Mod.0116.US-A Ref.CTL.00.US-R05

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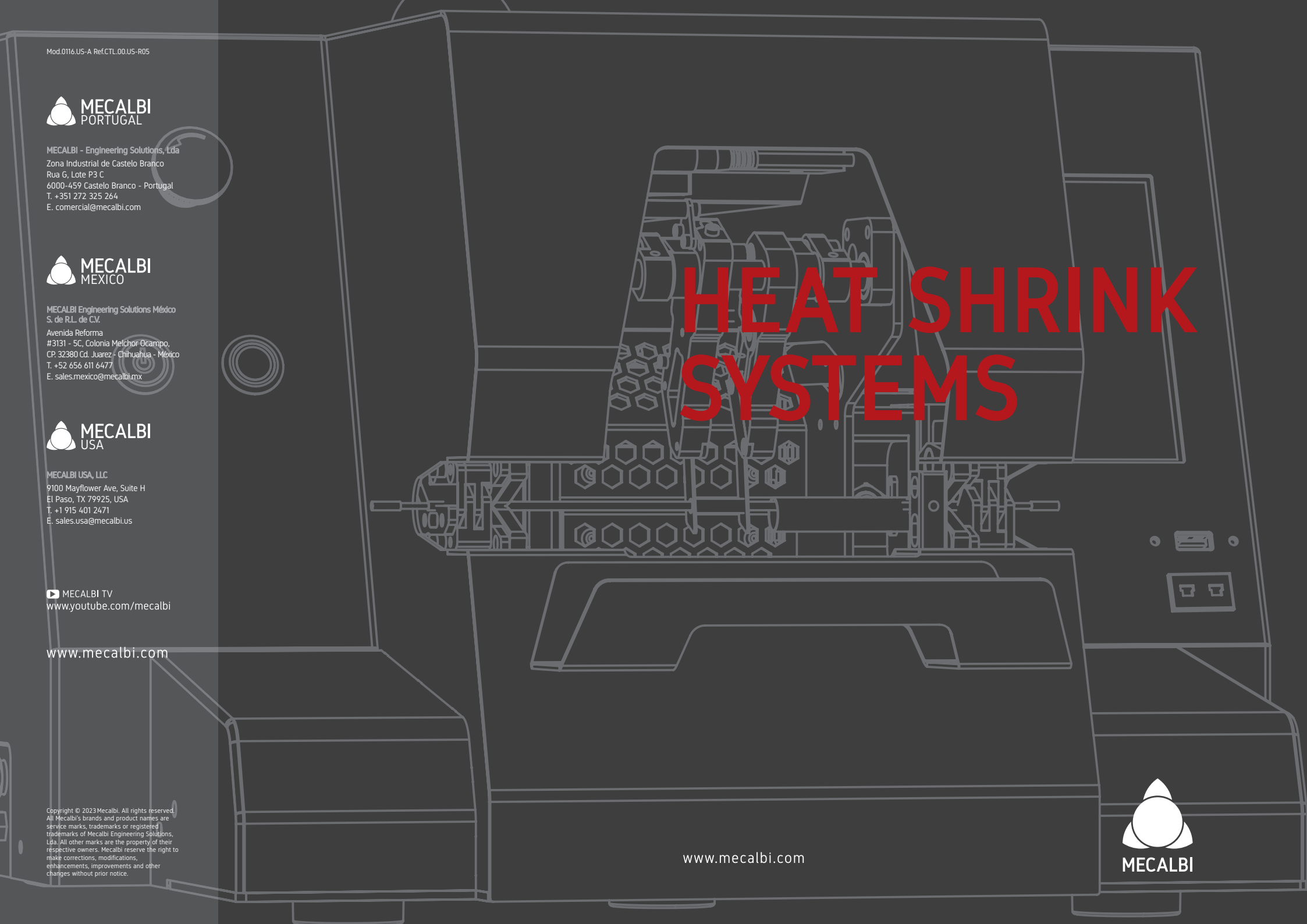


HEAT SHRINK SYSTEMS

www.mecalbi.com

MECALBI

MECALBI
Engineering Solutions, Lda

Mecalbi is a Portuguese company specialized on development and production of heat shrink systems, being nowadays an important part in the daily work of all major cable harness manufacturers. Laboring since 2006, it has recorded a continuous and solid growth in its segment being today a world reference in heat shrink systems.
Mecalbi is a worldwide company working for the global market. It's represented in four continents by local partners who provide sales and technical support.

Why MECALBI?

- **TIME SAVING**
  During the shrinking process, the operator is free to perform other tasks.
- **PROCESS CONTROL**
  Reliability and consistency of the process by monitoring and controlling the system's temperature, process time and position of heat shrink tube.
- **SAFER**
  The operator is protected against injuries.

MYX
The Shuttle.

SYX
The Slider.

ISAC19
The Feeder
for tube centering for CS19TS

CST
The Conveyor
for terminal applications.

RCMM
The Automatic Centering
heat shrink system.

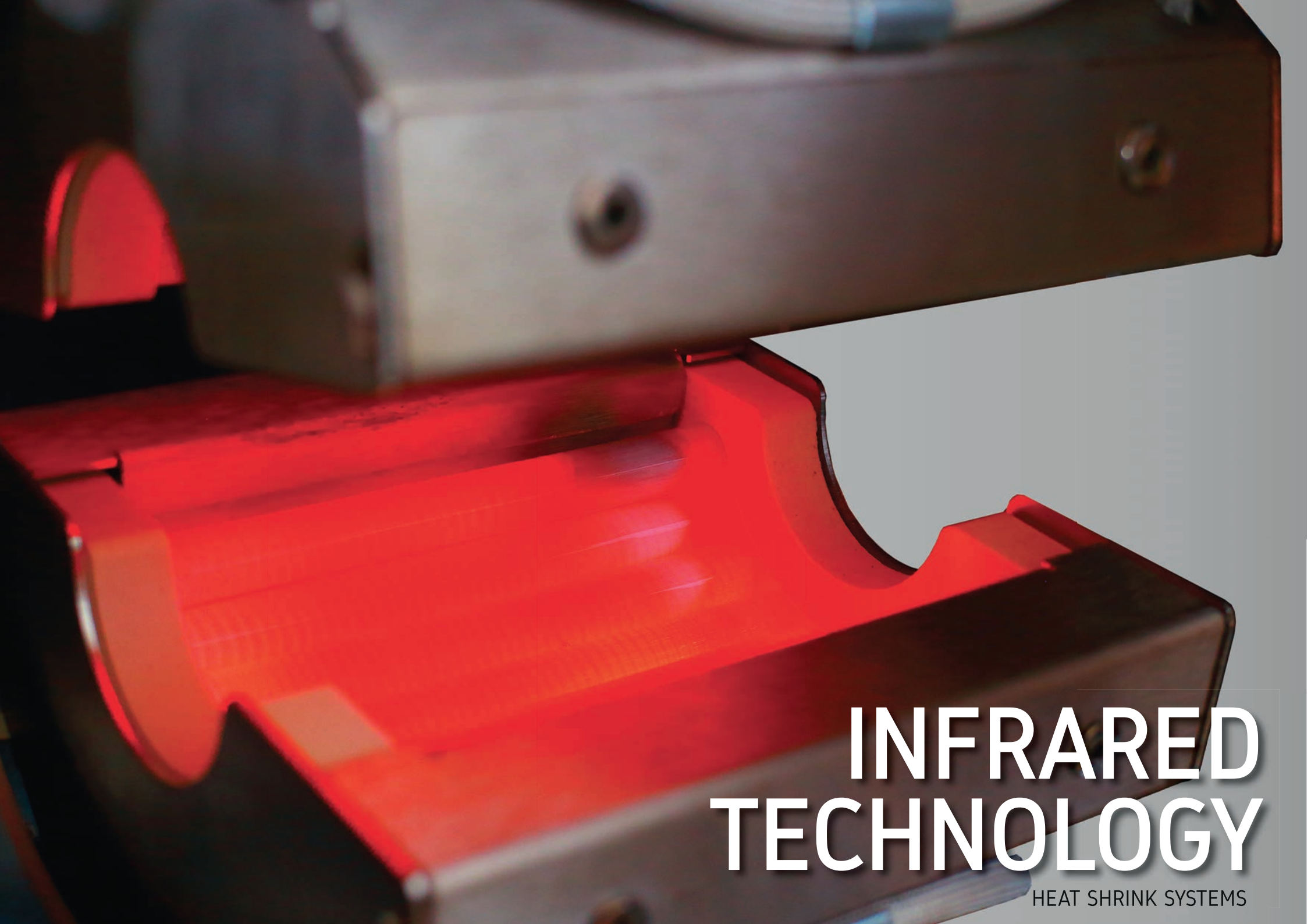
PRODUCT RANGE

HEAT SHRINK SYSTEMS

Infrared Technology

Hot Air Technology

Test Systems



INFRARED TECHNOLOGY

HEAT SHRINK SYSTEMS

DATASHEET

STCS evo500

The STCS-evo500 is a machine for processing heat shrink tubes, based on infrared resistors.

It's designed for workbench applications and can process one part at a time.

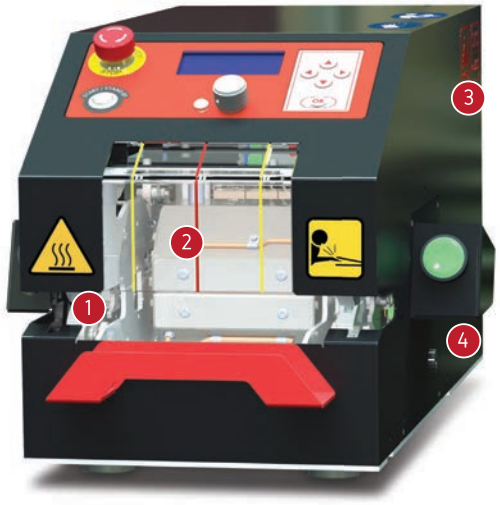
It has built-in communication with ultrasonic welding machines and several operating modes.

It can be supplied with end splice tool with cooling that doesn't have to be removed when working with normal splices.

