



COMPANY PROFILE

UNDERGROUND MINING PRODUCTS & CONTRACT MINING

Scraping System · Drill Jig · Roof Bolter · Blasting Barricade

Contract Mining · Manufacturing · Skills Transfer

Forging Solutions Underground



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WHO WE ARE



“Forging Solutions Underground”

Snatch Mining Industries (Pty) Ltd operates within the South African mining sector with a clear strategy to deliver measurable results. We design, manufacture and install productivity-enhancing products for underground mining at any reef width, conventional or mechanised — principally chrome, platinum and gold, though not limited to those commodities — and, where the mine’s contracting model allows, we run the contract mining teams that use them.

We have strategically headhunted individuals with the skills and experience to achieve our objectives, and we hold licences for the patented products that form part of our portfolio. Success in this sector takes more than products. It takes expertise, innovation and a deep commitment to safety and efficiency, which is why our solutions are tailored rather than catalogued — and why they are installed on our clients’ shafts by our own people.

HARNESSING MAXIMUM PRODUCTIVITY

SMI is a true one-stop shop. We do not only supply equipment; we provide a complete turnkey package from concept and supply through manufacturing to full-scale implementation of every product in our portfolio. That approach is driven by two objectives: meeting the expectations of the mines we serve, and using our products in the most efficient way possible to enhance productivity, safety and operational reliability.

SAFETY IS THE FIRST DESIGN CONSTRAINT

Every product SMI builds is designed to remove an unsafe condition rather than warn against it. The Drill Jig hangs from installed support and cannot be operated where support has not been placed. Remote drilling keeps operators out of unstable ground. The Snatchblock lifts the scraper rope off the footwall, reducing the rope failures that cause snapback injuries. Safety is not a section at the back of this profile; it is the reason the products take the shape they do.

2024

YEAR FOUNDED

Brits, NW

HEAD OFFICE

2024/512958/07 4380322224

REGISTRATION NUMBER

VAT NUMBER



OUR BUSINESS

SMI operates across three connected divisions. Products are invented and built by us; contract mining proves them on real production targets; manufacturing keeps both under our own control.

CORE BUSINESS — PRODUCTS & CONTRACT MINING

01 Underground Productivity Products

Design, manufacture, supply and installation of the SMI Scraping System, Drill Jig, Roof Bolter and SMI Blasting Barricade — equipment developed by SMI for conventional and mechanised mining at any reef width.

02 Volume-Based Contract Mining

Stoping and development on all-inclusive rate-per-ton structures — and the division where every product above is proven before it reaches a client's shaft.

03 Secondary Support & Sweeping

Support, sweeping and rehabilitation work taken on alongside a contract or on its own. Full scope on page 22.

ADDITIONAL BUSINESS — MANUFACTURING, TRAINING & SUPPORT

04 Manufacturing & Steel Supply

In-house design and fabrication, extending beyond our own portfolio into steel manufacturing and supply for third parties.

05 Training & Skills Transfer

Super Miner consulting and on-shaft operator training — a mining triage system for training, auditing and reporting delivered at miner level.

06 Electrical Infrastructure

Panel building, on-site installation, system integration and power distribution, designed and maintained to mining electrical standards. Delivered alongside our mining and supply work.



OUR SPECIALISTS

SMI is built around a team of specialists whose experience spans the full width of the business — from underground mining and commodity-specific expertise through to product design, manufacturing and supply chain management.

Morné Venter

CHROME & PRECIOUS METALS MINING

Twenty years of commodity-specific mining expertise, with a strong focus on aligning operations to industry best practice — ensuring safety, efficiency and technical standards are consistently met from ground conditions through to extraction.

Dan Kula

DRILL JIG INSTRUCTION & MAINTENANCE

Dan has spent more than two decades on drilling equipment underground, moving from assistant drill rigger into instruction and maintenance. He both trains crews on the equipment and keeps it running — the combination SMI places on a client's shaft for the first month of every installation.

Paul Vicus Langeveldt

MANUFACTURING, SUPPLY & CONSTRUCTION

Paul leads SMI's manufacturing capability on the back of a quarter-century across steel manufacturing, supply and design, construction management and conveyor installation. His background spans design and fabrication through to on-site execution — the experience that lets SMI build its own products.

Gideon Odendaal

COAL MINING

Forty-five years in coal extend SMI's commodity coverage beyond chrome and precious metals, ensuring the right technical approach is applied to coal-specific ground conditions and extraction methods.

Elmo Venter

CHROME & PRECIOUS METALS MINING

Four decades underground have given Elmo command of the operational and technical considerations unique to each reef, from ground conditions through to extraction method. That depth lets SMI tailor its approach to each orebody rather than apply one method everywhere.

