



**Autotool 2000 CPK**

Operating Instructions



## Table of contents

<b>1</b>	<b>Notes for the user</b> . . . . .	<b>5</b>		
1.1	Information about the product . . . . .	5		
1.2	Warranty . . . . .	5		
1.3	Contact data . . . . .	5		
1.4	Information about these Operating Instructions . . . . .	5		
1.5	Copyright and intellectual property rights	5		
1.5.1	Keeping and dissemination of the Operating Instructions . . . . .	5		
1.6	Target group of these Operating Instructions . . . . .	5		
1.7	General information . . . . .	5		
1.8	Conventions adopted in these Operating Instructions . . . . .	6		
1.8.1	Classification of the precautionary notices	6		
1.8.2	Other notational conventions . . . . .	6		
<b>2</b>	<b>Safety warnings</b> . . . . .	<b>6</b>		
2.1	General power tool safety warnings . . . . .	6		
2.1.1	Work area safety . . . . .	6		
2.1.2	Electrical safety . . . . .	6		
2.1.3	Personal safety . . . . .	7		
2.1.4	Power tool use and care . . . . .	7		
2.1.5	Servicing . . . . .	7		
2.2	Intended use . . . . .	7		
2.3	Misuse . . . . .	7		
2.4	Personnel qualification . . . . .	8		
2.4.1	Specialist personnel for operation . . . . .	8		
2.4.2	Specialist personnel for maintenance and servicing . . . . .	8		
2.4.3	Authorised person for low-voltage electrical equipment . . . . .	8		
2.4.4	Authorised specialist for repair and testing . . . . .	8		
2.5	Underlying hazards associated with use of the device . . . . .	8		
2.5.1	Cleanliness at the workplace . . . . .	8		
2.5.2	Spare parts and accessories . . . . .	8		
<b>3</b>	<b>Design and function</b> . . . . .	<b>9</b>		
3.1	Overview of the device . . . . .	9		
3.1.1	Scope of supply . . . . .	9		
3.1.2	Serial number . . . . .	9		
3.1.3	Checking scope of supply . . . . .	9		
3.2	Functional description . . . . .	10		
3.2.1	Tool AT2000 CPK . . . . .	10		
3.2.2	Power pack CPK . . . . .	10		
<b>4</b>	<b>Transport, disposal and storage</b> . . . . .	<b>11</b>		
4.1	Transporting the device . . . . .	11		
4.2	Disposal . . . . .	11		
4.3	Storage . . . . .	11		
<b>5</b>	<b>Installation</b> . . . . .	<b>11</b>		
5.1	Installing the accessories . . . . .	11		
5.2	Connecting the device . . . . .	11		
<b>6</b>	<b>Operation</b> . . . . .	<b>11</b>		
6.1	Switching on . . . . .	11		
6.2	Switching off . . . . .	11		
6.3	Loading cable ties . . . . .	11		
6.4	Positioning and binding items for bundling . . . . .	12		
6.4.1	Emptying the waste box . . . . .	12		
<b>7</b>	<b>Service menu</b> . . . . .	<b>12</b>		
7.1	Navigation . . . . .	12		
7.2	Start menu . . . . .	13		
7.3	Main menu . . . . .	13		
7.4	Languages menu . . . . .	13		
7.5	Status menu . . . . .	13		
7.6	Settings menu . . . . .	13		
7.6.1	Force level . . . . .	13		
7.6.2	Quality . . . . .	14		
7.6.3	Interruption front sensor . . . . .	14		
7.6.4	Date / time . . . . .	14		
7.6.5	Check of binding . . . . .	14		
7.7	Contact menu . . . . .	14		
<b>8</b>	<b>HT Data Management</b> . . . . .	<b>15</b>		
8.1	First steps . . . . .	15		
8.2	Access levels . . . . .	15		
8.2.1	Start page/Binding menu . . . . .	15		
8.2.2	Service menu . . . . .	15		
8.2.3	Memory menu . . . . .	15		
8.2.4	Update menu . . . . .	15		
8.2.5	Measurement environment menu . . . . .	15		
8.3	Binding menu . . . . .	16		
8.3.1	Entering password . . . . .	16		
8.3.2	Select a language . . . . .	17		
8.3.3	Show binding information . . . . .	17		
8.3.4	Change binding parameter settings . . . . .	17		
8.3.5	Status indicators . . . . .	17		

8.3.6	Synchronising time and date . . . . .	17	<b>11</b>	<b>Technical data . . . . .</b>	<b>32</b>
8.4	Service menu . . . . .	18	11.1	Tool AT2000 CPK . . . . .	32
8.4.1	Changing other parameter settings . . .	18	11.2	Power pack CPK . . . . .	33
8.4.2	Changing the access code in the AT2000 CPK . . . . .	18	11.3	Noise and vibration information. . . . .	33
8.5	Memory menu . . . . .	19	<b>12</b>	<b>Declarations of conformity . . . . .</b>	<b>34</b>
8.5.1	Refresh memory of the tool . . . . .	19	12.1	AT2000 CPK automatic tool system . . .	34
8.5.2	Select bindings . . . . .	19	12.2	Power pack CPK . . . . .	35
8.5.3	Select messages . . . . .	19			
8.5.4	Export process data . . . . .	20			
8.6	Update menu . . . . .	20			
8.6.1	Update firmware . . . . .	21			
8.6.2	Change password . . . . .	21			
8.6.3	Update binding parameter settings . . .	21			
8.6.4	Install other languages. . . . .	21			
8.7	Measurement environment menu . . . .	22			
8.7.1	Using measurement mode . . . . .	22			
8.7.2	Deleting measurement results . . . . .	23			
8.7.3	Saving measurement results. . . . .	23			
8.7.4	Deactivating measurement mode . . . .	23			
8.8	Exporting process data from the power pack . . . . .	23			
8.8.1	Converting CSV file . . . . .	23			
<b>9</b>	<b>Troubleshooting . . . . .</b>	<b>24</b>			
9.1	Important notes . . . . .	24			
9.2	Performing a reset . . . . .	24			
9.3	Display messages. . . . .	25			
9.4	Possible fault . . . . .	28			
9.4.1	Troubleshooting a cable-tie bandoleer malfunction. . . . .	28			
9.4.2	Changing back-up battery . . . . .	29			
<b>10</b>	<b>Maintenance . . . . .</b>	<b>29</b>			
10.1	Important notes . . . . .	29			
10.2	Accessories and extras . . . . .	29			
10.3	Servicing by manufacturer . . . . .	29			
10.4	Maintenance schedule. . . . .	30			
10.5	Repair . . . . .	30			
10.5.1	Checking upper jaw . . . . .	30			
10.5.2	Replacing upper jaw . . . . .	30			
10.5.3	Checking front cap and position of c utter . . . . .	31			
10.5.4	Checking tie advancer . . . . .	31			
10.5.5	Replacing tie advancer. . . . .	31			

## 1 Notes for the user

These Operating Instructions are very important for correct use of the device.

They contain important information and safety instructions that will enable you to utilise the product correctly and economically for its intended use.

The instructions help avoid hazards, reduce repair costs and downtimes, and enhance the dependability and durability of the device.

Non-compliance of any nature whatsoever can lead to accidents with fatal consequences, injury or damage to property.

### 1.1 Information about the product

Product designation: AT2000 CPK

Article number: 106-00000

### 1.2 Warranty

The warranty is in accordance with statutory requirements. Warranty entitlement applies only in the country in which the device was originally purchased.

Batteries, fuses and light sources are not covered by the warranty.

### 1.3 Contact data

The manufacturer of the product described in these Operating Instructions is:

HellermannTyton GmbH

Grosser Moorweg 45

D-25436 Tornesch, Germany

Tel. +49 4122 701-0

[www.HellermannTyton.de](http://www.HellermannTyton.de)

[info@HellermannTyton.de](mailto:info@HellermannTyton.de)

### 1.4 Information about these Operating Instructions

Last update: 08.09.2017

### 1.5 Copyright and intellectual property rights

The manufacturer retains the copyright to these Operating Instructions. Under no circumstances may these instructions be reproduced or electronically processed, replicated or disseminated, in whole or in part, without the prior written consent of HellermannTyton GmbH (hereinafter referred to as HellermannTyton). Any breach or infringement of these stipulations will result in liability for damages.

### 1.5.1 Keeping and dissemination of the Operating Instructions

These Operating Instructions must be kept in the immediate vicinity of the workplace and must be available at all times to all operating personnel. The operating company shall inform the operating personnel of the location of these Operating Instructions.

The operating company shall obtain replacement from the manufacturer if these instructions are, become or are rendered no longer easily legible.

If the device is acquired by or sold on to a third party the following documents must be handed over to the new owner:

- Operating Instructions
- Documents relating to repair work
- Logs of repair work undertaken
- ▶ Protect these Operating Instructions from moisture, direct sunlight and extreme heat.

### 1.6 Target group of these Operating Instructions

These Operating Instructions must be read and complied with by every person charged with any of the following tasks:

- Installation
- Operation
- Servicing
- Repair
- Fault rectification

### 1.7 General information


All accompanying drawings are not covered by the change service.


## 1.8 Conventions adopted in these Operating Instructions


### 1.8.1 Classification of the precautionary notices

Precautionary notices in these Operating Instructions draw attention to hazards associated with use of the device and indicate how they can be avoided.

The precautionary notices are subdivided into three groups according to the severity of the potential hazard:

 <b>DANGER</b>
<p>Texts accompanied by the signal word "DANGER" indicate hazardous situations which, in the event of non-compliance with the appropriate precautions, will cause death or severe injury.</p>

 <b>WARNING</b>
<p>Texts accompanied by the signal word "WARNING" indicate hazardous situations which, in the event of non-compliance with the appropriate precautions, can cause death or serious injury.</p>

 <b>CAUTION</b>
<p>Texts accompanied by the signal word "CAUTION" indicate hazardous situations which, in the event of non-compliance with the appropriate precautions, can cause slight or serious injury.</p>

### 1.8.2 Other notational conventions


- ▶ Indicates an instruction
- Indicates an item in a bulleted list
- ☑ Indicates the result of an action

**This text highlight** is used for names of menus, clickable on-screen buttons, pushbuttons and switches.

This text highlight is used for display messages.


→ This text highlight is used for cross-references.


<b>NOTE</b>
<p>Texts accompanied by the signal word "NOTE" indicate situations which, in the event of non-compliance with the appropriate precautions, can cause damage to the device or the surroundings.</p>

 Texts accompanied by this symbol contain useful additional information.

## 2 Safety warnings

### 2.1 General power tool safety warnings

 The safety warnings in this section contain general power tool safety warnings to be set out verbatim in the Operating Instructions as required by EN 60745. Consequently, some instructions might not be relevant for the AT2000 CPK.

 <b>WARNING</b>
<p><b>Read all safety warnings and all instructions.</b> <i>Failure to follow the warning and instructions may result in electric shock, fire and/or serious injury.</i></p>

**Save all safety warnings and other instructions for future reference.** The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### 2.1.1 Work area safety

- a) **Keep work area clean and well lit.** *There is an increased risk of accident in cluttered or poorly lit areas.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### 2.1.2 Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **Use a suitable extension cord.** *Use of a suitable extension cord reduces the risk of electric shock.*
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*



### 2.1.3 Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*
- d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

### 2.1.4 Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children. Do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

### 2.1.5 Servicing

**Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

### 2.2 Intended use

Use the device only when it is in full working order and safe, always be safety-conscious and aware of the hazards.

The AT2000 CPK is suitable for and intended for the following uses:

- Automatic binding of bundles up to a diameter of max. 20 mm
- Use indoors and, under rainproof roofing, outdoors
- Industrial use

### 2.3 Misuse

Use other than as stated in the section entitled "→ *Intended use*" on page 7" is misuse. The operator of the device bears sole responsibility for injury and damage resulting from misuse.

The following are specifically prohibited:

- Use with faulty parts
- Use in explosive environments or in the presence of a fire hazard
- Use in high humidity and/or direct sunlight
- Simultaneous use by two or more persons
- Unauthorised alterations and modifications to the device and its accessories without the prior consent of HellermannTyton
- Use of spare parts and accessories not tested and approved beforehand by HellermannTyton
- Operation of the device without closed service covers fitted at the gate

## 2.4 Personnel qualification

Under-age persons and trainees are permitted to use the device only under the supervision of an experienced specialist and only with the express permission of the operating company.

### 2.4.1 Specialist personnel for operation

The tasks and authorisations assigned to specialist personnel for extended operation are as follows:

- Operation of the device
- Rectification of faults or, as applicable, initiation of measures for the rectification of faults
- Cleaning of the device

These individuals have the specialist training or practical experience that will ensure correct handling.

### 2.4.2 Specialist personnel for maintenance and servicing

Always have maintenance and servicing carried out by duly qualified specialist personnel. These individuals have the specialist training that affords sufficient knowledge of the device for them to judge when it is in safe working order.

These individuals are also familiar with the following rules and regulations:

- Applicable national health and safety regulations
- Accident prevention regulations
- Generally accepted rules of engineering practice (e.g. employers' liability insurance association codes, DIN standards, VDE regulations, technical rules of other European Union member states or other states party to the Agreement on the European Economic Area).

### 2.4.3 Authorised person for low-voltage electrical equipment

Work on the electrical supply and on parts that are live when the device is in operation should always be carried out by a person duly authorised to work on low-voltage electrical equipment.

### 2.4.4 Authorised specialist for repair and testing

Only service technicians from HellermannTyton or service technicians certified by HellermannTyton are permitted to carry out repairs and safety checks.

## 2.5 Underlying hazards associated with use of the device

### 2.5.1 Cleanliness at the workplace

Orderliness, good lighting and cleanliness at the workplace all help to make work easier, minimise hazards and reduce the risk of injury.

Always comply with the following principles of orderliness and cleanliness at the workplace.

- ▶ Put tools away as soon as they are no longer needed.
- ▶ Avoid trips (e.g. immediately dispose of waste by placing it in the containers provided for the purpose).
- ▶ Immediately remove spillages of grease, oil and other liquids.
- ▶ Clean smears off the controls.

