



## MATERIAL SPECIFICATION

VOCAB NUMBER	ITEM DESCRIPTION
134050	SHROUD, TRANSFORMER BUSHING, 22KV BLACK POLYETHYLENE SHIELDS.

### SPECIFICATION DETAILS

Black, polyethylene shields for transformer bushings.

To fit ESSA Standard, 22kV, 250 amps, bushing (ESSA drawings 2/3/19, PNG Power SC-1/19).

To be suitable for outdoor use in a tropical environment at altitudes up to 3000m.

Full dimensioned drawings and description of product to be provided with tender.

- **Unit of Measure:** Metres
- **Rejection:** PNG Power Ltd reserves all rights to reject whole or part of the order not complying with this specification and is not liable for any cost or loss with the return of rejects to the Supplier. Facilitation of Invoice Credit must commence between the supplier and PNG Power Ltd through the process of PNG Power Ltd Discrepancy Report provisions.

**Drawing References:**

**Manufacturer's Product Code:**

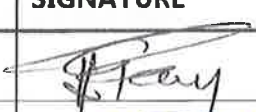



### STANDARDS COMMITTEE APPROVAL

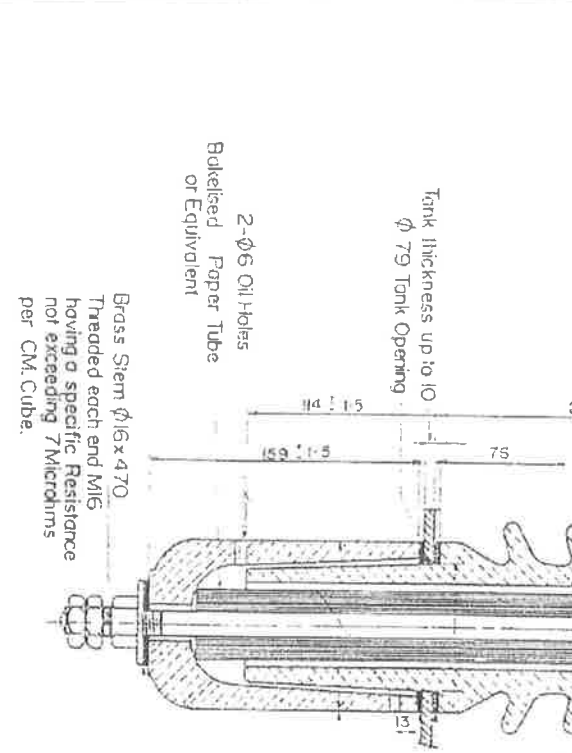
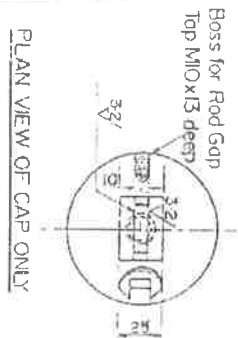
Approval by Alex Oa  
Chairman

Signature: 

Date: 22/6/16

### DATA REVIEW ENDORSEMENT

NAME	TITLE	SIGNATURE	DATE
Grevasias Peni	Team Leader Standards & Materials		16/6/16
			09/03/20



ALL DIMENSIONS IN MILLIMETRES — DRAWING NOT TO SCALE

IF IN DOUBT PLEASE ASK DO NOT SCALE

REVISION	REFERENCE DRAWINGS
	REFER TO 44 81/2 81W/2 81W/2 81W/2 81W/2

REVISION	DATE	BY	CHKD	APPD

<p>PAPUA NEW GUINEA ELECTRICITY COMMISSION</p> <p>GENERAL ARRANGEMENT OF ESAA STANDARD 24KV DISTRIBUTION TRANSFORMER TERMINAL BUSHING</p>			
<p>DRAWN: A GASIGAU</p> <p>INSPECTOR: <i>[Signature]</i></p> <p>DATE: 19/08/88</p> <p>SCALE: <i>[Blank]</i></p>	<p>CHANGED BY: <i>[Signature]</i></p> <p>DATE: 19/08/88</p>	<p>A2</p> <p>SC 1/19</p>	<p>15</p> <p>11</p> <p>10</p> <p>9</p> <p>8</p> <p>7</p> <p>6</p> <p>5</p> <p>4</p> <p>3</p> <p>2</p> <p>1</p>

$\phi 14$  Drill  
Flanged  $\phi 88$  603 Plug  
Seated on raised Machined Pkd  
Synthetic Rubber Bored Cork  
(Hardness NPS50 or NP40) or Similar

$\phi 127 \pm 3$

$\phi 75 \pm 3$  To suit Centre Electrode of Arching Horns  
Minimum Oil Level

$\phi 75 \pm 1.5$   
Oiltight Resilient Gasket  
Bedding Gasket Press Board or similar

$\phi 102 \pm 3$   
Bedding Gasket Press Board or similar

**NOTE**  
THIS BUSHING SHALL COMPLY WITH THE REQUIREMENTS OF AS 1265/1974

2. FURTHER INFORMATION IN ACCORDANCE WITH AS 1265.19 APPENDIX 'A' IS -
- 2.1 This outdoor immersed type bushing is suitable for use only on oil immersed Distribution Transformers of rated capacity not exceeding 1000KVA or other than Distribution Transformers or Distribution Transformers having a capacity in excess of 1000KVA. It should be used only with the specific approval of the customer.
  - 2.2 Rated Voltage 24KV
  - 2.3 Rated Phase to Earth Voltage 24/ $\sqrt{3}$ KV
  - 2.4 Service Conditions, Standard, with no worse than normal pollution
  - 2.5 Insulation Level: Power Frequency withstand Voltage (wet) 50KV RMS. Impulse withstand Voltage (dry) 150KV
  - 2.6 Rated Current 250A
  - 2.7 Dimensional Restrictions as on this drawing
  - 2.8 Cap and Terminal Flg are to be of corrosion resistant non-ferrous, non-porous alloy, tested to 1000kV
  - 3 PORCELAIN GLAZE COLOUR MUNSSELL SYSTEM CODE NUMBER SB97 070 4
  - 4 STEM TO BE ATTACHED TO BUSHING CAP BY SCREWING AND SWEATING OR EQUIVALENT
  - 5 ALL PORCELAIN SURFACES IN CONTACT WITH GRADE 75T BE GROUND FLAT AND SQUARE WITH AXIS OF BUSHING
  - 6 THE GENERAL FORM OF THE PORCELAIN IS TO BE IN ACCORDANCE WITH THIS DRAWING
  - 7 THE BUSHING SHALL BE SUITABLE FOR THE MOUNTING OF DUAL GAP ARCING HORNS
  - 8 PARTIAL DISCHARGES HAVE OCCURRED IN SERVICE AND THE TANK OPENING USE OF CONDUCTING PAINT, OR EQUIVALENT, ON ASSEMBLY IS ADVISED.