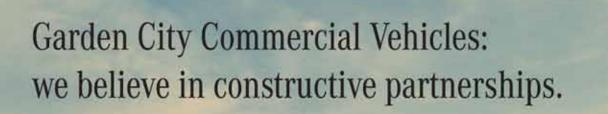
INPREGIO

www.impregilo.it









Garden City Commercial Vehicles

Pietermaritzburg Tel. +27 33-397 5600 Fax. +27 33-397 0528 Ladysmith Tel. +27 36-637 8600 Fax. +27 36-637 8611

Enrico.Botha@nmidsm.co.za www.nmidsm.co.za



Mercedes-Benz Commercial Vehicles

"Mercedes-Benz Commercial Vehicles and its extensive dealer network throughout Southern Africa will continue to focus all business activities around our full product line-up and extensive range of services, all aimed at supporting the customer," says Kobus Van Zyl, Vice President, Commercial Vehicles, South Africa.

The success of the Fleetboard telematic system has been confirmed with a number of fleets. Competitive rates and commitment to customer service have seen Mercedes-Benz CharterWay make inroads into the industry. CharterWay offers customers a one-stop shop for all their service needs. Driver Training is a key focus area for Mercedes-Benz Commercial Vehicles and various programmes are successfully implemented throughout the dealer network.

"Our joint venture partners are CMC di Ravenna, an Italian company like ourselves, and local contractor PG Mavundla," says Gianni Porta, operations director for the Sub-Saharan Africa division of Impregilo. "This joint venture was formed specifically to take on the Ingula project; however it was a partnership that came very naturally for us. Although we are separate companies and this is our first joint venture in South Africa, we have been co-operating with CMC di Ravenna for a number of years on other projects around the globe."

The pumped storage scheme at Ingula is being carried out for electricity supplier Eskom and is designed to allow the scheme to cope with peaks of electricity demand that occur each day—a method that has been in use for many years in the Alps. It will also enable other power stations on the grid to run more efficiently. "Coal power stations produce the same level of power constantly. The Ingula Pumped Storage Scheme makes use of this excess power during off peak times to re-pump the water at the plant from the lower reservoir to the upper one," Porta explains. "Thus it uses low cost energy from the coal-fired plants to produce high-cost energy at times of high demand. By doing this, the grid works more effectively."









A&D Engineering and Manufacturing

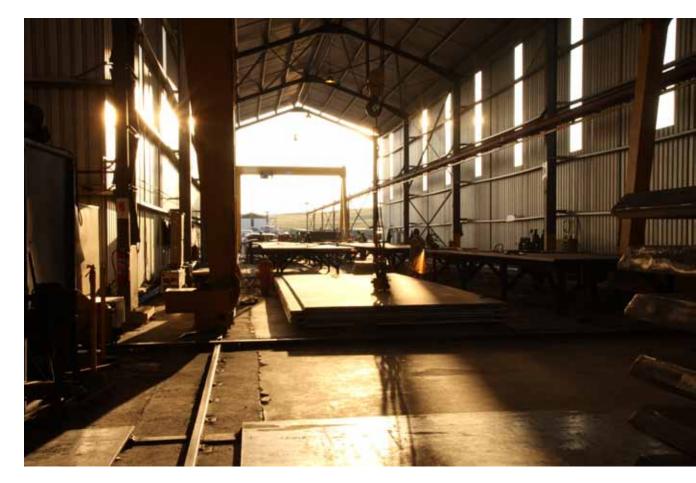
We specialize in the following:

- Water jet cutting
- · Wire eroding
- CNC Vertical Lathes up to 3m
 - CNC Horizontal Lathe
 - 5 axis milling
 - 7 axis engraving
 - Tig & Mig welding
 - · Aluminium foundry
 - Spark eroding
 - 3D modelling & design

www.adtyres.com

Marketing Director Dino Rambelli dino@adtyres.com +2783 635 7150 Technical Director Andrea Rambelli andrea@adtyres.com +2783 635 7170 Technical Consultant Vino Rambelli vino@adtyres.com +2783 635 7180





Despite the fact that the finished product itself is fairly typical of pumped storage schemes, the project is not without its difficulties. "During the construction phase of the project we will be drilling and blasting tunnels totalling approximately 13 kilometres. Here the challenge is in the complexity of the structure itself, as there are a lot of interconnections and different priorities in execution of the works," says Porta. "There is a considerable underground powerhouse to be built and a large transformer cavern too. We will be facing challenges that are common when carrying out work underground, such as excavating and not always knowing what you will find in the rock in front of you." Fortunately to date there have been no major surprises, nevertheless it is something that the workers, engineers and project managers have to be aware of and prepared for.

There are also some technical challenges that have required innovative solutions from







"Coal power stations produce the same level of power constantly. The Ingula Pumped Storage Scheme makes use of this excess power during off peak times to re-pump the water at the plant from the lower reservoir to the upper one" the idea of the South African 'Rainbow Nation'," explains Porta. "Once we have finished the Ingula Pumped Storage Scheme, we hope that many of the workers will move with us to new projects, either in South Africa or abroad, or that they will have the transferable skills necessary to move on to another local company."

Besides training, the firm has a number of other corporate and social responsibility initiatives in place, not least of which is its environmental focus. "The Ingula project is actually a sustainable development itself, using a closed loop system, meaning the water used to drive the turbines is the same liquid recycled over and over again. Inevitably there will be some loss through evaporation, which cannot be helped, but that is the only wastage in the whole process," Porta explains.

The re-use of water is especially important in an arid environment like South Africa, where low

water levels and drought can present a problem. Other environmental plans put in place to ensure that the construction process has minimal impact on the area surrounding the pumped storage scheme are audited on a regular basis by Eskom. The company also uses this opportunity to monitor improvements and through this evaluation can see that there is ongoing improvement in this area.

Once the Ingula project is finished, Impregilo will be focusing on winning further unique and challenging work in South Africa. "We are working to be able to develop other projects—we want to get involved in the interesting schemes where there is a need for technical and logistical know-how. There is a lot of competition in our market, but I am confident about us being involved in other projects here and that we will be able to form further joint partnerships with South African contractors," Porta concludes. www.impregilo.it •



