

DSS-Co.05.03 | Coating Anomalies

Frit Over-Spray / Edge Ghost

Ceramic frit anomaly - faint halo, fog, or particulate fringe extending beyond the intended frit boundary after application/firing; reads through glass from the viewing side; typically SC-0 at the viewing face. Confirm frit face, mask lines, and artwork intent before attribution.

Diagnosis summary

Frit over-spray / edge ghost is an appearance change where fine frit particulates or mist extend just outside the intended frit edge (mask/screen boundary), producing a narrow, edge-parallel halo or ghost fringe after firing. The condition is planar within the fired frit layer (usually on #2 or #4) and non-tactile from the viewing surface. Classification is appearance-only per VIS (method-agnostic).

Field identification cues

- Surface-catch class (MSRT)
- From the viewing (glass) side: SC-0 (planar defect behind the glass).
- Do not MSRT the frit face in situ. MSRT supports classification only on the viewing surface.
- Visual signature

Classification, severity and scope

- Assign CAT by visibility at acceptance geometry and halo prominence/extent. Depth values are apparent optical, not substrate relief.
- CAT-1 (Benign / non-relief): Very faint halo legible mainly at oblique/raking; halo width $\square$ 2-3 mm; SC-0 viewing face.
- CAT-2 (Light): Discernible fringe at standard distance in common lighting; halo width $\sim$ 3-6 mm or moderate density along limited lengths; SC-0.
- CAT-3 (Moderate): Pane-noticeable halo at standard distance along long edges/corners, width $\square$ 6-8 mm or high density compromising edge crispness over $\geq$ 0.5% of visible field; SC-0.
- Reclassify when:

Distinguishing criteria

- vs. Roller pickup (Co.02.01): Roller ghosting shows panel-spanning parallel bands at fixed pitch, not edge-tied halos.
- vs. Back-paint edge fog (Co.04.01): Similar halo can occur in back-paint; confirm system and face to avoid mis-attribution.
- vs. Chemical halos (Ch family): Chemistry presents rings/runs/wetting geometry and may yield SC-1/2; Co.05.03 is edge-parallel, ringless, and SC-0 at the viewing face.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros across the edge transition; overview frames showing edge length and uniformity.
- System ID. Confirm frit face, mask/artwork specification, lot/date; obtain shop drawings/submittals if available.
- MSRT (viewing face). Record SC-0 to distinguish from front-face mechanical/chemical attack.

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-co-05-03-frit-over-spray-edge-ghost/>