



## CONTROL BASIC Operating Instructions

Quality Management System Conforming to  
ISO9001:2008 Standard



PennEngineering®



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## GENERAL INFORMATION

### ASSISTANCE

For assistance concerning the use and the maintenance of the tool, or if you need to order any spare parts, contact your local authorized dealer specifying the identification/serial numbers of the tool, found on the outer casing of the control basic.

### CERTIFICATION AND EC MARKING

The tool is manufactured in compliance with the European Directives, which are in force when the tool itself is put on the market.

### WARRANTY

The warranty has a validity of 12 months, as of the date indicated on the invoice.

The warranty only covers replaced parts; labor is not included.

The following are not covered by warranty: standard accessories and tool damages caused by:

- transport and/or handling, user's mistakes,
- failed servicing/maintenance, as indicated in this manual,
- faults and/or breakages that are not attributable to tool anomalies,
- normal consumption of consumables.

The warranty is invalidated both in case of unauthorized tampering/replacements of tool components and in case of use of accessories, tools or consumables different to those recommended by the manufacturer, which could even cause injuries to the tool's user.

PennEngineering assumes responsibilities only if the tool is originally defective, but declines all forms of responsibility if the user fails to follow the instructions given.

### MANUAL STRUCTURE

This instruction manual must be read with particular attention by the Customer, as the correct pre-arrangement, installation and use of the tool, are the correct basis for a good relationship between Manufacturer and Customer.

### PURPOSE AND CONTENTS

The manual herein has the purpose of providing the Customer with all the information needed not only to use the tool correctly, but also to manage it self-sufficiently and safely. It includes information concerning technical aspects, operation, maintenance, spare parts and safety.

**Users and Qualified Technicians must read the instructions given herein thoroughly before starting to use the tool.** If you have any doubts on the meaning of the instructions given, please do not hesitate to contact us for further explanations.

### RECEIVERS

The manual herein has been written for both the operators and the technicians enabled to service the tool.

Operators must not carry out jobs reserved to service and/or qualified technicians.

PennEngineering is not liable for any damage deriving from the failed observance of this rule.

### PLACING OF THE MANUAL

This instruction manual must be kept near the tool, inside a dedicated container and, above all, away from liquids or anything else that may compromise its legibility.

### OPERATING SYSTEM

The Control System is designed to allow the operator to keep monitored the placing procedure according to the set and repeatable parameters.

The component is transportable and can be placed in different positions to improve the reading.

RIVIT CONTROL BASIC: the system allows to control the fastening according to the predetermined settings made by the operator. It is equipped with:

- Visual and sound alarm for right or wrong application;
- Visual and sound alarm if there is no air;
- Pneumatic valve to prevent further errors during processing and more safety devices on the system;
- Piece counter and batch counter;
- Settings directly made from the module;
- Adjustable module for better vision and ergonomics of the workstation;
- Operator interface easy to understand;
- Intervention levels with password;
- Data storage for set batches;
- Data storage whether data is OK or NOT OK for later verification.

The proposed system will allow a more precise control of the work, avoiding mistakes and oversights; the result is an improvement in productivity and in quality of work, and also a reduction in waste.

**VIBRATION**

When used correctly, the tool does not produce any dangerous vibration.

**NOISE LEVEL**

The tool is designed and manufactured in such a way that the noise level is very low. The weighed equivalent continuous acoustic pressure level A in the operator position is indeed below 80 dB (A).

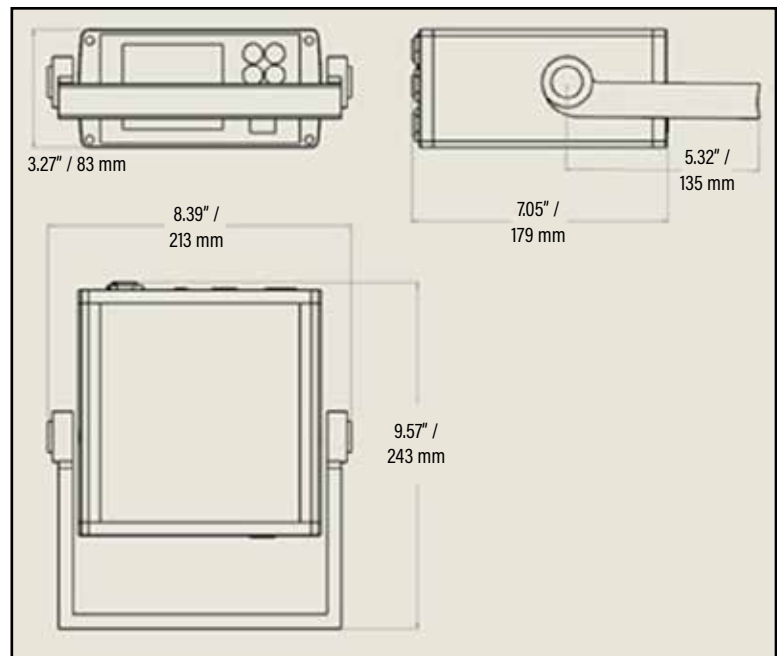
This information allows the tool user to better evaluate the possible risks of danger.

