

[click here to go to www.tcluk.net](http://www.tcluk.net)

## Control Panel Manufacture

April 2013



TCL are pleased to announce that they are enhancing their product line and now offer panel design and manufacture as individual services. Building on over 27 years' of control system design and manufacturing experience we now offer the design and manufacture of bespoke panels for numerous control system applications to customer specifications. We offer a flexible service to suit customer requirements and can include one or more of the following services:-

- Control panel design by our team of experienced engineers
- Sourcing of panel equipment or integration of client supplied equipment
- Manufacture of the panels to a TCL or client design in our workshop
- Testing of the panels in our fully equipped workshop

The service builds on the design experience of our engineering team in the design of control equipment for many varied applications including hazardous and non-hazardous environments. Typical applications include:-

- Process control and monitoring
- Fire & gas protection
- LV switchgear

All equipment is designed and manufactured to TCL's strict quality control standards which have been audited to **ISO EN ISO 9001:2008, ISO 14001:2004 & BS OHSAS 18001:2007** standards

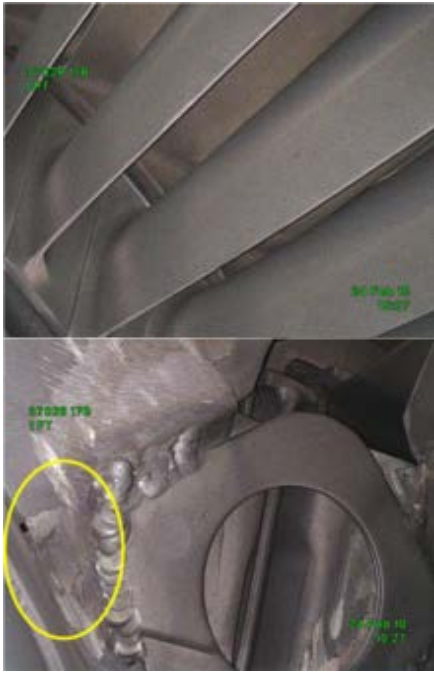
Contact the TCL sales team for a quotation [sales@tcluk.net](mailto:sales@tcluk.net)

[click here to see the TCL product pages>>](#)

## Maintenance, Boroscoping

April 2013

The TCL Service department can provide an internal boroscope inspection



service for all types of gas turbine. Internal inspection is particularly important for gas turbines which are subjected to high thermal stresses and is a critical preventative maintenance operation. A boroscope inspection will enable the owner to:-

- 1) Identify parts that may fail in the future.
- 2) Plan future scheduled and non-scheduled maintenance activities.
- 3) Pre-order parts for future replacement.
- 4) Reduce the spare parts holding.

The engine boroscope service includes:-

- 1) Attendance on site by TCL engineers, with the latest boroscoping equipment.
- 2) Detailed report highlighting all areas of concern.
- 3) Video of the engine internals.
- 4) Recommendations for future maintenance.

TCL are not linked to any of the major engine repair facilities and hence the inspection service offers owners an independent and unbiased assessment of their plant.

[Contact TCL Customer Support department for a quotation support@tcluk.net](mailto:support@tcluk.net)

[click here to see full details of TCL site services >>](#)

## TCL New Projects

April 2013



### **BAP Cameroons**

Complete new controls systems for three Hispano Suiza THM1203 gas turbine generators each rated at 6MW. These turbines are located on an off-shore rig in Cameroon, West Africa. The upgrade includes a new Allen Bradley PLC based control system installed in the local panel to replace the existing electro mechanical relays. A HMI with hard-wired instruments and controls will also be mounted in the local panel along with a new vibration system and overspeed trip. In the field a Det-Tronics fire and gas detection system and a TCL manufactured fuel gas skid will be installed.

### **Didcot Power Station**

Didcot Power Station consists of two power plants. Didcot A power station includes a coal fired steam turbine plant and a liquid fuel simple cycle gas turbine plant. The Didcot B power station consists of a natural-gas fired CCGT power plant. The A station coal fired plant will be decommissioned under the European Large Combustion Plant Directive but the simple cycle gas turbine plant is being retained. To allow continued use of the four RR Avon powered gas turbines, they will be made autonomous from the A station by providing controls within the B station control room.

The remote controls, to be provided by TCL, consist of an Allen Bradley ControlLogix PLC to provide an interface between the gas turbine and the B station control room. The B station control room will communicate with the PLC over an Ethernet communication link.

### **PLN Ombilin**

Ombilin Power Station situated on the Indonesian Island of Sumatra consists of two 125 MW steam turbines and is operated by the Indonesian power utility PLN. The governor system has become obsolete and will be replaced with a new PLC based system. The upgrade includes a GE PLC based controller with a PC based HMI mounted on the front of the control panel. The control functions include:-

- Governor speed control
- HP pressure control
- MW control
- Automatic run-up with stress control
- Gland steam control
- Valve position control with manual override

The electrical and software design will be completed by TCL and hardware will be provided by PT Mitra Techno of Indonesia who are the TCL partners in Indonesia.

#### **Dubai Valves**

Turbine Controls Limited is replacing the Woodward governor system on the Rolls-Royce Avon Gas Turbine Control Systems for Dubai Petroleum at their Fateh offshore platforms. The new governor system incorporates an Allen Bradley PLC and EZ Panel HMI screen from which operators can view governor information. The replacement governor system has been designed to minimise the installation down time and interface with the new GS16 Woodward fuel gas modulating 24Vdc actuated valves that TCL are fitting.

[click here to see details of TCL projects>>](#)

**Turbine Controls Ltd**  
**52 Kenilworth Drive**  
**Leicester LE2 5LG**  
**Tel:- +44 (0)116 271 7248**  
**Email:- sales@tcluk.net**