### 2.5.2 Spare parts and accessories

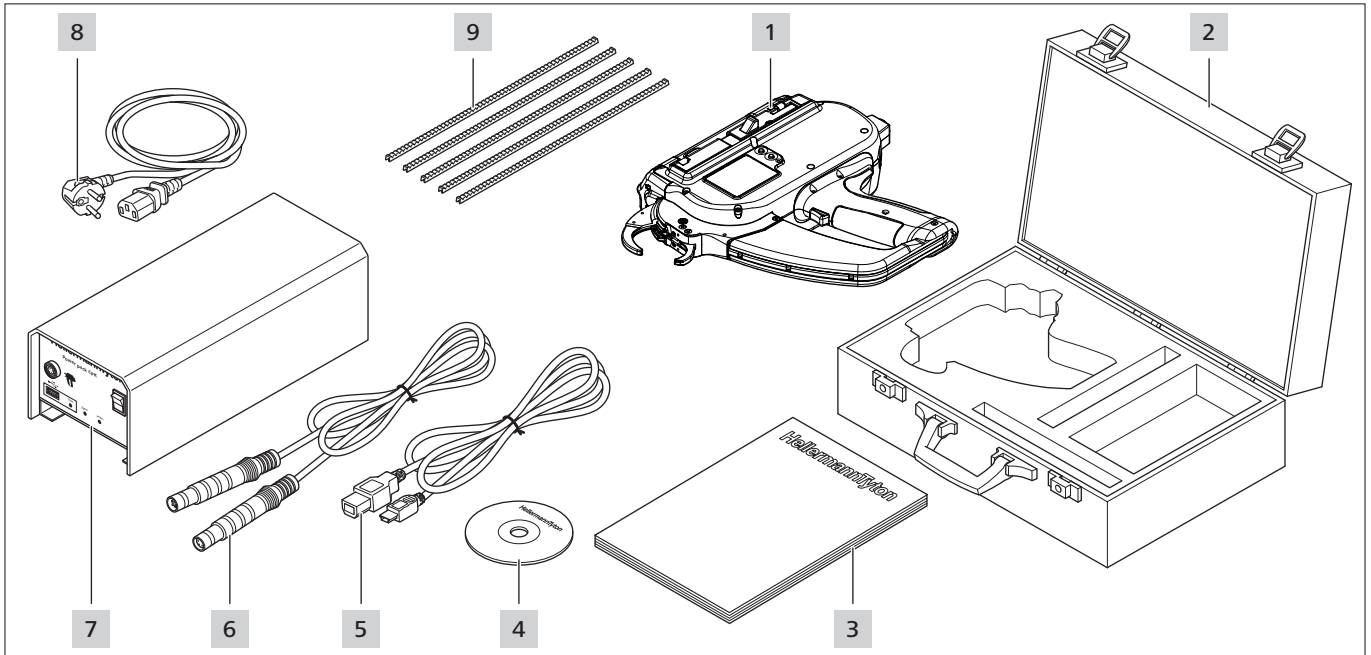
- ▶ Use only OEM spare parts.
- ▶ After parts have been replaced, always make sure that everything is in full working order.
- ▶ Use only accessories approved by HellermannTyton. Accessories can affect the way in which the device works.



### 3 Design and function

#### 3.1 Overview of the device

##### 3.1.1 Scope of supply

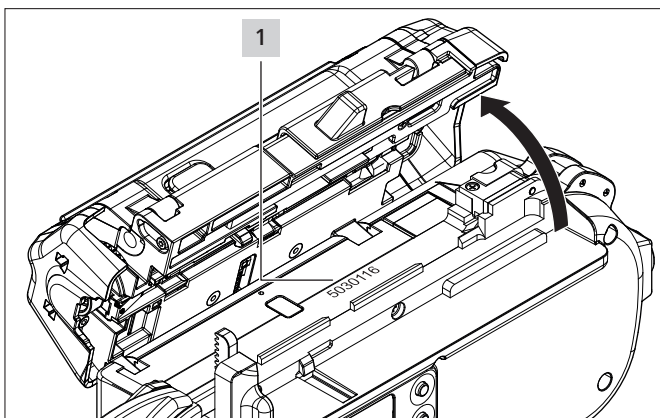


- 1 AT2000 CPK
- 2 Case, complete with 2 keys
- 3 CPK safety warnings
- 4 CPK Operating Instructions on CD
- 5 USB connecting cable A/B (separate delivery)
- 6 Connecting cable for connecting power pack and AT2000 CPK
- 7 power pack CPK (separate delivery)
- 8 Power cord (separate delivery)
- 9 Tie advancer

##### 3.1.3 Checking scope of supply

- ▶ Check that nothing is missing and that there are no visible signs of damage in transit or other damage. Have damage confirmed by the freight forwarder and notify HellermannTyton immediately in writing.

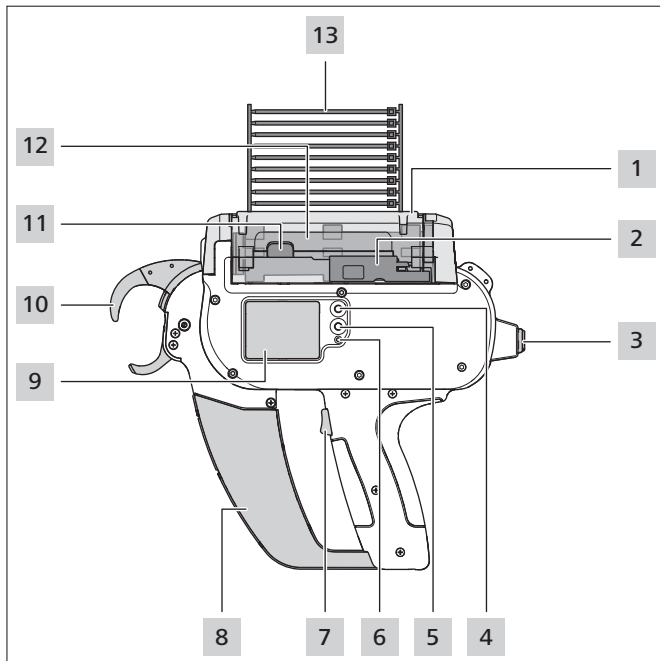
##### 3.1.2 Serial number



**i** Serial number **1** is inside the AT2000 CPK. It is visible when the gate is open.

### 3.2 Functional description

#### 3.2.1 Tool AT2000 CPK



- 1 Release button for left service cover
- 2 Actuator bandoleer cutter
- 3 Socket for connection to power pack
- 4 Enter button for confirming a selection
- 5 Select and reset button for selecting a menu
- 6 LED status indicator
- 7 Start trigger
- 8 Box for waste material
- 9 Display with touch-sensitive controls
- 10 Front cap with level sensor, upper and lower jaws
- 11 Catch
- 12 Drum
- 13 Cable tie bandoleer

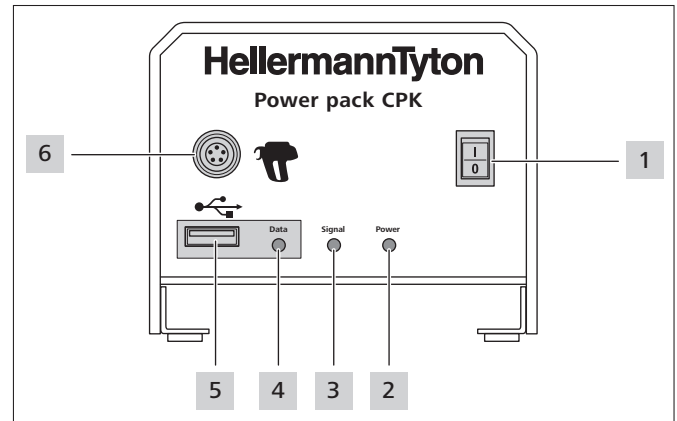
The AT2000 CPK is an electrically powered system for bundling electrical wires, for example, and for securing parts of various kinds with T18RA cable ties, 100 mm x 2.5 mm x 1 mm (L x W x T).

Force and quality of the binding can be software-controlled or set by means of the display on the device. The items to be bundled have to be positioned between the jaws and against the front cap. The device then closes the tie as soon as the trigger is pressed.

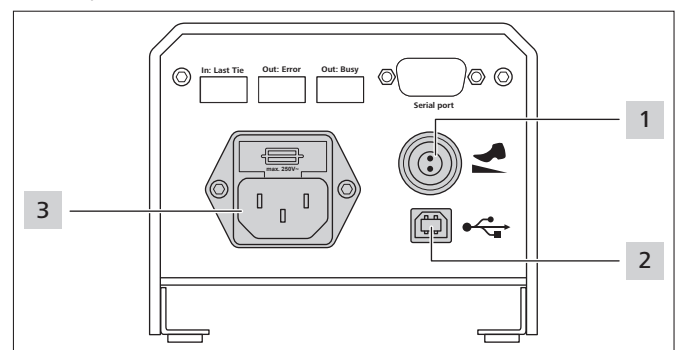
If a fault occurs, messages appear on the display to step the user through the recommended fault-diagnosis routine.

Process data of various kinds are collected during use. These data can be analysed by PC software and used to document process capability, for example. In addition, the operator is notified if the tension force exceeds the preset.

#### 3.2.2 Power pack CPK



- 1 Main switch
- 2 LED indicator **Power**:  
Green: Power pack ON
- 3 LED indicator **Signal**:  
Green: AT2000 CPK Connected and ready,  
Red: Fault  
Yellow: Binding cycle active  
Blue: Navigation in main menu, binding not possible
- 4 LED indicator **Data**:  
Green: PC connected; AT2000 CPK connected; USB stick found; USB stick can be removed,  
Red/green flashing: Data are being written to USB stick
- 5 USB port for exporting process data to USB memory stick
- 6 Socket for connection to AT2000 CPK



- 1 Socket for foot pedal
- 2 USB port for connection to PC
- 3 Socket for power supply

In automatic systems, the AT2000 CPK can be integrated with the power pack with control box (106-00110) via a serial interface.

## 4 Transport, disposal and storage


### 4.1 Transporting the device

- ▶ Always use the case that comes with the device to transport the AT2000 CPK.

### 4.2 Disposal

End-of-life (EOL) disposal of the device and individual subassemblies and the disposal of consumables and auxiliaries are subject in part to statutory regulations. Detailed information is available on request from the appropriate authorities (e.g. regional or national water boards or environmental authorities).

- ▶ Dispose of packaging materials.

 Always dispose of packaging materials in accordance with the currently valid materials-disposal and environmental protection regulations.

- ▶ Always take materials for disposal to certified collection points.
- ▶ Contact the manufacturer if there is any uncertainty regarding disposal.

### 4.3 Storage

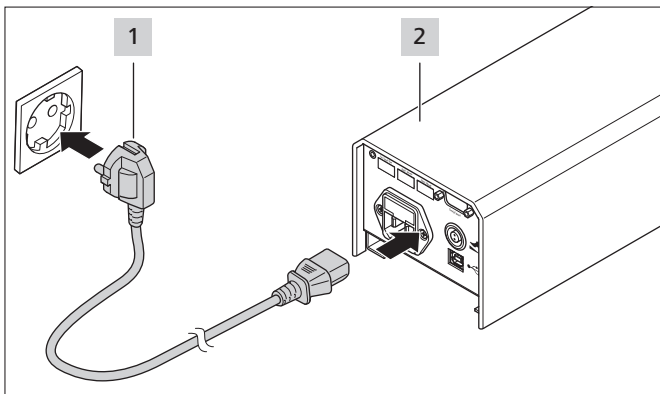
- ▶ Store the tool and the power pack in a cool, dry place.
- ▶ Avoid direct sunlight.
- ▶ Store the tool and the power pack in dustproof packaging.
- ▶ Store electrical components (tool and power pack) in impact-absorbing packaging and separately from the accessories.
- ▶ Consult and comply with the appropriate data sheets for storage of the accessories.

## 5 Installation

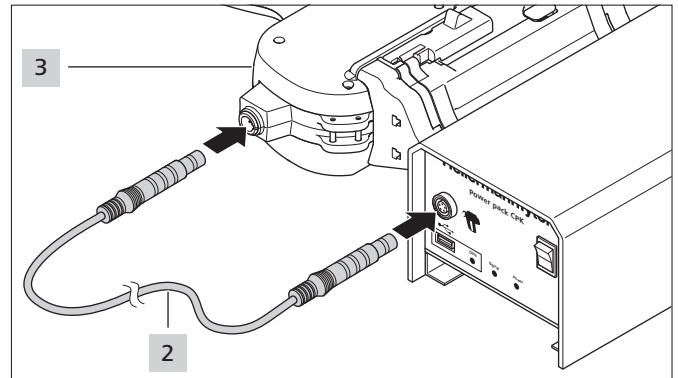
### 5.1 Installing the accessories

- ▶ Always proceed in accordance with the instructions supplied with the accessory in question.

### 5.2 Connecting the device



- ▶ Connect power pack **2** to power-supply outlet **1**.



- ▶ Use connecting cord **2** to connect the power pack to tool AT2000 CPK **3**.

## 6 Operation

### 6.1 Switching on

- ▶ The power-supply outlet must be readily accessible so that the system can be de-energised if the need arises.
- ▶ Keep the main switch OFF when the AT2000 CPK is not in use and when a change is to be made.
- ▶ Switch the power pack ON at the main switch.
- The **Signal** and **Power** LEDs on the power pack show green.
- The **Status** LED on the AT2000 CPK shows green.
- The welcome screen appears on the display:

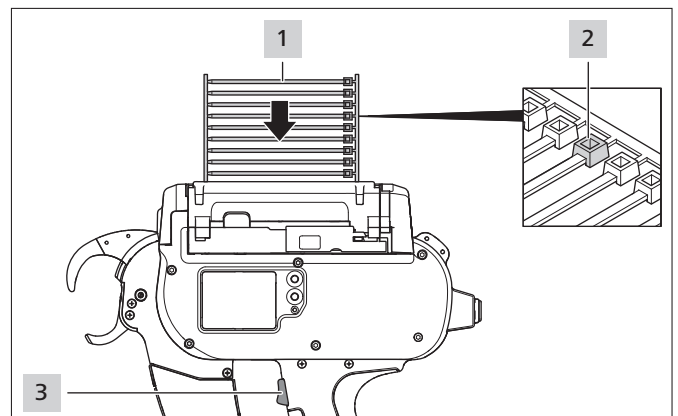


- The device is ready for use.