Reference of the product
14-01-0016

Technology
Infrared

> Media for this machine



Holding system that preserves the integrity of the cable, ensuring it does not move during the entire process

Quartz infrared oven that allows higher temperatures

External connection for communication with ultrasonic welding machines

Built-in air treatment unit that provides steady regulation and increase lifetime of pneumatic components

Technical Data

WORKING TEMPERATURE	
Min - Max [°C] / [°F]	300-550 / 572-1022
SHRINKING TIME	
Min - Max [s]	1-99
MEASUREMENTS	
Width; Length; Height [mm] / [in]	293; 496; 255 / 11.5; 19.5; 10
Weight [kg] / [lbs]	16.5 / 36.4
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	250 [mA] to 3 [A] (Max.700W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 5bar; Max: 8bar; Rec: 6bar

CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Membrane Keyboard, Barcode Reader, External Device
Interface	LCD 16x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	77; Ø32 / 3; Ø1.3
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Tube Length [mm] / [in]	0-75 / 0-3
Min-Max Cable Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Cable Length [mm] / [in]	230-∞ / 9.1-∞
CALIBRATION	
Calibration Probe	ref.: 06-01-0158

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (100 in total, each having from 1 to 40 shrinking times);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode;
- Cycle and time counter;
- Communication with ultrasonic welding machines;
- Air fault detection;
- Larger fan to reduce the machine's body temperature;
- Interchangeable system language, including: English, Portuguese, French and Spanish (others on demand).

Options

- CAN tool (end splice)
  Ref: 26-23-0013
- Ring terminal tool
  Ref: 26-23-0021
- End splice tool
  Ref: 26-23-0010
- CAN tool (normal splice)
  Ref: 26-23-0014
- Cooling system
  Ref: 06-01-0132

DATASHEET

STCS evo500TS

The STCS-evo500TS is a heat shrink system, based on infrared technology.

It's designed for workbench applications and can process one part at a time.

The system is based on a touchscreen display and offers network capability.

By adding optional tools, besides normal splices, the STCS-evo500TS can work on end splices, ring terminals and other special applications.

Reference of the product
evo500TS 14-01-0024
with OPC UA 14-01-0055
Technology
Infrared

> Media for this machine

Available with OPC UA communication

Several new generation communication features as Ethernet, USB, HDMI, to connect external displays, WI-FI, etc.

Optional SDD (Splice Diameter Detection System)

Compact machine for space optimization

Technical Data

WORKING TEMPERATURE		
Min - Max [°C] / [°F]	250-550 / 482-1022	
SHRINKING TIME		
Min - Max [s]	1-100	
MEASUREMENTS		OPC UA
Width; Length; Height [mm] / [in]	293; 496; 255 / 11.5; 19.5; 10	332; 541; 267 / 13.1; 21.3; 10.5
Weight [kg] / [lbs]	16.5 / 36.4	20 / 44
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	250 [mA] to 3 [A] (Max.700W)	
PNEUMATIC		
Supply	Quick Hold Socket Ø8 [mm]	
Supply Pressure	Min: 5bar; Max: 8bar; Rec: 6bar	

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Touchscreen, Barcode Reader, External Device
Interface	Touchscreen, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	77; Ø32 / 3; Ø1.3
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Tube Length [mm] / [in]	0-75 / 0-3
Min-Max Cable Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Cable Length [mm] / [in]	230-∞ / 9.1-∞
CALIBRATION	
Calibration Probe	ref.: 06-01-0158

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (999 in total);
- Additional operating mode (M3) for splice diameter detection (SDD System) and automatic parameters setting;
- The pre-programming of references can be done manually, using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Use of labels for each shrinking time inside a reference;
- Cooling system;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifecycle of components;
- Partial and total cycle counter;
- Working time counter;
- Communication with ultrasonic welding machines;
- Network communication;
- HDMI port to mirror the system's display;
- Optional OPC UA Communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- End splice tool
  Ref: 26-23-0010
- CAN tool (end splice)
  Ref: 26-23-0013
- CAN tool (normal splice)
  Ref: 26-23-0014
- Ring terminal tool
  Ref: 26-23-0021
- SDD system
  Ref: 06-01-0230
- Cooling system
  Ref: 06-01-0229
- HDMI port
  Ref: 06-01-0233

DATASHEET

STCS RCM

Reference of the product
14-01-0011

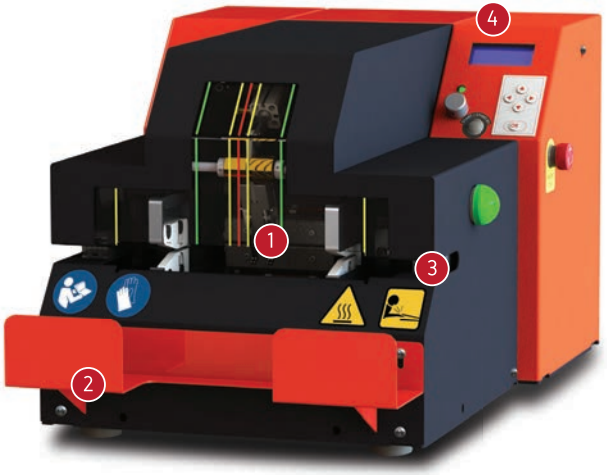
Technology
Infrared

> Media for this machine

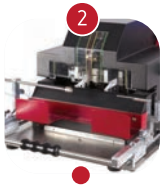
The STCS-RCM is a machine for processing heat shrink tubes, based on infrared resistors with inbuilt automatic heat shrink tube centering system. It's designed for workbench applications and can process one part at a time.

Built-in communication system with ultrasonic welding machines and several operating modes.

The centering feature ensure the automatic centering of the shrink tube in the middle of the splice (welded zone), in order to avoid mispositioned tubes.



Built-in centering system that ensures that the shrink tube is always in the middle of the splice



Can be equipped with an end splice tool with cooling that doesn't have to be removed to work with normal splices

Possibility of working with centering system or in normal mode

The pre-programming of references can be done manually or using a PC with STCS-RCT software

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	300-550 / 572-1022
SHRINKING TIME	
Min - Max [s]	1-99
MEASUREMENTS	
Width; Length; Height [mm] / [in]	380; 665; 360 / 15; 26.2; 14.2
Weight [kg] / [lbs]	37.5 / 82.7
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	250 [mA] to 3 [A] (Max.700W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 5bar; Max: 8bar; Rec: 6bar

CONNECTIONS		
Barcode Reader	RS232	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Membrane Keyboard, Barcode Reader, External Device	
Interface	LCD 16x4, Buzzer and LED	
SHRINKING CHAMBER		CENTERING
Shrinking Chamber [mm] / [in]	77; Ø32 / 3; Ø1.3	-
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8	-
Min-Max Tube Length [mm] / [in]	0-75 / 0-3	45-75 / 1.8-3
Min-Max Cable Ø [mm] / [in]	0-20 / 0-0.8	-
Min-Max Cable Length [mm] / [in]	360-∞ / 14.2-∞	-
Splice Detection Length [mm] / [in]	13 & 18 / 0.5 & 0.7	-
CALIBRATION		
Calibration Probe	ref.: 06-01-0286	

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two working modes: automatic centering and normal mode;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (100 in total, each having from 1 to 40 shrinking times);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference, to help the selection of the assembly;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Automatic cool down cycle to extend the lifetime of components;
- Cycle and time counter;
- Communication with ultrasonic welding machines;
- Air fault detection;
- Built-in cooling system;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options

- End splice tool
  Ref: 06-01-0071

- Cooling system
  Ref: 06-01-0133

DATASHEET

STCS RCMM

The STCS-RCMM is the (r)evolution from the current STCS-RCM and a big improvement in what refers to the quality requirement upcoming request from the cable harness industry.

Based on a quartz infrared oven, its main feature is the automatic centering system with offset to compensate the potential movement of heat shrink tubes during the shrinking process.

Designed with a narrower shrinking chamber, it's able to process cables from 235mm.

Reference of the product
OVEN 75mm 14-01-0058
OVEN 50mm 14-01-0047

Technology
Infrared

> Media for this machine

Automatic centering system with offset

Splice Diameter Detection System (SDD) for automatic loading of process parameters

Narrower shrinking chamber for cables with more than 235mm of length

Quartz infrared oven

Technical Data

WORKING TEMPERATURE		
Min - Max [ºC] / [ºF]	250-550 / 482-1022	
SHRINKING TIME		
Min - Max [s]	1-100	
MEASUREMENTS	OVEN 50mm	OVEN 75mm
Width; Length; Height [mm] / [in]	471; 622; 350 / 18.5; 24.5; 13.8	545; 659; 328 / 21.4; 25.9; 12.9
Weight [kg] / [lbs]	34 / 74.9	38 / 83.8
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	500 [mA] to 3 [A] (Max.700W)	
PNEUMATIC		
Supply	Quick Hold Socket Ø8 [mm]	
Supply Pressure	Min: 5bar; Max: 7bar; Rec: 6bar	

CONNECTIONS		
Barcode Reader	USB	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Touchscreen, Barcode Reader, External Device	
Interface	Touchscreen, Buzzer and LED	
SHRINKING CHAMBER	OVEN 50mm	OVEN 75mm
Shrinking Chamber [mm] / [in]	52xØ32 / 2xØ1.3	77; Ø32 / 3; Ø1.3
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8	-
Min-Max Tube Length [mm] / [in]	20-50 / 0.8-2	20-75 / 0.8-3
Min-Max Cable Ø [mm] / [in]	1-10 / 0.04-0.4	-
Min-Max Cable Length [mm] / [in]	235-∞ / 9.3-∞	295-∞ / 11.6-∞
Splice Detection Length [mm] / [in]	10-20 / 0.4-0.8	-
CALIBRATION		
Calibration Probe	ref.: 05-22-0024	

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (999 in total);
- The pre-programming of references can be done manually, using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Use of labels for each shrinking time inside a reference;
- Automatic centering system with offset for heat shrink tube position assurance;
- Detection system to validate heat shrink tube position and dimension;
- Adjustable electrode for splice detection between 10mm and 20mm;
- Cooling system;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Working time, partial and total cycle counter;
- Communication with ultrasonic welding machines;
- Network communication;
- HDMI port to mirror the system's display;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- End splice tool
  Ref: 27-36-0001
- Vacuum CAN end splice tool
  Ref: 27-36-0003
- CAN end splice tool
  Ref: 27-36-0002

DATASHEET

STCS VMir/VMir+

Reference of the product
VMir 14-01-0022
VMir+ 14-01-0032

Technology
Infrared

> Media for this machine

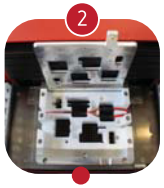
The STCS-VMir is a heat shrink system, based on infrared technology. It´s designed for workbench applications and can process several parts at the same time.

