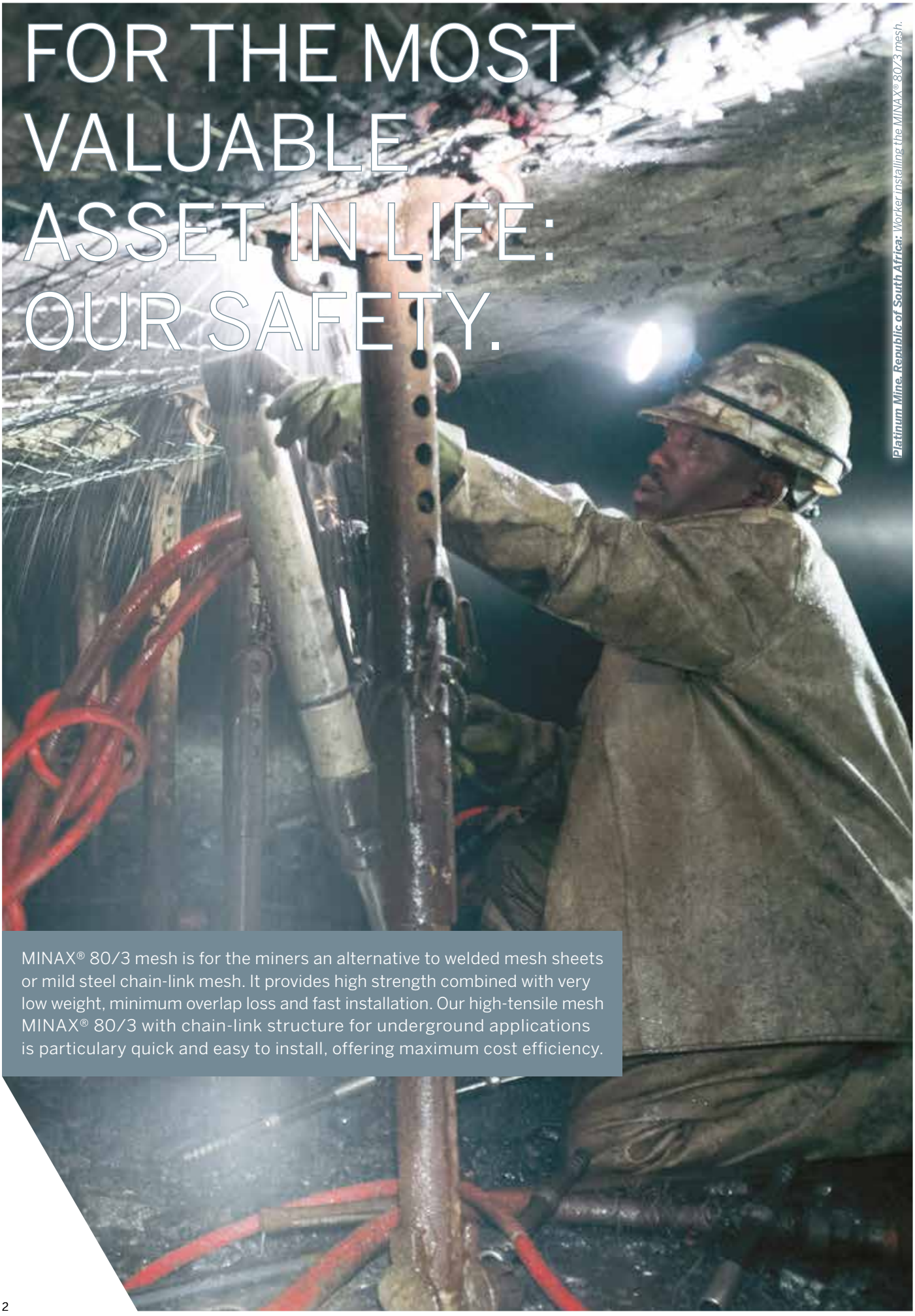
GEOBRUGG®
BRUGG
Safety is our nature

MINAX® 80/3 mesh made of high-tensile steel wire

THE MOST ECONOMICAL GENERAL SURFACE SUPPORT

FOR THE MOST VALUABLE ASSET IN LIFE: OUR SAFETY.



