Press release:

A New Spin on Filter Technology – RTS's flagship product showcased at Electra Mining 2014

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Tshwane-based Rand Technical Services (RTS) offers a range of innovative technologies to industry and is looking forward to an opportunity to showcase its spin filter technology at Electra Mining 2014. Although the technology has been in operation around the world for the past 20 to 30 years, uptake has been comparatively slow in South Africa, according to Ian Fraser, Managing Director of RTS.

The company has been at the forefront of introducing spin filter technology to the local market, engineering it to suit heavy industrial applications, with a strong focus on mining.

"It is gratifying to see that spin filters are becoming increasingly commonplace on a number of mines in this country, but they also have application in a number of other areas of industries where a clean, continuously dust-free environment is required," Fraser says. These include transformer rooms, Motor Control Centre rooms, laboratories and the like.

Fraser explains how the technology works: "Spin filter units are a high-efficiency application of cyclone technology. Air to be separated is blown through a module that consists of a series of small vortexes. The air flow is induced to spin by fixed vanes at the entry to the vortexes, and centrifugal force then drives the dirt particles to the outside of the vortex.

"Spin filters are designed for the optimum vortex size of 35 mm and will remove 98% of dust particles 15 micron and larger (15 micron is about one sixth of the diameter of the average human hair.) The dust is then collected and disposed of, instead of polluting the environment."

The technology, therefore, has important benefits when it comes to ensuring a cleaner environment. It also offers long-term cost-saving benefits because it requires little or no maintenance.

"Not only do spin filters provide an extremely effective answer to the problem of dust build-up but they are virtually maintenance-free. This is a compelling advantage when you take in to account the cost of maintaining and replacing conventional filters," says Fraser.

"We have chosen to focus heavily on spin filter technology at Electra Mining this year because we believe it has increasing relevance in industry today in ensuring a clean environment, in an efficient and cost-effective way."

RTS prides itself on having driven home the advantages of spin filters to the mining industry in this country and now, according to Fraser, RTS spin filters are accepted as standard at many of this country's mines.

The company also prides itself in being a global leader in engineering the technology to suit heavy industry, where the problem of dust extraction tends to be nothing more than an afterthought.

"Spin filter technology is definitely gaining a wider acceptance as the benefits become more apparent to the user," says Fraser. "As the filters require almost no cleaning or maintenance, they are particularly beneficial in an underground mining situation where accessibility can be an issue. An example of a highly successful application of a spin filter is in a transformer room, bearing in mind that if a transformer stops functioning because of dust or dirt build-up, the entire mine will grind to a halt."

"Electra Mining is industry's most prominent 'shop window' for specialist technologies, and RTS has had a presence there since 1994. This year we are particularly excited to showcase the benefits of spin filters and to demonstrate the applicability of this technology not only in mining, but in a diversified range of industries which demand a clean and dust-free environment," Fraser concludes.

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(592 words)

Note to Editors

Rand Technical Services, or RTS, is a specialised, Tshwane-based company offering innovative technologies and solutions to industrial problems.

Run by Managing Director Ian Fraser since its inception in the early 1990's, the company offers globally-sourced, quality products such as continuous belt weighers without load cells, laser-based gas detection devices for hot or corrosive areas, and electrolysers for hydrogen production.

Product delivery and technical consultation by highly-trained staff is offered throughout Southern Africa to a range of clients in industry sectors such as mining, glass, steel and energy.

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