

MASTER COPY

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 SHAKAMBHARI GROUP #SteelWithin		SHAKAMBHARI ISPAT & POWER LTD. (Formerly known as Ess Dee Aluminium Ltd.)	
STANDARD TEST METHOD			
Title: Heat Seal Ability Test			Page No. 1 of 2
STM No.	Version No.	Effective Date	Next review date
SIPL/STM/007	00	06.07.2026	05.07.2028

1.0 PURPOSE

- 1.1 To define a test method for determination of the heat seal ability of Coated / Laminated Foil and other laminates.

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:

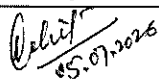
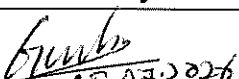
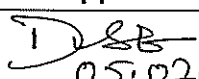
- 4.3.1 To approve the new or revised STM, and to ensure the implementation of the defined system.

5.0 DISTRIBUTION

- 5.1 Quality Assurance
5.2 Quality Control

6.0 DEFINITION(S) & ABBREVIATION(S)

- 6.1 Definitions: Nil
6.2 Abbreviations: Nil

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

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7.0 PROCEDURE

- 7.1 The heat seal strength of HSL-coated / laminated aluminium foil and other laminates determines the seal ability of the foil to ensure proper bonding with PVC or LDPE film.
- 7.2 In case of HSL-coated foil, the HSL side of the substrate should be sealed with the film side, with the following machine parameters:

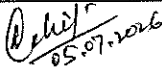
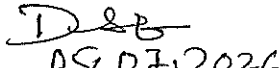
7.2.1 Heat Sealing Machine

Parameter	Value
Temperature – Blister Foil	180 to 200°C
Temperature – Strip Foil / Laminate	140 to 160°C
Dwell Time	1 second
Pressure	2 Kg/cm ²
Strip Width	15 mm

- 7.3 The heat seal strength is determined on the Sealing Strength Tester.
- 7.3.1 Clamp the stiffer layer of the 15 mm sealed strip on the upper side and the thinner layer on the lower side of the clamping assembly.
- 7.3.2 Separation angle: 180°.
- 7.3.3 Acceptance criteria: As per specification.

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:
 05.07.2026	 05.07.2026	 05.07.2026