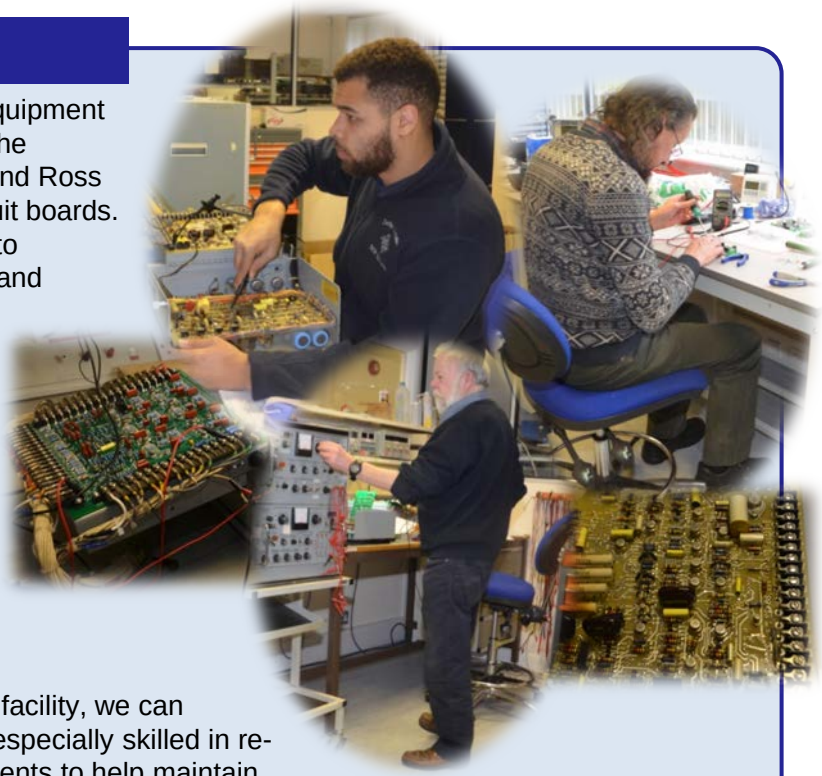
Zeefax

Control Modules – New Sales and Repair / Calibration

Since 1980, **Zeefax** has built a reputation on its ability to provide a reliable and excellent electrical engineering service to the Drilling Industry worldwide; we have the technical expertise and capability to specify, engineer, manufacture and deliver complete SCR Power Control Houses for both land-based and offshore installations.

Repair and Calibration



Zeefax has the technical expertise and equipment to repair, configure, test and re-calibrate the complete range of Hill Graham Controls and Ross Hill type control modules and printed circuit boards. Module enhancements can also be fitted to improve motor or generator performance and controllability, including:-

- Regenerative Brake
- DC Regulator Auxiliary II
- Stall Protection
- Power Swivel / Top Drive Protection
- Dynamic Brake Retro-fit
- RT Regulator
- Over-current Trip
- Current Ramp Limit

From our UK-based manufacturing & test facility, we can guarantee a fast turnaround, and we are especially skilled in re-engineering obsolete boards and components to help maintain and preserve your valuable assets.

New AC & DC Control Modules

Zeefax can supply all of your SCR system needs, from hard to find components, re-designed and re-engineered printed circuit boards, AC and DC modules and complete SCR systems.

New modules are built to the specific legacy design and then, each parameter is carefully configured and tested using our in-house simulators for both motors and generators, providing confidence and assurance of correct calibration and configuration before it leaves our premises.

We produce a range of digital modules with identical footprints and connection patterns for system upgrades and re-designs; this enables a fast and simple installation.

Zeefax inc.
6049 Keller's Church Road, Pipersville, PA 18947
Tel: +1 215 230 5500
Email: ussales@zeefax.com

Zeefax Limited
320 King Street, London, W6 ORR, ENGLAND
Tel: +44(0) 20 8748 7808
Email: uksales@zeefax.com

Technical Description

Regenerative Braking
Replacement for the standard Drawworks Dynamic Brake which uses the power generated by the motor to brake the Drawworks drum, rather than a resistor bank. Can be retro-fitted with additional external work, but is usually specified at the design stage.

DC Regulator Auxiliary II
An enhanced speed regulator and current limit controller which shapes the motor current limit to achieve higher torque at low speed, and ensure the armature current and voltage remains within the commutation limit of the motor. Used to squeeze the maximum performance from the motor.

Stall Protection
A circuit which detects motor stall condition (high current, low speed) and ramps down the motor torque in a controlled manner when stall has been detected for a pre-set period of time (typically 30s). This is used on Rotary Table or Top drive assignments to prevent sudden unwinding of the drill pipe.

Power Swivel (Top Drive) Protection
Incorporates several control and protection circuits normally associated with Top Drive control, including stall and over-current protection, and a circuit which emulates the thermal effects of an overload condition in the motor to allow higher torques for short periods of time in between cooling periods.

Dynamic Brake Retro-Fit
A circuit to improve the performance of the dynamic brake circuit. Particularly useful with series motor systems.

RT Regulator
The standard speed regulator in the DC Module is quite droopy, which means that it is difficult to achieve full torque with a low speed setting. This circuit provides a less droopy speed regulator, which means that torque control at lower speeds can be controlled more accurately.

Over-current Trip
An over-current protection circuit which cuts back the SCR output if the current exceeds a set amount for a sustained period.

Current Limit Ramp
A circuit to prevent step-changes in motor current, which may black out the rig. The motor current is only allowed to rise smoothly, and is particularly useful for Mud Pump control.

Contact us

Zeefax is now the preferred global supplier for all Hill Graham services and manufactured parts, as well as providing a host of other related Drilling services. Please call us to find out more about how we can help to preserve your capital investment, through a program of works, carefully designed to optimise the utility and the performance of your Power System, whilst ensuring that it provides reliable and dependable operation for all your drilling applications.

Zeefax inc.
6049 Keller's Church Road, Pipersville, PA 18947
Tel: +1 215 230 5500
Email: ussales@zeefax.com

Zeefax Limited
320 King Street, London, W6 ORR, ENGLAND
Tel: +44(0) 20 8748 7808
Email: uksales@zeefax.com