**TECHNICAL DATA**

The following table provides the technical data and features of the tool, to which you must refer when contacting the ATLAS® Technical Assistance Department at PennEngineering.

**TECHNICAL DATA AND FEATURES**

WEIGHT WITHOUT TRANSFORMER	1.8 kg
WEIGHT WITH TRANSFORMER	2.3 kg
AIR CONSUMPTION	6 to 7 BAR
WORKING TEMPERATURE	+5° to +40° C
INPUT VOLTAGE 100-240V 1.1A	50 - 60 Hz
VIBRATIONS	< 2.5 m/s <sup>2</sup>
NOISE LEVEL	76 dB (A)



## PROPOSED COMBINATIONS

	<i>BASIC VERSION</i>	<i>EVOLUTION VERSION</i>	<i>WiFi VERSION</i>
<b>RIV 503C</b>			
<b>RIV 504C</b>			
<b>RIV 505C</b>			
<b>RIV 508C</b>			
<b>RIV 938C</b>			

To view the NEWTON values expressed by the Control System, use the following references in the table:

Tool 1 = RIV 938C

Tool 2 = RIV 939C

Tool 3 = RIV 503C

Tool 4 = RIV 504C

Tool 5 = RIV 505C

Tool 6 = RIV 506C

Tool 7 = -----

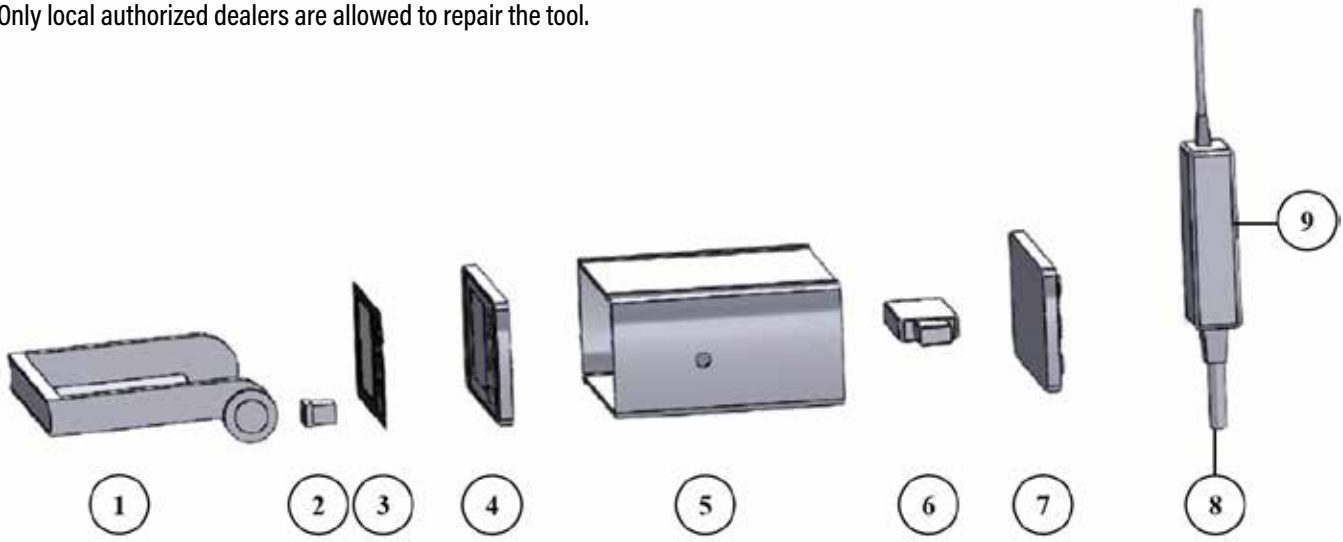
Tool 8 = RIV 508C

Tool 9 = -----

Tool 10 = -----

**SPARE PARTS**

Only local authorized dealers are allowed to repair the tool.



