



## OVERVIEW

Improved control and virtually eliminated maintenance costs thanks to Optidrive 3GV

Global Solutions...

wireless control for hundreds of applications

with Invertek Drives the solutions start here!

- easy to use and incredible performance
- leading edge design and technology
- highly committed to innovation
- products you can rely on
- global support and suppliers

For more information, visit [www.invertek.co.uk](http://www.invertek.co.uk)

## COMPANY

**MAROTECHNIEK BV**

Reducing energy and maintenance in marine winching

Netherlands

Floating barges in Nigeria have achieved massive energy savings, greatly improved control and virtually eliminated maintenance costs thanks to an integrated control system using Optidrive Plus 3GV variable speed drives.

The floating barges use winches to haul the vessel and to control the spud palls, the anchoring system used on this type of river barge. Known as spud barges these are riverboats that are most commonly used as work barges, or as a loading or unloading platform.

In this application four spud pall winches were required to provide a hauling force up to 20,000 Kg and a holding force up to 30,000 Kg.

Each winch was required to have an integrated control system capable of providing reliable motor control in this high torque, harsh environment.

The solution was provided by Marotechniek BV of the Netherlands ([www.marotechniek.nl](http://www.marotechniek.nl)), a young and dynamic company founded by Martin Bossenbroek and Rob Molenaar who between them offer more than 20 years experience in winches, mechanical and electric drive systems for the marine and dredging industry.

Marotechniek manufactured, installed and tested the four planetary winch systems with switchboxes on each winch using a 37kW power output Optidrive Plus 3GV unit. These units were supplied by Hiflex Automatiseringstechniek B.V. ([www.hiflex.nl](http://www.hiflex.nl)), the Invertek Drives Sales Partner in the Netherlands.

This resultant system provides a highly superior solution to alternative approaches using either hydraulic or direct on-line (DOL) control. Using Optidrive to control the winch not only provides vastly improved speed control but also eliminates the high maintenance costs associated with hydraulic systems.

In addition, the Optidrive Plus 3GV control system requires a smaller generator than hydraulic alternatives and hence provides large energy savings. The Optidrive system also lowers installation costs by eliminating the need for a hydraulic power pack, allowing the winch to be wired straight to the generator.

John van der Lugt, Sales Manager at Hiflex Automatiseringstechniek B.V confirms:

“The innovative design features of the Optidrive range delivers significant performance benefits and cost savings which ensure that it will remain the control system of choice for the vast majority of winch applications”

email: [sales@invertek.co.uk](mailto:sales@invertek.co.uk) web: [www.invertek.co.uk](http://www.invertek.co.uk)

**Invertek Drives Limited**

Offa's Dyke Business Park, Welshpool, Powys. UK. SY21 8JF  
Tel:+44 (0)1938 55 68 68 Fax:+44 (0)1938 55 68 69

