

CPC Engineering

Process Control and
Automation Engineering
solutions experts





Introduction

CPC ENGINEERING is a company of **control system consultants** specialising in the design, implementation, optimisation and maintenance of (advanced) **process control applications** for the Petro-Chemical, Chemical and GTL Industry worldwide.

CPC ENGINEERING engineers have extensive experience in:

- The middle East
- Asia
- Russia
- The CIS countries
- Southern & Western Africa
- Europe
- South America

OUR VISION

To provide the adequate compressor **controls solution** inside an open hardware architecture meeting exactly our customers need in terms of systems requirements, interfacing and **compressor and process performance**.

ENGINEERING SERVICES

- Basic and detailed project engineering
- Control cabinet/Panel engineering
- Control system commissioning
- Site acceptance tests & Troubleshooting
- Re-commissioning, preventive maintenance
- Machine start-up and tuning (over speed testing, surge testing, performance tuning)

Our challenges and how we reach them

CPC Engineering combines senior industry knowledge with **dynamic process simulation** tools to prove new technology feasibility, making decision making easier, and securing the project outcome.

TRAINING SERVICES

CPC Engineering offers Process control training, as well as product training. **Training for operator process control** and control systems engineer process and for products such as ABB Protronic P500/700 and Protronic PS controllers, ABB Melody DCS system or Siemens PLCs.

ISO 9001
BUREAU VERITAS
Certification





Industries served

- Oil & Gas
- Power Plants
- Petrochemical Plants
- Chemical Plants
- Steel Plants
- CTL and GTL Factories
- Offshore Platforms
- Metals & Mining Plants
- Pulp & Paper Plants
- Pharmaceutical Plants

PLCs Expertise in:

- SIEMENS S5 and S7
- H&B / ABB PS Controllers
- ABB Protronic Controllers
- ABB Digitric Controllers
- Yokogawa
- Allen Bradley



SYSTEMS REVAMPS – DCS UPGRADES

Over the years, CPC Engineering has developed **DCS Upgrade** applications, with the following features:

- Automatic Mapping features between legacy and new DCS system
- Automated DCS design between legacy and new DCS system
- Automatic discrepancy report generation
- Fit for purpose DCS based simulator to prove re-engineered control structure, as well as reducing start-up time

ADVANCED PROCESS CONTROL

- Feasibility studies
- Application of multivariable controls to fast dynamic systems
- Factory Optimisation
- Application to compressor controls
- Design of integrity interfaces between multivariable controllers and DCS systems



ANTISURGE & SURGE DETECTION

The anti-surge algorithm used by CPC Engineering has been designed to solve in its standard configuration most of the common applications regarding compressor anti-surge and process controls, and can also be easily adapted to fit non-standard requirements



GTL Plant Optimization

The major GTL key players have trusted CPC Engineering for the last 3 decades when it comes to optimizing their plants through enhanced optimal stability, flexibility and safety. There 3 key elements are the secret to sustainable, clean and profitable GTL plant.

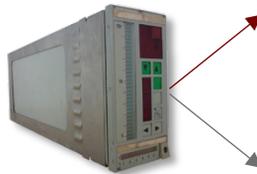
Proprietary Solutions



CPC ENGINEERING RENT AND REPLACE SOLUTIONS

In CPC Engineering we have a vast experience in the upgrade and migration of H&B Protronic PS2, Protronic PS Controller, ABB Protronic P700, ABB Protronic P500 and ABB Digitric D500. / D100.

PROTRONIC PS CONTROLLER



CPC RECOMMENDED UPGRADE OPTION



Migrate program of the PS Controller to SIEMENS S71200 PLC + HMI.

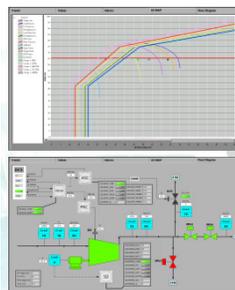
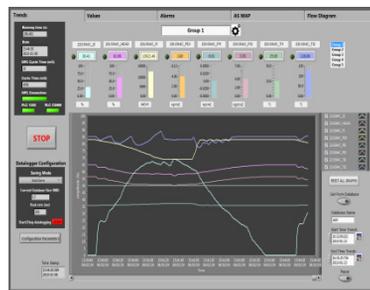
ALTERNATIVE UPGRADE



Replace old PS Controller with new version of Protronic Controllers.

FAST MONITORING TOOL PACKAGE

CPC Engineering Fast Monitoring Tool package is a process data acquisition and logging system developed specifically to monitor the performances of rotating equipment and their associated controls.



RMP FEATURES

- Trends
- Values
- Alarms
- AS MAP
- Flow Diagram
- AN Params

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