REF.	PART NUMBER	QTY	DESCRIPTION	REF.	PART NUMBER	QTY	DESCRIPTION
1		1	HANDLE	6		1	ELECTRIC DRIVE
2		1	SWITCH	7		1	COMPLETE BACK PANEL
3		1	MEMBRANE COVERING	8		1	SYSTEM CONNECTION CABLE
4		1	COMPLETE FRONT PANEL	9		1	TRANSFORMER
5		1	BODY				

### GENERAL WARNINGS

The operator must read carefully the information given in the present manual, especially with regard to the safety precautions listed in this chapter. The operator must also observe the warnings listed below:

- The control system shall be used exclusively by trained personnel.
- The control system and the work area shall be kept clean and tidy.
- The control system shall be rested upright on a flat surface to prevent it from falling.
- The control system shall only be used in normal operating conditions.
- The user shall use the accessories supplied when servicing and/or adjusting the control system.
- The plates applied on the control system shall not be removed or altered.
- Unauthorized personnel shall not be allowed to touch the control system.
- Make sure that the air supply hoses are correctly sized.
- Do not drag the control system holding it by the hose when it is connected to the power supply. Keep the hose away from sources of heat and from sharp objects.
- Remember to remove service or adjustment keys after having making a repair and/or adjustment.
- Before disconnecting the compressed air hose from the tool, ensure it is not pressurized.
- Disconnect the air supply before cleaning or making repairs.
- Where possible, it is recommended to permanently mount the control system by the proper handle.
- Pay attention to possible risk of whiplash with the air supply hoses.

### INTENDED USE

The control system is designed exclusively to be used with the following tools: RIV938C, RIV939C, RIV503C, RIV504C, RIV505C, RIV506C, and RIV508C.

### UNINTENDED USE

The control system shall not be used:

- For purposes different to those listed in previous section.
- In explosive or aggressive atmosphere or when there is an excessive amount of dust or oil in the air.
- In atmosphere subject to the risk of fire.
- When it is exposed to weather conditions.

### RESIDUE RISK

During the normal working cycle and when servicing the control system, the operators are exposed to some residue risks which, due to the nature of the operations to be carried out, cannot be totally eliminated.

***It is therefore absolutely crucial not to exceed the maximum pressure indicated in the technical data section.***

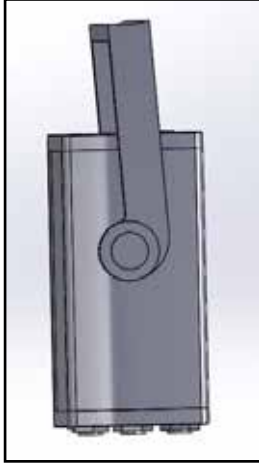
## IDENTIFICATION/SERIAL NUMBER

Adhesive label indicating the model number, the name of the manufacturer and the CE marking.  
Model and serial number etched in the outer casing.

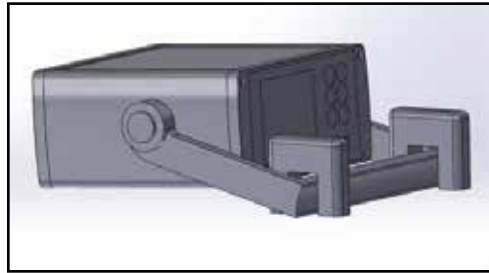


### INSTALLATION

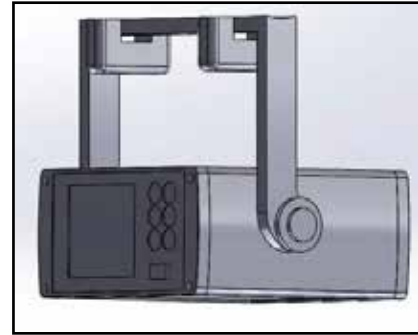
The Control System can be hand carried. For safe transporting, store the tool in its case after use. Damages to the Control System caused during transport and/or handling are not covered by warranty. Repairs or replacements of damaged parts are at customer's expense.



