

DSS-M.01.02 | Mechanical Abrasion, Scoring, Impact & Cracking

Straightedge / Metal-Guide Scoring

Mechanical scoring on the worked surface - appearance-based classification; acceptance per VIS §6

Diagnosis summary

Long, ruler-straight linear score(s) produced when a scraper/razor or other hard edge rides along a metal straightedge/guide on the glass face. Typically presents bright "chip flanks" / micro-chipping along the line in raking light; persists after reveal and does not behave like a residue film. Terminology for micro-chipping and chip flank per VIS §3;

Field identification cues

- Surface-catch class (MSRT):
- Commonly SC-2 (clear) for true guide-assisted scores; shallow grazes may read SC-1 (slight). One light, non-marring pass only; MSRT supports classification, not acceptance.
- Reveal / lighting / geometry:
- Complete Non-Invasive Reveal (distilled/neutral-pH water; lint-free microfiber; no blades/abrasives/chemicals prior to evaluation).

Classification, severity and scope

- Assign CAT by visibility convention and MSRT outcome under VIS inspection-use chip-flank severity to distinguish depth bands:
- CAT-2 - Light: Narrow, clean-edged line(s) with SC-1, no pronounced chip flanks; limited impact at standard view.
- CAT-3 - Moderate: SC-2 with minor chip flanks; noticeable at standard distance.
- CAT-4 - Severe: SC-2 (clear-to-strong) with rough chip flanks, possible pits/craters; distinctly visible at standard and wide-field views.
- (Use the VIS three-part cueing: surface catch + edge/surface morphology + location/access.

Distinguishing criteria

- vs. Scraper/Razor scoring (M.01.01): Hand-free scores often show arcs/variable directionality; guide scores are ruler-straight with consistent depth and may have parallel repeats.
- vs. Glass-on-glass tracks (M.01.03): Tracks commonly present paired arcs/lines with travel-path periodicity; guide scores are single or parallel straight runs.
- vs.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, include raking; add macro frames of the line showing chip flanks (no worked transition edge).
- MSRT result: Record SC class (often SC-2); one pass, non-marring.
- Forms: Pane ID; surface numbering; worked surface Y/N; geometry checklist; photos attached (per VIS Appendix X3 fields).

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-m-01-02-straightedge-metal-guide-scoring/>