

FOR BATCH FURNACES RETROFITS & NEW FURNACES

**NO MORE GUESSING * PRECISE CONTROL
ONLINE DIFFUSION & β -CONTROL READY**

Need to be AMS 2750D, CQI-9, NADCAP
or ASM compliant? UPC control
solutions offer:

- Dynamic atmosphere control with available process modeling
- Infrared compensation
- Carbon flow control



STANDARD EQUIPMENT

- Protherm 455, 500, 600 or 700 controller (see separate brochures for more details)
- Hi-limit temperature controllers for furnace & oil bath
- Steel plate (mountable) or cabinet (enclosure)
- DIN mounted hardware
- Pre-wired with terminal blocks & isolation relays
- Electrical drawing / user manual
- Smart transmitter (allows probe care)

MAIN FEATURES

- Precise atmosphere control (carbon potential control)
- Furnace temperature control
- Quench (oil) temperature control
- Alarm notification and processing
- Password protected interface
- Real time and historical paperless chart recorder displaying process variables
- Recipes and templates can be created and modified

OPTIONAL FEATURES

- Online carbon & nitrogen diffusion module **for more precise control.** Includes: target control / surface carbon control / soot carbon control / auto boost / auto diffusion / calculates carbon profile & hardness curve
- β -control module for **more precise control & savings.** Includes: online carbon diffusion module plus shortens process time and reduces energy, gas consumption and exhaust
- Dual probe reliability function (with additional smart transmitter)
- Additional I/O cards: 3-gas I/R, Cascade heating control

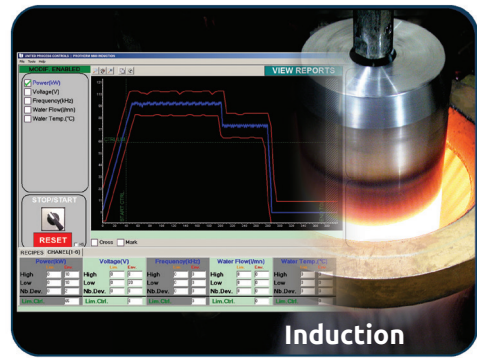
INTEGRATION / CONNECTION

- Integrated web server
- CANopen / DeviceNet interfaces
- RS485/422 4 wire Modbus / J-bus
- RJ45 Ethernet LAN interface for configuration
- Seamless integration with SCADA
- Modbus / TCP interface
- Optional Profibus slave or master

OTHER CONTROL SOLUTIONS



Annealing



Induction



Nitriding



Vacuum

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