Lucky Kgantsi

MINING SUPERVISION & OPERATOR TRAINING

A legally appointed miner and shift supervisor under MHSA regulations 4.4 and 2.15.1, with production supervision at Sibanye-Stillwater, Impala and Samancor Western Chrome, and currently at Tumela Shaft, Amandelbult. He has trained crews underground on drill jigs at Siyanda Bakgatla.

Cor Janse van Rensburg

UNDERGROUND ENGINEERING & CONVEYORS

Thirty years in underground engineering and conveyor systems, on the same manufacturing, supply and construction management foundation — the link between SMI's underground operations and its manufacturing and supply work.

Megan Pretorius

ELECTRICAL, PROJECT MANAGEMENT & LOGISTICS

Megan runs SMI's electrical scopes and project management alongside mining and product logistics — planning the work, tracking it to completion, and getting product, spares and consumables to site and underground on the timelines the mining cycle demands.



EQUITY & TRANSFORMATION

SMI is committed to real transformation in mining, and we measure it the same way we measure everything else — by what actually changed on a shaft. Transformation here is not a policy bolted onto the business; it is built into how the products are delivered.

EQUITY STRUCTURE

B-BBEE STATUS	Level 4 contributor
PROCUREMENT RECOGNITION	100%
ENTERPRISE CLASSIFICATION	Exempted Micro Enterprise
BLACK OWNERSHIP	26%

OUR APPROACH TO TRANSFORMATION

Skills transfer is contracted, not promised

Our contract mining work has been structured around trial, demonstration, skills transfer and maintenance from the outset. Client workforces are trained and qualified on our equipment, and the standards and norms we establish stay behind when we leave.

Every product trains the crew that uses it

The instructor we place underground for a month qualifies the mine’s existing workforce as operators. It creates capability inside the client’s own team rather than a dependency on ours.

Local employment and local procurement

We employ from the communities around the operations we serve, with a focus on the Rustenburg area, and buy from black-owned suppliers in our own supply chain wherever the capability exists.

Manufactured in South Africa

Design, fabrication and assembly are performed locally, so spend with SMI contributes to a mine’s local content and preferential procurement targets.

B-BBEE affidavit and company registration certificates available on request.



WE DO WHAT WE SAY

Every product here is built to return more than it costs. The spend comes first and the saving follows, and that judgement sits with the mine — so each one below is described by what it puts back on the panel, in figures an operation can weigh against its own.

SMI SCRAPING SYSTEM — ONE SYSTEM, THREE PARTS WORKING ON THE SAME ROPE RUN

Supplied with scraper attachments, sold in sets of two and fitted to the mine's existing scraper. Required whether one part of the system is used or all three.

01

CORNER PULLEY

One winch cleans multiple panels around 90° corners

Gulleys are established from the first blast in ledging, and production continues through the turn instead of stopping to clear the bottleneck.

02

BROW PULLEY

Avoids 40 minutes of tools-down time per shift, per winch

The rope stops wearing against the hanging wall, so it breaks less often — and air, water and electrical services stay intact.

03

DUAL ELEVATING SNATCHBLOCK

Tools-down time cut by at least 80%

The rope is carried clear of the footwall, so it lasts five to ten times longer and breaks far less often.

ADDITIONAL PRODUCTS

04

SMI DRILL JIG

More face advance per blast, with the same crew

A 1.5 m hole in 2 minutes, drilled to the same angle and burden every time.

05

SMI ROOF BOLTER

The operator is no longer under the drill

Remote drilling from a supported area, and the air leg holds the angle on every hole.

06

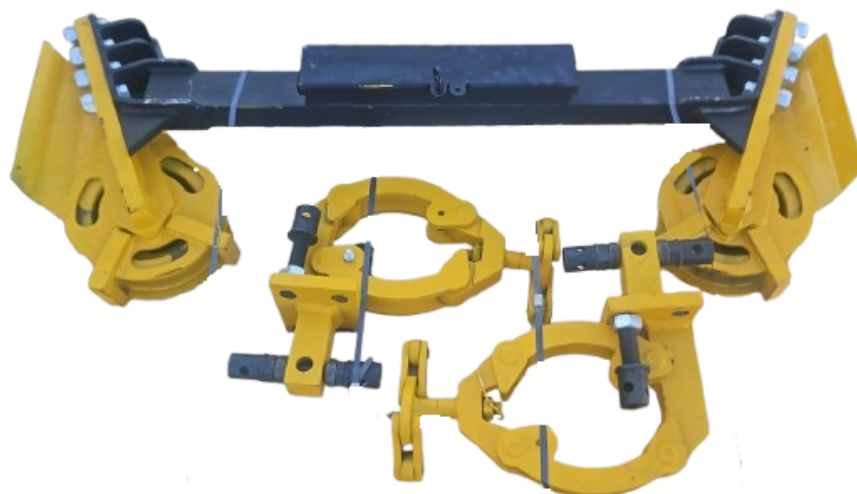
SMI BLASTING BARRICADE

Keeps the blast you lose to sweeping

Back areas stay clean, so catching up before measuring day does not cost a blast.