### 6.2 Switching off

- ▶ Switch the power pack OFF at the main switch.

### 6.3 Loading cable ties



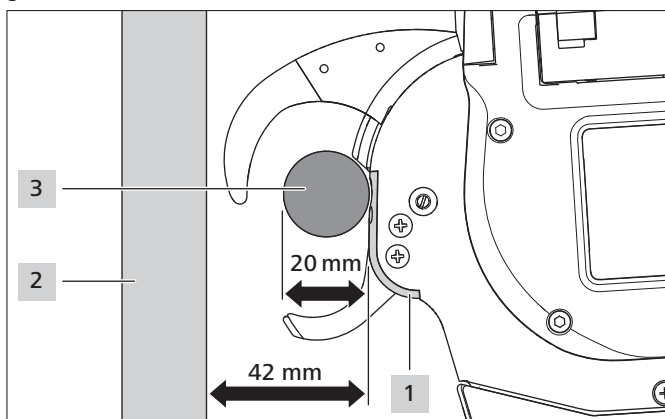
- ▶ Insert cable tie bandoleer **1** parallel with the drum.
- Make sure that cable-tie heads **2** are facing up.
- ▶ Press start trigger **3**.

- ▶ If there are no cable ties in the device three blank shots are fired.
- ☑ The cable ties are loaded.

### 6.4 Positioning and binding items for bundling

- ▶ Set the **Force level** and/or **Quality** parameters, → "Settings menu" on page 13 or → "Change binding parameter settings" on page 17.
- ▶ Check the time and date; set if necessary, → "Date / time" on page 14 .

The device is suitable for the following bundle geometries:

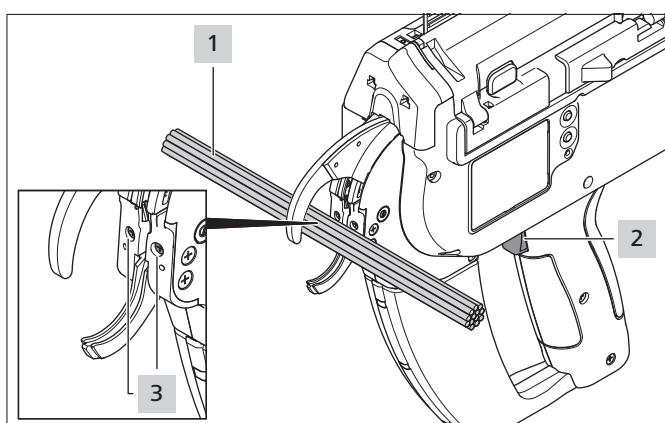


The distance from front cap **1** to flat **2** must be at least 42 mm. Bundle **3** can be no more than 20 mm in diameter.

**CAUTION**

**Crush hazard when jaws close.**

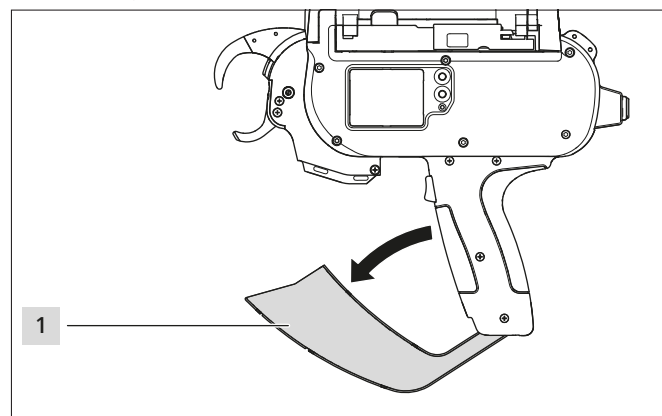
- ▶ Do not insert fingers between upper and lower jaws and do not keep your finger on the trigger.
- ▶ Always keep the power pack switched OFF when clearing a blockage.



- ▶ Centre bundle **1** in line with front-cap screws **3**. Space adjacent cable ties at least 10 mm apart.
- ▶ Press start trigger **2**.
- ☑ Bundle **1** is secured by the cable tie.

### 6.4.1 Emptying the waste box

The waste box has to be emptied after a maximum of 120 bindings at a bundle diameter of 3 mm.



- ▶ Pull waste box **1** in the direction indicated by the arrow and empty the box.
- ▶ Close waste box **1**.

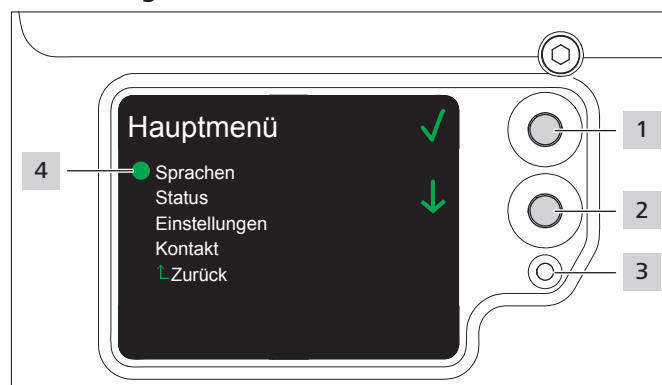
## 7 Service menu

The AT2000 CPK has a Service menu for setting and checking numerous functions.

The menu covers:

- Language setting
- Device status
- Settings
- Contact

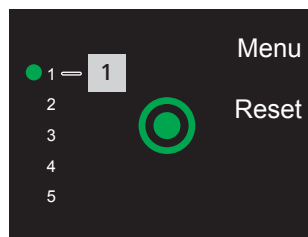
### 7.1 Navigation



- 1 Enter button for confirming a selection
  - 2 Select and reset button for selecting a menu
  - 3 LED status indicator **Signal**:  
Green: AT2000 CPK connected and ready  
Red: Error
  - 4 Green marker to indicate which menu has been selected
- ▶ Press Select button **2** to select menu **4** of your choice.
  - ▶ Press Enter button **1**.
  - ▶ Check the LED status indicator, → "Troubleshooting" on page 24.

### 7.2 Start menu

- ▶ Switch the AT2000 CPK ON, → "Switching on" on page 11.
- ☑ Wait approximately 5 seconds for the Start menu to appear on the display.

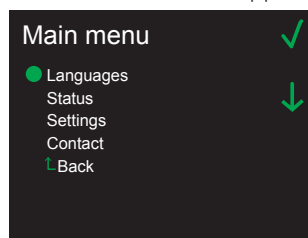


- ☑ The green highlight indicates the current force level 1.

### 7.3 Main menu

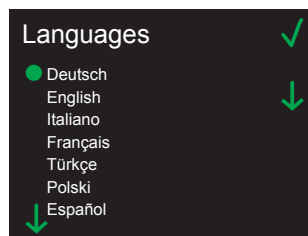
**i** Bindings cannot be triggered while you are navigating in the main menu. The **Signal** LED on the power pack shows blue.

- ▶ Press the Enter button.
- ☑ The **Main menu** appears on the display.



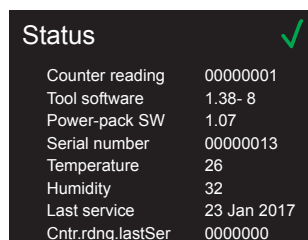
### 7.4 Languages menu

You use the **Languages** menu to select the language for the menus.



- ▶ Use the Select button to select the language.
- ▶ Press the Enter button.
- ☑ The display switches to the language you selected.

### 7.5 Status menu



The **Status** menu shows you the following status readings.

- Counter reading
- Software version of the tool (Tool) and an index number for the language version

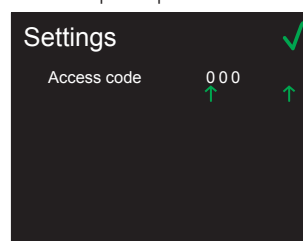
- Software version of the power pack
- Serial number of the tool
- Ambient temperature and humidity
- Date of last service
- Counter reading at last service

### 7.6 Settings menu

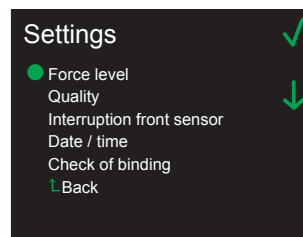
You use the **Settings** menu to set important parameters of the AT2000 CPK.

**i** Access to the **Settings** menu is protected by a three-digit access code that can be changed in the HT Data Management software, → "Changing the access code in the AT2000 CPK" on page 18. The default access code is **000**.

- ▶ Use the Select button in the **Main menu** to select the **Settings** menu.
- ▶ Press the Enter button.
- ☑ The prompt for the access code appears on the display.

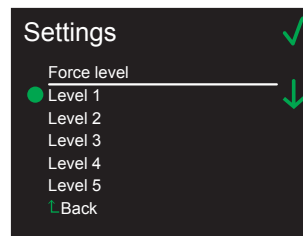


- ▶ Use the Select button to enter each digit of the access code.
- ▶ Press the Enter button to confirm each digit.
- ☑ The **Settings** menu appears on the display.



#### 7.6.1 Force level

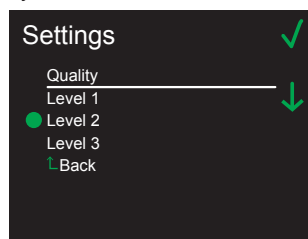
The **Force level** setting corresponds to the force applied by the AT2000 CPK when binding, and it can be set from **Level 1** (lowest force) to **Level 5** (highest force).



- ▶ Use the Select button to select the force level.
- ▶ Press the Enter button.
- ☑ The setting changes to the level you selected.

### 7.6.2 Quality

The **Quality** setting corresponds to the quality of binding and it can be set from **Level 1** (lowest quality) to **Level 3** (highest quality). The higher the level the longer the cycle time, so the bundle has more time to settle.

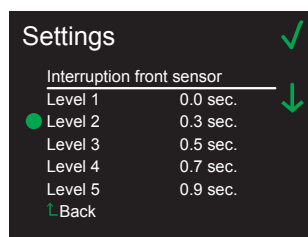


- ▶ Use the Select button to select the quality level.
- ▶ Press the Enter button.
- ☑ The setting changes to the quality you selected.

### 7.6.3 Interruption front sensor

The **Interruption front sensor** setting enables you to decide how long the level sensor can remain busy without the **Error, front cap** message appearing on the display.

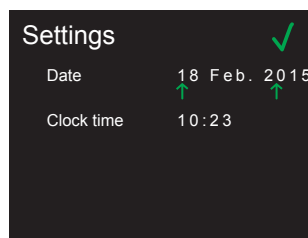
**i** This function is intended for use with the device integrated into an automatic system.



- ▶ Use the Select button to select the level.
- ▶ Press the Enter button.
- ☑ The setting changes to the level you selected.

### 7.6.4 Date / time

You can set the **Date / time** for process documentation.

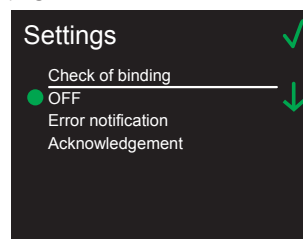


- ▶ Use the Select button to change the date and time, as applicable.
- ▶ Press the Enter button to confirm each digit.
- ☑ The setting changes to the option you selected.

**i** Date and time can also be synchronised with the PC date and time, → "Date / time" on page 14.

### 7.6.5 Check of binding

The **Check of binding** setting enables you to decide whether or not the **Error, binding force** message appears on the display, → "Display messages" on page 25.

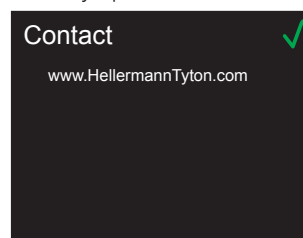


- ▶ Use the Select button to select the option of your choice.
- ▶ Press the Enter button.
- ☑ The setting changes to the option you selected.

Setting	Meaning
<b>OFF</b>	The <b>Error, binding force</b> message does not appear on the display.
<b>Error notification</b>	The <b>Error, binding force</b> message appears when applicable but does not require confirmation.
<b>Confirmation</b>	The <b>Error, binding force</b> message appears when applicable and requires confirmation. The next binding is not possible until the trigger has been pulled to confirm the message.

### 7.7 Contact menu

The **Contact** menu shows you the current website with country-specific contact data.





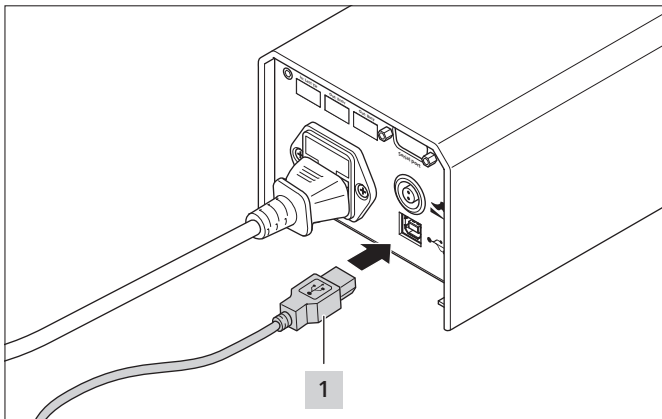
## 8 HT Data Management

The HT Data Management software enables you to:

- Update the software for the power pack and the AT2000 CPK.
- Export production data.
- Change parameter settings.

### 8.1 First steps

- ▶ Copy the HT Data Management software to the hard drive of a PC.
- ▶ Switch the AT2000 CPKON, → "Switching on" on page 11.



- ▶ Connect the PC to the power pack with USB cable **1** provided for the purpose.
- ▶ Launch the HT Data Management software.
- ☑ The HT Data Management start page appears on the screen, → "Binding menu" on page 16.