Handle position when transporting.



Use attached hardware to mount unit to flat surface.



Handle can be used as a bracket for ceiling mounting.

### STORAGE

If you are not going to use the Control System for a long period of time, store as follows:

- Store the control system indoors.
- Keep the control system in its protect the Control System from impacts and stresses.
- Protect the control system from damp and excessive heat conditions.
- Keep the control system away from corrosive substances.

### PNEUMATIC CONNECTIONS

The pneumatic connection is made by a hose with a quick-release coupling (internal  $\varnothing$  5mm and external  $\varnothing$  8mm), to be connected to the connector supplied with the Control System. The air supply hose must be flexible and must meet the safety requirements of the pressurised products.



### ELECTRIC CONNECTIONS

The customer is responsible for the electrical connection of the control system. The control system must be connected to the power line with the supplied power adapter (100-240 V, 50-60 Hz), and according to technical regulations in force.



### **AIR SUPPLY**

The air supply line must be free from dirt and damp to prevent the early wear of moving components in the control system. Use dry air only.

### **PRELIMINARY INSPECTION**

Before using the control system, check the following:

- Check for damaged during transport.
- Make sure compressed air hose is properly connected to the air supply line.

### **OPERATORS**

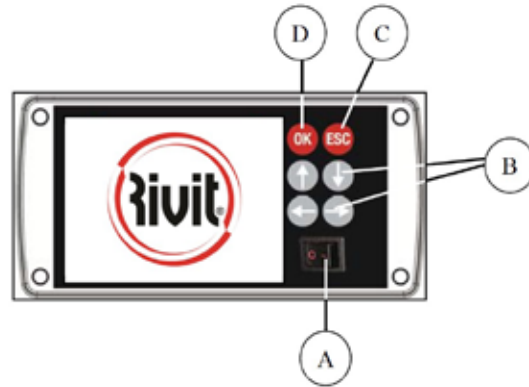
The control system is designed to be used by one operator only. Control system operators must satisfy the requirements stated hereafter (or they must be informed and trained accordingly). They must be aware of the manual herein and of all information relevant to safety:

- They must have some general and technical education, to a sufficient level to be able to understand the manual and to interpret the drawings and the diagrams correctly.
- They must be acquainted with the main hygienic rules, and with the industrial-safety and technological instructions.
- They must have an overall knowledge of the line and of the factory in which the control system is installed.
- They must know what to do in case of emergency, where to find the individual protection means and how to use them correctly.

Service technicians must also have an appropriate technical training.

**BUTTON IDENTIFICATION**

- A = power switch
- B = to change functions and move on the screen
- D = to confirm press OK button
- C = to exit press (ESCAPE BUTTON)



- E = Compressed air intake from distribution system.  
Hose OD 8mm. Hose ID 5mm.
- F = Exhaust air
- G = Compressed air outlet to the tool.  
Hose OD 8mm. Hose ID 5mm.
- H = Connector socket to power supply
- I = Connector for sensor on the tool
- L = USB port (for maintenance operations from manufacturer when needed)
- M = Label
- N = Serial number



Before turning the Control System on, check the pneumatic connections and verify that the pressure getting from the distribution system is between 6 and 7 BAR; verify that the pneumatic connections, to and from the tool, are correctly assembled as indicated in section 6.4, and that pneumatic lines are not damaged or squashed.

Start power with the on/off switch A; the module emits a long beep and displays the manufacturer logo.



After the initial interval, the next page displays by default the highlighted choice WORK SETUP; with OK, you enter the page WORK SETUP, and with the arrows on the right, you change the function to choose.

**Software release**



When in Calibration or Work Setup, AIR OK indicates that air connects are correct.

### SETUP

On the home page, press SETUP to change the general settings of the module. Using the arrows, select SETUP and press OK to open the settings page.



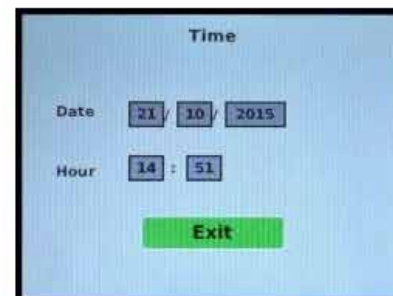
### LANGUAGE

The language selection is made by positioning on LANGUAGE by means of the arrows, and then press OK.