SMI SCRAPING SYSTEM | PART 1 OF 3

CORNER PULLEY



Gulleys from blast 1

One winch cleans multiple panels around 90° corners

Gulleys are established from the first blast in ledging, and production continues through the turn instead of stopping to clear the bottleneck.

UNDERGROUND APPLICATION

- 90° corners in ledging, board & pillar and pillar mining
- Slusher gulleys
- Gulley and ASG intersections
- Any layout where a winch per panel is not possible
- Finger raises

TRIALED AND TESTED

Anglo American Platinum

Now Valterra Platinum. Approved for use. Proof of concept and production trial completed at Amandelbult, Tumela 16 West Shaft.

2016

Sibanye-Stillwater

Stock item

2018



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CORNER PULLEY

THE PROBLEM — UNDERGROUND REALITY

- Material (“stof”) accumulates at 90° corners, because guiding the scraper through the turn is difficult.
- The build-up restricts scraper movement and damages gully services — air and water.
- Production eventually stops so the bottleneck can be cleared before normal operations resume.

THE SMI SOLUTION

The Corner Pulley provides controlled, stable guidance for scraper travel at 90° corners, so “stof” moves through the turn instead of collecting in it. The value of the avoided production downtime far exceeds the cost of the product, and the winch driver is relieved of repetitive, unproductive work.

BENEFITS

- **Ledging** — normal production maintained; panel and gully cleaned without multiple winches; gulleys established from the first blast; pack support standards held above and below the gully
- **Board & pillar** — effective where a winch per panel is not possible; multiple panels cleaned with one winch
- **Slusher gulleys** — fewer winches in corner-heavy layouts; better ore movement into the tip
- **Pillar mining** — better scraper access and cleaning reach into pillars
- **Finger raises** — clears back areas where corners restrict movement; less interference with ventilation, air and water at low stoping widths
- **Panel cleaning** — minimises production loss where face winches are unavailable or awaiting installation
- **Face cleaning** — removes dependence on gully overrun; the scraper navigates the panel toe directly

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.
ASSEMBLY	Left- and right-hand snatch blocks on a 1 150 mm spreader beam, both swivelling in both directions. Integral toolbox.
SAFE WORKING LOAD	10 tonne, referenced to SANS 1819:2006 Edition 1.2
MASS	82.5 kg assembled — 33.9 kg per snatch block, 11.8 kg spreader beam
ASSEMBLED DIMENSIONS	1 150 mm overall; 1 030 mm between mounting pins

SHEAVE	Ø230 mm from solid EN8 bar, on two 7208 bearings per block
MATERIALS	S355JR plate; VRN400 abrasion-resistant arms; EN8 shafts and sheave stock
ROPE	Sized for Ø19 mm scraper rope
ENGINEERING	SB-GA-00 Rev 0, issued for fabrication 9 June 2025; signed off by a registered professional engineer 7 July 2025
TEST CERTIFICATION	CSIR destruction tests to SABS 1819:2006, certificates T14201–T14204. Specification minimum 400 kN; the four units carried 634.89, 672.85, 729.67 and 804.13 kN.

PATENT & DESIGN	DESIGN LIFE	SUGGESTED SPARES	IMPLEMENTATION
ZA 2016/01725 (D0309ZA) · ZA 2006/09906 (P0018ZA)	6 months · 3-month warranty	Defined spares set per system	1 month on site — see p.20

BROW PULLEY



40 min per shift

Avoids 40 minutes of tools-down time per shift, per winch

The rope stops wearing against the hanging wall, so it breaks less often — and air, water and electrical services stay intact.

UNDERGROUND APPLICATION

- Brows in raises
- Centre gullies
- Strike ASGs
- Any elevation transition where the rope runs against the hanging wall
- Roller lengths to suit narrow and wide raises and ASGs

DEVELOPMENT STATUS

Built, not yet underground. The rollers, bearings and suspension are finalised and the unit is in manufacture. What it has not had is a shift on a working brow, and we would rather say so than imply otherwise.



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BROW PULLEY

THE PROBLEM — UNDERGROUND REALITY

- Friction of the scraper rope against the hanging wall cuts its life expectancy.
- The rope damages air, water and electrical services.
- Rope friction against rock creates dust.
- Weakened ropes break repeatedly, and every splice stops the panel.