### 8.2 Access levels

There are two access levels. Each level permits access to the features available on the lower levels:

- Operator level
- Setup-specialist level

#### 8.2.1 Start page/Binding menu

Function Level	Binding information	Binding parameters	Change language	Synchronise with PC time
Operator	Read	No	Yes	Yes
Setup specialist	Read	Yes	Yes	Yes

#### 8.2.2 Service menu

Function level	Change service parameter settings	Change parameter settings	Change access code
Operator	No	No	No
Setup specialist	No	Yes	Yes

#### 8.2.3 Memory menu

Function level	Export data	Delete memory
Operator	Yes	No
Setup specialist	Yes	No

#### 8.2.4 Update menu

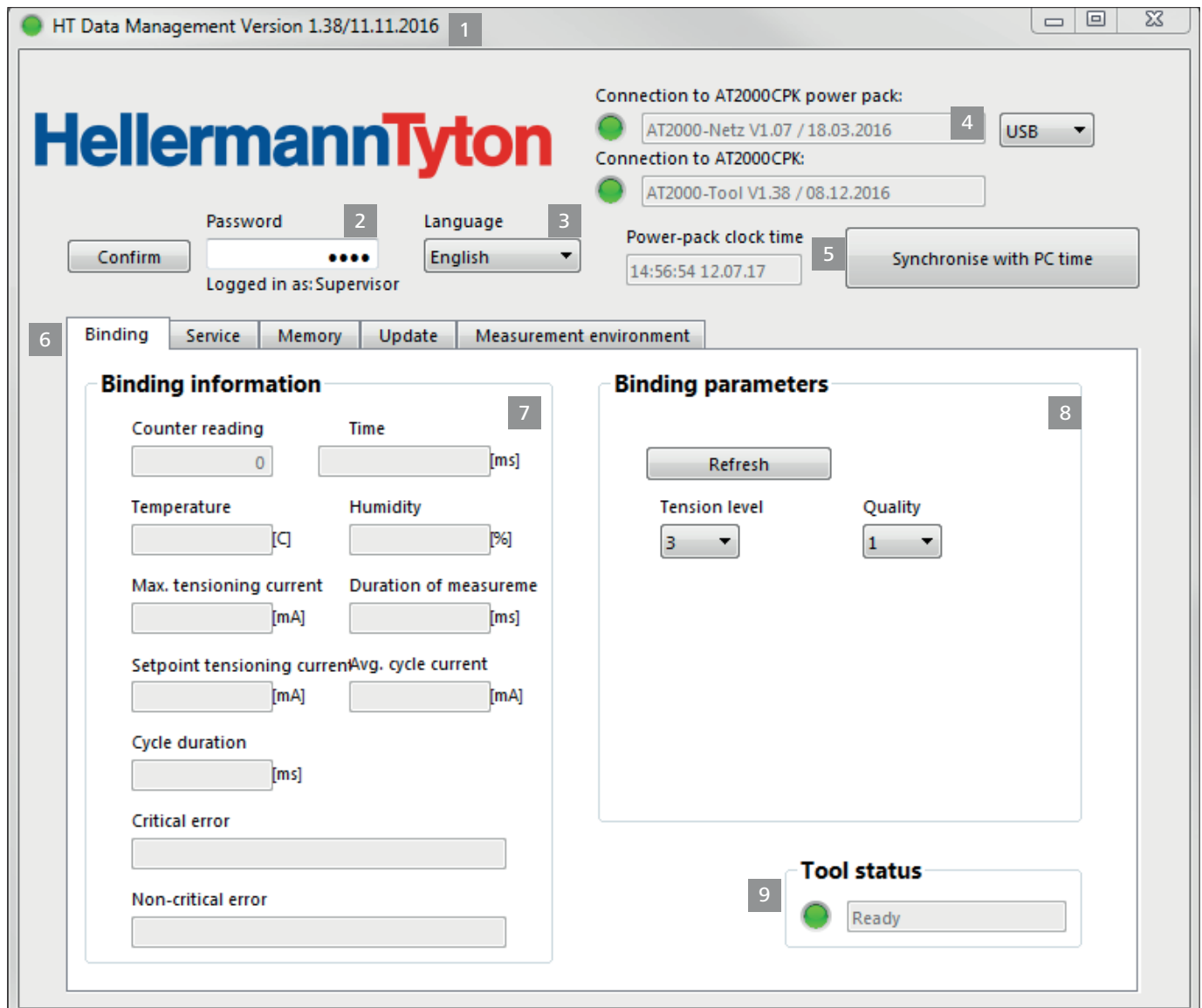
Function Level	Perform updates	Change access code
Operator	No	No
Setup specialist	Yes	Yes

#### 8.2.5 Measurement environment menu

Function Level	Visibility
Operator	No
Setup specialist	Yes

### 8.3 Binding menu

The **Binding** menu appears on the display when you launch the software.



- 1 Version information and date of publication of the software
- 2 Entry box for password for access level
- 3 Language setting
- 4 Connection states and software version
- 5 Time and date synchronisation
- 6 Menus
- 7 Show binding information
- 8 Change binding parameter settings
- 9 Status of the AT2000 CPK

#### 8.3.1 Entering password

- i** The password consists of four characters and the default setting is **0000**.
- ▶ Enter the password.
- ▶ Click on **Confirm**.
- ☑ What you see in **Menu** field **6** view depends on your access rights, → "Access levels" on page 15.
- ☑ Certain fields can be greyed, hidden or active, depending on the access level.

### 8.3.2 Select a language

- ▶ Open the drop-down **Language** menu.
- ▶ Select the language.
- The setting immediately changes to the language you selected.

**i** In the measurement environment the column headings do not change until the next restart of the software.

### 8.3.3 Show binding information

**Binding information** shows the process data of the last binding performed with the AT2000 CPK in connected status.

### 8.3.4 Change binding parameter settings

- ▶ Change the settings for the **Force level** and/or **Quality** parameters.
- The parameter settings are changed and the new settings are transmitted to the AT2000 CPK.

If force level and/or quality are changed at the AT2000 CPK, the new values are uploaded to the HT Data Management software, → *"Force level" on page 13 and → "Quality" on page 14.*

- ▶ Click on the **Refresh** button.
- The settings from the AT2000 CPK are uploaded to the HT Data Management software.

### 8.3.5 Status indicators

	Colour	Status
<b>Connection to the power pack CPK</b>	Green	Connection active
	Red	Error message active
<b>Connection to the AT2000 CPK</b>	Green	Connection active
	Red	Error message active
<b>Status, tool</b>	Green	Ready
	Yellow	Busy
	Blue	Main menu on tool active Binding not possible
	Red	Error message active

### 8.3.6 Synchronising time and date

- ▶ Click on **Synchronise with PC time**.
- Clock time and date of the power pack are synchronised with the PC connected to the device.

**i** Time and date are saved in the power pack and have to be rechecked if the power pack is subsequently changed.

## 8.4 Service menu

- 1 Interruption level sensor
- 2 "Check of binding" setting
- 3 Tool access code (AT2000 CPK)
- 4 Send data to tool (AT2000 CPK)
- 5 Refresh the service information and parameters
- 6 Information for HellermannTyton service

## 8.4.1 Changing other parameter settings

- ▶ Change the settings for the **Interruption front sensor (level 1-5)** and/or **Check of binding** parameters.
- ▶ Click on **Send data to tool**.
- The parameter settings are changed and the new settings are transmitted to the AT2000 CPK.

## 8.4.2 Changing the access code in the AT2000 CPK

- ▶ Enter the new code at **Tool code**. The code is a three-digit number and the default setting is 000.
- ▶ Click on **Send data to tool**.
- The access code is changed and transmitted to the AT2000 CPK.

## 8.5 Memory menu

- 1 Refresh memory status
- 2 Select messages
- 3 Open created file
- 4 Select bindings
- 5 Export messages and binding data

### 8.5.1 Refresh memory of the tool

Updates the number of data records, bindings and messages stored in the tool's memory.

- ▶ Click on the **Refresh** button.
- ☑ The current values appear in the corresponding fields.

### 8.5.2 Select bindings

Select the bindings to be exported. The data exported contain the information about the individual bindings.

**i** It is advisable to set a filter to restrict the choice if the volume of data involved is large.

- ▶ Restrict the binding data for export by setting a **From binding No.** and a **To binding No.** as a filter.

### 8.5.3 Select messages

Select the messages to be exported. The data exported contain the errors or messages.

**i** It is advisable to set a filter to restrict the choice if the volume of data involved is large.

- ▶ Restrict the messages for export by setting a **From message No.** and a **To message No.** as a filter.

### 8.5.4 Export process data

**i** The data are not deleted after they have been exported.

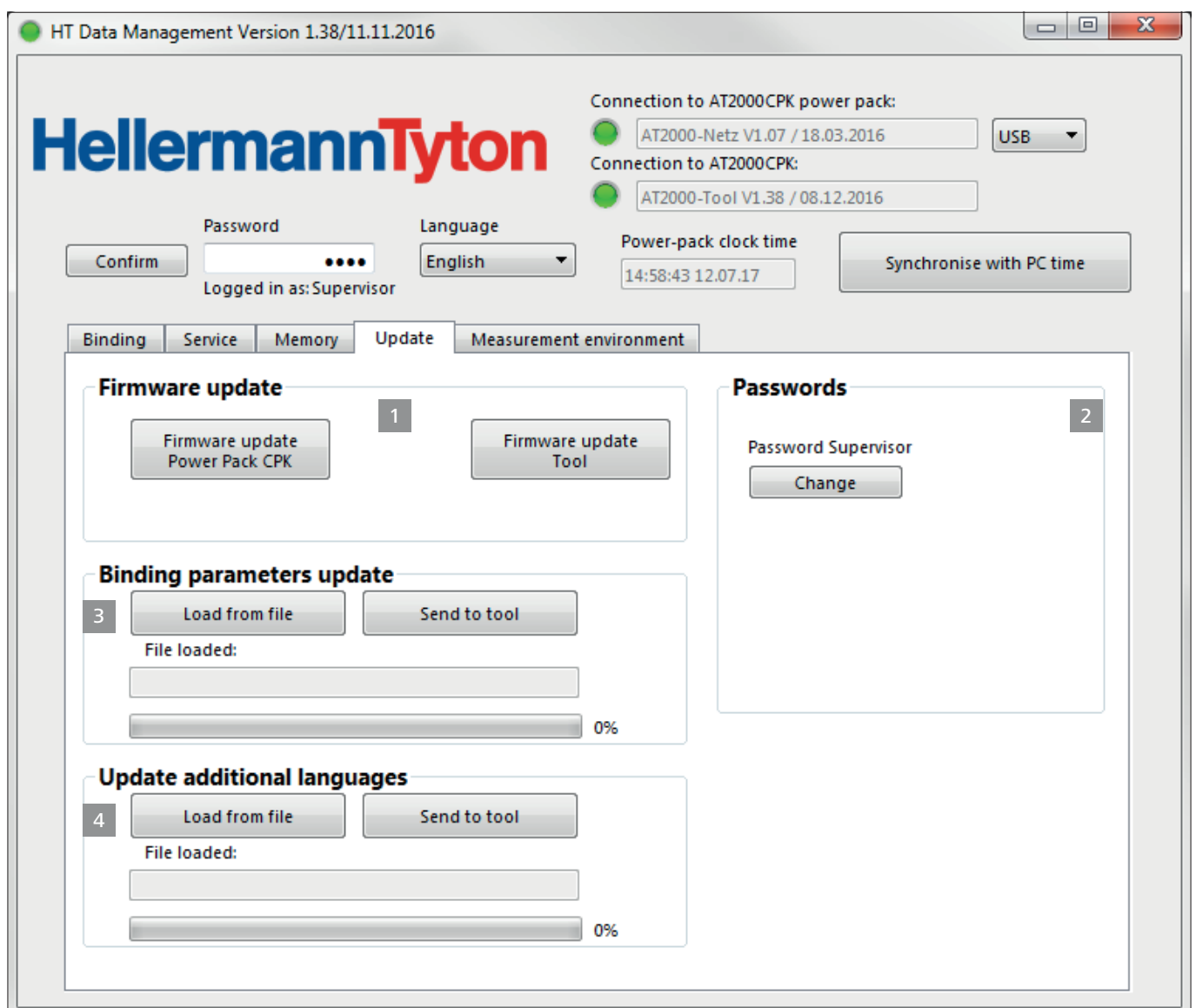
A Data fields have not been initialised message is issued if the process data have not been refreshed.

- ▶ Click on the **Refresh** button, → "Refresh memory of the tool" on page 19.
- ▶ Click on **Export**.
- ▶ Define the path for saving the \*.CSV file.

- ▶ In the window opened by the operating system, click on the **Save** button.
- ☑ The bindings and messages are exported from the AT2000 CPK and saved.
- ☑ The progress bar shows progress of the data transfer in percent (%).
- ☑ When export completes the name of the saved file appears in **File loaded**.
- ▶ Click on **Open**.
- ☑ The \*.CSV file containing the exported data is opened.

### 8.6 Update menu

**i** The **Update** menu appears only if the user has logged on with the setup specialist's password.



- 1 Update firmware
- 2 Change password
- 3 Update binding parameter settings
- 4 Install other languages



### 8.6.1 Update firmware

A firmware update includes an update for the installed languages.

**i** Languages such as Asiatic languages that do not use the Latin alphabet have to be updated separately, → "Install other languages" on page 21.

- ▶ Click on **Firmware update power pack**.

or

- ▶ Click on **Firmware update tool**.

**i** There are separate \*.HEX files for the AT2000 CPK and the power pack:  
AT2000 CPK: AT2000CPK\_Tool\_Vxxx  
Power pack: AT2000CPK\_PowerPack\_Vxxx

- ▶ Select the appropriate \*.HEX file.
- ▶ In the window opened by the operating system, click on the **Open** button.
- The **Start upload** button appears on the screen.
- ▶ Click on **Start upload**.
- The new firmware is uploaded.

### 8.6.2 Change password

**i** The setup specialist's password consists of four characters and the default setting is **0000**. HellermannTyton recommends setting an alphanumeric password that includes at least one special character.

- ▶ Click on **Change**.
- ▶ Enter the current password and click on **OK** to confirm.
- ▶ Enter the new password and click on **OK** to confirm.
- ▶ Re-enter the new password and click on **OK** to confirm.
- The password is changed.

### 8.6.3 Update binding parameter settings

The update for the binding parameter settings is a \*.BIN file.

- ▶ Click on **Load from file**.
- ▶ Select the appropriate \*.BIN file.

