

For Restricted Circulation only

 SHAKAMBHARI GROUP #SteelWithin		SHAKAMBHARI ISPAT & POWER LTD. (Formerly known as Ess Dee Aluminium Ltd.)	
STANDARD TEST METHOD			
Title: Determination of Coating GSM			Page No. 1 of 2
STM No.	Version No.	Effective Date	Next review date
SIPL/STM/005	00	06.07.2026	05.07.2028

1.0 PURPOSE

- 1.1 To define a test method for determination of the coating GSM of VMCH, Ink, Adhesive, Overcoat, etc.

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 GSM: Grams Per Square Meter

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

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7.0 PROCEDURE

- 7.1 Cut the coated sample using a 100 mm² GSM round cutter.
- 7.2 Weigh the test specimen and record the initial weight (W1) in mg on the weighing balance.
- 7.3 Dip the cotton swab in solvent (Ethyl Acetate).
- 7.4 Rub the wet cotton swab on the coated surface of the sample, ensuring that no trace of the coating remains on the sample.
- 7.5 Allow the sample to dry in open air. If required, keep the sample in the oven for 30 seconds for proper drying of the solvent.
- 7.6 Weigh the cleaned test sample on the weighing balance once more and record the weight (W2) in mg.
- 7.7 Calculate the GSM of the coating as below:
- 7.8 $GSM \text{ of Coating} = (W1 - W2) \times 100$
- 7.9 **Note:** For checking adhesive coating GSM, ensure the sample is not folded and the adhesive is not stuck to the template surface.

8.0 REVISION HISTORY

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

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