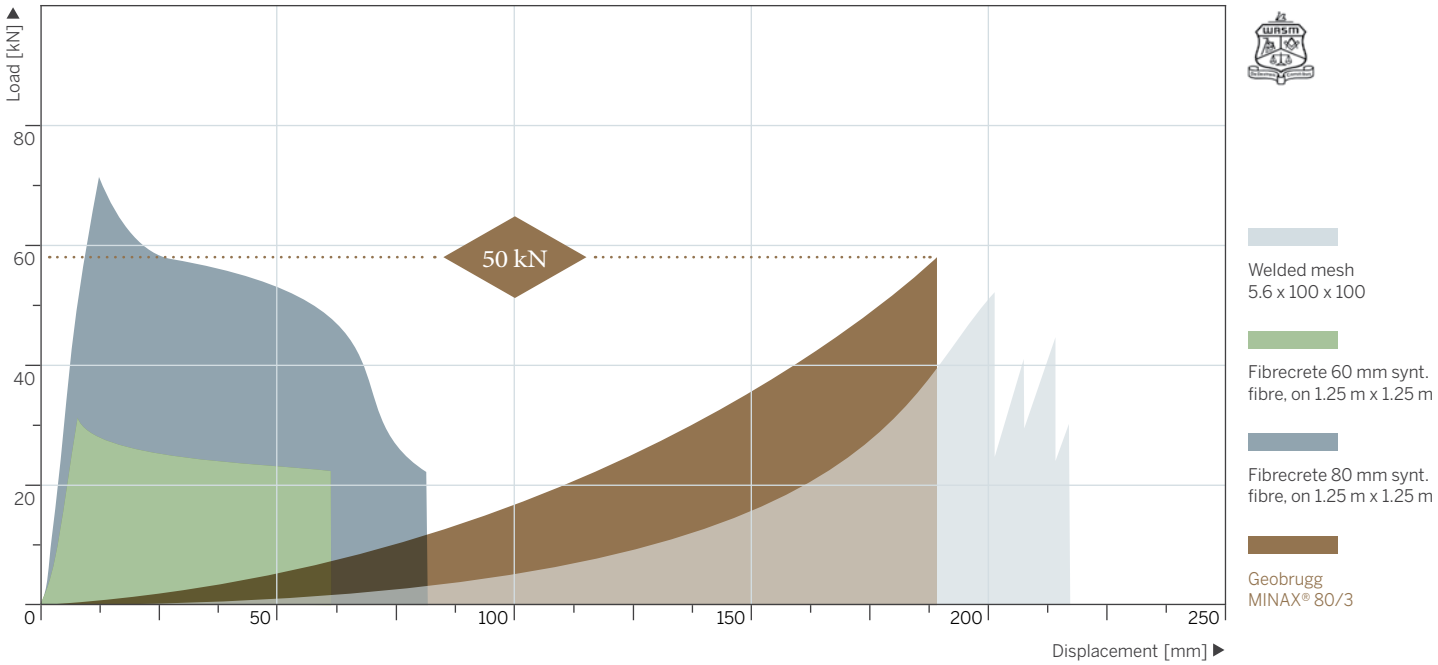
Platinum Mine, Republic of South Africa: *Worker installing the MINAX® 80/3 mesh.*

MINAX® 80/3 mesh is for the miners an alternative to welded mesh sheets or mild steel chain-link mesh. It provides high strength combined with very low weight, minimum overlap loss and fast installation. Our high-tensile mesh MINAX® 80/3 with chain-link structure for underground applications is particulary quick and easy to install, offering maximum cost efficiency.