**i** There are separate \*.BIN files for updating the binding parameter settings and adding additional languages.

- ▶ In the window opened by the operating system, click on the **Open** button.
- The name of the file appears in **File loaded**.
- ▶ Click on **Send to tool**.
- The new binding parameters are uploaded to the AT2000 CPK.
- The progress bar shows progress of the data transfer in percent (%).

### 8.6.4 Install other languages

Function for updating languages such as Asiatic languages, for example, that do not use the Latin alphabet.

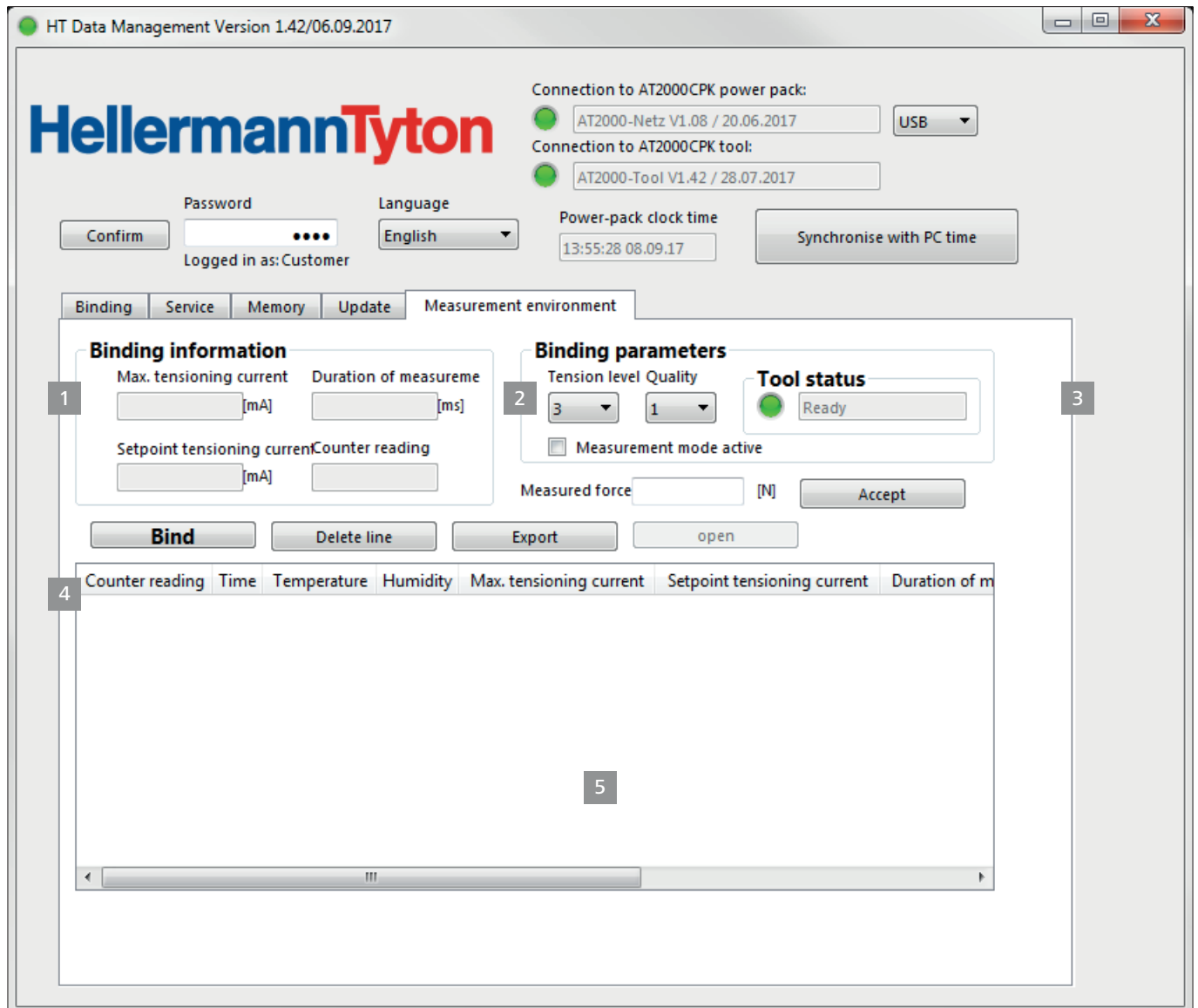
- ▶ Click on **Load from file**.
- ▶ Select the appropriate \*.BIN file.

**i** There are separate \*.BIN files for updating the binding parameter settings and adding additional languages.

- ▶ In the window opened by the operating system, click on the **Open** button.
- The name of the file appears in **File loaded** ("More\_Languages-Index8.bin).
- ▶ Click on **Send to tool**.
- The new languages are uploaded to the AT2000 CPK.
- The progress bar shows progress of the data transfer in percent (%).

## 8.7 Measurement environment menu

**i** The **Measurement environment** menu appears only if the user has logged on with the setup specialist's password.



- 1 Show binding information
- 2 Show binding parameter settings
- 3 Status des AT2000 CPK
- 4 measurement results
- 5 List of measurement results

In measurement mode, the binding information for a binding cycle with a measured force are documented in a log file. This file can be used for the purposes of monitoring tool performance.

### 8.7.1 Using measurement mode

The measurement mode is dependent on the measurement process.

**i** No cycle movement or jaw movement takes place while measurement mode is active. Only the tensioning drive is active, with the current binding parameter settings.

- ▶ Depending on the measurement process, activate the measurement mode.
- ▶ Select the settings for the **Force level** and **Quality** parameters.
- ▶ Perform one binding.
- ☑ The binding information appears in the left pane of the window.
- ▶ Enter the calculated force in the field on the right.
- ▶ Click on **Accept**.
- ☑ A new line is added to the logfile.
- ▶ Repeat the measurement procedure several times.

### 8.7.2 Deleting measurement results

- ▶ To delete a line, highlight it and hit the Delete key on the keypad.

### 8.7.3 Saving measurement results

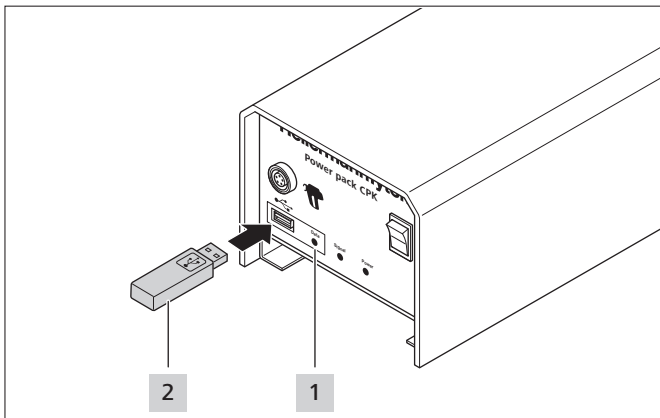
- ▶ To save the table, click on the **Export** button.
- ☑ The \*.CSV file can be saved.
- ▶ To analyse the CSV file in the data macro and view the information, click on the **Open** button.

### 8.7.4 Deactivating measurement mode

- ▶ To deactivate measurement mode, either switch off the tool or clear the **Measurement mode active** checkbox.

## 8.8 Exporting process data from the power pack

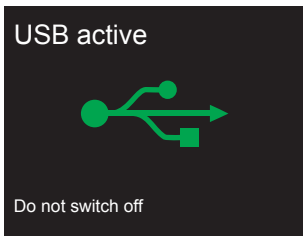
- i** Bindings cannot be triggered while a data transfer is in progress.



- ▶ Switch the AT2000 CPKON, → "Switching on" on page 11.
- ▶ Plug a USB memory stick **2** into the power pack CPK.

- i** The USB memory stack must be FAT32-formatted.

- ☑ **Data** LED **1** shows green as soon as the device recognises the USB memory stick.
- ☑ The data are exported to the USB memory stick.
- ☑ The display shows:



While data are being saved, the status indicators show as follows:

- **Data** LED **1** flashes blue.
- The progress bar shows progress of the data transfer in percent (%).

As soon as the data transfer completes, a **Data transfer ended** message appears on the display. **Data** LED **1** shows green.

- ▶ Unplug the USB memory stick.

- ☑ **Data** LED **1** goes out and the AT2000 CPK is ready for use.

### 8.8.1 Converting CSV file

The "Datenmakro.xmls" conversion file can be used to render the data more readily legible.

- ▶ Open the "Datenmakro.xmls" file in the HT DataManagement/Excel/ directory.
- ▶ Click on the **Import data** button in the spreadsheet.
- ▶ Select the \*.CSV file saved beforehand.
- ▶ In the window opened by the operating system, click on the **Open** button.

- ☑ The \*.CSV file containing the data exported beforehand from the tool is converted into an Excel spreadsheet.

- i** In the Excel spreadsheet you can change the language by clicking on the **Language** button. The converted Excel file can be saved.

## 9 Troubleshooting

### 9.1 Important notes

**CAUTION**

**Crush hazard when jaws close.**

- ▶ Do not insert fingers between upper and lower jaws and do not keep your finger on the trigger.
- ▶ Always keep the power pack switched OFF when clearing a blockage.

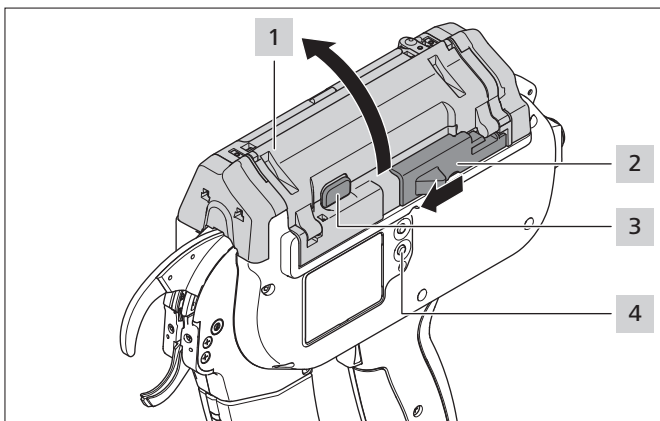
**CAUTION**

**Crush hazard due to moving/rotating parts when service covers are open.**

- ▶ Do not insert fingers underneath the drum and do not keep your finger on the trigger.
- ▶ Always keep the power pack switched OFF when clearing a blockage.

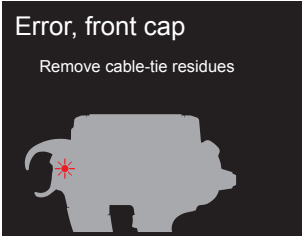

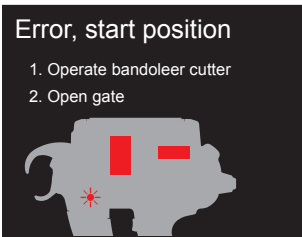


### 9.2 Performing a reset






A reset of the tool always has to be performed before repair work is undertaken.








- ▶ Switch the AT2000 CPK ON.
- ▶ Push actuator for bandoleer cutter **2** to the left.
- ▶ Press catch **3**.
- ▶ Open gate **1**.
- ▶ Press Reset button **4**.
- ▶ Close gate **1**.

9.3 Display messages

DISPLAY MESSAGE	POSSIBLE CAUSE	SOLUTION
<p><b>Error, front cap</b> Remove cable-tie residues</p> 	<ul style="list-style-type: none"> <li>• There are residues of cable ties trapped behind the front cap.</li> <li>• The level sensor is busy.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Clean the front sensor.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> </ul>
<p><b>Error, gate</b> Close gate</p> 	<ul style="list-style-type: none"> <li>• Drum is not in the correct position.</li> <li>• The gate is open.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Open the gate and turn the drum to the correct position.</li> <li>▶ Close the gate.</li> </ul>
<p><b>Error, start position</b> 1. Operate bandoleer cutter 2. Open gate</p> 	<ul style="list-style-type: none"> <li>• The AT2000 CPK is not in the start position.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Push actuator for bandoleer cutter to the left.</li> <li>▶ Open the gate.</li> <li><input checked="" type="checkbox"/> <b>Error, start position</b> appears as the next message on the display.</li> </ul>
<p><b>Error, start position</b> 1. Remove cable-tie residues 2. Press Reset button</p> 		<ul style="list-style-type: none"> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Press the Reset button.</li> <li><input checked="" type="checkbox"/> <b>Error, start position</b> appears as the next message on the display.</li> </ul>
<p><b>Error, start position</b> Close gate</p> 		<ul style="list-style-type: none"> <li>▶ Close the gate.</li> </ul>

DISPLAY MESSAGE	POSSIBLE CAUSE	SOLUTION
<p><b>Position of tie advancer</b></p> <p>1. Operate bandoleer cutter 2. Open gate</p>  <p><b>Position of tie advancer</b></p> <p>1. Press Reset button 2. Check position of tie advancer</p>  <p><b>Position of tie advancer</b></p> <p>Close gate</p> 	<ul style="list-style-type: none"> <li>No tie advancer present.</li> <li>The tie advancer is faulty.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Push actuator for bandoleer cutter to the left.</li> <li>▶ Open the gate.</li> <li>☑ <i>Position of tie advancer</i> appears as the next message on the display.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Press the Reset button.</li> <li>▶ Open the roller block, → "<i>Checking tie advancer</i>" on page 31.</li> <li>▶ Check the tie advancer; replace if necessary.</li> <li>☑ <i>Position of tie advancer</i> appears as the next message on the display.</li> <li>▶ Close the gate.</li> </ul>
<p><b>Error, drum</b></p> <p>1. Operate bandoleer cutter 2. Open gate</p>  <p><b>Error, drum</b></p> <p>1. Remove cable-tie residues 2. Press Reset button</p> 	<ul style="list-style-type: none"> <li>The cable tie bandoleer is pulled in at an angle.</li> <li>Roller lever drum is jammed or is defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Push actuator for bandoleer cutter to the left.</li> <li>▶ Open the gate.</li> <li>▶ Open the two transparent flaps at the gate, → "<i>Troubleshooting a cable-tie bandoleer malfunction</i>" on page 28.</li> <li>☑ <i>Error, drum</i> appears as the next message on the display.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Open the roller lever drum and turn the drum to the correct position.</li> <li>▶ Press the Reset button.</li> <li>☑ <i>Error, gate</i> appears as the next message on the display.</li> <li>▶ Close the gate.</li> <li>▶ Load a new cable tie bandoleer, → "<i>Loading cable ties</i>" on page 11.</li> </ul>



