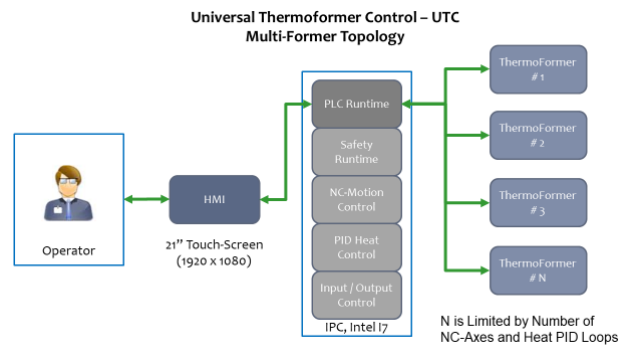


The UTC, or Universal Thermoformer Control from Automation Control Source, is a pre-engineered, modular, open, white branded control platform for Machine Builders. The UTC has been designed to cost efficiently run any Thermoforming Equipment, regardless of material, heating/forming/trimming sequence, and is available as a standalone or multi machine control option.

The UTC integrates the latest in both industrial control technology hardware and software, it uses only standardized programming function blocks.

As an open solution the UTC is capable of controlling any legacy analog servo drive/motor package, as well as the latest available in digital servo drives/motors with Fieldbus interface. All without requiring you to change your PLC program.



By providing an abstraction layer between the Control Program and the attached hardware, your machine control is freed from the legacy "control-hardware-vendor lock-in". You'll no longer have to worry about having to use obsolete and expensive OEM components.

Everything you need to control your thermoforming equipment is included, whether it be your first machine or your next generation of equipment. With a spectacular 21.5" panel mount or standalone HMI multi-touch screen, the operator has full control over the machine recipe, temperature, feeding, forming and trimming; including precise process-triggers. The HMI design is modern and very intuitive, minimizing the learning curve for your operators.

The UTC platform from Automation Control Source is worry free and easy to maintain, as all of the machine parameters and configurations are controller based. This makes the replacing of individual machine control components a breeze. The UTC's open architecture also allows for seamless integration into existing SCADA, OPC UA, or any other IOT reporting or analytics platform.



UTC CONFIGURATIONS AND TECHNICAL SPECIFICATIONS:

DESCRIPTION OF FEATURES	SINGLE MACHINE CONTROL	MULTIPLE MACHINE CONTROL
HMI		
Panel Mount Model	Beckhoff CP2921	Beckhoff CP2921
Standalone Model	Beckhoff CP3921	Beckhoff CP3921
Size	21.5"	21.5"
Resolution	1920 x 1080, HD	1920 x 1080, HD
Touchscreen	Multitouch	Multitouch
Development	< 4000 Tags	< 16000 Tags
Embedded Industrial PC		
Model	Beckhoff CX2020	Beckhoff CX2040
Processor	Intel Celeron 1.4 GHz, 1 Core	INTEL I7 2.1GHz, 4 Cores
Operating System	Win7 Standard Embedded or Win10 IOT, 32 or 64 Bit	Win7 Standard Embedded or Win10 IOT, 32 or 64 Bit
RAM, SSD	2 GB DD3 RAM, 8 GB CFast Card	4 GB DD3 RAM, 8 GB CFast Card
Safety PLC Module	Beckhoff EL-6900	Beckhoff EL-6900
Performance (Recommended Limits)		
PLC Runtimes (Minimum 1ms Cycle)	1	4
NC-Tasks (Motion Axis)	< 10	< 50
PID-Heat Control Loops	< 50	< 250
Digital and Analog I/O (EL-Type Modules preferred, not included)	< 350	< 2000
Supported Motor Drive Interfaces		
Analog	0-10V, -10-+10V, 4-20mA	0-10V, -10-+10V, 4-20mA
Digital	Step/Direction, PWM, Fieldbus	Step/Direction, PWM, Fieldbus
Fieldbus Protocols* *(EtherCAT and 1 other included)	EtherCAT, Ethernet, Profibus, Profinet, Ethernet/IP, CANopen, Sercos, CC-Link, Modbus, RS232/485 and many others	EtherCAT, Ethernet, Profibus, Profinet, Ethernet/IP, CANopen, Sercos, CC-Link, Modbus, RS232/485 and many others
Servo Control Type	Position, Velocity or both	Position, Velocity or both
Encoder Feedback	Incremental/SinCos, RS422, SSI, EnDAT2.2, BISS or Fieldbus	Incremental/SinCos, RS422, SSI, EnDAT2.2, BISS or Fieldbus
Lifetime Licenses (Included)		
HMI Runtime License	4000 Tags	16000 Tags
TC3, PLC, NC-PTP and Temperature Controller Runtime Licenses	Performance Plus (50)	High Performance (70)
Pricing		
UTC Control Runtime	Upon request	Upon request