The same machine can be used on several applications, since it´s equipped with a fast exchangeable shrinking fixture system.

The shrinking fixture are designed according with the application specifications, making them ideal for special applications.

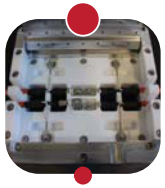
The main difference between STCS-VMir and STCS-VMir+, is on the shrinking fixture dimension: (225x100mm).

Fast interchangeable shrinking fixture system



Open work area for faster setup time

New and improved interface based on touchscreen technology, that allows network communication



Fixtures can be customized for the most challenging and complex applications

Technical Data

WORKING TEMPERATURE	VMir	VMir+
Min - Max [ºC] / [ºF]	250-500 / 482-932	250-500 / 482-932
SHRINKING TIME		
Min - Max [s]	1-100	1-100
MEASUREMENTS		
Width; Length; Height [mm] / [in]	540; 591; 455.5 / 21.3; 23.3; 17.9	540; 591; 475.5 / 21.3; 23.3; 18.7
Weight [kg] / [lbs]	37.5; 82.7	43; 94.8
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	230 [V] @ 50Hz
Consumption	500 [mA] to 7 [A] (Max.2000W)	500 [mA] to 14 [A] (Max.3200W)
PNEUMATIC		
Supply	Quick Hold Socket Ø8 [mm]	
Supply Pressure	Min: 5bar; Max: 7bar; Rec: 6bar	

CONNECTIONS		
Barcode Reader	USB	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Touchscreen, Barcode Reader, External Device	
Interface	Touchscreen, Buzzer and LED	
SHRINKING CHAMBER	VMir	VMir +
Shrinking Chamber [mm] / [in]	120; 120; 57 / 4.7; 4.7; 2.2	100; 225; 55 / 3.9; 8.9; 2.2
Min-Max Tube Ø [mm] / [in]	0-45 / 0-1.8	0-45 / 0-1.8
Min-Max Tube Length [mm] / [in]	0-120 / 0-4.7	0-200 / 0-7.9
Min-Max Cable Ø [mm] / [in]	0-45 / 0-1.8	0-45 / 0-1.8
Min-Max Cable Length [mm] / [in]	-	-
CALIBRATION		
Calibration Probe	ref.: 06-01-0277	ref.: 26-33-0001

Features

- Adjustable parameters: process temperature, shrinking time, cooling time etc;
- Easy and fast interchangeable shrinking fixture;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references [999 in total];
- The pre-programming of references can be done manually, using a PC with STCS-RCT software or a USB stick;
- Automatic selection of references using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Use of labels for each shrinking time inside a reference;
- Built-in cooling system;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- External temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Communication with ultrasonic welding machines;
- Working time counter;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- Custom shrinking fixture
  (VMir) Ref: 06-01-0222
  (VMir+) Ref: 27-28-0001

- Dual fixture
  (VMir) Ref: 27-17-0005
  (VMir+) Ref: 27-28-0003

DATASHEET

STCS CS14

The STCS-CS14 is a heat shrink system designed as a short conveyor based on infrared resistors.

Compact and lightweight machine for large production requirements since the output is only determined by the pace of the operator.

Optional Integrated System Automatic Centering (ISAC14) for heat shrink tube position and length assurance.

Reference of the product
14-01-0025

Technology
Infrared

> Media for this machine

The system can be equipped also with optional systems like cooling, cable counter, auxiliary centering system, custom-made workbench and others

Communication features like Ethernet, USB, Wi-FI, etc.

Compact and lightweight machine for space optimization

Optional ISAC14 (Integrated System Automatic Centering) for heat shrink tubing position assurance

Technical Data

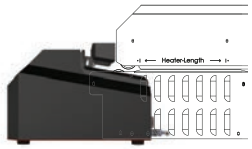
WORKING TEMPERATURE		
Min - Max [°C] / [°F]	300-600 / 572-1112	
SHRINKING TIME		
Min - Max [s]	3-100	
MEASUREMENTS		ISAC14
Width; Length; Height [mm] / [in]	214; 814; 398 / 8.4; 32; 15.7	341; 1046; 398 / 13.4; 41.1; 15.7
Weight [kg] / [lbs]	35 / 77.2	55 / 121
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	500 [mA] to 9 [A] (Max.2000W)	
PNEUMATIC		
Supply	Quick Hold Socket Ø6/Ø8 [mm]	
Supply Pressure	Min: 5bar; Max: 7bar; Rec: 6bar	

CONNECTIONS		
Barcode Reader	USB	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Touchscreen, Barcode Reader, External Device	
Interface	Touchscreen, Buzzer and LED	
SHRINKING CHAMBER		ISAC14
Shrinking Chamber [mm] / [in]	220; 70; 30 8.7; 2.8; 1.2	-
Min-Max Tube Ø [mm] / [in]	0-25 / 0-1	-
Min-Max Tube Length [mm] / [in]	0-65 / 0-2.6	30-70 / 1.2-2.8
Min-Max Cable Ø [mm] / [in]	0-25 / 0-1	-
Min-Max Cable Length [mm] / [in]	150-∞ / 5.9-∞	300-∞ / 11.8-∞
Splice Detection Length [mm] / [in]	-	6-22 / 0.2-0.9
CALIBRATION		
Calibration Probe	ref.: 06-01-0279	

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (999 in total);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Automatic conveyor's speed adjustment, in function of the programmed shrinking time;
- Cooling system;
- Optional automatic centering system with heat shrink tube length control (ISAC14);
- Adjustable electrode for splice detection between 6mm and 22mm (ISAC14);
- Custom-made workbench with long cables support system;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options



- **ISAC14**
  Ref: 27-18-0002
- Cable counter
  Ref: 06-01-0236
- Cooling system
  Ref: 06-01-0235
- Cable support system
  Ref: 06-01-0237
- Auxiliary centering system
  Ref: 06-01-0232
- Ethernet port
  Ref: 06-01-0238
- Workbench
  Ref: 06-01-0234
- End splice tool
  Ref: 06-01-0125
- Ring terminal tool
  Ref: 06-01-0106

DATASHEET

STCS CS19TS

Reference of the product
14-01-0063

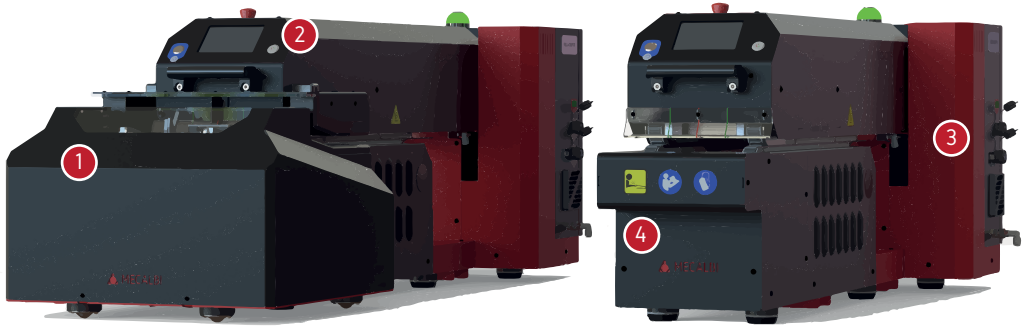
Technology
Infrared

> Media for this machine

The STCS-CS19TS is the evolution from Mecalbi's bigger heat shrink conveyor to process linear splices in a fast and continuous manner.

Based on a quartz infrared oven to guarantee outstanding process temperature, it is design for mass production since the output is only determined by the pace of the operator.

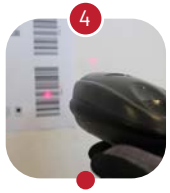
Optional automatic centering device (ISAC19) to guarantee the position and length of the heat shrink tube. It also features the new option of offset definition.



Optional ISAC19 for heat shrink tube position assurance with the option of offset definition

User-friendly touchscreen interface

New connections like Ethernet and USB



Use of references, that can be selected manually or using barcode readers, to automatically adjust the process parameters

Technical Data

WORKING TEMPERATURE		
Min - Max [ºC] / [ºF]	300-600 / 572-1112	
SHRINKING TIME		
Min - Max [s]	5-70	
MEASUREMENTS		with ISAC19
Width; Length; Height [mm] / [in]	562; 1329; 559 / 22.1; 52.3; 22	562; 1485; 559 / 22.1; 58.5; 22
Weight [kg] / [lbs]	110 / 243	145 / 320
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	500 [mA] to 16 [A] (Max.3600W)	
PNEUMATIC		
Supply	-	Quick Hold Socket Ø8 [mm]
Supply Pressure	-	Min: 5bar; Max: 7bar, Rec: 6bar

CONNECTIONS		
Barcode Reader	USB	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Touchscreen, Barcode Reader, External Device	
Interface	Touchscreen, Buzzer and LED	
SHRINKING CHAMBER		with ISAC19
Shrinking Chamber [mm] / [in]	200; 98; 30 / 8; 4; 1.2	-
Min-Max Tube Ø [mm] / [in]	0-25 / 0-1	0-17/ 0-0.7
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5	35-65 / 1.4-3
Min-Max Cable Ø [mm] / [in]	0-10 / 0-0.4	0-10 / 0-0.4
Min-Max Cable Length [mm] / [in]	215-∞ / 8.5-∞	450-∞ / 18-∞
Splice Detection Length [mm] / [in]	-	7-21 / 0.3-0.8
CALIBRATION		
Calibration Probe	ref.: 05-22-0022	

Features

- Adjustable parameters: process temperature, shrinking time, etc.;
- Two different operating modes: M1 with temperature and time control; and M2 mode with pre-programmed references (999 in total);
- Automatic reference selection using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Automatic conveyor's speed adjustment, in function of the programmed shrinking time;
- Optional automatic centering system with heat shrink tube dimension and position control (ISAC19);
- Adjustable electrode for splice detection between 6mm and 22mm (ISAC19);
- Cable counter;
- Manual and automatic calibration;
- User login;
- Equipped with the external thermocouple connection for temperature reading and offset adjustment;
- Hydraulic system to assist on the lifting of the equipment top structure for maintenance purposes;
- Automatic cool-down cycle to extend the lifetime of components;
- Heating elements failure detection;
- Working time counter and partial and total cycle counter;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- ISAC19
  Ref: 27-46-0005

- Auxiliary centering system
  Ref: 27-46-0004

- Workbench
  Ref: 27-46-0002

DATASHEET

STCS CS19

Reference of the product
14-01-0007

Technology
Infrared

> Media for this machine

The STCS-CS19 is a machine for processing heat shrink tubes, based on infrared resistors. It's designed for workbench applications and can process several parts at the same time.

