Presseinformation

Press Release

www.pneudrive.co.za

December 2013

CPUT Wins Greener Mining Design Challenge

Johannesburg: The panel of engineering specialists who gathered together to review entries for the PneuDrive Challenge 2013 Engineering Design Competition, concluded that an elegant design from two students from the Cape Peninsula University of Technology was the best entry.

This annual student engineering competition, initiated in 2008 and which is sponsored by SEW-EURODRIVE and Pneumax, takes as one of its starting points the acknowledgement that businesses need to commit to initiatives that can effectively allow students to demonstrate their academic knowledge on a practical business level. This year, students were asked to explore a "Greener Mining" theme where they had to review typical problems that mining operations need to control. Students had to select a specific area such as the problems and risks associated with slurry dams, rehabilitating mines and how to improve water recycling on mines. The problems of extracting and finding a use for mining by-products and controlling dust emissions were also part of the problem set.

As in previous years, the judging panel was made up of specialists with a wide range of business and engineering experience. The feedback they provided on the entries indicates that South Africa's engineering community can expect to receive a number of energetic and innovative young engineers into their ranks in the near future.

1st Place – Cape Peninsula University of Technology – Waste Granite to Cobblestone Machine

After two intensive days of judging the panel concluded and agreed that this entry presented the best technical solution for solving a real-life business and environmental problem. Students Christian Mpiana and Gareth Hardman submitted a design that proposes the rehabilitation of abandoned granite mines by turning surplus "waste" granite blocks into usable cobblestones. These can then in turn be used to develop access roads and walkways in rural areas. Apart from the direct benefit paved roads and paths will bring to these areas, they proposed that other possible business interventions around the system could generate job creation. Lecturer Francois Hoffman expressed that his students winning the competition was the highlight of his year.

Presseinformation

Press Release

www.pneudrive.co.za

2nd Place – Tshwane University of Technology – The Dust Buster

The difference between first and second place was a mere 3 percentage points – the closest margin in the history of the competition. However, students Alexander Jansen van Vuuren, Francois van Dyk, Myron van Staden and Daniel Posthumus, can be proud of the fact that their design won the Innovation Prize. They submitted a unique design concept that combines the use of low frequency sound waves, extraction fans and wireless systems, to address the problem of removing dust in a mining environment. Lecturer Johan Benade conveyed excitement about the design and felt that it was worthy of attention from potential investors for further development.

3rd Place – WITS University – Tailings Dam Water Solar Still

Students Gregory Behrens, Travis Bennett, Paul Hon, and Thomas Wyszkowski-Korwin submitted an equally unique design concept that focussed specifically on addressing water losses in tailings dams. Their automated solar still design showed how water can be captured on tailings dams and then fed back to mining operations for reutilisation. This has the advantage of minimising the dependency on fresh water supplies, a challenge that most if not all mines currently face.

A second entry from WITS – a Dust Emission Filtration System – won a prize sponsored by Autodesk for the best use of Autodesk Design Technology. Their submission reflects how well WITS students have taken to the potential of this world leading 3D design and engineering software.

Building Bridges between Engineering Students and Greener Mines

The approach of this year's competition to offer a learning platform that presents mining and business problems alongside the latest technology used in the mining environment, is a platform that many, if not everybody, engaged in South African business would support. Adrian Buddingh (Managing Director – Pneumax), adds that "it is business that needs to support learning experiences that allow students to apply their academic knowledge on a practical level and in conjunction with the latest technology that is available".

The sponsors, organisers and judges of this year's competition believe that students who immerse themselves in the competition, show the right academic credentials and display appropriate

problem solving skills, essentially open their own doors and can take a confident first step into the engineering industry.

The winners received a ten day all expenses paid trip to Germany and Italy where they will be hosted by the head offices of the sponsor companies. Furthermore the winning university receives R 100 000 worth of products from SEW-EURODRIVE and Pneumax, while each participating university is entitled to R 40 000 worth of products for completing the competition.

Contact address for editors and readers:

SEW-EURODRIVE

Marketing Department

Rene Rose – General Manager - Communications

Phone: (+27 11) 248 7000

rrose@sew.co.za

pneudrive@sew.co.za

www.sew.co.za

Pneumax

Marketing Department

Eugene van der Lith – Regional Manager

Phone: (+27 11) 573 0902

eugene@pneumax.co.za

pneudrive@pneumax.co.za

http://www.pneumax.co.za/

NGAGE

Media contact

Kelly Farthing – SEW-EURODRIVE Account Manager

Phone: (+2711) 867 7763

kelly@ngage.co.za

www.ngage.co.za