



## FYKAYS PROGRAMMABLE C-POT CONTROLLER.

The Heat Treatment industry in India is growing by leaps and bounds. However, increasing customer awareness, the rising costs of carburizing fluids and energy are causing Heat Treaters to be increasingly conscious about

- Incorrect Carbon absorption
- Incorrect case depth
- Insufficient case carbon
- Too much carburization resulting in fractures
- Too much energy consumption
- Too much fluid consumption
- Too many reworkings



The Fykays Automatic Programmable C-Pot controller is the perfect solution to all the above problems. .

**FYKAYS MICROPROCESSOR BASED C-POT CONTROLLER:**

The C-POT CONTROLLER works on the well-proven Zirconia sensor principle which enables detection of Oxygen in the furnace from PPM level to PPB levels.

The C-POT CONTROLLER has been specifically developed to monitor the precise Carbon Potential in the furnace atmosphere whether it is Pit type, SQ or a Continuous furnace. Whether a manual system is opted for, or a fully automatic unit with multiple cycles, Fykays' C-POT CONTROLLER enables heat treaters to achieve high standards of Carburizing, Carbo-nitriding and other operations.

Some salient features of the system are:

- Multiple segments are within the capability of the C-POT CONTROLLER, in terms of carburizing, Diffusion, Soaking etc.
- The multi segment programmable controller provides for Nitrogen sealing of the job during soaking.
- The C-POT CONTROLLER helps to regularly achieve high product homogeneity, reduction of enrichment fluid and reduced energy consumption and most importantly avoid any re-working.
- It is designed to accept dual inputs- from the thermocouple and Oxygen sensor.
- Four 1" displays showing RTC, C-POT value and temperature and operational status near the furnace enables the operator to precisely control his schedules.
- Extremely easy to install and operate
- Can be installed within a matter of hours
- Virtually maintenance free
- Data logging, alarm indications, computer compatibility etc.



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- Other features like RTC, Hi- Lo Oxygen set points indication facility, Triac output for fluid feed control, time proportionate ON/OFF control, system alarm for thermocouple failure, Probe temperature over range and very high probe cell voltage, etc.

The basic components of Fykays' C-POT CONTROLLER are as follows:

- Oxygen Probe: The Zirconia Oxygen probe which senses the Carbon potential in the furnace.
- C-POT CONTROLLER suitably panel mounted.
- The reference air system
- The electronic purging apparatus
- The remote display: with Hi/Lo alarm
- Trim by-pass manifold.
- Accessories like special umbilical chord etc

Fykays C-POT CONTROLLER reduces fluid consumption by as much as 20% and reduce energy consumption by about 10% and zero re-working.

**Under these circumstances, this system is a MUST for all carburizing furnaces particularly when the payback period for this system can be as low as a few weeks to a maximum of couple of months.**

For questions or additional information, please email us at [systems@fykays.com](mailto:systems@fykays.com)