THE SMI SOLUTION

A mechanically simple, low-maintenance pulley that lifts the rope clear of the hanging wall at the brow — eliminating all four problems at source, with no maintenance requirement of its own.

BENEFITS

- Easy to install, with no maintenance required
- Prevents loss of production by safeguarding air, water and electrical services
- Protects the scraper rope from friction against the hanging wall
- Limits tools-down time for scraper rope splicing
- Reduces dust generated by rope-on-rock friction
- Enhances safety by minimising rope breakages and related hazards
- **Polymer rollers** — lighter to carry and install, no corrosion in wet gullies, and gentler on the rope than bare steel

SPECIFICATIONS

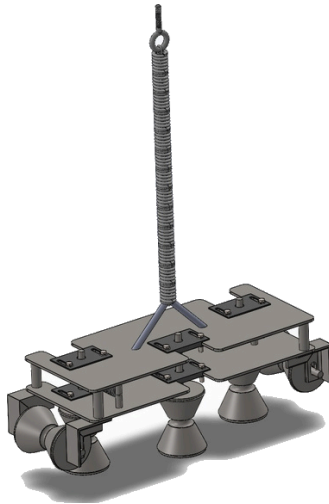
SCRAPER ATTACHMENTS	Required — see page 07.	SIZE VARIATIONS	Different roller lengths to fit narrow and wide raises or ASGs
ROLLERS	Two polymer rollers with a 1 000 mm working face, on FAG 6208-ZZ-C3 sealed bearings — four per unit	MOUNTING	Six shackles and two turnbuckles to eyebolts in the hanging wall; the turnbuckles set the working height
MATERIAL	Polymer	OPERATION	Full rope runs below the bottom roller; empty rope runs between top and bottom rollers
ASSEMBLED DIMENSIONS	1 211 mm overall; 1 200 mm roller assembly; rollers on 200 mm centres	ENGINEERING	SM-BRWPLY-GA-01 Rev A, issued for approval 30 October 2025. The Rev A general assembly shows the earlier steel-drum version.

INSTALLATION & MAINTENANCE

- Installed by SMI. Six drilled eyebolt holes per side — three for lifting gear, three for suspension
- Mine personnel mark hole positions and declare the area safe; work is supervised by competent personnel and signed off by mine Engineering
- Daily inspection added to the winch operator’s checklist; defects reported to SMI for repair

SMI SCRAPING SYSTEM | PART 3 OF 3

DUAL ELEVATING SNATCHBLOCK



5–10× rope life

Tools-down time cut by at least 80%

The rope is carried clear of the footwall, so it lasts five to ten times longer and breaks far less often.

UNDERGROUND APPLICATION

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

DEVELOPMENT STATUS

Awaiting a host shaft. The polymer unit is in manufacture against a signed-off general assembly. We are looking for one gully, on one shaft, to run it against the mine's own rope and splice figures.



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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

- Direct cost saving on scraper rope, and fewer ropes to move underground
- 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 — see page 07.	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.
MASS	150 kg for the original steel unit; the polymer unit targets 80 kg	ROPE	Ø19 mm scraper rope
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.	EMPTY ROPE	A 100 mm elevating snatchblock for the empty rope is included with each unit
MATERIAL	Polymer	ENGINEERING	SM-ROPEH-GA-01 Rev C, 9 December 2025. The Rev C general assembly shows the S355JR fabricated version.
ASSEMBLED DIMENSIONS	1 300 mm × 850 mm frame; rollers on 400 mm centres	LEAD TIME FROM PO	2 – 3 weeks current unit; 4 – 6 weeks for the lightweight unit
ROLLERS	Three 45° rollers on adjustable brackets, four tempered cone rollers, eight bearings		

PATENT & DESIGN

ZA provisional 2026/02710 — Dual Elevating Snatchblock

SEMI-MECHANISED DRILLING

SMI DRILL JIG



1.5 m in 2 minutes

More face advance per blast, with the same crew

A 1.5 m hole in 2 minutes, drilled to the same angle and burden every time.

UNDERGROUND APPLICATION

- At the face in conventional and mechanised stoping and development
- From 0.75 m operating width
- Bad hanging walls, dome slips, faults and dykes
- Methane pockets, fissures and holing examination zones
- Anywhere a trackless rig cannot reach or cannot be justified

TRIALLED AND TESTED

Lanxess Chrome Mines

Monorail Jig across two shafts, 25 000 t per shaft. Two-year contract; new standards and norms established for the Drill Jig.