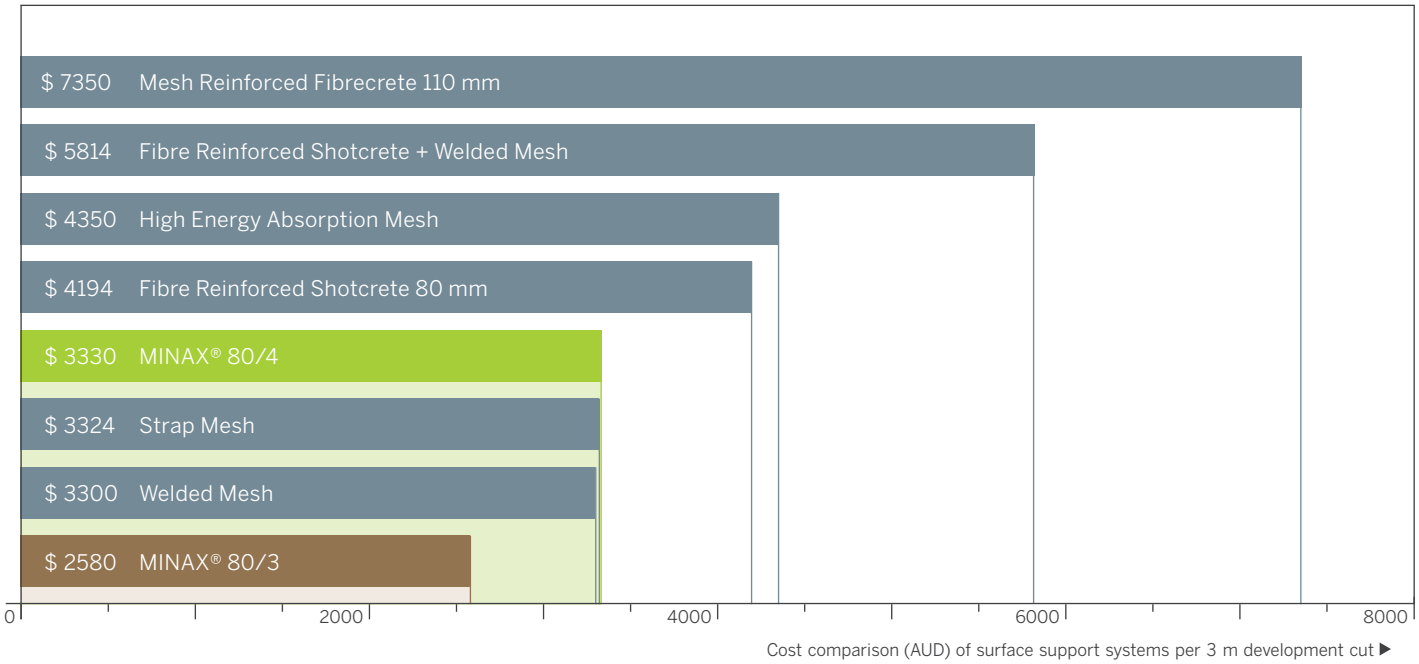
MINAX® 80/3 MESH – WHERE SAFETY MEETS ECONOMY.

Results of quasi-static tests made by the Western Australian School of Mines (WASM): MINAX® mesh with a wire tensile strength of 1770 N/mm² can carry much higher static and dynamic loads than traditional reinforcement nets (graph based on WASM results).