It has several operating modes, including the use of references which can be selected using barcode readers.

Once the reference is selected, the machine automatically adjusts all parameters to the pre-programmed values, including shrinking time (conveyor's speed).

Use of references, that can be selected manually or using barcode readers, to automatically adjust the parameters and allow seamless transitions between batches of assemblies

Automatic conveyor's speed adjustment based on the programmed shrinking time

New quartz infrared resistors with glass protection, for increase durability

Optional ISAC19STA for automatic centering of heat shrink tubes in linear splices.

Technical Data

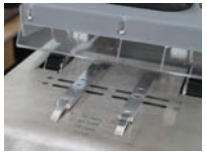
WORKING TEMPERATURE		
Min - Max [ºC] / [ºF]	300-600 / 572-1112	
SHRINKING TIME		
Min - Max [s]	2-50	
MEASUREMENTS		ISAC19STA
Width; Length; Height [mm] / [in]	284; 1540; 545 / 11.2; 60.6; 21.5	805; 1700; 560 / 31.7; 66.9; 22
Weight [kg] / [lbs]	100 / 220.5	145 / 319.7
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	500 [mA] to 16 [A] (Max.3600W)	
PNEUMATIC		
Supply	-	
Supply Pressure	-	

CONNECTIONS		
Barcode Reader	RS232	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket	
Programming	Membrane Keyboard	
Interface	LCD 16x2, Buzzer and LED	
SHRINKING CHAMBER		ISAC19STA
Shrinking Chamber [mm] / [in]	285; 95; 40 / 11.2; 3.7; 1.6	-
Min-Max Tube Ø [mm] / [in]	0-30 / 0-1.2	0-25 / 0-1
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5	30-90 / 1.2-3.5
Min-Max Cable Ø [mm] / [in]	0-30 / 0-1.2	-
Min-Max Cable Length [mm] / [in]	215-∞ / 8.5-∞	450-∞ / 17.7-∞
Splice Detection Length [mm] / [in]	-	6-22 / 0.2-0.9
CALIBRATION		
Calibration Probe	ref.: 05-22-0010	

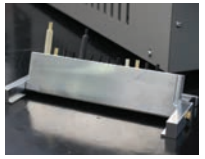
Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (100 in total);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference;
- Automatic conveyor speed adjustment, in function of the programmed shrinking time;
- Manual and automatic calibration;
- Optional automatic centering system with heat shrink tube dimentions and position control (ISAC19STA);
- ISAC19STA to operate as a standalone equipment or in server mode to communicate with client (heat shrink system);
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external thermocouple connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Can be supplied with a special kit for ring terminals and/or end splices;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

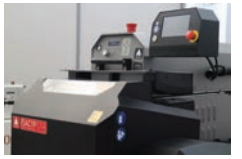
Options



- Auxiliary centering system
  Ref: 06-01-0131



- Normal cap to end cap tool
  Ref: 26-24-000X



- ISAC19STA
  Ref: 27-09-0002

- End splice tool
  Ref: 06-01-0125
- Ring terminal tool
  Ref: 06-01-0106
- Cooling system
  Ref: 06-01-0107

DATASHEET

STCS CST

Reference of the product
14-01-0049

Technology
Infrared

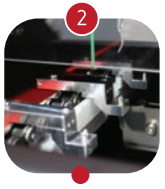
> Media for this machine

The STCS-CST is a heat shrink system designed as a short conveyor to process end splices, connectors and terminal applications in a fast and continuous manner.

Equipped with an inner oven heat shrink tube stopper to guarantee its position on the assembly.

Optionally, the system may be equipped with a side transporter to help the routing of big and heavy assemblies during the shrinking process.

Optional side transporter to help the routing of heavier assemblies during the shrinking process



Customizable attachable jigs for special applications

Adjustable heat shrink tube stopper to guarantee the correct position of the insulator

Specially developed to process faston terminals

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	300-600 / 572-1112
SHRINKING TIME	
Min - Max [s]	1-100
MEASUREMENTS	
Width; Length; Height [mm] / [in]	551; 898; 398 / 21.7; 35.4; 15.7
Weight [kg] / [lbs]	65 / 143.3
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	500 [mA] to 9 [A] (Max.2000W)
PNEUMATIC	
Supply	-
Supply Pressure	-

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Touchscreen, Barcode Reader, External Device
Interface	Touchscreen, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	220; 95; 50 / 8.7; 3.7; 1.9
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5
Min-Max Cable Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Cable Length [mm] / [in]	140-∞ / 5.5-∞
CALIBRATION	
Calibration Probe	ref.: 26-47-0002

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (999 in total);
- The pre-programming of references can be made manually, using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Capable of processing faston terminals, assuring the position of the heat shrink tube;
- Manual and automatic calibration;
- User login;
- Adjustable heat shrink tube stopper to guarantee the correct position of the insulator;
- Optional side transporter to help the routing of heavier assemblies during the shrinking process;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Communication with ultrasonic welding machines;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- Side transporter
  Ref: 27-38-0001

- Attachable jigs kit
  Ref: 27-38-0002

- Single attachable jig
  Ref: 27-38-0003

DATASHEET

STCS LC/LC XL

Reference of the product
LC 14-01-0021
LC XL 14-01-0027

Technology
Infrared

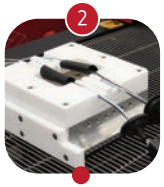
> Media for this machine

The STCS-LC (Longitudinal Conveyor) is a heat shrink system, based on infrared resistors, that is able to process several and different types of parts at the same time.

Designed for workbench applications, it has two operating modes including the usage of references which can also be selected using barcode readers.

The STCS-LC XL is a variation of the standard STCS-LC mahine. The bigger shrinking chamber (500x820mm) allows a higher range of harness dimensions and when using custom fixtures it´s possible to protect any sensible component and make sure of any position requirement.

Virtually no limits concerning the size of the harness and shrink tubes to be processed



Possibility to use customized fixtures for special applications

Side panel with USB port for reference uploading and barcode reader connection

New and improved interface based on touchscreen technology

Technical Data

WORKING TEMPERATURE	LC	LC XL
Min - Max [°C] / [°F]	250-400 / 482-752	350-600 / 662-1112
SHRINKING TIME		
Min - Max [s]	6-160	20-180
MEASUREMENTS		
Width; Length; Height [mm] / [in]	715; 1200; 508 / 28.1; 47.2; 20	1020; 1860; 771 / 40.2; 73.2; 30.4
Weight [kg] / [lbs]	80 / 176.4	220 / 485
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	400 [V] ~3/N @ 50Hz
Consumption	500 [mA] to 16 [A] (Max.3600W)	500 [mA] to 30 [A] (Max.20000W)
PNEUMATIC		
Supply	Quick Hold Socket Ø8 [mm]	
Supply Pressure	Min: 2bar; Max: 6bar; Rec: 3bar	

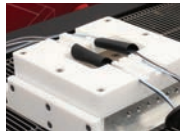
CONNECTIONS		
Barcode Reader	USB	
Temperature Sensor	Type K Thermocouple	
Power Line	1 IEC C20 Socket (LC)/ 1 IEC 60309 (6H) 3 Phase Socket (LC XL)	
Programming	Touchscreen, Barcode Reader and External Device	
Interface	Touchscreen, Buzzer and LED	
SHRINKING CHAMBER	LC	LC XL
Shrinking Chamber [mm] / [in]	400; 360; 100 / 15.7; 14.2; 3.9	500; 820; 140 / 19.7; 32.3; 5.5
Min-Max Tube Ø [mm] / [in]	0-100 / 0-3.9	0-140 / 0-5.5
Min-Max Tube Length [mm] / [in]	-	-
Min-Max Cable Ø [mm] / [in]	0-100 / 0-3.9	0-140 / 0-5.5
Min-Max Cable Length [mm] / [in]	-	-
CALIBRATION		
Calibration Probe	ref.: 06-01-0192	

Features

- Adjustable parameters: process temperature, shrinking time, cooling etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (100 in total);
- The pre-programming of references can be done manually, using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Use of labels for each shrinking time inside a reference;
- Automatic conveyor speed adjustment, in function of the programmed shrinking time;
- Built-in cooling system, based on compressed air amplifiers;
- Adjustable oven opening (up to 100mm);
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Interchangeable system language, including: English, Portuguese, French and Spanish (others on demand).

Options

- Extra-cooling system
  Ref: 06-01-0189



- Custom fixture
  Ref: 27-16-0001

- STCS-LC RF (Rotative Fixtures)
  Ref: 14-01-0040

DATASHEET

STCS SYX

The STCS-SYX is a heat shrink system based on infrared technology capable of processing up to six meters long harnesses.

The equipment can be supplied only as one single main module suitable to process products up to one meter long and extension modules are available to enlarge the machine's production area.

