



METIX

SMS group

FAIL-SAFE ELECTRODE SLIPPING DEVICE

Back of the drive assembly:
Individual rope tensioning bolts are easily accessible, allowing up to 80mm adjustment per rope, ensuring that ropes can be pre-tensioned with accuracy and ease.



Metix's unique fail-safe electrode slipping device is based on many years of design, production and maintenance experience. To meet or exceed operational and maintenance requirements in even the most severe applications, the following design considerations have been built in:

- Robustness, long life expectancy and maintainability.
- Simple and accurate adjustability.
- Minimal crimping/deformation of the electrode casing.
- Spares holding minimisation.
- Open design for ease of inspection.

Features of each Metix Slipping Device:

- Clearly visible coil spring packs, applying a “throttling” clamping force by tightening the ropes in a “rolling” action.
- Sealed bearing main shaft – ensuring that the force generated by the springs is transferred into useful clamping pressure with minimal friction loss.
- A single hydraulic cylinder used for un-clamping.
- Quick and easy adjustment or replacement of steel wire ropes. (>10 years life expectancy)
- The entire drive assembly can be replaced in less than 4 hours.
- Three pairs of non-spin, low-stretch steel wire ropes generate the clamping force, one pair able to support a 45 ton electrode safely.
- Friction shoes are suspended from above by means of links and pins to avoid crimping and to reduce friction.
- The ropes are arranged to ensure symmetrical clamping, even in the unlikely event of one or more rope failures.
- In the event of a spring failing, the remaining springs will still clamp the electrode securely, until a maintenance shut can be planned.
- Standardized drive sizes available for electrodes from 1.75m to 2.1m, 1.2m to 1.8m and 0.6m to 1.3m, thereby reducing the number of spares needed.

Large diameter rollers between the friction shoe and ropes, greatly reducing friction in the slipping device and maximizing efficient transfer of tension in the ropes to clamping force on the casing.



Back of the SD: The wire rope turnaround tension equalization blocks can be seen.

These blocks also facilitate quick slackening of the ropes to facilitate drive removal or rope replacement. The friction shoe hangers provide additional anti-friction and anti-crimping features.



Metix (Pty) Ltd. South Africa
1st Floor, Block A, 204 Rivonia Road, Morningside, Sandton
Tel: +27 (11) 676 2300 • Fax: +27 (11) 676 2323

E-Mail: info@metix.co.za
www.metix.co.za