



CONSTRUCTION  
INDUSTRY COUNCIL  
建造業議會

# Overhead Linesman Trade Test Mock Practical Test Paper

此文件關於架空電線技工工藝測試考題。如有需要索取此文件的中文版本，  
請致電 2100 9000 與香港建造業工藝測試中心聯絡。

## **Disclaimer**

*No part of this material may be reproduced or transmitted in any form or any means without the written permission of the CIC. Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this material, the CIC nevertheless would encourage readers to seek appropriate independent advice from their professional advisers where possible and readers should not treat or rely on this material as a substitute for such professional advice for taking any relevant actions.*

## **Enquiries**

Enquiries on this Material may be made to the Hong Kong Construction Industry Trade Testing Centre at:

95, Yue Kwong Road  
Aberdeen  
Hong Kong

Tel: (852) 2100 9000  
Fax: (852) 2100 9090  
Email: [enquiry@cic.hk](mailto:enquiry@cic.hk)  
Website: [www.cic.hk](http://www.cic.hk)

© 2020 Construction Industry Council.

## Test Paper for Trade Test

Job Title : Overhead Linesman  
Skill Level : Skilled worker  
Time Limit : 4 hours (not including lunch hour)

Test: Complete the following four overhead line practical tasks at the specified locations in the following sequence:

Task 1 Earth wiring installation

Candidates must pass this task in order to continue the tasks below.

Task 2 Cable Lug Fixing

Task 3 Replacement of Vertical Isolator

Task 4 High Voltage Cables Installation and dismantle

◆ This test consists of 4 tasks, with total score of 100. Candidates must obtain 60 marks or above to pass this practical test.

### Points to note:

- (1) Before you start, read all instructions for candidate below and test paper carefully. If you have any questions, ask an invigilator immediately.
- (2) You will fail the test if you do not take proper safety measures during the test.
- (3) After the test, clean up the venue and restore its original condition as instructed by the invigilators.
- (4) Please note that all fixed electrical installations at the site must be performed by registered "Electrical Workers".

**Trade Test for Construction Industry**  
**Overhead Linesman**

**Question 1. Earth wiring installation**

1. Checking for Power cut off of High Voltage Cables by Tester
2. Installation of earth terminal blocks on pillar pole
3. Connection of earthing cable Clip
4. Connection of earthing cable by hanging rod



( Reference image )