Performance: More load with MINAX® 80/3 mesh



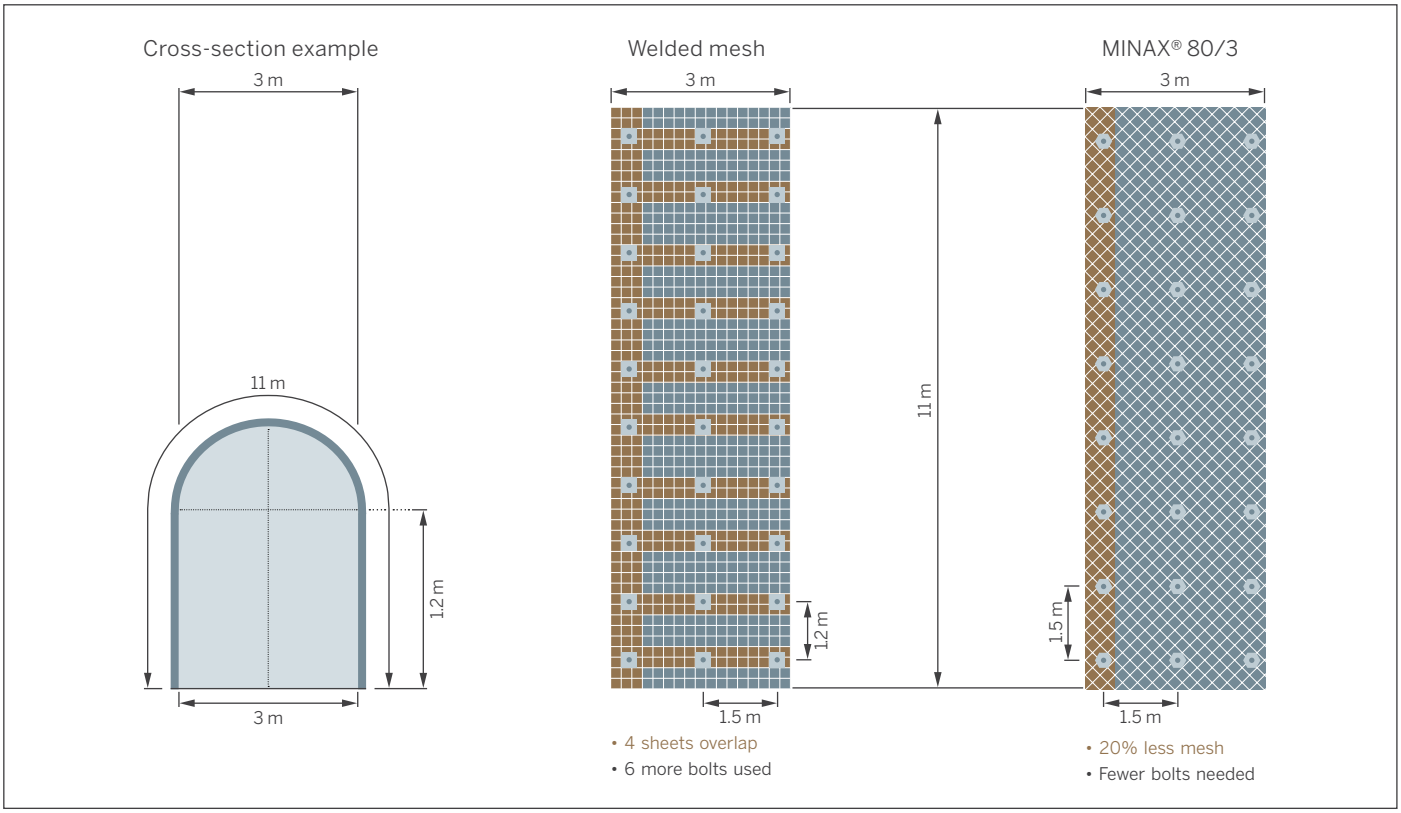
Total costs of surface support: Experiences in Australian mines



Adapted from: V. Louchnikov, S. Brown and R. Bucher, 2014.
Mechanized installation of high-tensile chain-link mesh in underground operations.
Original article available on request.

MINAX® 80/3 BRINGS TOP RESULTS – DUE TO BEST COMPONENTS.

Less overlap, increased bolt spacing, greater savings
Knotted ends at the edges of the mesh allow minimized overlapping on the rock surface.
This leads to a highly effective installation saving both on mesh and time.