2015 – 2018

Glencore, Rustenburg

Two 15 000-ton contracts executed with the Drill Jig

2017

Sibanye-Stillwater K6

15 000-ton contract managed by SMI

2018



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SMI DRILL JIG



THE PROBLEM — UNDERGROUND REALITY

- Rigs are tall, break down, and need access many panels do not have.
- Hand drilling puts the operator at the face in exactly the ground conditions where nobody should be standing.
- Hole direction and burden vary from operator to operator, so fragmentation and face advance vary with them.
- Drilling is physically punishing, and a tired crew drills fewer panels by the end of the shift.

THE SMI SOLUTION

A pneumatic drill jig suspended from a monorail on roof bolts or eyebolts, using inline thrust technology for faster drilling per hole and effortless extraction. Because it hangs from installed support, the jig **cannot operate without support in place** — there is no shortcut to take. Drilling is done remotely from 2 m off the face, and it works with all pneumatic machines and any hand drilling machine already on the mine.

BENEFITS

- **Accurate drilling removes the human factor** — hole direction and burden are set by the jig, not by how tired the operator is, so the hanging wall and footwall come out stable and to profile
- Smooth hanging and sidewall, proper face advance, and fragmentation control through direction and burden control
- Lower than rigs, reducing equipment height requirements, and less affected by equipment breakdowns
- Easy installation and assembly, reducing physical strain on operators
- Improves operator energy levels and enhances psychological awareness
- More panels drilled with the same workforce — fewer employees required at the face
- Capable of replacing trackless and semi-trackless rigs, improving face advance per blast — cost-effective and compatible with any hand drilling machine
- The existing workforce is trained and qualified as jig operators during the contract period

SPECIFICATIONS

ASSEMBLED WIDTH	0.4 m	COMPATIBILITY	Operates with all pneumatic machines
ASSEMBLED LENGTH	2.6 m development 1.6 m stoping	JUMPER SIZE / LENGTH	Site specific per desired hole depth (2.6 m)
ASSEMBLED HEIGHT	0.6 m – 3.5 m	DRILLING TIMES	1.5 m in 2 minutes 2.6 m in 3 min 20 s
MASS	Boom 35 kg Cradle 25 kg Monorail 7 kg	HARD ROCK EXTRACTION	15 seconds from extracting to collar of next shot hole
MONORAIL LENGTH	3 m / 6 m	AIR PRESSURE	3 – 7 bar
MINIMUM OPERATING WIDTH	0.75 m	HANDLING & STACKING	Moved on the face by hand; stacked clear of moving rock and material
EYEBOLT INSTALLATION DISTANCE	Site specific		

SUGGESTED SPARES

Defined spares set per product

IMPLEMENTATION

Dependent on the contract negotiated

DISTANCE CONTROL — SUPPORT DRILLING

SMI ROOF BOLTER



The operator is no longer under the drill

Remote drilling from a supported area, and the air leg holds the angle on every hole.

UNDERGROUND APPLICATION

- Low stoping with roof bolts
- Development roof bolting and secondary support
- Gulley and development roof bolting
- From 900 mm minimum operating stoping width
- Any application where the operator would stand beneath the drill

TRIALLED AND TESTED

Cooke 1# & 2#, Randfontein

Pillar extraction at a 0.86 m stoping width, with integrated roof bolting

2009



SMI ROOF BOLTER

THE PROBLEM — UNDERGROUND REALITY

- With conventional drilling the rock drill operator stands directly beneath the rock drill, exposed to falling rock.
- Holding the mine standard drilling angle of 70–90° by hand is difficult, so face shape and advance rates suffer.
- Manual drilling puts significant strain on the operator, causing fatigue, loss of accuracy and slower production.
- Inefficient drilling raises downtime, support requirements and operating cost across the section.

THE SMI SOLUTION

A remote-controlled air leg and rock drill remove the operator from directly beneath the drill, so the work is done from a supported area. An independent air leg holds the correct angle, taking the human error out of drilling discipline. Air and water are fed through hoses to the rock drill, air leg and stinger, regulated by Victoria and ball valves — and the ball valve on the water line shuts off supply whenever the machine is not drilling.

BENEFITS

- Remote drilling removes the operator from the hazardous area, so the work is done in a supported environment
- Faster and more effective drilling, with less physical effort from both the operator and the assistant
- Improved drilling angles ensure the support is installed correctly
- Less labour-intensive — one operator can manage the bolter, best supported by one assistant
- The 90° bolter optimises support drilling in standard mining applications
- Water is conserved: the ball valve saves supply whenever the machine is not in use

