

Distributor introduces laser levelling technology into local market

NOMVELO BUTHELEZI | FEATURES REPORTER

Construction materials distributor and manufacturer Pan Mixers South Africa (PMSA) has introduced a new product from floor preparation equipment supplier HTC Innovations, the Automatic Levelling Laser (ALL) system, into the local market.

The ALL system automatically grinds all large floor surfaces to the same level.

PMSA, through Superb Flooring Systems, is the exclusive distributor of the Swedish-manufactured HTC grinding equipment and HTC Superfloor polished concrete, which is

a floor style that involves mechanically refining a concrete surface by removing the top concrete paste and exposing the underlying aggregate and concrete matrix, before the underlying concrete is ground and polished to a completely smooth and shining surface.

The ALL system is an extension of the HTC 950 RX floor grinder, and consists of a rotation laser and a mounted receiver, which automatically controls the machine during the grinding process.

The 950 RX is remotely controlled, eliminating inaccuracies that could arise from

hand-held control of the machine.

"After extensive testing in Sweden, the machine is the first of its kind to be brought onto the African market," says PMSA MD **Walter Ebeling**.

The ALL system is a process of levelling the concrete floor by using a laser system, which spins and gives you a reference point of the lowest to the highest point on the floor. The machine will then start grinding from the highest point until the ground concrete floor is completely level. The system's rotational laser transmitter is accurate up to 30 m and is easily set up again by stopping the HTC 950 RX floor grinder and repositioning the rotational laser every 30 m, allowing large areas to be accurately ground.

As the machine moves along, it will grind away the concrete until it reaches the desired level. The machine has an indicator to alert the user when the desired level has been reached," explains PMSA marketing and sales manager **Quintin Booysen**.

"HTC discovered that, by using special tooling in a dry grinding process and by going finer and finer with the tooling, it was able to achieve shiny, smooth concrete flooring, known as polished concrete," says Ebeling.

HTC has incorporated microscopic diamonds into the system to abrade the floor surface, which allows one to achieve the smooth, levelled surface that is desired.

The concrete is required to be 25 MPa or more to get the best results when using the ALL

system and polished concrete.

The ALL system is suitable for warehousing applications with high-bay storage facilities, where forklifts are required to raise stock to high levels. The slightest inconsistency at ground level can have significant consequences for the operation, as an uneven surface may cause the vehicle to tip, or stock may be packaged unevenly, thereby causing safety hazards for employees.

"With increasing demand for space, warehousing is going to get higher and higher as the cost of buying land increases. This means that level flooring is going to become essential when constructing most warehouse spaces," says Ebeling.

In addition to the safety aspects that come with the end results, the ALL system is also environment friendly. It eliminates the need for top coating on the surface, eliminating the use of chemicals.

"The HTC ALL system is connected to the radio-controlled HTC 950 RX floor grinder together with dust extractors to enable work to be carried out more safely and efficiently, while the gathered dust can be easily disposed of by using specialised bags," says HTC Superfloor specialist **Thomas Torvaldsson**.

As part of the technology support provided by the company, PMSA will provide all users with training on how to operate the ALL system.

"Clients who purchase the HTC ALL system are provided with full training to ensure that they receive the best possible results when putting it into operation. This training forms part of PMSA's value-added service, and ensures that clients are always operating at maximum efficiency," says Booysen.

Through the introduction of the HTC ALL system, PMSA says it is able to offer its clients a comprehensive concrete floor preparation solution.

ENGINEERING NEWS COUPON ON PAGE 114 E237753



AUTOMATIC LEVELLING LASER SYSTEM

As the machine moves along, it will grind away the concrete until it reaches the desired level