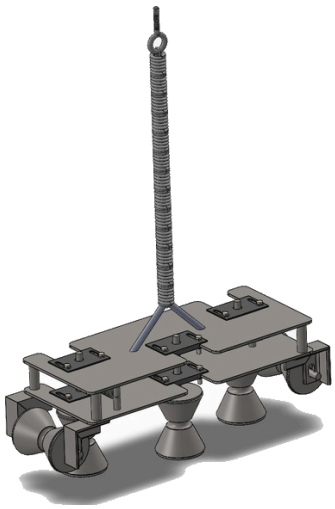
SMI SCRAPING SYSTEM | PART 3 OF 3

DUAL ELEVATING SNATCHBLOCK



5–10× rope life

Tools-down time cut by at least 80%

Scraper rope lasts 5–10× longer. Fewer ropes to move underground, and fewer snapback incidents.

UNDERGROUND APPLICATION

- Along the full scraper rope run in the gulley
- Conventional stoping
- Anywhere the full rope currently drags on the footwall
- Gullies where rope replacement and splicing recur

DEVELOPMENT STATUS

New product, currently in development. Design and manufacture are complete; underground trialling has not yet been carried out. SMI is seeking a host shaft for a production trial.

PRODUCT VIDEOS ON OUR WEBSITE
www.snatchmining.com

DUAL ELEVATING SNATCHBLOCK

THE PROBLEM — UNDERGROUND REALITY

- The full rope of the scraper winch is not suspended in any way. It drags on the ground and wears out.
- A worn rope breaks at least once per shift, and repairing it takes roughly 40 minutes per rope — during the mine's most critical production window.
- Snapback recoil can seriously injure anyone standing near a rope that fails under tension.
- Rope replacements are expensive and logistically complex to move underground.

THE SMI SOLUTION

The Dual Elevating Snatchblock suspends both the full and the empty rope in the air, without infringing on the scraper. The rope no longer wears against the footwall, so it lasts, and the shift keeps running.

BENEFITS

- Scraper rope lasts 5–10× longer
- Tools-down time reduced by at least 80%
- Direct cost saving on scraper rope
- Fewer ropes to move underground — less pressure on logistical bottlenecks
- Reduces snapback recoil and injury rates
- **Doubled-up rigging is built into the unit** — the suspension carries a second, independent point, so exposure in the death triangle is reduced rather than transferred to the crew
- **Polymer construction** — lighter to carry and install underground, and no corrosion in wet gullies

SPECIFICATIONS

SCRAPER ATTACHMENTS	Required. Sold in sets of two, fitted to the mine's existing scraper — whether one part of the system is used or all three.
MASS	150 kg for the original steel unit; the polymer unit targets 80 kg
LOAD CAPACITY	74 t for the steel unit at a 185% safety factor; 45 t at 112% for the lighter unit — sized to the inline elevating duty it actually performs, not to a 180° return wheel.
MATERIAL	Polymer
ASSEMBLED DIMENSIONS	1 300 mm × 850 mm frame; rollers on 400 mm centres
ROLLERS	Three 45° rollers on adjustable brackets, four tempered cone rollers, eight bearings
SUSPENSION	Sprung, with 50 mm travel on Ø50 mm ID tension springs. A chain is fitted with slack as an emergency restraint; the spring is the primary support.
ROPE	Ø19 mm scraper rope
EMPTY ROPE	A 100 mm elevating snatchblock for the empty rope is included with each unit
ENGINEERING	SM-ROPEH-GA-01 Rev C, 9 December 2025. The Rev C general assembly shows the S355JR fabricated version.
LEAD TIME FROM PO	2 – 3 weeks current unit; 4 – 6 weeks for the lightweight unit

PATENT & DESIGN	DESIGN LIFE	SUGGESTED SPARES	IMPLEMENTATION
ZA provisional 2026/02710 — Dual Elevating Snatchblock	6 months · 3-month warranty	Defined spares set per system	1 month on site — see p.20