

DSS-R.03.03 | Residue / Film / Adhesion

Roller / Handling Rail Transfer

Residue/film / pressure artifact - contact with conveyor rollers, handling rails, rack rails; linear bands, repeating pitch marks, soil-laden streaks; typically SC-0, SC-1 if aged film or light micro-texture

Diagnosis summary

Roller/handling rail transfer is an appearance change on glass from contact with conveyor rollers, storage/handling rails, truck/rack rails, or in-plant guides during fabrication, transport, or staging. It presents as linear bands (often horizontal), repeating pitch marks matching roller spacing, or soiled streaks at consistent heights.

Field identification cues

- Surface-catch class (MSRT)
- Typically SC-0 (film/pressure-only).
- SC-1 can appear where aged plasticizer/oxidized rubbers or abrasive dust produced very shallow micro-texture during movement; SC-2 uncommon-recheck classification if present.
- Perform one light, non-marring pass on a small revealed test patch (substrate), not over gummy accumulations. Use polymer stylus if a functional coating is suspected on the worked face. MSRT supports classification only.

Classification, severity and scope

- Assign CAT by visibility at acceptance geometry and MSRT after a controlled reveal test. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Faint linear band(s); SC-0 after reveal; mostly angle/raking visible. Indicative relief: 0-10 μm (optical film).
- CAT-2 (Light): Persistent rail bands with soil loading or slight SC-1 (aged plasticizer/oxidation); limited impact at standard view. Indicative relief: ~10-40 μm .
- CAT-3 (Moderate): Wide/contrasty bands or repeating roller pitch legible at standard distance; localized SC-1→SC-2 where abrasion with dust occurred. Indicative relief: ~40-120 μm .
- Reclassify when: If, after true residue removal, modeled micro-texture or linear scoring remains → evaluate under M.01 (linear scoring) or M.02 (abrasion fields) as applicable.

Distinguishing criteria

- vs. Conveyor/belt line scoring (M.01.04): True scoring shows chip-flank sparkle and SC-2; rail transfer is film/soil with SC-0/SC-1 and lacks sharp line incision.
- vs. Straightedge/metal guide scoring (M.01.02): Guide scoring is single/few sharp lines; rail transfer is broad banding often repeating across multiple panes.
- vs. Paint overspray (R.02.01): Overspray is speckled/mist without strict level bands or roller pitch.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros of band edges, pitch marks, particulate embed; context frames capturing repeating elevation across bays and.
- MSRT result (substrate): After a small reveal test patch, perform one light, non-marring pass; record SC-class (SC-0/SC-1/SC-2).
- Forms: Pane ID; product family & surface numbering; worked surface Y/N; functional coating present on worked surface?

Safety / repairability boundary: Complete only the non-invasive reveal and inspection steps authorized by the controlling VIS guidance. Classification does not authorize restoration, establish acceptance, or override stop-work, coating, crack, integrity, access, chemical, fall-protection, or project-specific requirements.

Full DSS publication: use the catalog download. Web specification:

<https://a7df714357.nxcli.io/learning-center/resource-center/damage-specification-standards/dss-r-03-03-roller-handling-rail-transfer/>