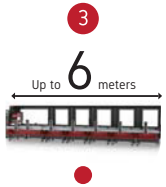
Reference of the product
14-01-0045

Technology
Infrared

> Media for this machine

Security system based on safety laser scanners

Adjustable resistors distance for better efficiency, 30 different shrinking positions and eletrical motor with x and y movement



Capable of processing up to 6 meters long of product

Up to 10 detections points to guarantee the presence/position of harness components like terminals, connectors, etc.

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	300-550 / 572-1022
SHRINKING TIME	
Min - Max [mm/s]	1-150
MEASUREMENTS	
Width; Length; Height [mm] / [in]	1298,5; 2395; 1602 / 51.1; 94.3; 6.3
Weight [kg] / [lbs]	660 / 1455.1
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	1[A] - 15[A] (Max.3500W)
PNEUMATIC	
Supply	-
Supply Pressure	-

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Touchscreen, Barcode Reader
Interface	Touchscreen, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	120; 230; 140 / 4.7; 9.1; 5.5
Min-Max Tube Ø [mm] / [in]	0-120 / 0-4.7
Min-Max Tube Length [mm] / [in]	0-6000 / 0-236.2
Min-Max Cable Ø [mm] / [in]	0-100 / 0-3.9
Min-Max Cable Length [mm] / [in]	0 - 6000 / 0 - 236.2
CALIBRATION	
Calibration Probe	ref.: 05-22-0026

Features

- Adjustable parameters: process temperature, shrinking time, cooling etc;
- Possibility of having up to 30 different shrinking positions with independent process parameters;
- Up to 10 detections to guarantee the integrity either of process or harness components;
- Adjustable oven opening for process efficiency;
- Manual motor learning for shrinking position set up;
- The pre-programming of references can be made manually on the touchscreen or using STCS-RCT and a USB stick to transfer the programs;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade;
- Electrical motor with x and y movement;
- Automatic motor speed adjustment, in function of the programmed parameters;
- Built-in cooling system based on cross flow fans;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifecycle of components;
- Partial and total cycle counter;
- Working time counter;
- Security system based on safety laser scanners that monitors 275º of the production area;
- Network communication;
- Interchangeable system language, including English, Portuguese, French and Spanish (others on demand).

Options

- +1m Extension module
  Ref: 27-35-0001

- Additional fixture holder
  Ref: 27-35-0002

- Additional fixture
  Ref: 27-35-0003

DATASHEET

STCS RT/RTTS

> Media for this machine

Reference of the product
RT 14-01-0008
RTTS 14-01-0030

Technology
Infrared

The STCS-RT/RTTS is a machine for processing heat shrink tubes, based on infrared resistors. It's designed for workbench applications and can process several parts at the same time.

The system has two independent workstations (with independent shrinking parameters) and a movable oven. Each workstation is provided with support for tooling fixtures that can be used on a variety of small components, such as ring terminals and small connectors.

Two completely independent workstations with separate parameters

Each workstation can perform, in average, 10 assemblies simultaneously

Fully automated oven movement

Easily replaceable jigs (less than 5 seconds to swap)

Technical Data

	RT	RTTS
WORKING TEMPERATURE		
Min - Max [°C] / [°F]	400-550 / 752-1022	300-550 / 572-1022
SHRINKING TIME		
Min - Max [s]	1-120	
MEASUREMENTS		
Width; Length; Height [mm] / [in]	760; 1500; 633 / 29.9; 59.1; 24.9	
Weight [kg] / [lbs]	123 / 271.2	
POWER SUPPLY/CONSUMPTION		
Supply	230 [V] @ 50Hz	
Consumption	500 [mA] to 16 [A] (Max.3600W)	
PNEUMATIC		
Supply	-	
Supply Pressure	-	

CONNECTIONS	
Barcode Reader	RS232 (RT) / USB (RTTS)
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Membrane Keyboard Barcode Reader and External Device (RT) / Touchscreen, Barcode Reader and External Device (RTTS)
Interface	LCD 16x2, Buzzer and LED (RT) / Touchscreen, Buzzer and LED (RTTS)
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	95; 275; 50 / 3.7; 10.8; 2
Min-Max Tube Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5
Min-Max Cable Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Cable Length [mm] / [in]	-
CALIBRATION	
Calibration Probe	ref.: 06-01-0280

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two independent workstations with independent parameters (shrinking time);
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references, (100 in total);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- Use of labels for each shrinking time inside a reference, to help the selection of the assembly;
- Tool fixtures with adjustable stopper to ensure the shrink tube's position;
- Easily replaceable jigs;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- External temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options

- Custom jigs (pair)
  Ref: 06-01-0058

- STCS-RTTS DYCOD
  Ref: 14-01-0054

DATASHEET

STCS MYX

Reference of the product
14-01-0046

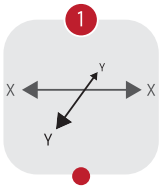
Technology
Infrared

> Media for this machine

The STCS-MYX is a heat shrink system based on an infrared quartz oven with Y and X axes movement to improve the process efficiency and effectiveness.

It's designed with two independent workstations and a shuttle oven that moves from one station to the other, reducing dead-time and boosting productivity.

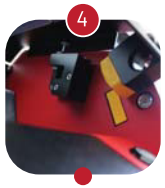
Optionally, the equipment can be supplied with RFID technology for fixture detection to guarantee the process integrity.



Oven with X and Y movement for improved process consistency

Workstations with independent process parameters

Easily exchangeable fixtures



Improved safety mechanisms to protect the user

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	350-550 / 662-1022
SHRINKING TIME	
Min - Max [s]	1-99
MEASUREMENTS	
Width; Length; Height [mm] / [in]	1688; 726; 1283 / 66.5; 28.6; 50.5
Weight [kg] / [lbs]	230 / 507.1
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	1[A] - 15[A] (Max.3500W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 5bar; Max: 7bar; Rec: 6bar

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Touchscreen, Barcode Reader
Interface	Touchscreen, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Fixtures [mm] / [in]	300; 110; 55 / 11.8; 4.3; 2.2
Min-Max Tube Ø [mm] / [in]	0-50 / 0-2
Min-Max Tube Length [mm] / [in]	0-110 / 0-4.3
Min-Max Cable Ø [mm] / [in]	0-45 / 0-1.8
Min-Max Cable Length [mm] / [in]	195-∞ / 7.7-∞
CALIBRATION	
Calibration Probe	ref.: 05-22-0025

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two independent workstations with independent parameters (shrinking time);
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references;
- The pre-programming of references can be made manually on the touchscreen or using STCS-RCT and a USB stick to transfer the programs;
- The selection of references can be made automatically using a barcode reader or manually on the touchscreen;
- Optional RFID system with fixture detection for automatic loading of process parameters;
- Use of labels for each shrinking time inside a reference, to help the selection of the assembly;
- Tool fixtures with adjustable stopper to ensure the shrink tube's position;
- Optional jig pusher tool to guarantee the heat shrink tube sealing near the terminals;
- Optional anti-glue tool to protect the terminals from glue overflow;
- Easily exchangeable fixtures;
- Work area with lighting;
- Easy firmware upgrade;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- External temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Working time, partial and total cycle counter;
- Network communication;
- Interchangeable system language, including Portuguese, English, French and Spanish (others on demand).

Options

- RFID system
  Ref: 27-37-0001

- Jig pusher system
  Ref: 27-37-0002

- Additional fixture
  Ref: 27-37-0004

❶ Additional fixture w/ anti-glue tool
Ref: 27-37-0003

❷ Additional fixture w/ RFID tag
Ref: 27-37-0005

❶❷ Additional fixture w/ RFID tag & anti-glue tool
Ref: 27-37-0006

DATASHEET

STCS CRT

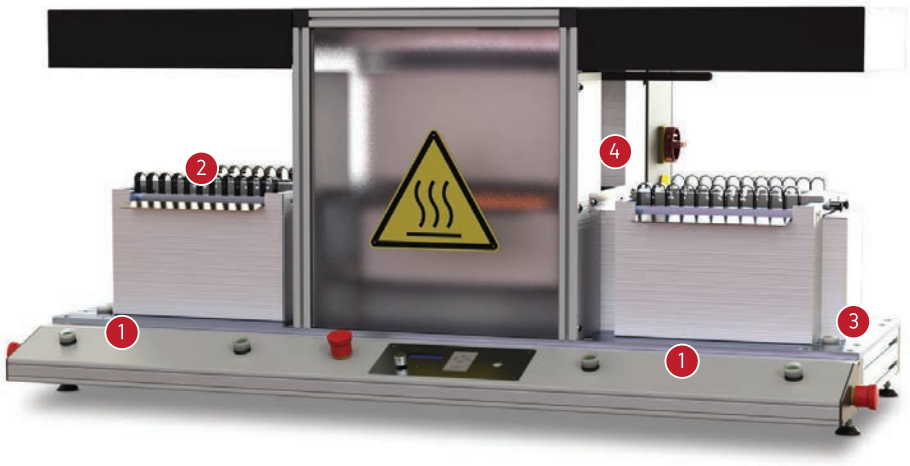
Reference of the product
14-01-0015

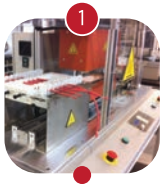
Technology
Infrared

> Media for this machine

The STCS-CRT is a custom solution based on the STCS-RT standard device. It's designed for workbench applications and can process several at the same time.

STCS-CRT main feature is the ability to work on the middle of the cable, i.e. cables that have terminals in their middle.





