

# HENCON ALTECRETER

Mechanised mobile batch mixing plant for the application of Minecrete S<sup>3</sup>







In proud partnership with:



www.henconmining.com

The South African launch of the Hencon Altecreter is the culmination of an exciting joint venture between Hencon and Altecrete.



### Hencon

The Hencon Group sets new standards for engineering, manufacturing and servicing of reliable special and custom made mobile equipment used in the aluminium, mining and forestry industries. Hencon focuses on delivering flexible solutions, achieving high standards and ensuring customer satisfaction.



### Altecrete

Altecrete is a world leading tunnel support liner materials manufacturer and specialist, that consistently defies the limitations of the industries material standards by creating new material technologies that exhibit gained improvements across the entire industry standard. With total leading improvements in durability, mechanical strengths, application time and efficiency, stable in challenging environments, totalling a reliable solution that surpasses expectations and delivers results that only Altecrete can offer.



## **Dango and Dienenthal**

Dango and Dienenthal (D&D) was founded in 1865 as a family owned business, with the head office situated in Siegen, Germany. Well known in the forging industry, D&D is in partnership with Paul Wurth from Luxembourg TMT (Taping Measuring Technology) — the world leader in the supply of taphole equipment to the metallurgical industry. D&D is a shareholder in Hencon and SAMSS.





The Hencon Altecreter is the world's first self-propelled, underground articulated, all-wheel drive volumetric concrete mixing vehicle.

It's a ground-breaking mechanised mobile batch mixing plant for the application of Minecrete S<sup>3</sup> and offers the following benefits in terms of man, money, machine and Minecrete S<sup>3</sup>:

#### Features and benefits



## MAN & MONEY

## **MACHINE**

MINECRETE S<sup>3</sup>

Mobile vehicle delivers, on average, a 23-29% saving on OPEX.

Offers a **50% cost saving** on secondary structural support material requirement due to the high bond, compressive, shear and

Reduces material handling and logistics underground by up to 64%.

tensile mechanical strengths.

Reduced maintenance cost of equipment due to new technology equipment and less m³ of Minecrete applied per m².

Reduced transport costs to the mine as less material is required per m<sup>2</sup>.

The cost saving on demand batch mixing and pumping is a mining industry first, due to the innovative design and equipment allowing for reliable and cost effective operations.

Reduces underground material transport traffic which improves production and increases safety.

Much quicker advance underground due to fast setting times of Minecrete S³ (blasting can commence two hours after spraying).

Interior comfort with spring suspended seats, seatbelts, door interlocks and ergonomically designed operator controls in an enclosed, filtered and force ventilated

Extra focus on safety with protected rotating and pinch point parts, added emergency stops in cabin and at the rear, and approved RODS FORS

Less wastage with an added easy fault finding diagnostic system on board.

Permits operator to mix only the desired amount of Minecrete S³ per spraying operation.

Comfort of mobility, easy to load, operate and clean.

Revolutionary, innovative design for high volume concrete underground batching in the mechanised mining industry.

Designed for the application of the super strong wetcrete called Minecrete S<sup>3</sup>.

Delivers an output of 0 to 12m³ per hour.

Allows for separation of raw aggregate material with only the required quantities mixed per required spray area.

Fitted with an advanced monitoring system and predetermined calibration system to ensure mixing quality conformance.

Operator interface for easy calibration, setup and process tracking and logging in the cabin, and at the discharge of the trailer.

State-of-the-art fire suppression, pedestrian detection and oncoming vehicle detection systems.

Equipped with failsafe brakes as well as a hydrostatic and automatic hydro-dynamic brake system for additional safety.

The vehicle is fully compliant with the MINE HEALTH AND SAFETY ACT, 1996 (ACT NO 29 OF 1996) regulation 8.10.

Eliminates the need for concrete batching plants and concrete mixers (aggie cars).

Latest technology engines and control system ensure maintenance and operational cost saving.

Machine has a lifecycle of **15 000 hours** of operation on engines axles, gearbox, prop shafts and brakes.

The vehicle can operate at an utilisation of 75% with an availability of over 89%, depending on the level of maintenance.

There are three types of sprayed secondary support liner: Shotcrete, Thin Sprayed Liner (TSL) and Resins. Minecrete S³ offers the benefits of each technology with none of the limitations.

Minecrete S³ is a non-toxic, non shrink, fast curing, high strength, structural-shotcrete that seals like a TSL, providing protection from oxidation and weathering, fibre optional.

Penetrates rock fractures like a resin, locking the rock in place and preventing block movement (Key Block Interlocking).

Minecrete S³ reaches 70% of its full strength within 24 hours.

Increased productivity with less material applied per m<sup>2</sup>.

Reduces rebound to only 4 to 5% as the thixotropic of Minecrete S<sup>3</sup> while spraying helps reduce the amount of product rebounding off the rock face.

Ensures consistent quality with each application.

Due to the ultra fast curing high strength gain, supported areas are work accessible sooner while increasing safety and preventing fall of ground accidents.

Non-toxic and non-flammable.

Increased chemical adhesion to substrate thanks to advanced chemical technology.

Minecrete S<sup>3</sup> is non-shrink, thus eliminating the usual 3-10% shrinkage that occurs with standard concrete materials.

Very low water uptake with water usage automatically measured and controlled.

Wired remote control operation while mixing and discharging for good control and view over the process.



## **Training**

Operator training for the Hencon Altecreter is can be aranged.

## Maintenance

Full after-sales support and maintenance services to ensure that the Hencon Altecreter operates at its full capacity at all times.

## Sales

For any sales related enquiries about the Hencon Altecreter, please send an email to info@altecrete.com



## Hencon Mining BV

De Stenenmaat 15 7071 ED Ulft The Netherlands

## Hencon Mining SA

Unit A2 1510 Zeiss Road Laserpark Honeydew Johannesburg South Africa, 2170

info@henconmining.co.za | www.henconmining.com

## Altecrete

20 Lammermoor Drive, Lammermoor, Krugersdorp, Gauteng, South Africa Tel: +27 10 001 5155

Email: info@altecrete.com www.altecrete.com