Providing quality solutions that are safe, reliable and cost-effective to meet our customers’ needs
CONCO has the expertise and experience to successfully design, engineer, manufacture, test, install and commission protection, control, DCS and metering schemes globally.

Consolidated Power Projects (CONCO) is a world-class electrical infrastructure company that has built an impressive reputation as a leading supplier of high voltage turnkey electrical substations, overhead lines, renewable energy and related products.

**Leading the way in Substation Automation**

When it comes to control and automation systems for substations, Consolidated Power Projects has a dedicated CONCO Energy Solutions company that focuses specifically on the highest quality design, engineering, in-house manufacture and commissioning of essential equipment. Driven by proficient engineers, the division's philosophy is based on providing flexible solutions to clients' specific needs and in so doing, providing the best equipment available taking the client’s product preferences and budget into account.

**A Complete Secondary Plant Solution under one roof**

CONCO Energy Solutions has widened its scope to include a number of product ranges, which include containerised substations, Smart Grid solutions, Low Voltage products and services, Batteries and Chargers as well as Telecommunications Solutions. All of the solutions that CONCO Energy Solutions provides, are manufactured just a few feet away from the design engineer, ensuring the highest quality solution manufactured to the client’s specifications.

**Ensuring the success of every project**

Modern day integrated Control and Protection schemes are relatively simple to manufacture, but focused testing procedures involving specialised personnel and a knowledgeable design department are part and parcel of CONCO Energy Solutions’ offerings. Solid designs and accurately tested Control and Protection schemes speed up delivery, and play a vital role in ensuring the success of turnkey projects.

**Flexibility is key**

Having all processes in-house enables CONCO to provide greater flexibility to its clients. These processes encompass:

- **In-house control and protection design** by qualified protection engineers and technicians.
- **In-house protection setting calculations**
- **In-house protection and control scheme manufacturing**
  - **Complete factory acceptance testing (FAT)** to stringent procedures and standards in accordance with IEC prior to delivery of any scheme, with the design engineer overseeing the FAT process.
  - **Site acceptance testing (SAT)** by testing and commissioning technicians. The design engineer ensures that standards and procedures are adhered to.
  - **High level in-house support** for all products and systems supplied. CONCO has built up good relationships with its suppliers, though a clients’ product preferences can be easily accommodated, plus CONCO has the flexibility to choose products that best fit the clients’ technical requirements. Local equipment is used as far as possible ensuring the best possible support into the future. Some products are sourced internationally and are fully supported by CONCO.
  - **Training** - both general protection, control theoretical training and project-specific practical training is undertaken.
  - **In-house skills and knowledge to complete turnkey projects** from traditional protection systems to modern integrated control and protection systems.
TURNKEY SOLUTIONS TAILORED TO CLIENT NEEDS

CONCO provides a complete turnkey solution, sourcing high quality products from reputable manufacturers in South Africa and abroad, that best suit each client’s technical and budget requirements.

Design and Manufacturing

Design and manufacturing form an integral part of CONCO Energy Solutions, enabling it to provide systems to individual client requirements. Design is undertaken in-house by a team of highly skilled engineers using the latest design software in accordance with IEC standards. In order to give the client the best possible solution, CONCO is adept at using any supplier, protocol or equipment to suit the client’s preference.

CONCO has one of the best manufacturing teams in South Africa, manufacturing equipment to the highest quality in its own factory that is located on the same premises as where it was designed. Through ensuring the highest quality fabrication, clients can be assured that CONCO is providing the highest quality solution based on their requirements.

Building long term relationships

CONCO has vast experience in integrated control and protection projects for large utilities in Southern Africa such as Eskom Transmission and Distribution, City of Cape Town, City of Tshwane, City Power Johannesburg and Nampower. In Australia, projects have been implemented for utilities such as United Energy and City Power, both of which are based in Melbourne. A number of numeric protection projects have been completed in Namibia, Sudan, Ghana, Nigeria and other African countries. Many other electrical supply authorities, municipalities, OEM’s and mines have CONCO installations controlling and protecting their systems.

CONCO Energy Solutions offers an all encompassing solution under one roof, providing personalised attention to clients. The company’s long-term contracts with electricity utilities are testimony to its success, and Consolidated Power Projects continues to maintain excellent business relations throughout South Africa and Africa.
A WIDE RANGE OF PRODUCTS AND SOLUTIONS

An African company providing Secondary Plant solutions all over Africa and beyond

Services:
- Grading and Setting Studies
- Audits
- Designs
- Manufacturing
- Commissioning

Products:
- Yard Marshalling Kiosks / Junction Boxes
- LV / AC Distribution Boards
- DC Distribution Boards
- Protection Schemes:
  - Incomer, Feeder, Transformer, Bus coupler,
  - Bus zone, Capacitor bank, Generator, Metering
- MCC’s
- Batteries and Chargers
- Commercial Rooftop Solar

System Automation and Control Applications:
- Substation automation Solutions using:
  - IEC 61850, MMS and GOOSE
- Variety of Protocol Support:
  - DNP3, IEC 101 / 103 / 104, Modbus and Profinet
- Secure Telecommunications Solutions:
  - 3G / GPRS, Satellite / Digital Area Radio
- Advanced Networking using substation hardened
  - Ethernet Switches, Routers and Firewalls, Intelligent
  - Human Machine Interface (HMI) applications and support
    (CitectSCADA, Adroit, Intouch, SEL Diagram Builder, GE
    One Line Designer).
- Advanced Telephony Systems using VoIP Facility SCADA
  and Power Plant Controller Solutions for Renewable
  Energy Facilities.
- Security and Surveillance Systems
- SCADA Event Notification Systems:
  - SMS / Email
- Software Development and PLC based programming for
  unique customer requirements

Control Centre Applications:
- EMS, DMS, Operations and Maintenance, Wide Area
  Measurement Systems (WAMS),
  - Telecommunications Network Management and
  Syncrophasors

In Africa, For Africa

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