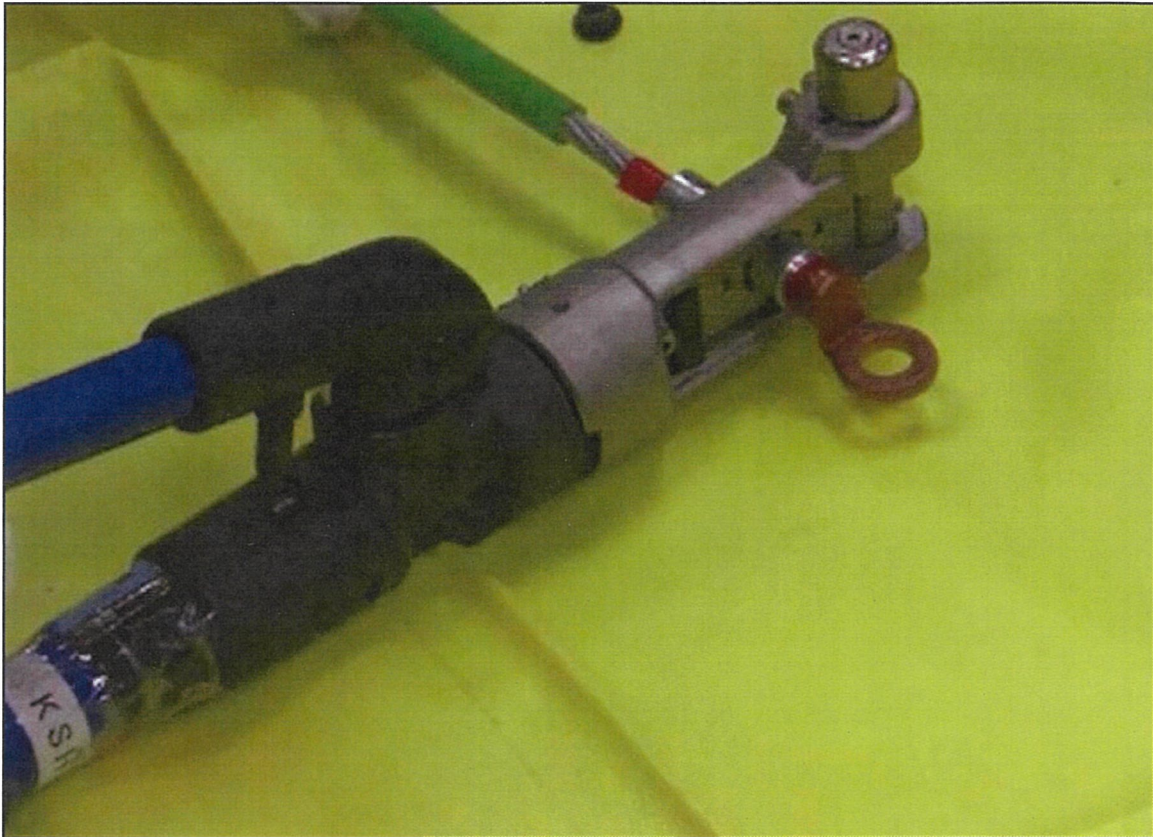
**List of materials and tools**

Item	Materials	QTY	Item	Tools	QTY
1	Earth cable	1 Set	1	11kV High Voltage Detector	1 Set
2	Terminal Block	1 Set	2	Electrical Insulation Glove	1 pair
3	Earthing cable clip	1 Set	3	8"set spanner	1 Set

**Trade Test for Construction Industry**  
**Overhead Linesman**

**Question 2. Cable Lug Fixing**

1. Put Press Mold on Hand Press
2. Press Connect cable lug and end of prepared cable



( Reference image )

