

## SA submerged arc systems adopted for wind towers

Three Starweld Infinity submerged-arc welding (SAW) systems have been delivered to one of South Africa's wind tower manufacturers as replace-



*The Infinity 1 000 A Multi-process dc welding inverter with CANBUS communication technology is the flagship of the Starweld range.*

ments for European imports. "Although we import the tractors from overseas, the critical parts, namely the power source and the control panels, are designed and manufactured by Starweld at its Boksburg premises in Gauteng, says Steve Hutchinson, Starweld's marketing manager.

"The most significant innovation, is the inclusion of CANBUS communication technology, which is an intelligent two way machine-to-machine communication protocol invented by Robert Bosch for the Motor Industry in the early 1970's," he says.

CANBUS is now present in virtually all new motor vehicles. It reduces the communication wiring harness to a two-wire system that carries instructions and sensor feedback signals to and from the vehicle's central computer and all interconnected components. Components are individually programmed to respond to instructions relevant to them and to pass on those that pertain to other components.

"And our South African Infinity systems are priced from around R 130 000,

which represents great value for money when compared to systems manufactured elsewhere.

Significant features include:

- 100% duty cycle at the rated current setting.
- Tunnel cooling, which keeps metal dust off electronic components.
- Full digital amp and volt metering.
- LEM transducer technology that guarantees the accuracy of output settings – what you set, is what you get.
- Multiply auxiliary output voltages (24/42/110 volts).
- Weighs only 92 kg, which makes it ideal to use on girth welders.
- A full two-year warranty that covers all components.
- Economical spare parts – a replacement control board retails at R1 500, for example.

The Infinity 1 000 A Multi-process dc welding inverter is the flagship of the Starweld range, which, as well as being ideal for SAW, can be used for shielded metal arc welding (SMAW or stick welding); gas metal arc welding (GMAW or MIG/MAG welding); flux-cored arc welding (FCAW) and for carbon arc gouging of section of up to 165 mm thick.

[www.starweld.co.za](http://www.starweld.co.za)

## Hydra-Arc delivers its largest ever module for Sasol

On Friday January 25, Hydra-Arc moved its largest and most impressive plant module from its Sky-Hill facility to the Sasol Secunda plant.

The plant module, one of several be-

ing manufactured by Hydra-Arc, was Unit 296, the coal tar filtration (CTF) east filter press plant, a 158 t module with a width of 9.7 m, a height of 12.0 m and a total length of 26.2 m.

Hydra-Arc has become a proudly South African specialist in the manufacture these modern plant modules for the petrochemical industries, which introduce a novel approach to plant design and construction. The whole plant is broken into interconnectable modules, which maximises the amount of factory-based fabrication and minimises onsite construction time.

"The idea is that each module is fabricated to include all of its equipment, vessels, piping, instrumentation and supporting structures. Then, once the site foundations have been prepared, the modules are simply delivered to site and coupled up to form a functional plant," explains Ewan Huisamen, Hydra-Arc's engineering manager. The full CTFE plant under construction consists of 24 individual modules, which are all being fabricated in Hydra-Arc's Sky-Hill facility outside Secunda. "This is the first time a plant has ever been constructed in this way in South Africa," Huisamen concludes.

[www.hydra-arc.com](http://www.hydra-arc.com)



*One of 26 plant modules for Sasol's CTFE plant in Secunda under construction at Hydra-Arc's Sky-Hill facility near Secunda. Inset: A 3D CAD model of Unit 296, the 158 t coal tar filtration (CTF) east filter press plant, the largest and most impressive module yet delivered.*