DISPLAY MESSAGE	POSSIBLE CAUSE	SOLUTION
<p><b>Overload</b></p> <p>1. Operate bandoleer cutter 2. Open gate</p> 	<ul style="list-style-type: none"> <li>The drum is blocked.</li> <li>The bandoleer cutter does not cut off the cable ties.</li> <li>The cable tie bandoleer is pulled in at an angle.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Push actuator for bandoleer cutter to the left.</li> <li>▶ Open the gate.</li> <li>▶ Open the two service flaps at the gate, → "Troubleshooting a cable-tie bandoleer malfunction" on page 28.</li> <li>☑ <b>Error, overload</b> appears as the next message on the display.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Press the Reset button.</li> <li>☑ <b>Error, gate</b> appears as the next message on the display.</li> <li>▶ Close the gate.</li> </ul>
<p><b>Overload</b></p> <p>1. Remove cable-tie residues 2. Press Reset button</p> 		
<p><b>Error, tensioning motor</b></p> <p>1. Operate bandoleer cutter 2. Open gate</p> 	<ul style="list-style-type: none"> <li>Drive is jammed or is defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Push actuator for bandoleer cutter to the left.</li> <li>▶ Open the gate.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Press the Reset button.</li> <li>☑ <b>Error, gate</b> appears as the next message on the display.</li> <li>▶ Close the gate.</li> </ul>
<p><b>Error, binding force</b></p> <p>1. Check binding 2. Confirm with trigger</p> 	<ul style="list-style-type: none"> <li>The specified binding force is not achieved.</li> </ul> <p><b>i</b> The message appears only if error notification is activated, → "Check of binding" on page 14.</p>	<ul style="list-style-type: none"> <li>▶ Check the binding.</li> <li>▶ If applicable, reset the binding force.</li> <li>▶ If applicable, carefully remove the cable-tie residues.</li> <li>▶ Press the trigger as confirmation.</li> </ul>
<p><b>Time loss</b></p> <p>1. Check battery in power pack 2. Press Reset button</p> 	<ul style="list-style-type: none"> <li>The back-up battery for the clock in the power pack has discharged.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Change the back-up battery, → "Changing back-up battery" on page 29.</li> <li>▶ Press the Reset button.</li> </ul>

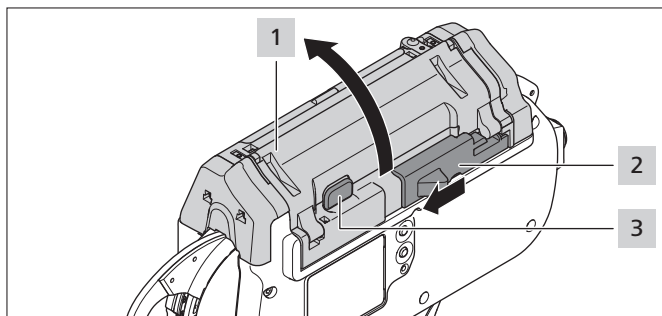
9.4 Possible fault

FAULT PATTERN	POSSIBLE CAUSE	SOLUTION
Loops form	• Bundle diameter is unsuitable.	▶ Use a suitable bundle diameter, → "Positioning and binding items for bundling" on page 12.
	• Tie advancer is not in the correct position.	▶ Check the position of the tie advancer, → "Checking tie advancer" on page 31.
	• Spring in upper jaw is faulty.	▶ Check upper jaw flap in upper jaw with spring, → "Replacing upper jaw" on page 30.
	• Lower jaw is blocked.	▶ Check lower jaw, → "Checking front cap and position of cutter" on page 31. ▶ Remove blockage.
Binding not possible. Cable tie shoots straight out.	• Upper jaw is blocked.	▶ Check upper jaw, → "Checking upper jaw" on page 30. ▶ Remove blockage.
Cable tie is not cut off flush.	• Cutter in front cap is not in correct position.	▶ Check position of cutter in front cap and remove cable-tie residues, → "Checking front cap and position of cutter" on page 31.

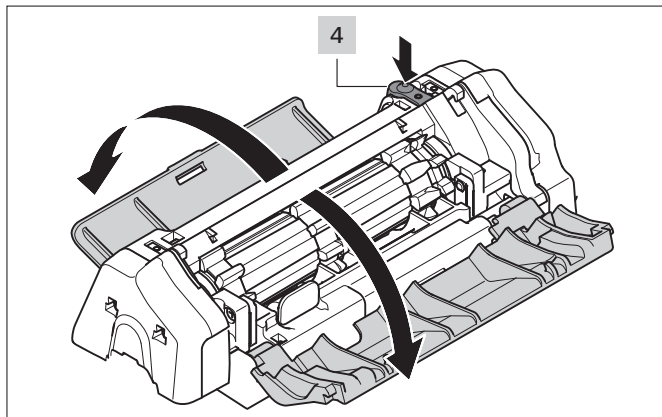
9.4.1 Troubleshooting a cable-tie bandoleer malfunction

**i** Be sure to check the information on the display, → "Display messages" on page 25.

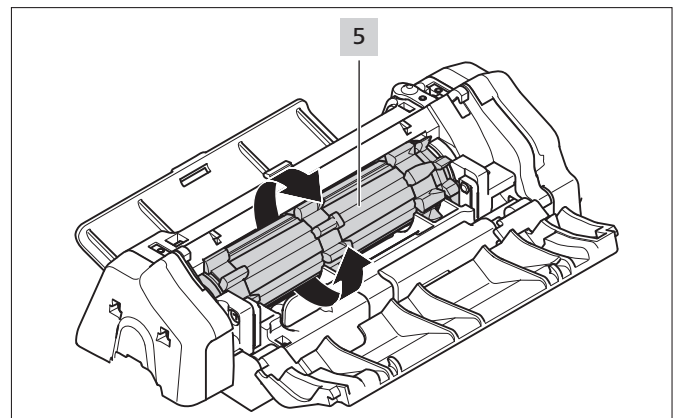
- ▶ Switch the power pack OFF.



- ▶ Push actuator for bandoleer cutter **2** to the left.
- ▶ Press catch **3**.
- ▶ Open gate **1**.



- ▶ Press actuator for service flap left **4**.
- ▶ Open the left service flap.
- ▶ Open the right service flap.



- ▶ Turn drum **5** past the point of indexing resistance and remove the cable-tie residues.
- ▶ Close the left and right service flaps.
- ▶ Switch the power pack ON.
- ▶ Close the gate.
- ▶ Load a new cable tie bandoleer, → "Loading cable ties" on page 11.

### 9.4.2 Changing back-up battery

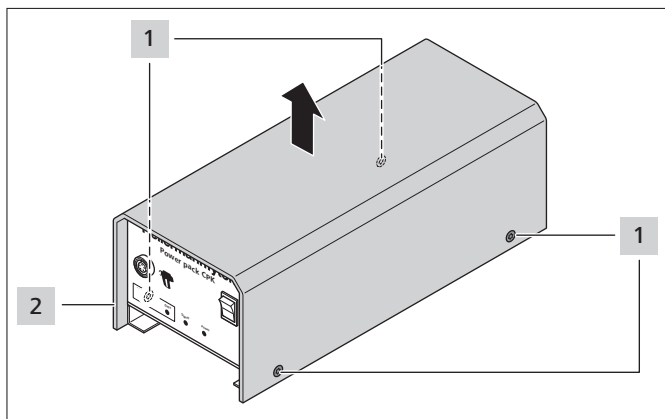
**⚠ DANGER**

**A hazardous electrical current flows though the body in direct or indirect contact with electrically live parts.**

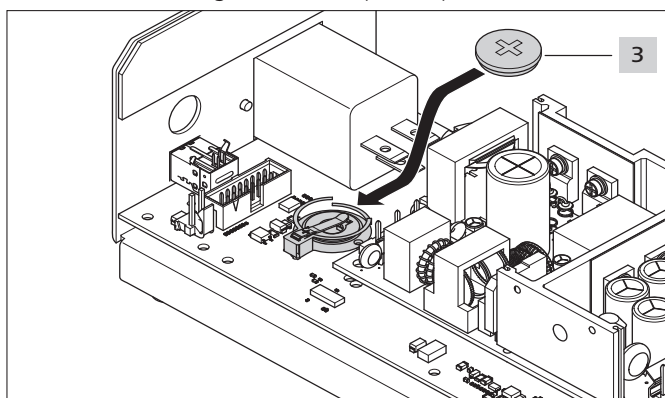
Electric shock, burns or death can result.

- ▶ Work on the electrical supply and on parts that are live when the device is in operation should always be carried out by a person duly authorised to work on low-voltage electrical equipment.
- ▶ Use only OEM fuses of the specified amperage.
- ▶ Have faulty electrical components replaced immediately.
- ▶ Always disconnect the plug from the power-supply outlet before starting maintenance work and troubleshooting.
- ▶ Check the electrical equipment of the device at regular intervals. Have defects such as loose connections or scorched wiring repaired immediately.

- ▶ Switch the power pack OFF.
- ▶ Disconnect the power cord from the power-supply outlet.



- ▶ Remove housing screws **1**.
- ▶ Remove housing **2** from the power pack.



- ▶ Change back-up battery **3**.

**i** For details of battery type, → "Power pack CPK" on page 33

- ▶ Refit the housing and secure it by tightening housing screws **1**.
- ▶ Set the date and time, → "Date / time" on page 14.

## 10 Maintenance

### 10.1 Important notes

Regular servicing is essential in order to ensure that the device remains in safe working order, → "Maintenance schedule" on page 30.

**⚠ CAUTION**

**Crush hazard when jaws close.**

- ▶ Do not insert fingers between upper and lower jaws and do not keep your finger on the trigger.
- ▶ Always keep the power pack switched OFF while maintenance is in progress.

**⚠ CAUTION**

Crush hazard due to moving/rotating parts when service covers are open.

- ▶ Do not insert fingers underneath the drum and do not keep your finger on the trigger.
- ▶ Always keep the power pack switched OFF while maintenance is in progress.

### 10.2 Accessories and extras

Accessories and extras can be ordered directly from your national HellermannTyton representative, → *separate spare parts list*.

Name	Article number
Power pack CPK	106-00100
CPK Operating Instructions on CD	106-29004
CPK safety warnings	106-29003
Bench mount kit CPK	106-00040
Overhead suspension CPK	106-00050

### 10.3 Servicing by manufacturer

It is advisable to have the AT2000 CPK serviced by HellermannTyton once a year or after every approx. 1 million bindings. This will allow the AT2000 CPK to be checked and updated to the latest modification status.

Service contact addresses for all countries are posted on the website: [www.HellermannTyton.com](http://www.HellermannTyton.com)

### 10.4 Maintenance schedule

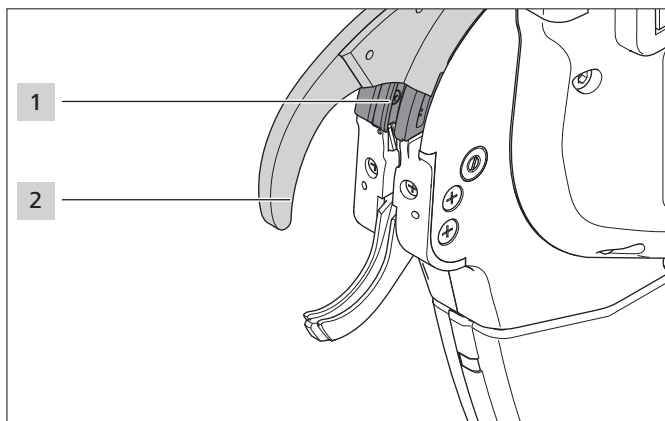
WHEN?	WHO?	WHAT AND HOW?
Approx. every 300,000 bindings	Setup specialist	▶ Check the upper jaw; replace if necessary, → "Checking upper jaw" on page 30 and → "Replacing upper jaw" on page 30
Approx. every 50,000 bindings	Setup specialist	▶ Check the tie advancer; replace if necessary, → "Checking tie advancer" on page 31.
Approx. every 300,000 bindings	Setup specialist	▶ Check the front cap; replace if necessary, → "Checking front cap and position of cutter" on page 31.

### 10.5 Repair

#### NOTE

Always perform a reset before commencing repair work, → "Performing a reset" on page 24.

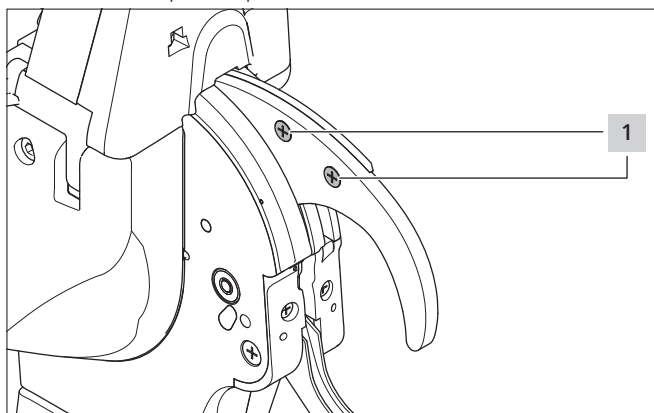
#### 10.5.1 Checking upper jaw



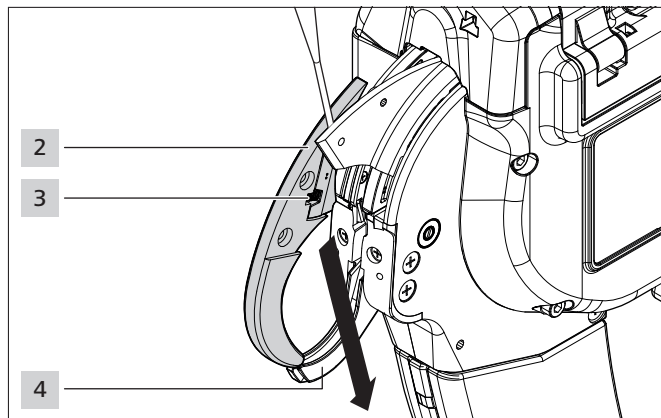
- ▶ Check upper jaw **2** and upper-jaw guide **1** for wear and chipping.
- ▶ If necessary, replace upper jaw, → "Replacing upper jaw" on page 30.

