



PROVINCIAL ELECTRICITY AUTHORITY

ELECTRICAL ENGINEERING AND TESTING DIVISION , TESTING SECTION

200 NGAM WONG WAN RD. CHATUCHAK BANGKOK 10900

Tel. 0-25909075-6 Fax.0-25909078

Test report No. ED-0042

Object : Insulator, Pin post type class 56/57-4

PEA's Material No. : 1-03-001-0102

Reference note No. 22/2552 date 20 April 2009

Customer : FINE ART CERAMIC CO.,LTD.

Testing Date : 14-20 May 2009



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1. Scope

Specimen : Insulator, Pin post type class 56/57-4

Product : FINE ART CERAMIC CO.,LTD.

PEA's Material No. : 1-03-001-0102

Reference note No. : 22/2552 date 20 April 2009

Customer : FINE ART CERAMIC CO.,LTD.

2. Reference standard

- PEA's specification No. R-752/2543

- TIS. 1251-2537

3. Purpose

Test according to PEA's acceptance test

4. Sample quantity

5 Samples.

5. Test description

5.1 Visual test (TIS. 1251-2537 Sub clause 5.1)

5.2 Dimensions and details (TIS. 1251-2537 Sub clause 4.1,4.2)

5.3 Average of Zinc coating thickness test (TIS. 1251-2537 Sub clause 5.3)

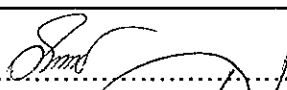
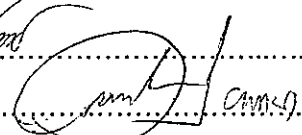
5.4 Low frequency dry flashover voltage test (TIS. 1251-2537 Sub clause 5.5.1)


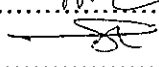
5.5 Cantilever strength test (TIS. 1251-2537 Sub clause 5.6)

5.6 Porosity test (TIS. 1251-2537 Sub clause 5.2)

5.7 Marking (PEA's specification No. R-752/2543 Sub clause 1c.2)

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Tested by 
Chief of Section..... 

Asst. Manager.....  26 W.A. 2552
Manager.....  26 W.A. 2552



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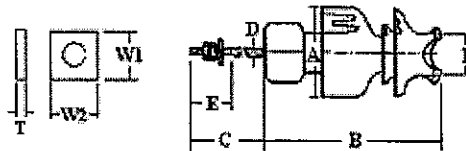
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6. Test result

6.1 Visual test (TIS. 1251-2537 Sub clause 5.1)

Result : passed

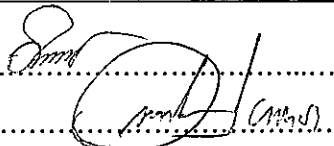
6.2 Dimensions and details (TIS. 1251-2537 Sub clause 4.1,4.2)

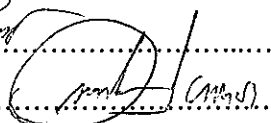


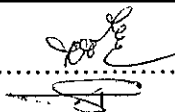
| Description | Dimension, mm. | | | |
|--------------------|----------------|---------------------------|-------|-------|
| | Specification | Test result of sample No. | | |
| | | 1 | 2 | 3 |
| A | 190 | 191 | 191 | 191 |
| B | 432 | 445 | 446 | 445 |
| C | 178 | 181 | 180 | 178 |
| D | 20 | 20.1 | 19.9 | 20.0 |
| E | 89 | 91 | 90 | 91 |
| F | 73 ± 3 | 73 | 72 | 73 |
| W1 X W2 | Not specify | 61x61 | 61x61 | 61x61 |
| T | Not specify | 4.9 | 4.8 | 4.8 |
| Leakage distance | min 953 | 1,035 | 1,025 | 1,043 |
| Protected distance | min 483 | 530 | 535 | 548 |

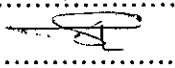
Remark Dimension without tolerance limits are provided as guidance only

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Asst. Manager.....  2-6-2552

Manager.....  2-6-2552



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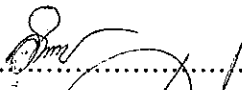
6.3 Average of Zinc coating thickness test (TIS. 1251-2537 Sub clause 5.3)


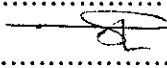
| Description | | Average of Zinc coating thickness, micron | | | | | |
|-------------|------------|---|---------------------------|-----|-----|-----|-----|
| | | Specification | Test result of sample No. | | | | |
| | | | 1 | 2 | 3 | 4 | 5 |
| Cap | Individual | min 78 | 111 | 153 | 147 | 121 | 107 |
| | Average | min 86 | 127.8 | | | | |
| Bolt & Nut | Individual | min 43 | 93 | 89 | 74 | 82 | 155 |
| | Average | min 53 | 98.6 | | | | |
| Washer | Individual | min 43 | 93 | 82 | 67 | 84 | 93 |
| | Average | min 53 | 83.8 | | | | |

6.4 Low frequency dry flashover voltage test (TIS. 1251-2537 Sub clause 5.5.1)

| Description | | Low frequency dry flashover voltage, kV | | | |
|-------------|--|---|---------------------------|-------|-------|
| | | Specification | Test result of sample No. | | |
| | | | 1 | 2 | 3 |
| Individual | | Not specify | 155.3 | 159.9 | 155.3 |
| Average | | min 133.0 | 156.8 | | |

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6.5 Cantilever strength test (TIS. 1251-2537 Sub clause 5.6)

| Description | Cantilever strength, kN | | | | | |
|-------------|-------------------------|---------------------------|-------|-------|-------|------|
| | Specification | Test result of sample No. | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Individual | min 10.6 | >14.7 | >14.7 | >14.7 | >14.7 | 12.5 |
| Average | min 12.5 | >14.3 | | | | |

6.6 Porosity test (TIS. 1251-2537 Sub clause 5.2)

Requirement : No dye penetration

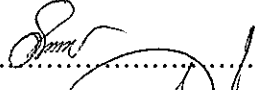
Result : Passed

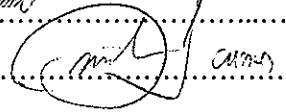
6.7 Marking (PEA's specification No. R-752/2543 Sub clause 1c.2)

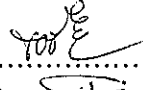
| Description | Mark on sample |
|--------------------------|---|
| Inspection / test result | <p>FAC THAILAND 2008</p> <p>POWARC 10 KA, 0.4 SEC 3 KA, 0.79 SEC</p> <p>TIS 1251 - 2537</p> |
| Specification | <ol style="list-style-type: none"> 1. Manufacturer's name and/or Trade-mark 2. Magnitude of the power arc current in kA and duration in second, identified by the word "POWARC" |

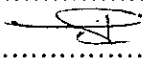
Remark : PEA's Testing Section Laboratory can test particular items as shown in this report only.

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Manager  2.6 W.A. 2552