SPECIFICATIONS

EXTENDED LENGTH	950 – 1 900 mm	DRILLING TIMES	1.5 m in 1 min 27 s 2.6 m in 2 min 30 s
ASSEMBLED HEIGHT	Small 740 – 1 550 mm Large 1 080 – 2 390 mm	HARD ROCK EXTRACTION	20 seconds to collaring of the next hole
REACHABLE DISTANCE FROM FACE	300 mm	AIR PRESSURE	3 – 7 bar
MASS	8.5 – 12.5 kg, excluding rock drill	REMOTE	5 m hose 14 kg
MINIMUM OPERATING STOPPING WIDTH	900 mm	HANDLING	Manually on the face
AIR LEG	Pneumatic — operates with a pneumatic drilling machine	STORAGE	Stacked clear of mobile equipment, ore and travel paths

VARIANTS

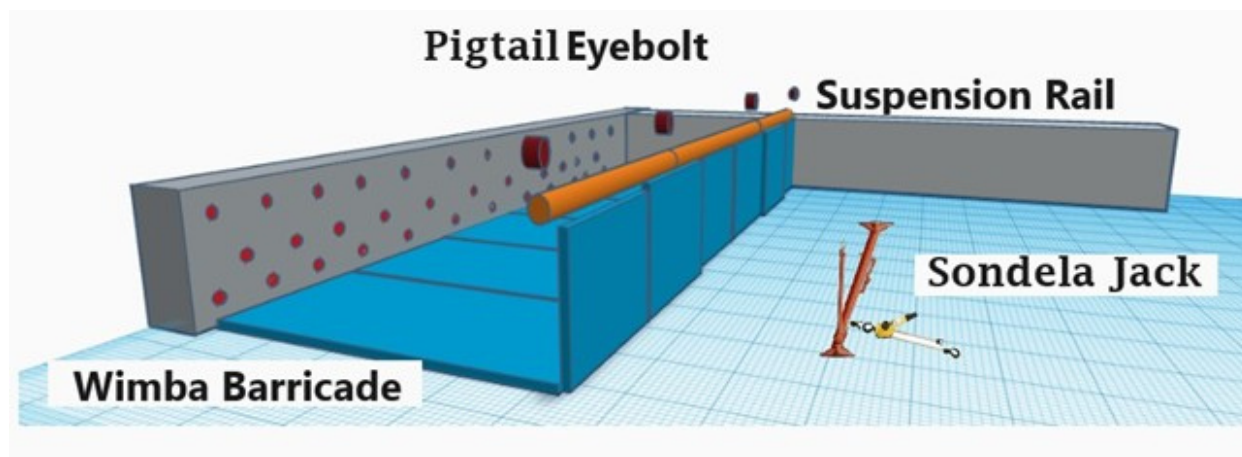
- **Low stoping** — 8.5 kg; low stoping roof bolts
- **Pencil** — 17.5 kg; development bolting and secondary support
- **High stoping** — 22 kg; gulley and development bolting
- All variants drill remotely; only the pencil bolter needs a spanner to collar

SUGGESTED SPARES
Defined spares set per product

IMPLEMENTATION
Dependent on the contract negotiated

SWEEPING & BLAST CONTROL

SMI BLASTING BARRICADE



Keeps the blast you lose to sweeping

Back areas stay clean, so catching up before measuring day does not cost a blast.

UNDERGROUND APPLICATION

- Across the full panel width, 4 m from the face
- Conventional stoping
- Advanced daily with the face during in-stope roof bolting
- No mine poles or sticks required
- No winch needed to move the barricade forward

DEVELOPMENT STATUS

Designed and costed, not yet trialled. The suspension rail, the belt and the Sondela Jack are specified and the method is worked out shift by shift. What it needs now is a panel.



SMI BLASTING BARRICADE

THE PROBLEM — UNDERGROUND REALITY

- After a blast, broken ore re-contaminates back areas that were already swept clean.
- Catching up on sweeping before measuring day costs a blast.
- Conventional barricading needs mine poles and sticks, and a winch to advance it.
- A rough footwall makes sweeping slow and the sweeping tool ineffective.

THE SMI SOLUTION

A suspended conveyor-belt wall, advanced daily with the face, that stops back areas being re-contaminated and keeps the swept footwall clean to mine standard. No blast is lost catching up on sweeping before measuring day, and no winch is required to move the barricade forward.