#### 10.5.2 Replacing upper jaw

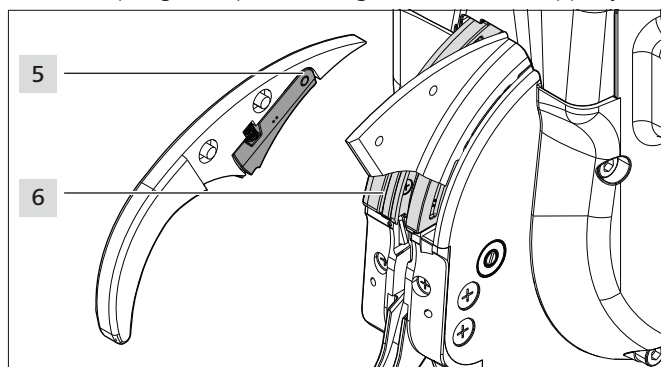
- ▶ Switch the power pack OFF.



- ▶ Remove screws **1**.



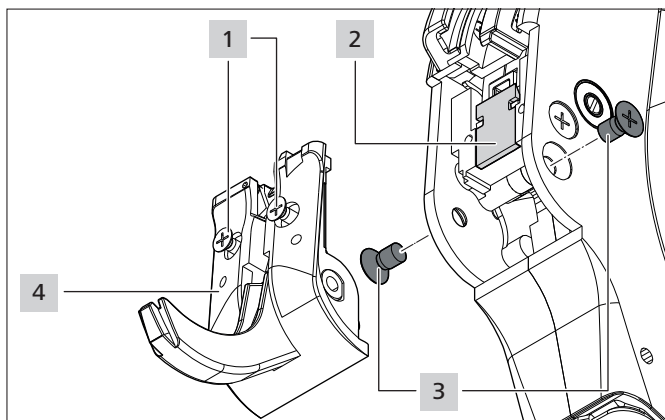
- ▶ Use a screwdriver to pry upper jaw **2** apart (approx. 3 mm) at the top.
- ▶ Work upper jaw **2** down and to the side past lower jaw **4**.
- ▶ Hold spring **3** in place during removal of the upper jaw.



- ▶ Check spring **3**, upper jaw flap **5** and upper jaw guide **6** for wear and chipping.
- ▶ Angle the upper jaw past the lower jaw and seat it in the guide.
- ▶ Hold spring **3** in place during installation of the upper jaw. Make sure that spring **3** is correctly positioned.
- ▶ Tighten screws **1**.

### 10.5.3 Checking front cap and position of cutter

- ▶ Switch the power pack OFF.



- ▶ Remove screws **3**.
- ▶ Slacken screws **1**.

**CAUTION**

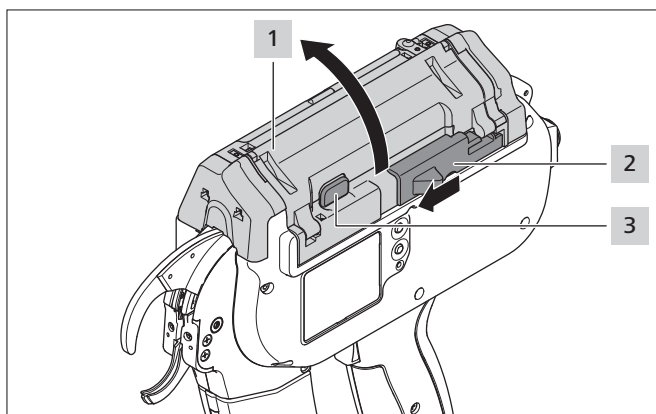
Cut hazard. The cutter is extremely sharp.

- ▶ Never touch the cutting edge with your fingers.

- ▶ Carefully remove front cap **4** with the lower jaw.
- ▶ Remove tail cutter **2**.
- ▶ If necessary, replace tail cutter **2**.
- ▶ Remove cable-tie residues.
- ▶ Use compressed air to blow the tension gear and the waste channel clean.
- ▶ Insert tail cutter **2** into the recess **with the cutting edge facing in**.
- ▶ Insert front cap **5** with the lower jaw.
- ▶ Tighten screws **1**.
- ▶ Insert screws **3** and tighten.

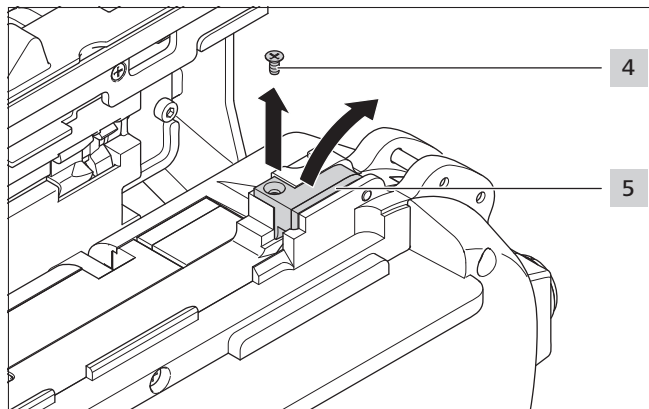
### 10.5.4 Checking tie advancer

- ▶ Switch the power pack OFF.

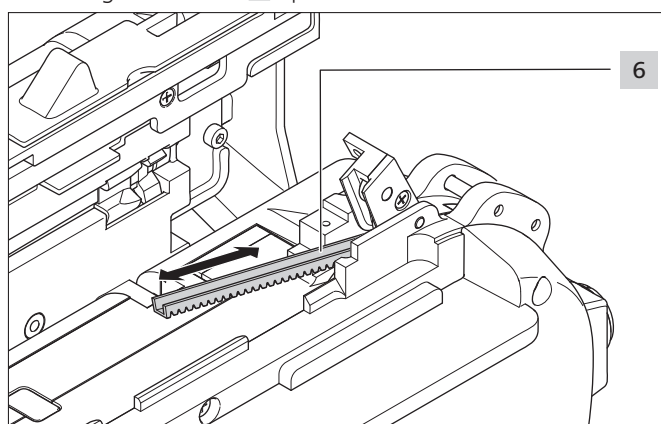


- ▶ Push actuator for bandoleer cutter **2** to the left.
- ▶ Press catch **3**.
- ▶ Open gate **1**.

### 10.5.5 Replacing tie advancer

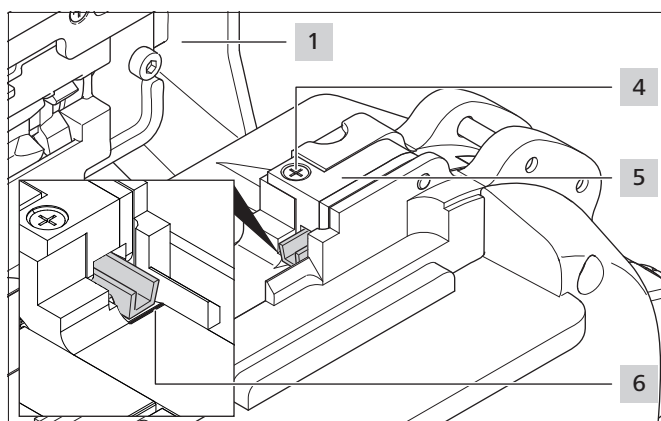


- ▶ Remove screw **4**.
- ▶ Swing roller block **5** up.



- ▶ Replace faulty tie advancer **6**.
- The teeth of the tie advancer face down.

**i** The tie advancer can be inserted in both directions.



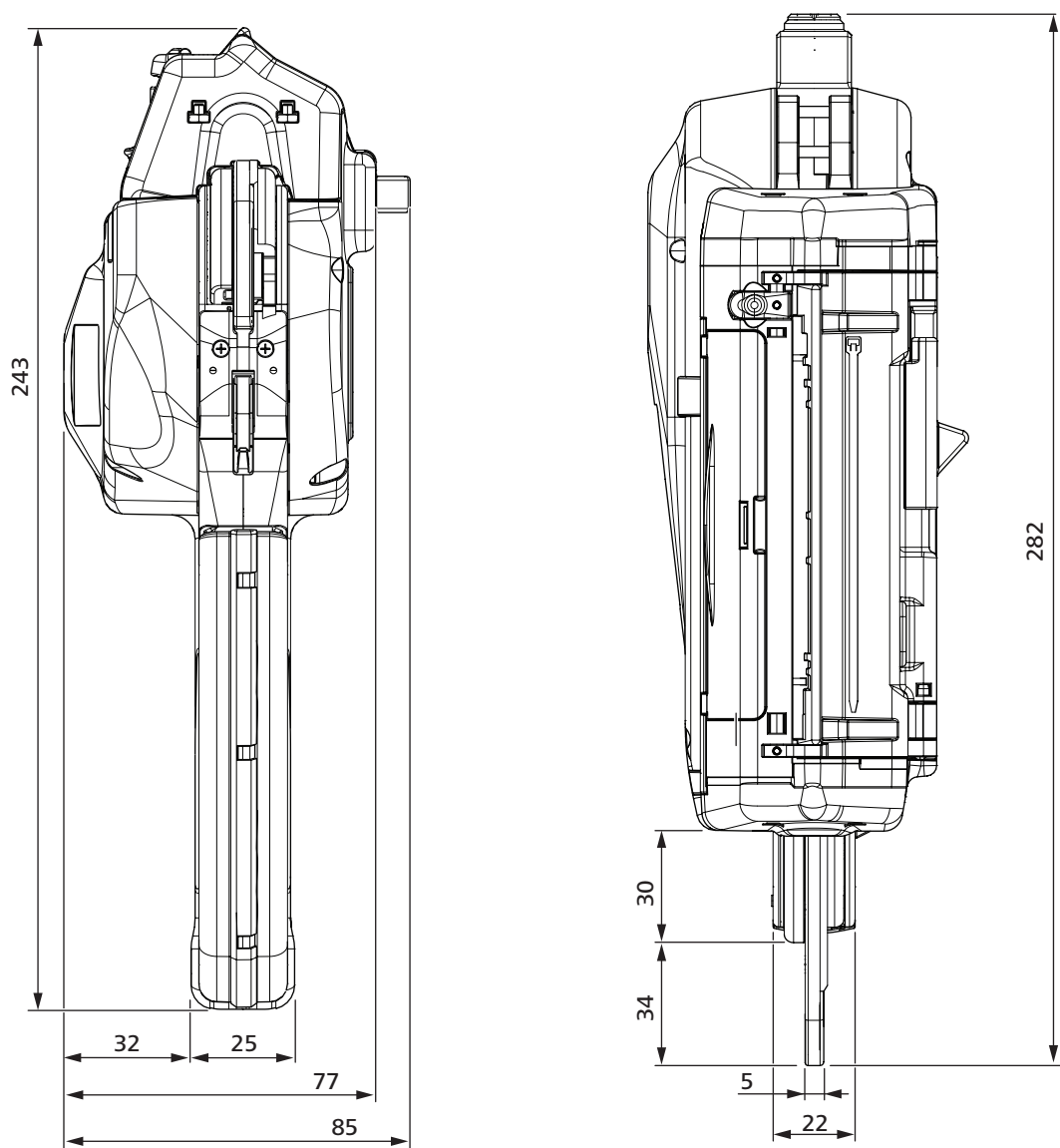
- ▶ Push in the tie advancer as far as mark **6**.

**i** A Position of tie advancer message appears if positioning is not correct, → "Display messages" on page 25.

- ▶ Close roller block **5**.
- ▶ Tighten screw **4**.
- ▶ Close gate **1**.

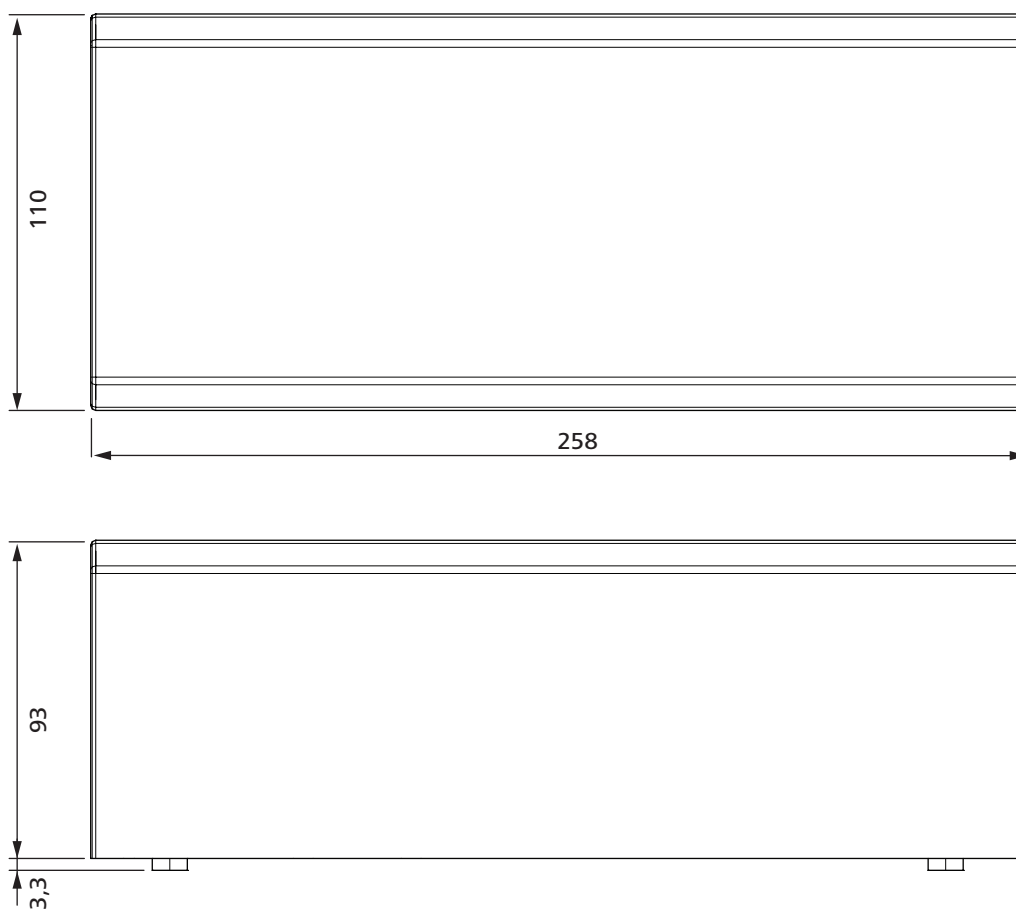
## 11 Technical data

### 11.1 Tool AT2000 CPK



	Value
<b>Max. power draw</b>	50 W
<b>Input voltage</b>	25.2 V
<b>Size L x W x H</b>	approx. 285 mm x 86 mm x 245 mm
<b>Weight</b>	approx. 1800 g
<b>Bundle thickness</b>	up to max. 20 mm in diameter

### 11.2 Power pack CPK



	Value
Line voltage	100 V – 230 V
Line frequency	50/60 Hz
Protection class	I
Size L x W x H	approx. 260 mm x 110 mm x 93 mm
Weight	approx. 1300 g
Back-up battery	CR 2032 3V or equivalent

### 11.3 Noise and vibration information

Emission sound pressure level $L_{pA}$	65 dB re20 $\mu$ Pa
Uncertainty $K_{pA}$	3 dB
Sound power level $L_{WA}$	76dB re1pW
Uncertainty $K_{WA}$	3 dB
Aggregate figure for vibration $a_r$	0.8 $m/s^2$
Uncertainty K	1.5 $m/s^2$

**i** The vibration level as stated here is a measured value obtained by the standardised method set out in EN 60745-1:2009; it can be used for the purposes of device comparison.

