

Zero Overshoot (GSRF Practical) — Claim Ladder (2026-08)

Live site numbers with pack links always win if an older PDF, offline copy of this note, or remembered marketing language conflicts.

Hierarchy: current published evidence with pack identity → older copy → remembered claims → marketing adjectives.

A number without its exact surface is not a portable claim. No filter equations, source code, or patent claim language.

<https://www.zeroovershoot.com/notes/claim-ladder-2026-08.html> · info@boonmind.io · gsrf@boonmind.io

1. What it is

Zero Overshoot (GSRF Practical) is a deterministic soft thermostat for noisy signals. Most filters either chase the noise or smear the truth. ZO does neither: mid-band ring down and peaks toward a declared normal, so the next stage sees a calmer input. Locked packs. Published failure modes. No slide-deck metrics.

2. Job

- Pre-stage signal hygiene on industrial / SCADA-style and command–measure loops.
- Damp mid-band ring on locked Workbench pack surfaces.
- Compress peaks toward a declared normal on locked characterization packs.
- Auditable: frozen implementation, receipts, local gsrf-bench on your CSV.

3. Identity limit

Not a general tracker. Tracking MAD loses by design on the excellence-hunt multi-family package (0/52 MAD wins vs best EMA). The spring is the product.

4. Where locked packs show strength (pack identity first)

- **Mid-band — locked Phase 6.2 pack:** ~35% improvement on osc31; ~70% reduction on the defined sweet-band spectral surface versus best EMA. Pack: midband-osc-phase6-2 (Evidence · frequency).
- **Peaks — Excellence Hunt v2 pack:** ~38% mean peak-deviation advantage; 49/52 characterization wins. Pack: peak-compression-49-of-52.
- **Adaptive normal — adaptive x* probe (Evidence):** regime-shift surface; frozen vs adaptive normal (Evidence · adaptive).
- **Robot true command+measured continuous fleet (Phase 5 MAIN true-cmd; ABB/UR/Franka, n=298):** wear 298/298, 0 continuous losses; osc/rate surface-labeled only.
- **Pathology-scoped industrial synthetic map (independent adversarial / domain-map surface):** domain dependence published; always keep domain + metric labels.

If a number cannot name its pack and metric surface, do not use it as a portable claim.

<https://www.zeroovershoot.com/evidence.html>

5. Where we lost (do not sell these jobs)

- Multi-minute delayed command path — locked delay packages (~+59% / +97% / +106% MAD-to-measured vs EMA at 3/6/10 min).
- Fixed false-alarm residual detection — locked probe (~0.44 GSRF vs ~0.83 EMA residual recall at matched FA).

- Tracking MAD vs raw — Excellence Hunt multi-family (0/52 vs best EMA).
- Axiom industrial composite (PID-style pure evaluate, 2026-08 sealed eligible set): no clear composite wins vs strong causal smoothers; wear/churn-style terms often favour baselines. Boundary mapped — not a hero claim. Do not conflate Axiom industrial oscillation_power with Workbench mid-band/spectral packs.
- DAMADICS multi-day plant hardness: composite mostly loss; wear better on 1/75 days — not a plant wear championship.

<https://www.zeroovershoot.com/notes/when-gsrf-lost.html>

6. Non-claims

- Not a universal industrial-PID composite winner under Axiom pure evaluate.
- Not “always beats EMA.” Not delay-tolerant command smoother. Not fixed-FA residual alarm product claim.
- Not joint/PLC controller replacement; not certification authority; not AI-invented metrics; not plant ROI guarantees.

7. Ecosystem roles

ZO: a candidate worth testing for a specific pre-stage job. Axiom: the controlled environment to test claims under frozen rules. Audit pack / sealed receipt: what actually happened. Claim ladder: exactly what we are willing to say about what happened.

<https://www.boonmind.io/workbench.html> · <https://axiom.boonmind.io/ui/>

8. Evaluate

- Your CSV first: gsrf-bench / try (evaluation license).
- Open locked packs on Evidence — claim → pack → metric → dataset → comparison → receipt.
- Multi-method sealed comparison → Axiom.
- License when the job matches green lights — not red lights.

9. Supersedes

This note and the live site supersede older short public PDF stubs for claim-ladder wording. Live site numbers with pack links always win.