

## Product Change Notice PCN0402: Software History / Changes of bentrup TC500 Series Controllers

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The following listing explains the modifications done on TC500 software since 1<sup>st</sup> product release:

- 1.00 initial release based on TC-S1 6.05
- 1.01 May 2000: D1/D2 completed
- 1.01 September 2000: TC507 initial edition
- 1.02 September 2000:  
bugfix: miscellaneous
- 1.03 January 2001:  
EVENT log incorporated; data log incorporated; new process flow; process info;  
hardware info string (power up w/ inst key), weekly command clock; bugfix on BYTE values;  
bugfix PROG mem calculation error (progs destroyed / overlaid)
- 1.04 January 2001 (1-26-2001)  
< 1st release incorporating all previous changes >  
day / date in select sequence  
weekly clock jobs  
new structure + handling + error codes
- 1.05 February 2001  
UC hold configurable  
DO configurable for div. process status  
bugfix: wrong Restart on power up  
time for seg. TC507 forced >=tSKP
- 1.06 UCcrit: default par 9 = 1 hold only if all zones uncontrolled
- 1.07 bugfix: "uncontrolled continue" has been misprocessed as "break" (A7 instead of message A8)  
bugfix: motorized valve operation corrected
- 1.08 July 2001  
TC8000: final control temp configurable  
bugfix: NwModTime also during programme run (not only after pressing start key)  
bugfix: Blinking DEC point equals programme run, Displv handling corrected  
August 2001  
proper S/N handling also by SIMCFG (simple configuration list)
- 1.09 September 2001  
Wait for final temp also in RAMPS (in either configuration setting)

proper programme selection via WINCONTROL  
read of max no of programmes implemented (for WINCO)

1.10 November 2001

RS485 communication ID adjustable also by SIMCFG (simple configuration list)  
serial number settable by controller keyboard  
limited operation time feature (3 days / 10 days / 40 days) disabled

1.11 February 2002

new options when selecting the function of the control outputs:  
*setting "8"* = "safety output controlled by separate thermocouple  
(other details same as "1" = "normal safety output")  
allows using a separate thermocouple for overtemperature checking  
*setting "9"* = "Limit output: ON at fixed temp of 1<sup>st</sup> input  $\geq 200^{\circ}\text{C}$  disregarding programme run

1.12 March 2002

controller supports extended help feature (enables WinControl/WinConfig to provide detailed configuration parameter help). Only used if controller is set to extended configuration (jumper)

1.13 May 2002

TC8000 only: BUGFIX: kWh counter set to zero on loading programmes

1.14 May 2002

TC503, TC505, TC8000 only: Programme continues on kiln heat up problem (refer to PCN 0502)

1.15 October 2002

kwh and heating-time-per firing counter cleared when repeating current programme

1.16 December 2002

bugfix: "digital output" modification is not rejected when downloading extended configuration via WinControl/Config (previously error message "incompatible pages" due to variable limits)

Initial Issue	Aug 22 <sup>th</sup> 1998	Be
Updated	Dec 23 <sup>rd</sup> 2002	Be