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SHAKAMBHARI ISPAT & POWER LTD.

(Formerly known as Ess Dee Aluminium Ltd.)

STANDARD TEST METHOD

Title: Thickness and Width of Substrate			Page No. 1 of 2
STM No.	Version No.	Effective Date	Next review date
SIPL/STM/001	00	06.07.2026	05.07.2028

1.0 PURPOSE

- 1.1 To define a test method to determine the thickness and width of any substrate.

2.0 SCOPE

- 2.1 This STM applies to the Quality Control department.

3.0 REFERENCE(S) & ATTACHMENTS

3.1 References

- 3.1.1 In-house

3.2 Attachments

- 3.2.1 Nil

4.0 RESPONSIBILITY

4.1 QC Department Person

- 4.1.1 To carry out the testing as per the STM.

4.2 QC Department Head:

- 4.2.1 To prepare and ensure the implementation of the STM.

4.3 QA Head:

- 4.3.1 To approve the new or revised STM, and to ensure the implementation of the defined system.

5.0 DISTRIBUTION

- 5.1 Quality Assurance

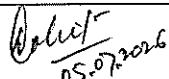
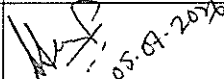
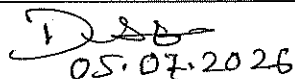
- 5.2 Quality Control

6.0 DEFINITION(S) & ABBREVIATION(S)

- 6.1 Definitions: Nil

6.2 Abbreviations

- 6.2.1 LC: Least Count

Prepared By:	Checked By:	Approved By:
 05.07.2026	 05.07.2026	 05.07.2026

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7.0 PROCEDURE**7.1 Thickness Measurement****7.1.1 For flat samples like Blister foil, Pharma strip foil, PVC, PET film, Poly Film, Alu-Alu, etc.**

7.1.1.1 Take a sample around 50 mm x 50 mm in size.

7.1.1.2 The test sample should be flat and clean.

7.1.1.3 Set the Digital Micrometer at zero reading.

7.1.1.4 Keep the test sample between the fixed anvil and the movable spindle, rotating the movable knob until the specimen is held tightly between the two spindles.

7.1.1.5 Repeat the same procedure 3 times to obtain a 90% confidence limit.

7.1.1.6 The tolerance for thickness measurement shall be $\pm 8-10\%$ for the in-process and finished stage. For the RM stage, refer to the specification of each material.**7.1.2 For wrinkled (un-flat) samples, separated layers, and Lid/Strip foil samples**

7.1.2.1 Calculate the GSM of the desired sample.

7.1.2.2 Divide by the specific gravity (relative density) of the material.

7.1.2.3 Note the thickness value.

7.2 Width Measurement

7.2.1 Take the sample at full width.

7.2.2 The test sample should be flat and clean.

7.2.3 Place the sample on the flat sample table.

7.2.4 Measure the width of the test sample with the calibrated measuring scale (LC at least 1 mm). Ensure that the zero reading is taken accurately from the edge of the foil.

7.2.5 Repeat the same procedure 3 times to obtain a 90% confidence limit.

7.2.6 The width tolerance shall be ± 1 mm.**8.0 REVISION HISTORY**

Revision No.	00	Effective Date	06.07.2026	CC No.	NA
Details of revision: New SOP					

Prepared By:	Checked By:	Approved By:
