

High-quality Sermac concrete pumps

Pan Mixers' international product fair held in September brought together some of the industry's most respected experts and demonstrated a range of high quality equipment and technology. A highlight of the product fair was the launch of the company's new range of Sermac concrete pumps. Dale Kelly reports:

Pan Mixers South Africa (PMSA) became the sub-Saharan distributor for Italian-based Sermac S.p.A. in February this year. The company is representing Sermac across all southern African developing countries, including Namibia, Mozambique, Zimbabwe, Kenya, Angola and Zambia.

Welcoming guests and customers who attended the fair from several African regions, PMSA director Walter Ebeling says the products are a natural extension of Pan Mixers' customer base. "Sermac felt we were an excellent fit for its operations, having checked our infrastructure, technical support facilities, service and reliability. I think the profiles between the two companies are well suited. We have the technical back up and expertise to be able to support the products and Sermac has an excellent product that suits our market."

There are currently two Sermac pumps in the country: the SD100 stationary pump, which runs at 100 m³/hour and the 4Z 36,

which has a four-piece Z-boom with a 36 m reach. "It was the largest crane that we could import without having to use a double axle on the front wheels of the truck," Ebeling explains. The pump is mounted on a Mercedes 2628 truck.

The new Z design allows for opening and closing of the boom in confined areas, and Sermac has incorporated large cylinders making it easier to pump difficult or stickier concrete. Able to pump 140 m³ of concrete an hour, the pumps are perfect for the local construction and house building markets. "Ideal for any large area, the units offer neater, faster and more accurate placing of concrete, as well as a reduction in manual labour," he says.

The hydraulic pump combination is flanged to a transfer shift gear driven by the cardan shaft and assembled on the truck by Sermac. The hydraulic system performs in the open oil circuit system, and the 'S' valve pumping unit is provided with an automatic greasing system. "This comes after years of



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research and development together with testing in extreme conditions," explains PMSA general manager Michael Dörner, adding that the special 'S' valve guarantees greater output and smaller load loss.

He notes that the high-performance pumping unit comprises a hydraulic pump combination mounted to a transfer shift-gear driver by the engine PTO system. "The boom and pump are controlled via a proportional system distributor, and all their functions are managed by radio remote control with a variable regulation of the concrete output," he explains.

Looking at efficiencies, he says all hydraulic pumps are supplied with power through a drive shaft from the gear box, via a chassis-mounted transfer box, or alternatively by taking power via a direct drive PTO.

Sermac offers a complete range of concrete pumps with booms from 21 m (four sections) to 65 m (six sections), several fold configurations in Z and ZR (Zenith series) or R, RZ or TR (Sirio series). The booms have high-yield point heads welded to sections and hinges with double-support pins, ranking them among the safest in the world market. The unloading booms are available in the following folding types:

- Z folding: ideal for work in confined spaces where maximum manoeuvrability is required. This fold enables the second section to be used even if the boom is not fully extended.
- R folding: ideal for working at height in open spaces where there is a requirement for long distance coverage.
- RZ folding: combines the benefits of R and



Pictured at the launch of the Sermac range of concrete pumps, from left: Alessandro Viello, Sermac marketing manager; Robert Ebeling, PMSA director; Walter Ebeling, PMSA managing director; Dario Viello, Sermac vice president and one of the founders; Michael Dörner, PMSA general manager; and Gian Carlo Montesoro, Sermac consultant.

launched in SA



Above: Ikhaya Technologies' i-brick. **Right:** Sermac offers a complete range of concrete pumps with booms from 21-65 m, together with several fold configurations.

Z fold and is ideal for long reaches where large outputs are required. It enables the boom to open in a small amount of space and for concrete to be pumped over long distances.

- ZR folding: combines the benefits of Z and R fold and is ideal for use in built-up areas where easy placing and maximum versatility are required.

The hydraulically operated pumping unit's stabilisers are operated by two distributors placed on both sides of the machine to ensure safe use. The lifting jacks are fitted with check valves which hold the cylinders in position even if there is a hydraulic pipe failure.

New on the market is the Star Series 6, with concrete flow rates of up to 60 m³/hour, and a maximum concrete pressure value of up to 108 bar. The sophisticated system is trailer-mounted for maximum mobility and efficiency on a construction site.

"What excites me is the quality of Sermac's equipment," Ebeling says. "Every component is of the best quality available, resulting in products that can compete with the best in the world. Sermac suits Pan Mixers' dedication to quality, and we are happy to have the opportunity of adding our high level of service to these superior products."

Product fair report back

A fair mix of local and international customers and guests attended the international product fair and a line up of international

speakers discussed relevant industry issues. Omega Consulting Services' Gordon Forester, who is always easy to listen to, started off his presentation with an excellent analogy: "Concrete is like a woman; you can squeeze her but don't bring any tension into the equation – they don't like it!" This was followed by CMA (Concrete Manufacturers Association) director John Cairns, who discussed new SABS paving slab standards for 2010.

Another innovative product launched at the fair and which *MechTech* was told looks set to change the face of the house building sector, was the Ikhaya brick (i-brick). Ebeling says that Nico le Grange of Ikhaya Brick Technologies (IBT) approached Pan Mixers with the latest in stabilised soil/cement brick design, "and we developed the machine to make the i-brick to the quality standards and production capacity required."

The soil mix will include IBT additives together with cement as a stabiliser to ensure waterproofing and better longevity than current soil brick products. I-bricks are manufactured under high pressure – up to 20 t, where conventional equipment uses 7 t – and the additive binds the products successfully to extend its lifespan to beyond 30 years.

A single stage press will yield some 2 000 i-bricks/day, and a double stage press with double the capacity will soon be available.

Adding to the international flavour at the Pan Mixers fair was the new Fasteverdini range. Direct from Italy, products include

drum vibrating rollers, vibrators and converters, power screeds and core drills.

"The fair is more than just a way to show our customers new products," Ebeling says. "It's our way of showing our commitment to offering the best service and the best technology, in good and in tough times. We are committed to our customers, suppliers and to the market as a whole" he adds. □

About PMSA

Pan Mixers SA was established in South Africa in 1976 and is the largest manufacturer on the African continent of: laboratory, turbine and counter current pan mixers; complete weigh batching plant; mixer or aggregate-mounted microwave moisture sensors for the concrete, refractory, ceramics, briquetting and clay industries. Other products include concrete block, brick and paving machinery; and pallet- and product-handling equipment.

PMSA founder Hans Ebeling, started the company in Sebenza, east of Johannesburg. Following years of rapid growth and expansion, the factory was relocated to Jet Park. In 1995, the next generation, Walter and Robert Ebeling took control of the organisation, providing a strong foundation of business and engineering expertise.

The 18 200 m² factory boasts the latest technology in CNC machinery and lathes. Innovative design and production techniques are aided with CAD/CAM software. PMSA has achieved ISO 9002 certification for quality management systems and standards.