Two completely independent workstations with separate parameters

Ability to work on the middle of the cable

Two additional start buttons on the side of the equipment for multiple operation layouts

Easily replaceable jigs (less than 5 seconds to swap)

Technical Data

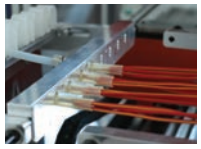
WORKING TEMPERATURE	
Min - Max [°C] / [°F]	400-550 / 752-1022
SHRINKING TIME	
Min - Max [s]	1-120
MEASUREMENTS	
Width; Length; Height [mm] / [in]	820; 1500; 710 / 32.3; 59; 28
Weight [kg] / [lbs]	140 / 308.6
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	500 [mA] to 16 [A] (Max.3600W)
PNEUMATIC	
Supply	-
Supply Pressure	-

CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Membrane Keyboard
Interface	LCD 16x2, Buzzer, LED
SHRINKING CHAMBER	
Shrinking Fixtures [mm] / [in]	95; 275; 50 / 3.7; 10.8;
Min-Max Tube Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5
Min-Max Cable Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Cable Length [mm] / [in]	-
CALIBRATION	
Calibration Probe	ref.: 05-22-0012

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two independent workstations with independent parameters (shrinking time);
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references, 100 in total;
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- Automatic selection of references using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference, to help the selection of the assembly;
- Tool fixtures with adjustable stopper to ensure the heat shrink tube's position;
- Easily replaceable jigs;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- External temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options



- Custom jigs
  Ref: 06-01-0104

DATASHEET

STCS PHDir

The STCS-PHDir is a machine for processing heat shrink tubes, based on infrared technology. It's designed for line panel applications and can process one part at a time.

The system is made by a control module for parameter definition and a portable unit for the shrinking operation.

It's based on a touchscreen display and offers network capability.

Reference of the product
14-01-0034

Technology
Infrared

› Media for this machine

New and improved interface based on Touchscreen technology

Several new generation communication features as Ethernet, USB and WI-FI capability

Information of process parameters on the portable unit for work efficiency

Compact and lightweight portable device

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	250-510 / 482-950
SHRINKING TIME	
Min - Max [s]	1-100
MEASUREMENTS	
Width; Length; Height [mm] / [in]	166; 328; 300 / 6.5; 12.9; 11.8
Weight [kg] / [lbs]	5 / 11
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	500 [mA] to 3 [A] (Max.700W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 5bar; Max: 7bar; Rec: 6bar

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Touchscreen, Barcode Reader and External Device
Interface	Touchscreen, LCD 8x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	74; Ø34 / 2.9; Ø1.3
Min-Max Tube Ø [mm] / [in]	0-14 / 0-0.6
Min-Max Tube Length [mm] / [in]	0-65 / 0-2.6
Min-Max Cable Ø [mm] / [in]	0-14 / 0-0.6
Min-Max Cable Length [mm] / [in]	140-∞ / 5.5-∞
CALIBRATION	
Calibration Probe	ref.: 26-34-0001

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (999 in total);
- The pre-programming of references can be done manually, using a PC with STCS-RCT software or using a USB stick;
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Easy firmware upgrade using a USB stick;
- Use of labels for each shrinking time inside a reference;
- Cooling system;
- Manual and automatic calibration;
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Equipped with the external temperature probe connection for temperature reading and offset adjustment;
- Automatic cool down cycle to extend the lifetime of components;
- Partial and total cycle counter;
- Working time counter;
- Communication with ultrasonic welding machines;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand).

Options

- End splice tool
  Ref: 27-26-0003

- Vacuum holding system
  Ref: 27-26-0001

- Blade holding system
  Ref: 27-26-0002

- Workbench
  Ref: 27-26-0005
- Ring terminal tool
  Ref: 27-26-0004

HOT AIR TECHNOLOGY

HEAT SHRINK SYSTEMS

DATASHEET

STCS B

Reference of the product
14-01-0003

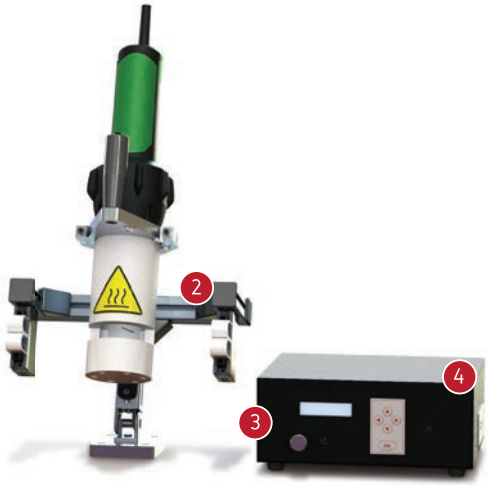
Technology
Hot Air

> Media for this machine

The STCS-B is a machine for processing heat shrink tubes, based on hot air devices. It's designed for workbench applications and can process one part at a time.

The system is made by a control module for parameter´s definition and a hot air tool for the shrinking operation.

It is supplied with a standard shrinking chamber of 15x50mm, which can be customized.



Can be supplied with custom shrinking chambers, designed to specific applications

Can be supplied with customized clamps with automatic holding system and/or cooling system

Use of references or sequences, that can be selected manually or using barcode readers

Lightweight control module, low cost, simple and low maintenance solution for heat shrink applications that require the control of parameters

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	150-350 / 302-662
SHRINKING TIME	
Min - Max [s]	1-999
MEASUREMENTS	
Width; Length; Height [mm] / [in]	290; 255; 530 / 11.4; 10; 20.9
Weight [kg] / [lbs]	3.2 / 7.1
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	50 [mA] to 15 [A] (Max.3400W)
PNEUMATIC	
Supply	-
Supply Pressure	-

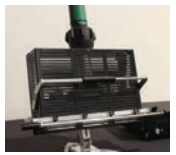
CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	2 IEC C20 Socket
Programming	Membrane Keyboard
Interface	LCD 16x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	50; Ø20 / 2; Ø0.8
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Tube Length [mm] / [in]	0-50 / 0-2
Min-Max Cable Ø [mm] / [in]	0-15 / 0-0.6
Min-Max Cable Length [mm] / [in]	140-∞ / 5.5-∞
CALIBRATION	
Calibration Probe	ref.: 05-22-0011

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references;
- Additional mode with references usage (group of shrinking in sequence - 100 in total);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference;
- Manual calibration;
- Programming mode password protected;
- Cycle counter;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options

- End splice tool
  Ref: 27-01-0002



- Custom shrinking chamber
  Ref: 26-01-0001

- Cooling system
  Ref: 06-01-0137

DATASHEET

STCS L

Reference of the product
14-01-0002

Technology
Hot Air

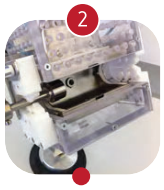
> Media for this machine

The STCS-L is a machine for processing heat shrink tubes, based on hot air devices. It's designed for line panel applications and can process one part at a time.

All controls and interfaces are integrated in a compact box, which includes the hot air tool and clamps, making it the ideal solution for simple line panel applications that require parameter's control.

It is supplied with a standard shrinking chamber 15x50mm, which can be customized.

Can be supplied with custom shrinking chambers, designed for specific applications



Can be supplied with customized clamps with automatic holding system, cooling system or end splice tool

Use of references or sequences, that can be selected manually or using barcode readers

Holding to the panel using a suction vacuum pump, which can be positioned horizontally or vertically

Technical Data

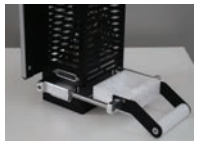
WORKING TEMPERATURE	
Min - Max [°C] / [°F]	150-350 / 302-662
SHRINKING TIME	
Min - Max [s]	1-999
MEASUREMENTS	
Width; Length; Height [mm] / [in]	216; 345; 445 / 8.5; 13.6; 17.5
Weight [kg] / [lbs]	7 / 15.4
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	50 [mA] to 15 [A] (Max.3400W)
PNEUMATIC	
Supply	Quick Hold Socket Ø6 [mm]
Supply Pressure	Min: 4bar; Max: 6bar; Rec: 5bar

CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	2 IEC C20 Socket
Programming	Membrane Keyboard
Interface	LCD 16x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	50; Ø15 / 2; Ø0.6
Min-Max Tube Ø [mm] / [in]	0-15 / 0-0.6
Min-Max Tube Length [mm] / [in]	0-50 / 0-2
Min-Max Cable Ø [mm] / [in]	0-15 / 0-0.6
Min-Max Cable Length [mm] / [in]	200-∞ / 7.9-∞
CALIBRATION	
Calibration Probe	ref.: 05-22-0011

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references;
- Additional mode with references usage (group of shrinking performed in sequence - 100 in total);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference;
- Programming mode password protected;
- Manual calibration;
- Cycle counter;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options



Custom shrinking chamber
Ref: 26-02-0001

- Standard end splice tool
Ref: 27-02-0002

DATASHEET

STCS VM

Reference of the product
14-01-0006

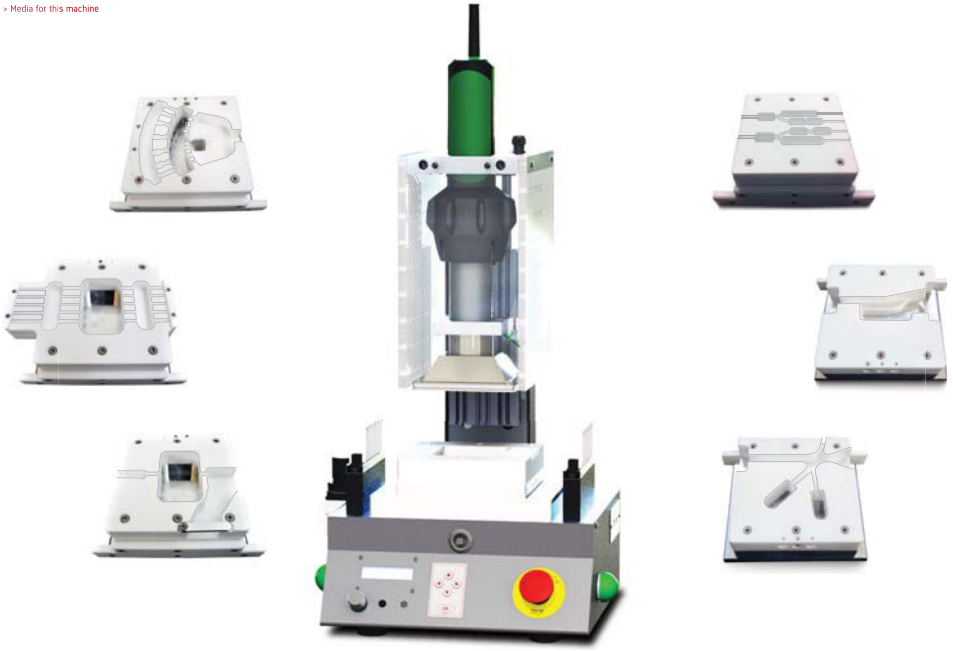
Technology
Hot Air

› Media for this machine

The STCS-VM is a machine for processing heat shrink tubes, based on hot air devices. It's designed for workbench applications and can process several parts at the same time.