BENEFITS

- Keeps swept footwall clean to mine standards and prevents re-contamination of back areas
- Creates a smooth footwall, so broken ore is removed quickly and the sweeping tool works properly
- Where all broken ore has been removed after the blast, the belt is moved forward manually — no winch
- Where broken ore sits on the barricade, the belt is advanced with the Sondela Jack
- No mine poles or sticks needed for installation
- Durable, user-friendly and effective
- A skill that integrates into the current cleaning crew's responsibilities

SPECIFICATIONS

SUSPENSION RAIL	3 m × 60 mm interlocking, suspended from the hanging wall across the panel width, 4 m from the face, on pigtail eyebolts drilled daily during in-stope roof bolting
BARRICADE	1.5 m wide × 6 m long conveyor belt attached skin to skin across the full panel width
OVERLAP	Belts overlap by 200 mm from the up-dip side
SECURING	Three securing points on the vertical side, forming a solid wall
SONDELA JACK	Supplied with a 3-ton lever hoist to pull each conveyor up to the face after a blast; required only where the barricade is weighed down by broken ore
ADVANCE	Rail and barricade advanced daily in accordance with mine standards

SUGGESTED SPARES

Defined spares set per product

IMPLEMENTATION

Dependent on the contract negotiated



IMPLEMENTATION & SUPPORT

Every product comes with a month underground

Mining products fail on implementation far more often than they fail on engineering. SMI does not hand over a crate. We place a qualified instructor on the shaft for one month from installation, working your shifts alongside your crew. This applies to every product in this profile.

WEEK 1

Install and commission

Our instructor installs alongside your people, marks positions with mine personnel, confirms the area is declared safe, and obtains Engineering sign-off.

WEEKS 2 – 3

Train and qualify

Your existing workforce is trained and qualified as operators. No new headcount, and no dependency on SMI to run the equipment.

WEEK 4

Run to standard

The product runs on your shift patterns, at your production targets, with the daily inspection built into the checklists your supervisors already use.

HANDOVER

Support and spares

Defects and wear are reported to SMI through the same checklist. Our instructor remains available on site for the duration of the supply agreement.

The result is that the crew who will use the product every day were taught by the person who installed it — and the mine keeps the capability when we move to the next section.

WEAR, WARRANTY AND REPLACEMENT

Our products are consumables. They work in the hardest-worked part of the panel — the same environment that eats scraper rope, drill steel and picks — and they are priced and replaced on the same logic. Each unit carries a **three-month defect warranty** and a **six-month design life** in normal production conditions.

That is the argument, not the caveat. A mine replaces scraper rope several times over in six months, and loses shift hours to splicing every time. So the fair comparison is not a purchase price against a capital asset's life — it is our cost per month against the rope, the hours lost to splicing and the blasts the section is losing today.

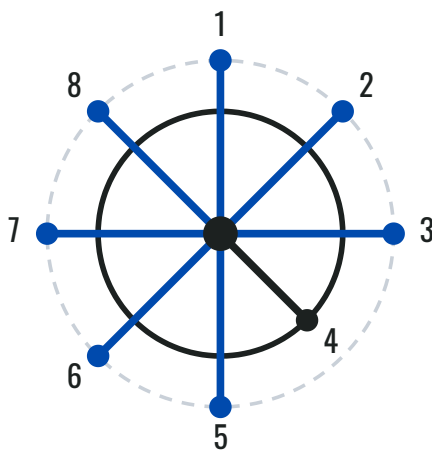
We will do that calculation on your own numbers before you buy — your rope consumption, your splice times, your lost blasts — and if it does not come out in your favour, we will say so.



SUPER MINER

A mining triage system built around the person who runs the panel

Super Miner is SMI's own operating method for conventional and semi-mechanised sections. It starts from a simple position: the miner is the only person legally able to take charge of a crew, and the only one who spends the full shift at the face — so every other function should be serving the miner. In most operations that relationship runs the other way round.



THE EIGHT SPOKES

The method treats the mining cycle as a wheel carried on eight spokes. Each spoke is one of the conditions a blast depends on. **The shortest spoke sets the size of the wheel** — and the number of turns the wheel makes is the number of blasts that panel produces in a month.

01 **Safe Production**

03 **Cleaning**

05 **The Miner**

07 **Documentation**

02 **Human Resources**

04 **Drill & Blast**

06 **Construction**

08 **Sustainability**

TRIAGE, RUN OFF A DASHBOARD

At the start of every shift the miner assesses all eight and acts on the weakest one first — the way a medic reads vital signs before deciding what to treat. Identify the shortest spoke, escalate it, and fix it before it costs a blast.

All eight spokes are scored and tracked on a single dashboard, one row per panel. The shortest spoke is visible at a glance to the miner, the shift supervisor and the mine overseer, so the same constraint is not argued about three times. Every lost blast is logged against the spoke that caused it, and the close-out report is built off the dashboard.

THE PRINCIPLES IT RUNS ON

- **Never force a blast.** A forced blast means a shortcut was taken, and the shortcut is the incident.
- **Set the cycle by the biggest constraint**, not by the target. An unrealistic call is a pressure the crew absorbs physically and mentally.
- **Manage the process, not the outcome.** By the time you are measuring the outcome, the process has already decided it.
- **Momentum first, then detail and quality.** Get the cycle turning, then enforce the standard inside it.
- **Root cause, not symptom.** Every recurring problem is traced to the sequence that caused it, under a no-repeat policy.
- **Total transparency.** Every lost blast is recorded against the reason it was lost, so the same blast is not lost twice.

