



MECHANICALLY ANCHORED ROCK BOLT

RSC Ekusasa Mining is the Original Equipment Manufacturer (OEM) and supplier of Mechanically Anchored Rock Bolts to the mining industry in Africa.

Description

Rock Bolts / studs are mechanically point anchored within the rock using 3 leaf bail-type expansion shells attached to the inserted end of the bolt. Expansion shells are supplied screwed onto the end of the rock tendon and are inserted into the hole. When tension is applied to the tendon the tapered plug within the shell forces the leaves to move outwards, thus wedging them against the walls of the borehole. This means that the mechanical bolt is functional immediately on installation. In many applications the installation is post-grouted for additional stability.

The complete rock bolt assembly includes the threaded bar, bearing plate (washer), nut, seat and expansion shell. Numerous combinations are available to suit individual strata control requirements.

These include:

- Bar type
- Bar diameter
- Thread type
- Expansion shell size
- Washer profile
- Washer dimensions

All round and deformed bar (ribbed bar) used for mechanical anchors is high tensile (minimum 480 MPa) steel hot rolled in accordance with SANS 920. Step Bar® and Kat Bar® are specifically designed for mining applications (please refer to the individual Product Sheets for more detail).

Advantages of the product

- Mechanical Anchors provide immediate support.
- Wide choice of combinations to meet specific support requirements.
- Can be post grouted.
- The wedge and leaf arrangement provides parallel contact with the hole sides.
- Up to 4mm range in hole diameter can be tolerated (depending on the choice of shell).

Dimensional Specifications

Type	Diameter (mm)	Length (m)	Thread
Round Bar	14.5	0.5 to 3	16mm DIN405
Rebar	25	0.5 to 3	M24
Step Bar®	14.5, 16, 18, 20	0.5 to 3	Diameter + 2mm DIN405
Fully threaded Katbar®	16, 20	0.5 to 3	Katbar® hot rolled double start

General Disclaimer

The information contained within this document is correct at the time of publishing and every attempt is made to ensure its accuracy. The information contained within is subject to change without notice. All information should be viewed as guidelines and are for information purposes only.

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