The same machine can be used on several applications, since it's equipped with a fast exchangeable shrinking fixture system.

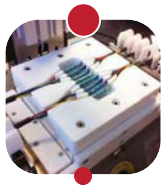
The chambers are designed in accordance with the application specifications, making them ideal for those where the assurance of the heat shrink tube position is mandatory.



Fast changeable shrinking fixture

Optional cooling system

Fixtures designed in accordance with the application, ensuring a strict positioning of the shrink tube during the process



Can process several parts simultaneously

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	150-350 / 302-662
SHRINKING TIME	
Min - Max [s]	1-999
MEASUREMENTS	
Width; Length; Height [mm] / [in]	375; 315; 600 / 14.8; 12.4; 23.6
Weight [kg] / [lbs]	25 / 55.1
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	50 [mA] to 15 [A] (Max.3400W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 4bar; Max: 6bar; Rec: 5bar

CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Membrane Keyboard
Interface	LCD 16x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Fixture [mm] / [in]	100; 100; 27 / 3.9; 3.9; 1.1
Min-Max Tube Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Tube Length [mm] / [in]	0-90 / 0-3.5
Min-Max Cable Ø [mm] / [in]	0-20 / 0-0.8
Min-Max Cable Length [mm] / [in]	-
CALIBRATION	
Calibration Probe	ref.: 05-10-0008

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Easy and fast replaceable shrinking fixture, locked by key;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (each reference can have from 1 to 20 shrinking times);
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Can be supplied with a chamber detection system to automatically select the reference and adjust the parameters for a given chamber;
- Use of labels for each shrinking time inside a reference;
- Manual calibration;
- Programming and maintenance mode password protected;
- Special maintenance mode for hardware debug;
- Cycle counter;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options

- Custom shrinking fixture
  Ref: 06-01-0056

- Cooling system
  Ref: 06-01-0086

- Fixture detection system
  Ref: 06-01-0128

DATASHEET

STCS PHD

The STCS-PHD is a machine for processing heat shrink tubes, based on hot air devices. It's designed for line panel applications and can process one part at a time.

The system is made by a control module for parameter definition and a hot air device for the shrinking operation.

It has several working configurations to easily accommodate all panel applications.

Reference of the product
14-01-0005

Technology
Hot Air

> Media for this machine

Can be supplied with custom shrinking chambers, designed for specific applications

Can work vertically, horizontally, in parallel or perpendicular towards the line panel

Panel fixation using a suction vacuum pump or a blade system

Use of references or sequences, that can be selected manually or using barcode readers

Technical Data

WORKING TEMPERATURE	
Min - Max [ºC] / [ºF]	150-350 / 302-662
SHRINKING TIME	
Min - Max [s]	1-99
MEASUREMENTS	
Width; Length; Height [mm] / [in]	240; 440; 190 / 9.4; 17.3; 7.5
Weight [kg] / [lbs]	6 / 13.2
POWER SUPPLY/CONSUMPTION	
Supply	230 [V] @ 50Hz
Consumption	50 [mA] to 15 [A] (Max.3400W)
PNEUMATIC	
Supply	Quick Hold Socket Ø10 [mm]
Supply Pressure	Min: 5bar; Max: 6bar

CONNECTIONS	
Barcode Reader	RS232
Temperature Sensor	Type K Thermocouple
Power Line	1 IEC C20 Socket
Programming	Membrane Keyboard
Interface	LCD 16x2, Buzzer and LED
SHRINKING CHAMBER	
Shrinking Chamber [mm] / [in]	65; Ø27 / 2.6; Ø1.2
Min-Max Tube Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Tube Length [mm] / [in]	0-80 / 0-3.1
Min-Max Cable Ø [mm] / [in]	0-30 / 0-1.2
Min-Max Cable Length [mm] / [in]	160-∞ / 6.3-∞
CALIBRATION	
Calibration Probe	ref.: 05-22-0011

Features

- Adjustable parameters: process temperature, shrinking time, etc;
- Several working configurations to accommodate all panel´s applications;
- Two different operating modes: M1 with temperature and shrinking time control; and M2 mode with pre-programmed references (each reference can have from 1 to 20 shrinking times);
- Built-in cooling system;
- The pre-programming of references can be done manually or using a PC with STCS-RCT software;
- The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- Use of labels for each shrinking time inside a reference;
- Manual and automatic calibration (single cycle);
- Programming mode password protected;
- Special maintenance mode for hardware debug;
- Cycle counter;
- Air fault detection;
- Interchangeable system language, including: Portuguese, English, French and Spanish (others on demand).

Options

- Vacuum support system
  Ref: 06-01-0063

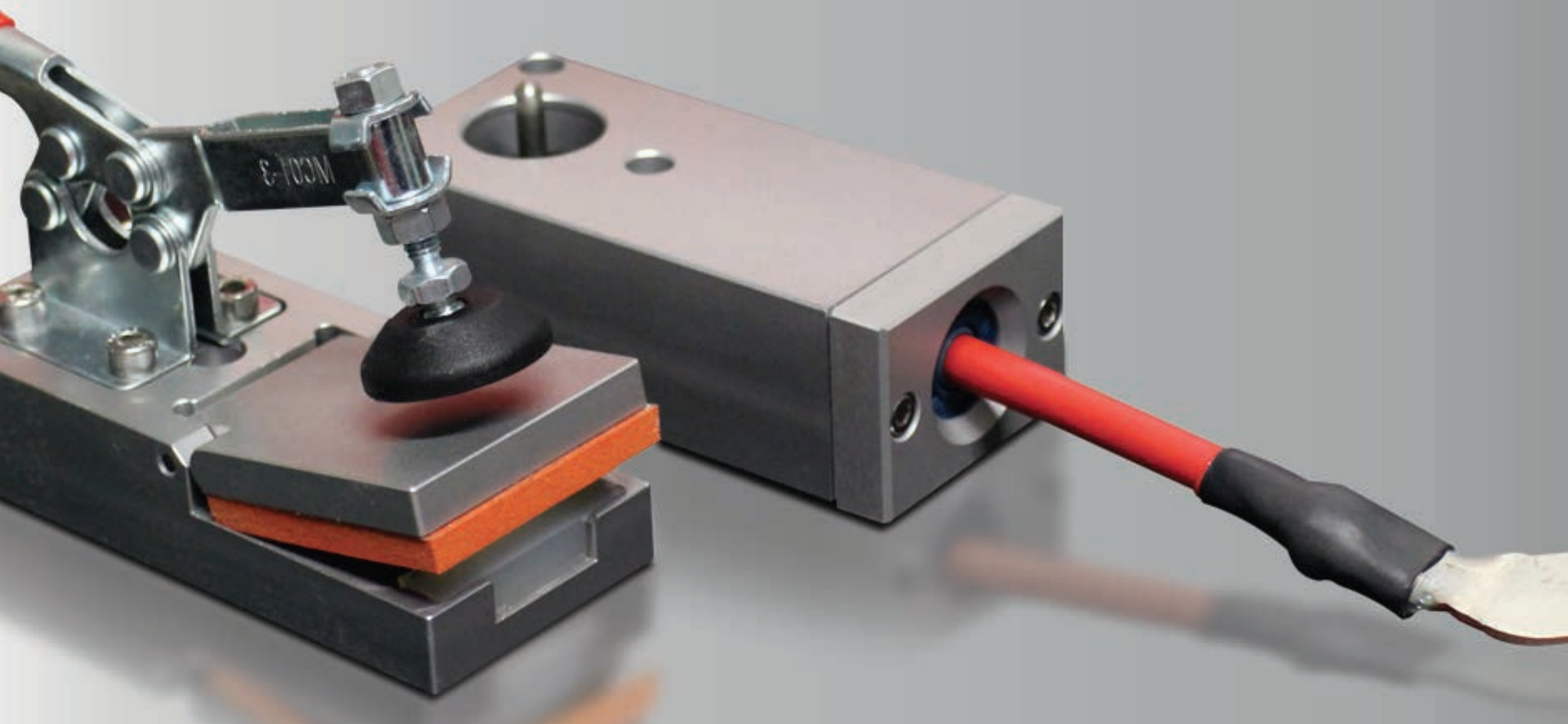
- Blade support system
  Ref: 06-01-0064

- Custom shrinking chamber
  Ref: 06-01-0055

- End splice tool
  Ref: 27-03-0001

TEST SYSTEMS

TEST SOLUTIONS



DATASHEET

STCS BLTTS

Reference of the product
14-03-0010

Technology
Test System

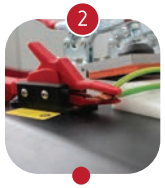
> Media for this machine

The STCS-BLTTS is a test equipment to check sealed splices.

Based on touchscreen technology, it can perform two independent tests: bubble test, to check if the splice is waterproof; and leakage test, to measure the splice's insulation resistance or current.

It's designed to be connected to external printers to instantaneously get the test result and can also be configured with custom test chambers to check big cross-section cables.