The figure for vibration stated here is for the power tool in conditions of its intended use and can differ from the actual figure for the power tool in conditions of other use or if not adequately serviced.

Accurately estimating vibration load over a certain work period entails making due allowance for the times during which the device is switched off or running, but not actually in use. This can reduce vibration load over the entire work period by a significant margin.

- ▶ Implement additional safety measures to protect the operator from the effects of vibration, for example:
  - Servicing of power tools and use tools
  - Keeping hands warm
  - Workflow organisation

## 12 Declarations of conformity

### 12.1 AT2000 CPK automatic tool system

**HellermannTyton**

#### EC declaration of conformity

**AT2000 CPK AUTOMATIC TOOL SYSTEM  
106-00000**

Manufacturer: **HellermannTyton GmbH**  
 Address (street): Grosser Moorweg 45  
 Address (postcode/place): D-25436 Tornesch, Germany  
 Telephone: +49 4122/701-1  
 Telefax: +49 4122/701-400

We declare that the product introduced to the market by us

**Name: AT2000 CPK automatic tool system**

**Product type: Binding tool**

**Machine type: Electrically powered binding tool**

**Serial number:** \_\_\_\_\_

is compliant in its design and construction with the basic safety and health requirements of the EC directives set out below:

**Machinery Directive 2006/42/EC  
Low Voltage Directive 2014/35/EU**

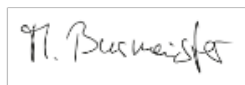
The harmonised standards listed below were applied for this purpose:

**EN60745-1:2000 + A11:2010**

Tornesch, 25 January 2017

**HellermannTyton GmbH**

rep.



Martin Burmeister  
Safety engineer

rep.



Olaf Wulff  
Head of development, application systems

This declaration corresponds to a manufacturer's declaration in the meaning of the Machinery Directive 2006/42/EC, Annex II A. Changes, if made to the above-mentioned product, void the validity of this declaration.



## 12.2 Power pack CPK

# HellermannTyton

## EC declaration of conformity

**POWER PACK CPK**  
**106-00100 and 106-00110**

Manufacturer:	<b>HellermannTyton GmbH</b>
Address (street):	Grosser Moorweg 45
Address (postcode/place):	D-25436 Tornesch, Germany
Telephone:	+49 4122/701-1
Telefax:	+49 4122/701-400

We declare that the product introduced to the market by us

<b>Name:</b>	<b>Power pack CPK</b>
<b>Product type:</b>	<b>Power supply unit</b>
<b>Machine type:</b>	<b>Power supply unit (direct current)</b>
<b>Serial number:</b>	_____

is compliant in its design and construction with the basic safety and health requirements of the EC directives set out below:

### Low Voltage Directive 2014/35/EU

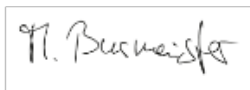
The harmonised standards listed below were applied for this purpose:

### IEC/EN 60950-1

Tornesch, 25 January 2017

### HellermannTyton GmbH

rep.



Martin Burmeister  
Safety engineer

rep.



Olaf Wulff  
Head of development, application systems


This declaration corresponds to a manufacturer's declaration in the meaning of the Machinery Directive 2006/42/EC, Annex II A. Changes, if made to the above-mentioned product, void the validity of this declaration.


# HellermannTyton operates globally in 37 countries




## Europe

 **HellermannTyton GmbH – Austria**  
Rennbahnweg 65  
1220 Vienna  
Tel.: +43 12 59 99 55-0  
Fax: +43 12 59 99 11  
Email: office@HellermannTyton.at  
www.HellermannTyton.at

 **HellermannTyton – Czech Republic**  
Email: officeCZ@HellermannTyton.at  
www.HellermannTyton.cz

 **HellermannTyton – Denmark**  
Industrivej 44A, 1.  
4000 Roskilde  
Tel.: +45 702 371 20  
Fax: +45 702 371 21  
Email: htdk@HellermannTyton.dk  
www.HellermannTyton.dk

 **HellermannTyton – Finland**  
Sähkötie 8  
01510 Vantaa  
Tel.: +358 9 8700 450  
Fax: +358 9 8700 4520  
Email: myynti@HellermannTyton.fi  
www.HellermannTyton.fi

 **HellermannTyton S.A.S. – France**  
2 rue des Hêtres - CS 80543  
78197 Trappes Cedex  
Tel.: +33 1 30 13 80 00  
Fax: +33 1 30 13 80 60  
Email: info@HellermannTyton.fr  
www.HellermannTyton.fr

 **HellermannTyton GmbH – Germany**  
Großer Moorweg 45  
25436 Tornesch  
Tel.: +49 4122 701-0  
Fax: +49 4122 701-400  
Email: info@HellermannTyton.de  
www.HellermannTyton.de

 **HellermannTyton KFT – Hungary**  
Kisfaludy u. 13  
1044 Budapest  
Tel.: +36 1 369 4151  
Fax: +36 1 369 4151  
Email: officeHU@HellermannTyton.at  
www.HellermannTyton.hu


 **HellermannTyton Ltd – Ireland**  
Unit A5 Cherry Orchard  
Business Park  
Ballyfermot, Dublin 10  
Tel.: +353 1 626 8267  
Fax: +353 1 626 8022  
Email: sales@HellermannTyton.ie  
www.HellermannTyton.co.uk


 **HellermannTyton S.r.l. – Italy**  
Via Visco, 3/5  
35010 Limena (PD)  
Tel.: +39 049 767 870  
Fax: +39 049 767 985  
Email: info@HellermannTyton.it  
www.HellermannTyton.it

 **HellermannTyton B.V. – Belgium/Netherlands**  
Vanadiumweg 11-C  
3812 PX Amersfoort  
Tel.: +31 33 460 06 90  
Fax: +31 33 460 06 99  
Email (NL): info@HellermannTyton.nl  
Email (BE): info@HellermannTyton.be  
www.HellermannTyton.nl  
www.HellermannTyton.be

 **HellermannTyton AS – Norway**  
PO Box 240 Alnabru  
0614 Oslo  
Tel.: +47 23 17 47 00  
Fax: +47 22 97 09 70  
Email: firmapost@HellermannTyton.no  
www.HellermannTyton.no

 **HellermannTyton Sp. z o.o. – Poland**  
Kotunia 111  
62-400 Ślupca  
Tel.: +48 63 2237 111  
Fax: +48 63 2237 110  
Email: info@HellermannTyton.pl  
www.HellermannTyton.pl

 **HellermannTyton – Romania**  
Email: officeRO@HellermannTyton.at  
www.HellermannTyton.at

 **OOO HellermannTyton – Russia**  
40/4, Pulkovskoe road  
BC Technopolis Pulkovo, office A 8081  
196158, St. Petersburg  
Tel.: +7 812 386 00 09  
Fax: +7 812 386 00 08  
Email: info@HellermannTyton.ru  
www.HellermannTyton.ru

 **HellermannTyton – Slovenia**  
Branch Office Ljubljana  
Podružnica Ljubljana, Leskoškova 6  
1000 Ljubljana  
Tel.: +386 1 433 70 56  
Fax: +386 1 433 63 21  
Email: officeSI@HellermannTyton.at  
www.HellermannTyton.si

 **HellermannTyton España s.l. – Spain/Portugal**  
Avda. de la Industria 37 2 2  
28108 Alcobendas, Madrid  
Tel.: +34 91 661 2835  
Fax: +34 91 661 2368  
Email:  
HellermannTyton@HellermannTyton.es  
www.HellermannTyton.es

 **HellermannTyton AB – Sweden**  
Isafjordsgatan 5  
16440 Kista  
Tel.: +46 8 580 890 00  
Fax: +46 8 580 348 02  
Email: kundsupport@HellermannTyton.se  
www.HellermannTyton.se

 **HellermannTyton Engineering GmbH – Turkey**  
Saray Mah Dr. Adnan Büyükdizeni Cad. No:4  
Akkom Office Park 2. Blok Kat: 10  
34768 Ümraniye-Istanbul  
Tel.: +90 216 687 03 40  
Fax: +90 216 250 32 32  
Email: info@HellermannTyton.com.tr  
www.HellermannTyton.com.tr

 **HellermannTyton Ltd – UK**  
William Prance Road  
Plymouth International Medical  
and Technology Park  
Plymouth, Devon PL6 5WR  
Tel.: +44 1752 701 261  
Fax: +44 1752 790 058  
Email: info@HellermannTyton.co.uk  
www.HellermannTyton.co.uk

 **HellermannTyton Ltd – UK**  
Sharston Green Business Park  
1 Robeson Way, Wythenshawe  
Manchester M22 4TY  
Tel.: +44 161 947 2200  
Fax: +44 161 947 2220  
Email: sales@HellermannTyton.co.uk  
www.HellermannTyton.co.uk


 **HellermannTyton Ltd – UK**  
Cley Road, Kingswood Lakeside  
Cannock, Staffordshire  
WS11 8AA  
Tel.: +44 1543 728282  
Fax: +44 1543 728284  
Email: info@HellermannTyton.co.uk  
www.HellermannTyton.co.uk

 **HellermannTyton Data Ltd – UK**  
Cornwell Business Park  
43-45 Salthouse Road, Brackmills  
Northampton NN4 7EX  
Tel.: +44 1604 707 420  
Fax: +44 1604 705 454  
Email: sales@htdata.co.uk  
www.htdata.co.uk


## Middle East

 **HellermannTyton – UAE**  
Email: info@HellermannTyton.ae  
www.HellermannTyton.ae


## North America


 **HellermannTyton – Canada**  
Tel.: +1 905 726 1221  
Fax: +1 905 726 8538  
Email: sales@HellermannTyton.ca  
www.HellermannTyton.ca

 **HellermannTyton – Mexico**  
Tel.: +52 333 133 9880  
Fax: +52 333 133 9861  
Email: info@HellermannTyton.com.mx  
www.HellermannTyton.com

 **HellermannTyton – USA**  
Tel.: +1 414 355 1130  
Fax: +1 414 355 7341  
Email: corp@htamericas.com  
www.HellermannTyton.com

## South America

 **HellermannTyton – Argentina**  
Tel.: +54 11 4754 5400  
Fax: +54 11 4752 0374  
Email: ventas@HellermannTyton.com.ar  
www.HellermannTyton.com.ar


 **HellermannTyton – Brazil**  
Tel.: +55 11 4815 9000  
Fax: +55 11 4815 9030  
Email: vendas@HellermannTyton.com.br  
www.HellermannTyton.com.br


## Asia-Pacific


 **HellermannTyton – Australia**  
Tel.: +61 2 9525 2133  
Fax: +61 2 9526 2495  
Email: cservice@HellermannTyton.com.au  
www.HellermannTyton.com.au

 **HellermannTyton – China**  
Tel.: +86 510 8528 2536  
Fax: +86 510 8528 2731  
Email: cservice@HellermannTyton.com.cn  
www.HellermannTyton.com.cn


 **HellermannTyton – Hong Kong**  
Tel.: +852 2831 9090  
Fax: +852 2832 9381  
Email: cservice@HellermannTyton.com.hk  
www.HellermannTyton.com.sg


 **HellermannTyton – India**  
Tel.: +91 120 413 3384  
Email: cservice@HellermannTyton.co.in  
www.HellermannTyton.co.in

 **HellermannTyton – Japan**  
Tel.: +81 3 5790 3111  
Fax: +81 3 5790 3112  
Email: mkt@hellermanntyton.co.jp  
www.HellermannTyton.co.jp

 **HellermannTyton – Republic of Korea**  
Tel.: +82 32 833 8012  
Fax: +82 32 833 8013  
Email: cservice@HellermannTyton.co.kr  
www.HellermannTyton.co.kr

 **HellermannTyton – Philippines**  
Tel.: +63 2 752 6551  
Fax: +63 2 752 6553  
Email: cservice@HellermannTyton.com.ph  
www.HellermannTyton.com.ph

 **HellermannTyton – Singapore**  
Tel.: +65 6 586 1919  
Fax: +65 6 752 2527  
Email: cservice@HellermannTyton.sg  
www.HellermannTyton.com.sg

 **HellermannTyton – Thailand**  
Tel.: +662 237 6702 / 266 0624  
Fax: +662 266 8664  
Email: cservice@HellermannTyton.co.th  
www.HellermannTyton.com.sg

## Africa

 **HellermannTyton – South Africa**  
Tel.: +27 11 879 6600  
Fax: +27 11 879 6603  
Email: jhb.sales@Hellermann.co.za  
www.HellermannTyton.co.za