Additional components for the MINAX® 80/3 mesh

G-Plate®
For optimal load transmission from the rock bolts to the MINAX® mesh. The special spike plate grabs the mesh in 6 positions assuring optimal load transfer, also during blasting works.

T3 connection clips
For a tool-less connection the T3 clip connects the mesh when necessary, ensuring 100% load transfer.

MESHA® installation handler
For a fully mechanized installation of Geobrugg mesh in one working process. The MESHA® can be retrofitted to any development jumbo or bolting machine, without losing a boom for drilling.

QUALITY YOU CAN RELY ON.

Foundation for our solutions is steel wire with a high tensile strength of minimum 1770 N/mm^2. Compared to mild steel wire our high-tensile wire offers at least three times higher tensile strength. It is characterized by high mechanical resistance, high energy absorption capability and long life. Designed specifically for the underground mining industry, MINAX® 80/3 offers unparalleled quality through performance, that is synonymous with the Geobrugg name worldwide. We provide MINAX® 80/3 with tailor made corrosion protection solution taking into account your specific mining conditions.

The MINAX® 80/3 mesh provides the following features:

High-tensile steel wire
For high loads: Both static and dynamic capacities (e.g. while blasting) are higher compared to other general surface support materials.

Rhomboidal chain-link structure
For easy handling and storing: The whole installation process becomes much easier.

Low weight
For fast installation: Very light weight relative to its strength due to the high-tensile wire. This makes manual or mechanical installation very easy and improves the occupational health and safety.

Knotted ends
For maximum stability at the edges: Profit from minimized overlapping, optimized number of rock bolts and no sharp edges.

Efficient production
For competitive rates: High-tech production technology allows top quality at a very attractive price. Can be easily provided customized to local needs (bolt spacing and/or advance length).

Cutting edge corrosion protection
Whether hot dip galvanized, ULTRACOATING®, SUPERCOATING® or stainless steel: After our analysis of the environmental conditions in your mine, we offer the corrosion protection solution, according exactly to your specific needs.

ALWAYS READY FOR YOUR DEMANDS.

Geobrugg headquarter Romanshorn, Switzerland: *MINAX® 80/3 mesh rolls on stock.*

What makes our systems particularly economical, is Geobrugg's global network – and therefore the local availability of our products. With close proximity to our customers we produce meshes on four continents with precisely controllable state-of-the-art technology. This not only allows top quality at a very attractive price, but also reduces the logistic expenditure, enables short delivery times and provides flexibility to adjust the level of capacity to the customers' needs.

TECHNICAL DATA:

SPECIFICATION	MINAX® 80/3 MESH
Mesh shape	Rhomboid
Mesh opening	80 mm (+/- 3%)
Mesh geometry	102 x 177 mm (+/- 3%)
No. of meshes transversal	9.8 pcs/m
No. of meshes longitudinal	5.6 pcs/m

STEEL WIRE	
Wire diameter	3 mm
Total height of mesh three-dimensional	12.5 mm (+/- 1 mm)
Tensile strength of steel	min. 1770 N/mm²
Material	High-tensile steel wire
Tensile strength of a wire	12.5 kN

LOAD CAPACITY	
Punching load 300 x 300 mm plate	50 kN (according to WASM tests)
Tensile strength of mesh longitudinal	110 kN/m

MESH ROLLS	
Mesh edges	Mesh ends knotted
Roll width	1.5 m – 3.5 m
Roll length	As per site requirement
Total surface per roll	Various
Weight per m²	1.45 kg/m²

CORROSION PROTECTION	
Composition	According to mine specific environment
Coating weight	According to EN 10264-2

Small deviations from mesh geometry and other modifications are subject to change without notice.

CE

More information is available on our website:
www.geobrugg.com/mining

EN.200630

GEOBRUGG®
BRUGG

Safety is our nature

Your local Geobrugg specialist:
www.geobrugg.com/contacts

Geobrugg AG
Aachstrasse 11 | 8590 Romanshorn | Switzerland
www.geobrugg.com

A BRUGG GROUP COMPANY