Real time automatic pressure test adjustment without the need of manual regulation



Insulation test by checking either current or insulation resistance

Several new generation communication features as Ethernet, USB and HDMI

External printer connection for test results printing

Technical Data

WORKING PRESSURE	
Min - Max [bar] / [psi]	0.1-2 / 1.5-30
PROCESS TIME	
Min - Max [s]	1-999
MEASUREMENTS	
Width; Length; Height [mm] / [in]	660; 557; 370 / 26; 21.9; 14.6
Weight [kg] / [lbs]	30 / 66.1
POWER SUPPLY/CONSUMPTION	
Supply	24 VDC
Consumption	50 [mA] to 1 [A] (Max.24W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 0.5bar; Max: 2bar

CONNECTIONS	
Barcode Reader	USB
Temperature Sensor	-
Power Line	1 DC Socket 2.5 [mm]
Programming	Touchscreen
Interface	Touchscreen, Buzzer and LED
CHAMBER	
Chamber [mm] / [in]	30; 40; 10 / 1.2; 1.6; 0.4
Min-Max Tube Ø [mm] / [in]	-
Min-Max Tube Length [mm] / [in]	-
Min-Max Cable Ø [mm] / [in]	0-6.5 / 0-0.3
Min-Max Cable Length [mm] / [in]	-
CALIBRATION	
Calibration Probe	-

Features

- Adjustable test parameters: test time, test pressure, test resistance failure and test current failure;
- Automatic air pressure adjustment;
- Two different operating modes: M1 with time, pressure and resistance control; and M2 mode with pre-programmed references (999 in total);
- The selection of references can be done automatically using a barcode reader or manually on the touchscreen;
- Selection of which chambers receive test pressure, for air economy;
- Built-in detection system to detect insulation defects either by current leakage or insulation resistance;
- Programable leakage failure threshold (insulation and resistance);
- Insulation resistance failure programable between 1kΩ and 10GΩ;
- Current leakage failure programable between 1nA and 999µA;
- Easy firmware upgrade using a USB stick;
- Manual internal pneumatic calibration;
- Programming mode password protected;
- Error lock (password protected);
- User login to save individual working data, like user ID, time and test result;
- Download of test parameters by USB or Ethernet;
- Pneumatic inlet failure detection;
- Interchangeable unit of pneumatic pressure: bar and PSI;
- Special maintenance mode for hardware debug;
- Equipped with the external pressure verification connection for system pressure reading and offset adjustment;
- Partial and total cycle counter;
- Working time counter;
- Network communication;
- Interchangeable system language including: English, Portuguese, French and Spanish (others on demand);
- Minimal skills required for operating with the machine;
- Special chambers for big cross-section cables.

Options

- Special test chamber (>Ø6.5)
  Ref: 06-01-0127

- Special test chamber for terminals
  Ref: 06-01-0297

DATASHEET

STCS BLT

The STCS-BLT is a manually operated pneumatic device, intended to be used as a convenient "in-process" sampling technique testing sealed splices.

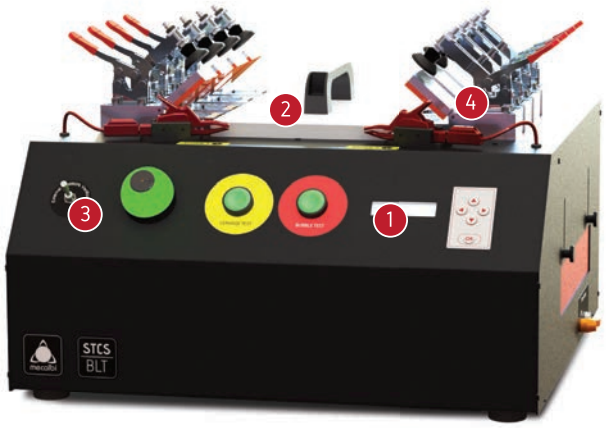
It has a built-in current leakage detection system that detects splice's insulation resistance.

It can be supplied with special test chambers for big cross-section cables.

Reference of the product
14-03-0006

Technology
Test System

> Media for this machine



Real time automatic pressure test adjustment without the need of manual regulation

Built-in current leakage detection system, that measures the electrical resistance of the splice

External pressure test verification

Option of using special chambers, mechanically compatible with normal chambers, to test big cross-section cables

Technical Data

WORKING PRESSURE	
Min - Max [bar] / [psi]	0.1-2 / 1.5-30
PROCESS TIME	
Min - Max [s]	1-999
MEASUREMENTS	
Width; Length; Height [mm] / [in]	561; 525; 345 / 22.1; 20.7; 13.6
Weight [kg] / [lbs]	30 / 66.1
POWER SUPPLY/CONSUMPTION	
Supply	24 VDC
Consumption	50 [mA] to 1 [A] (Max.24W)
PNEUMATIC	
Supply	Quick Hold Socket Ø8 [mm]
Supply Pressure	Min: 0.5bar; Max: 2bar

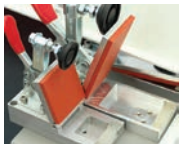
CONNECTIONS	
Barcode Reader	-
Temperature Sensor	-
Power Line	1 DC Socket 2 [mm]
Programming	Membrane Keyboard
Interface	Membrane Keyboard, LCD 16x2, Buzzer, LED
CHAMBER	
Chamber [mm] / [in]	30; 40; 10 / 1.2; 1.6; 0.4
Min-Max Tube Ø [mm] / [in]	-
Min-Max Tube Length [mm] / [in]	-
Min-Max Cable Ø [mm] / [in]	0-6.5 / 0-0.3
Min-Max Cable Length [mm] / [in]	-
CALIBRATION	
Calibration Probe	-

Features

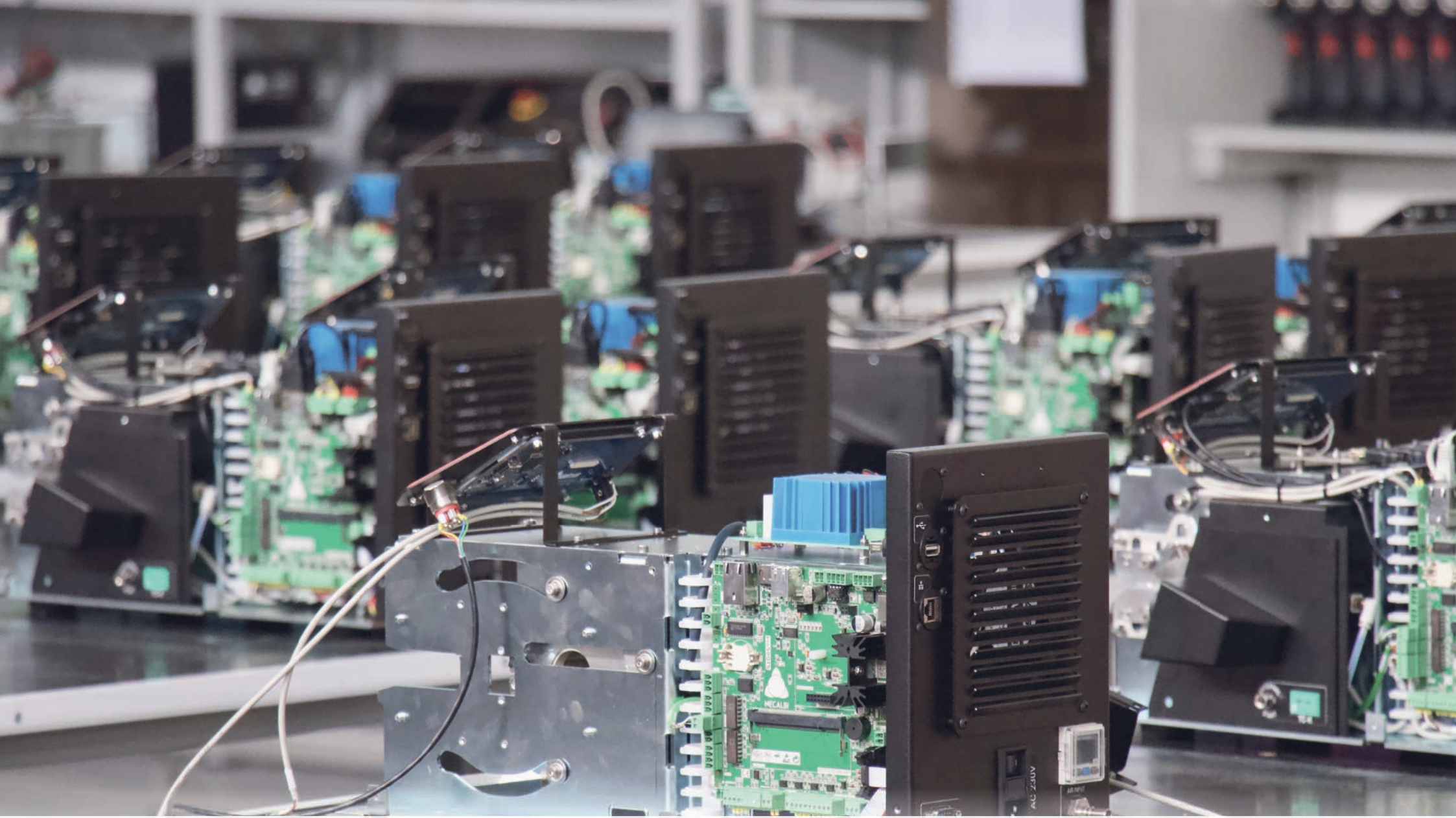
- Automatic air pressure adjustment;
- Selection of which chambers receive test pressure, for air economy;
- Configurable test time and test pressure;
- Built-in detection system to detect insulation defects either by current leakage or insulation resistance;
- Programable leakage failure threshold (insulation and resistance);
- Insulation resistance failure programable between 1kΩ and 10GΩ;
- Current leakage failure programable between 1nA and 999µA;
- Bubble and leakage test counter;
- Manual internal pneumatic calibration;
- Password protected menu;
- Error lock (password protected);
- Pneumatic inlet failure detection;
- Interchangeable system language, including: English, Portuguese, French and Spanish (others on demand);
- Minimal skills required for operating with the machine;
- Special chambers for big cross-section cables.

Options

- Special test chamber (>Ø6.5)
  Ref: 06-01-0127



- Special test chamber for terminals
  Ref: 06-01-0297



Differentiation Approach

Lead Times
Four weeks for machines/typical One week for spare parts.

Service
Direct contact and quick feedback.

Flexibility
Always available to implement custom solutions based on the client needs.

Range of Products
Our range of products covers the entire spectrum of shrinking needs.

Competitive Prices

Reactiveness
When a client asks for last minute changes, we always adapt.

Research and Development
Two new solutions in the market each year.

Technology
Our products integrate state of the art technology.