

Bid Bulletin No. 1

**“Supply, Delivery and Installation of Turnkey System for Secondary Battery Testing for the Bureau of Philippine Standards – Product Testing Division”
21-005**

March 5, 2021

This Bid Bulletin No. 1 is hereby issued to modify or amend the Bidding Documents.

Section VII. Technical Specifications

1. Lot No. 1 - Secondary Battery Safety Test

1.1. Forced Internal Short Circuit Test Capability

Press jig is made of nitrile rubber or acrylic resin on a 10mm x 10mm stainless steel shaft. Press jig shall be designed as detailed in Figure 2. Press Jig for Forced Internal Short Circuit as per Clause 7.3.9 of IEC 62133-2:2017.

B The bottom surface of the moving part of the press equipment (i.e. pressing jig) is made of nitrile rubber or acrylic resin, which is put on the 10 mm x 10 mm stainless steel shaft. Details of the pressing jigs are shown in Figure 2. The nitrile rubber bottom surface is for a cylindrical cell test. For a prismatic cell test, 5 mm x 5 mm (2 mm thickness) acrylic resin is put on the nitrile rubber.

The fixture is moved down at a speed of 0,1 mm/s, monitoring the cell voltage. When a voltage drop caused by the internal short-circuit is detected, stop the descent immediately and keep the pressing jig in the position for 30 s, and then release the pressure. The voltage is monitored at a rate of more than 100 times per second. If the voltage drops more than 50 mV compared to the initial voltage, an internal short-circuit has been determined to have occurred. If the force of the press reaches 800 N for a cylindrical cell or 400 N for a prismatic cell before the 50 mV voltage drop, stop the descent immediately .

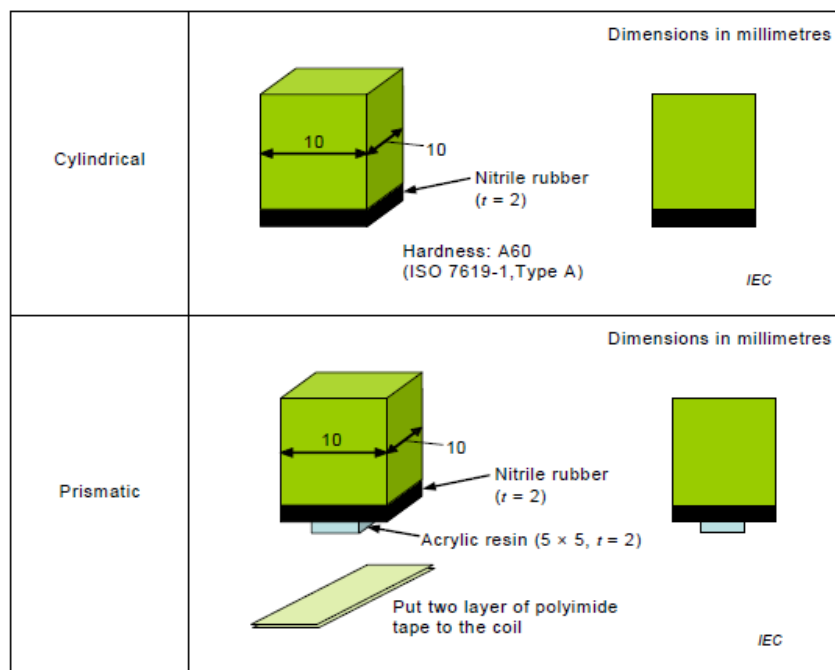


Figure 2 – Jig for pressing

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2. LOT NO. 2 - Secondary Battery Performance Test
2.1. Nickel Particle (1-pack of 1kg)

Shape of Nickel Particle as per Annex A of IEC 62133-2:2017

The shape of the nickel particle shall be as shown in Figure A.3.

Dimensions: Height: 0,2 mm; Thickness: 0,1 mm; L shape (Angle: $90^\circ \pm 10^\circ$): 1,0 mm for each side with 5 % tolerance. Material: more than 99 % (mass fraction) pure nickel.

Dimensions in millimetres

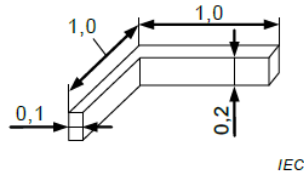
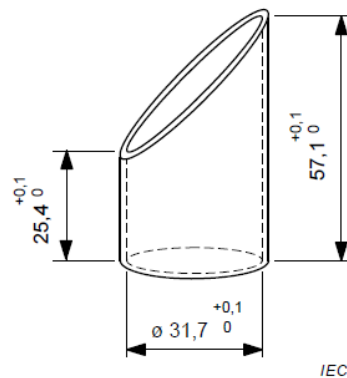


Figure A.3 – Shape of nickel particle

2.2. Ingestion Gauge (2-units)

Dimensions: as described in Figure 3 – Ingestion Gauge, Clause 8.2 of IEC 62133-2:2017

Dimensions in millimetres



NOTE This gauge defines a swallowable component and is defined in ISO 8124-1.

Figure 3 – Ingestion gauge

2.3. Standards under IEC 62133-2:2017 covers all technical specifications of both lots, therefore, no other requirements for the said standards shall be included in the supplier’s bidding document.

For the guidance and information of all concerned.

SGD.
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Assistant Secretary
Chairperson, DTI Bids and Awards Committee