mm (S3) | Passed | |
| Dia.32mm (S1) | Passed | |
| Dia.32mm (S2) | Passed | |
| Dia.32mm (S3) | Passed | |

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TEST RESULTS: (CON'T)

(3a) Dimensions

| Sample Reference | "COT" Brand | IEC 61386-1 : 2008 Requirements (Clause 8.1) |
|------------------|------------------------|---|
| | Results of observation | |
| Dia.20mm (S1) | Passed | Thread Ring "Go" Gauge-It shall be possible to slide the gauge completely over the conduit without excessive force. |
| Dia.20mm (S2) | Passed | |
| Dia.20mm (S3) | Passed | |
| Dia.25mm (S1) | Passed | |
| Dia.25mm (S2) | Passed | |
| Dia.25mm (S3) | Passed | |
| Dia.32mm (S1) | Passed | |
| Dia.32mm (S2) | Passed | |
| Dia.32mm (S3) | Passed | |

(3b) Dimensions

| Sample Reference | "COT" Brand | IEC 61386-1 : 2008 Requirements (Clause 8.1) |
|------------------|------------------------|--|
| | Results of observation | |
| Dia.20mm (S1) | Passed | Snap "Not Go" Gauge-It shall not be possible to pass the gauge over the conduit, in any position, without excessive force. |
| Dia.20mm (S2) | Passed | |
| Dia.20mm (S3) | Passed | |
| Dia.25mm (S1) | Passed | |
| Dia.25mm (S2) | Passed | |
| Dia.25mm (S3) | Passed | |
| Dia.32mm (S1) | Passed | |
| Dia.32mm (S2) | Passed | |
| Dia.32mm (S3) | Passed | |

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TEST RESULTS: (CON'T)

(4) Bend Test

| Sample Reference | "COT" Brand | IEC 61386-21 : 2002 Requirements (Clause 10.4) |
|------------------|------------------------|---|
| | Results of observation | |
| Dia.20mm (S1) | Passed | The conduit with welded seam, six samples shall be tested, three with the seam on the outside of the bend, and three with the seam on the flank. After the test: - the basic material of conduit and the protective coating of the conduits shall show no cracks visible to normal or corrected vision without magnification; - seam, if any, shall not have opened; -the section of the conduit shall not have distorted unduly. |
| Dia.20mm (S2) | Passed | |
| Dia.20mm (S3) | Passed | |
| Dia.25mm (S1) | Passed | |
| Dia.25mm (S2) | Passed | |
| Dia.25mm (S3) | Passed | |
| Dia.32mm (S1) | Passed | |
| Dia.32mm (S2) | Passed | |
| Dia.32mm (S3) | Passed | |

Appendix

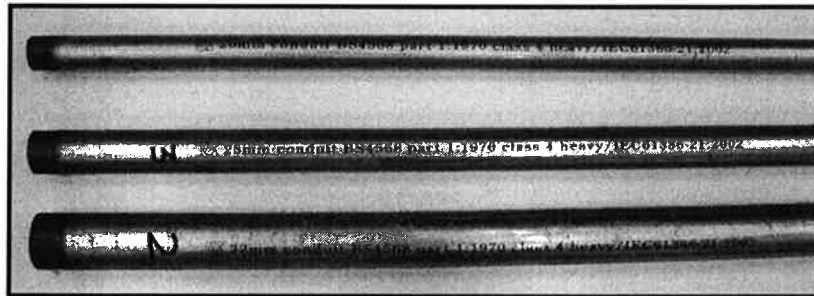


Photo 1 Steel conduit pipe Ø20mm, Ø25mm, and Ø32mm



Chua Lee Choong
Associate Engineer



Chua Peck Cheong
Product Manager
Industrial & Polymer Products
Mechanical Centre



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January 2008

TEST REPORT: S08MEC06429-02-EKH-CORR02

Date: 26 DEC 2008

Tel: +65 68851335 Fax: +65 67784301

Client's Ref: -

Email: Sihai.LI@tuv-sud-psb.sg

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SUBJECT

Testing of galvanized steel conduit pipes for resistance to corrosion – heavy protection (IEC 61386-1 : 1996).

CLIENT

Many Folk Enterprises Ltd
Flat F, 13/F., Golden Plaza
745-7, Nathan Road, Kowloon
Hong Kong

Attn: Mr Ray Lee

SAMPLE SUBMISSION DATE

26 Nov 2008

DESCRIPTION OF SAMPLE

Three samples of galvanized steel conduit pipes (3 pieces each) were received. The conduit samples were bent by the company at 90 degrees in their workshop.

METHOD OF TEST

IEC 61386-1 : 1996

"Conduit systems for electrical installations".

Part 1. General requirements.



Laboratory:
TÜV SÜD PSB Pte. Ltd.
Testing Services
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
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Regional Head Office:
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RESULTS

| Sample | Resistance to Corrosion Test (Class 4. Heavy protection both inside and outside) | |
|---------------------|---|------------------|
| | Interior Surface | Exterior Surface |
| Ø 20mm Conduit Pipe | Passed | Passed |
| Ø 25mm Conduit Pipe | Passed | Passed |
| Ø 32mm Conduit Pipe | Passed | Passed |



ENG KIA HEE
SENIOR TECHNICAL EXECUTIVE



DR LI SIHAI
AVP / SENIOR CHEMIST
COATINGS & INDUSTRIAL CHEMICALS
CHEMICAL & MATERIALS

TEST REPORT: S08MEC06429-02-EKH-CORR02
26 DEC 2008



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January 2008




HONG KONG STANDARDS AND TESTING CENTRE CERTIFICATE OF COMPLIANCE

Certificate Number: LVD1004867

APPLICANT:

Many Folk Enterprises Limited
Flat F, 13/F., Golden Plaza, 745-747 Nathan Road,
Kowloon, Hong Kong.

DESCRIPTION OF SAMPLE:

Product: Conduit and fittings
Manufacturer: Many Folk Enterprises Limited
Model No.: COT-C20-S-HDG, COT-C25-S-HDG, COT-C32-S-HDG,
Brand Name: 
Origin: China

APPLICABLE STANDARD(S) WITH AMENDMENTS:

Clause 11.2 of IEC 61386-1: 2008 used in conjunction with IEC 61386-21: 2002 Bonding Test

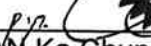
REFERENCE TEST REPORT NUMBER: HE156798

The complete detail of the tests performed and the results are recorded in HKSTC Test Report
No.: HE156798 Dated: 2010-01-29.

*This is to certify that the submitted sample has been tested in
accordance with and found to be in compliance with the said
investigation.*

Date: 2010-01-29




CHAN Ka Chun, Vincent
Electrical Safety Department
For and on behalf of

The Hong Kong Standards and Testing Centre Ltd
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