

## Excellence in Heater Control Systems

Control systems are manufactured at our factory in the United Kingdom to comply with each and every standard demanded by our clients.

EXHEAT offers a total control systems service which includes:

- Thyristor Control System Design
- Step Contactor Sequence Control
- PLC Programming
- Engineering Planning
- Manufacture
- Factory Testing and Quality Control
- Documentation
- On-Site Commissioning
- Spares and After Sales service

### ELECTRIC HEATER CONTROLS

The operation of an electrical heater is only as good as the system which controls it.

EXHEAT specialise in the control of electric heaters and heating systems. These systems can range from the simple on/off control, to the most sophisticated burst fire or single cycle thyristor control.

EXHEAT has extensive experience in the design of large heater control systems and requirements for 'load splitting'.

Loads can also be divided into stages to give multi-thyristor control and in addition combinations of thyristor and contactor control can be supplied to provide a fully synchronised system and limit impact on the power generating system.

### IN HOUSE TESTING

- Full Load / Heat Soak Testing
- Harmonic Analysis
- RF Interference Testing
- Oscilloscope Photometry



## Applications, Experience and System Design

A first class control system needs to take into account the technological constraints of the plant it controls and the ability to apply experience and expertise at all levels of the project. We can recommend cost-effective solutions to clients, outline requirements, or work to detailed specifications. In-house design facilities are supported by experienced engineers, backed-up by modern CAD facilities. Production schedules are drawn up and the progress of work monitored to ensure each project is despatched on time, to specification and within budget, with up-to-date information available to the customer at all times. EXHEAT adopts an integrated project management approach to each contract, which provides effective co-ordination of design, procurement, manufacture, test and, where required, commissioning. EXHEAT control systems are designed to incorporate important features such as high efficiency, robust construction and full circuit protection. All components within the control system are sized to allow a safety factor, ensuring reliability and maximizing the life of the control system. Attention is paid to ensuring that each system is built to the demanding standards of our client, the environment and current legislation.

## Temperature Control

Each control system is fully function-tested for correct operation, including line-to-line checking and insulation resistance (megger) testing, as standard. Each test is simulated using the correct type of input signals to avoid start up and commissioning problems. EXHEAT can also provide facilities for R.F. testing, harmonic analysis, full load testing, heat soak testing, high voltage withstand testing and oscilloscope photometry of thyristor control systems.

## Testing

A range of temperature control systems suitable for anything from small space heating systems to large process heating systems, including full PID or differential control can be offered.

