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### SOUTH AFRICA

## WearCheck acquires new equipment for its transformer division laboratories



Senior analytical chemist, Lynette Pillay, feeds samples into the new HPLC (high performance liquid chromatography) machine at WearCheck's transformer laboratory in Durban. SOURCE | WEARCHECK

**W**earCheck has acquired four new laboratory instruments for its transformer division laboratories in Johannesburg, Durban and Cape Town.

These machines are two high-speed gas chromatographs (GCs) in Johannesburg and Durban laboratories, a PCB (polychlorinated biphenyl) chromatograph in Cape Town lab, and an additional

HPLC (high-performance liquid chromatography) in Durban lab.

Neil Robinson said, "getting analytical test results and diagnoses to our customers as fast as possible is a priority for us, and our investment in these instruments has ensured that our transformer sample testing capacity is more than double now. Our transformer division also recently moved to a new,

larger laboratory in Westville, where we offer a wide range of specialist transformer monitoring techniques."

GCs perform dissolved gas analysis, while PCB determines the presence of PCB (polychlorinated biphenyl) in electrical equipment containing insulating oil, which must not exceed 50 ppm (parts per million or mg/kg) according to the latest version of SANS 290:2017. If the PCB level

exceeds this limit, the oil must be drained and disposed of in an approved manner. WearCheck further explains that HPLC separates mixtures of compounds in transformer oil to help predict the remaining useful life of the paper insulation of the transformer and the transformer itself.

"One of the greatest advantages of the new GCs is that they can be pre-loaded with samples before a weekend, and they will continue operating for 48 hours. Our older models require reloading every 24 hours. Our transformer customers in various business sectors such as mining, power generation, transport, manufacturing, industrial and marine maintenance are receiving their results at high speed, enabling them to make critical maintenance-related decisions in good time and risk reduction of unplanned transformer failure," said transformer division manager, Gert Nel.

WearCheck operates 16 laboratories around Africa and beyond, specialising in used oil and fluid analysis, reliability solutions services, transformer monitoring and advanced field services. ■