DELIVERED AS

On-shaft consulting, training and a live dashboard

AUDITED

One spoke at a time

HANDOVER

Standards and norms stay behind

PROVEN AT

Sibanye-Stillwater Kloof 1#, 2014



MANUFACTURING & MINING SERVICES

SMI carries its own fabrication capability, from design and CAD through to finished product. Nothing in this profile is imported, badged or resold — so lead times are ours to control, and a design change found on a panel this week can be in production the next.

STEEL FABRICATION	A steel manufacturing and engineering works in Brits, North West, fabricating to SMI drawings — from CAD through to finished product
POLYMER COMPONENTS	Moulded and machined polymer for the Brow Pulley and the Dual Elevating Snatchblock
PLANT & EQUIPMENT	Cutting · forming · welding · assembly
LOCAL CONTENT	Design, fabrication and assembly performed in South Africa

STANDARDS THIS WORK IS HELD TO

- **SANS 1819:2006** — scraper winch systems and snatch blocks; the product standard our destruction testing is certified against
- **Mine Health and Safety Act 29 of 1996** and the Driven Machinery Regulations, for equipment taken underground
- **ISO 3834-2** — comprehensive quality requirements for fusion welding of metallic materials
- **ISO 9606-1** — qualification testing of welders, fusion welding of steels
- **EN 10204 3.1** mill certificates on structural steel and wear plate
- **ISO 9712** — qualification of non-destructive testing personnel, where NDT is called for
- **SANS 2001-CS1** — structural steelwork execution
- **ISO 1461 / SANS 121** — hot-dip galvanizing, where corrosion protection is specified
- **ECSA** — design and strength-of-materials sign-off by a registered professional engineer

MINING SERVICES

Our contract mining division works conventional, trackless and semi-mechanised operations at any reef width across PGM, chrome and gold. It is also where every SMI product is proven before it reaches a client's shaft, on all-inclusive rate-per-ton structures with clear production milestones.

Volume-based contract mining

Stoping and development: conventional, trackless, semi-mechanised

Wire mesh & lacing

Across development and stoping

Secondary support

Including secondary roof bolting

Sweeping and vamping

Area preparation and resource recovery

Opening up

Re-establishing access to mineable ground

Reclamation

Recovery from previously mined areas

Roadway maintenance

Haulages, travelling ways and rehabilitation

Super Miner

Mining triage system at miner level — see page 21



PROJECTS, CLIENTS & REFERENCES

Our mining division exists so that every product we sell has already been proven by our own crews, on a real contract, against a real production target.

SMI Scraping System

INVENTED AND MANUFACTURED BY SMI

A stock item at Sibanye-Stillwater and approved at Anglo American. Proof of concept and production trial completed. Sibanye-Stillwater stock item 2018; Anglo American (now Valterra Platinum) proof of concept 2016.

Lanxess Chrome Mines

DRILL JIG ROLLOUT, TWO SHAFTS

25 000 tons per shaft. A 25 000-ton contract held for two years as trial, demonstration, skills transfer and maintenance plan, establishing new standards and norms for the Drill Jig. 2015 – 2018

Glencore, Rustenburg

TWO 15 000-TON CONTRACTS

Executed using the SMI Drill Jig. 2017

Sibanye-Stillwater K6

15 000-TON CONTRACT

Contract managed by SMI, Rustenburg. 2018

Cooke 1# & 2#, Randfontein

PILLAR EXTRACTION

At a stoping width of 0.86 m with integrated roof bolting. 2009

Sibanye-Stillwater Kloof 1#

SUPER MINER CONSULTING

Mining triage system for training, auditing and reporting at miner level. 2014

CLIENTS

SIBANYE-STILLWATER

VALTERRA PLATINUM

GLENCORE

LANXESS CHROME
MINES

REFERENCE CONTACTS

The Amandelbult proof of concept was run under the Mine Overseer of Section 7-2 at Tumela 16 West Shaft, and the close-out was signed by the Section Engineer, the Production Manager and the General Manager of Tumela Mine, together with the Project Manager and Mining Engineer from New Mining Technology.

The signed close-out report is available on request. It sets out the measured results, what the trial found and what we changed as a result. We would rather hand you the mine's own document than ask you to take our word for it.

Named reference contacts are available on request. Mining is a mobile industry and the people who ran our trials have in many cases since moved shaft, mine group or company, so rather than print details that go out of date we will put you in touch with the right person for the contract you want to hear about — once we have confirmed they are contactable and willing to take the call.



CONTACT US

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Forging Solutions Underground