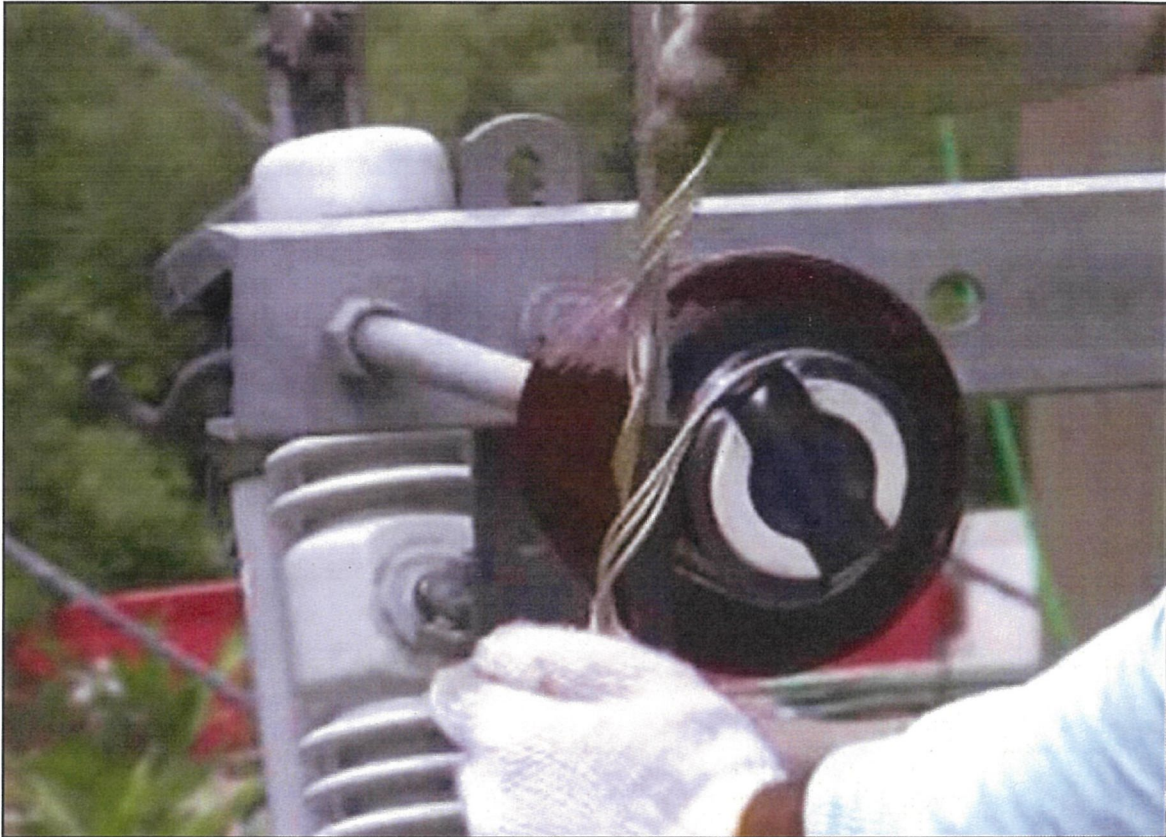
**List of materials and tools**

Item	Materials	QTY	Item	Tools	QTY
1	50mm <sup>2</sup> Cable	1	1	Hand Press and Press Mold	1 Set
2	50mm <sup>2</sup> Cable Lug	1	2	Cable cutter	1
3	Electrical Tape	1	3	Flat file	1
			4	Flat pliers	1

Trade Test for Construction Industry  
Overhead Linesman

**Question 3. Replacement of Vertical Isolator**

1. Disconnect existing Isolator
2. Install New Isolator and Cable conductor



( Reference image )

**List of materials and tools**

Item	Materials	QTY	Item	Tools	QTY
1	Isolator	1 Set	1	12" set spanner	1
2	wire stripe	2 Set	2	Gear hexagon spanner	1
			3	Flat screwdriver	1
			4	Flat Clipper	1

**Trade Test for Construction Industry**  
**Overhead Linesman**

**Question 4. High Voltage Cables Installation**

1. Proper checking and wearing of Personal protection equipment
2. Proper checking of tools and instrument
3. Proper checking and install climbing and anti-fall equipment
4. Install high voltage cables between two pillar poles
5. Disconnect high voltage cables



**( Reference image )**

**List of materials and tools**

Item	Materials	Quantity
1	50mm <sup>2</sup> AL cable	1 sheaf
2	Clamp	2
3	Electric insulation	1 roll
Item	Tools	Quantity
1	Safety Belt	1 Set
2	Anti-fall saving device	1 Set
3	Telescope ladder	1
4	Pole Working Platform Platform	1 Set
5	Pulley	1 Set
6	Hoisting nylon rope	2
7	hand stripe	1
8	Chicago Wire Grip	1 Set
9	Chain tightener	1 Set
10	Torque Wrench	1
11	8" set spanner	1
12	Tape ruler	1

Note : After completing the test, candidates should return all borrowed tools as well as this test paper. Candidates may not leave until the invigilator's instructions.

Notes to Candidates :

1. Candidates should read the test papers carefully and ask the invigilator for any queries.
2. Candidates should study the drawings and specifications attached to test papers, if any, before the test begins.
3. Candidates should carry out the test according to test papers, working drawings and specifications provided.
4. Candidates shall bring their own safety shoes, other safety equipment will be provided by trade testing centre. Candidates must take all necessary safety precautions to ensure work safety.
5. All tools and materials required by the test will be provided by trade testing centre, candidates should check and ensure their adequacy and quality. Candidates shall use the tools and materials properly based on trade practice. All the tools must be returned to trade testing centre after the test. The candidates may ask the invigilator for any problems.
6. Candidates are required to handle and move the tools and materials for use in the test, and to carry out associated works.
7. Invigilator will take record photos periodically during the test.
8. Candidates are not allowed to take any photo or video with cameras or mobile phones.
9. Candidates are not allowed to use their mobile phones during the trade tests, except for emergency situation.
10. The marking scheme is based on the following criteria :



- a) Understanding of drawing and specification
- b) Preparation works before commencement of test
- c) Working procedures
- d) Accuracy and quality of works
- e) Progress of works
- f) Proper handling and use of materials
- g) Proper use of tools and equipment
- h) Safety precautions
- i) Considerate of other trades
- h) Housekeeping after completion of test

11. All candidates must stop when time is up.

12. Candidates are required to return the test paper to invigilator after the test.

13. Offering bribe to invigilator is an offence in law and trade testing centre will report to the ICAC for any such case.

**In the event that the candidate fails to take any necessary safety precautions and / or works in any dangerous situations, he / she will be assessed failed**