### TIME

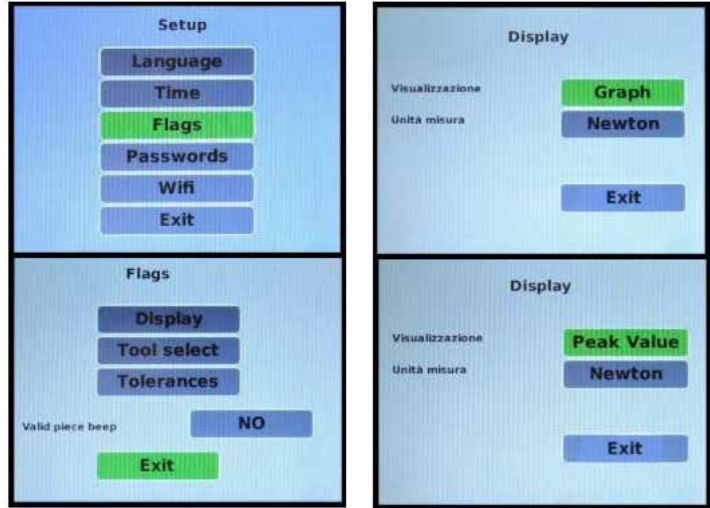
While on the SETUP page select TIME, then press OK; there are many positions in various fields and you can use the UP and DOWN arrows to move, and the LEFT and RIGHT arrows to increase/reduce the values. Time is saved automatically.



### DISPLAY

When in the VISUALIZATION page, you can select one of the following choices using the LEFT and RIGHT arrows: GRAPH: the acquired curve will be shown with peak values and the execution time. PEAK VALUE: shows the highest reached numeric values only. When in the MEASURE UNIT page, you can select one of the following choices using the LEFT and RIGHT arrows: NEWTON or BAR.

**Note:** The Newton value is to be considered an indicative value, even though derived from accurate comparisons.



### TOOL SELECT

When in the TOOL SELECT page, you can select the model of the tool. Using the arrows, choose the tool you want and click OK to confirm.



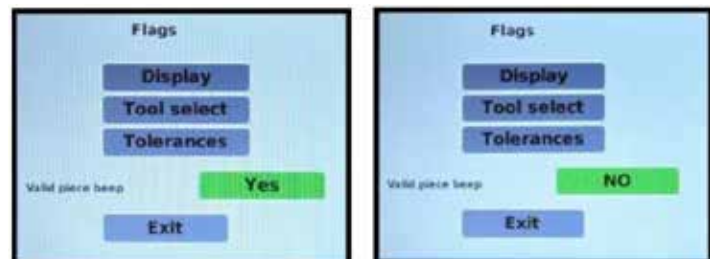
### TOLERANCES

TOLERANCES allows you to change the percentage of tolerance to the peak and the intermediate position of acceptance of the working curve.



### VALID PIECE BEEP

You can choose to hear a beep when the piece count is reached. Click YES, using the arrows to confirm.



### PASSWORD

The module is delivered with the password levels off.

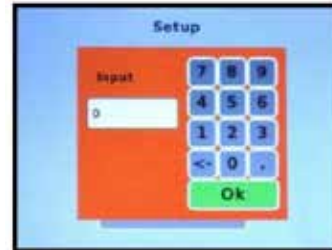
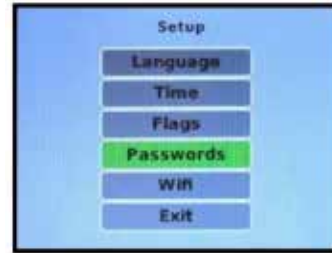
The standard codes, modifiable as the operator likes, are:

- Base Password 1234 to access the Counters,
- Administrator Password 8765 to access the values of tolerance to be set and to bypass the Base Password.

To access the setup page for passwords, enter the code 8765 with the arrows on the keyboard that appears in the selected page.

The preset values can be modified, use the arrows to change the password and press the OK button.

If you want to disable all levels of password and have free access to all pages and functions, go to ACTIVE PASSWORD to make the change by using the up and down arrows.



### WORK SETUP

Choose PIECES A and you can choose which process to use moving with the up and down arrows.

To confirm press OK.

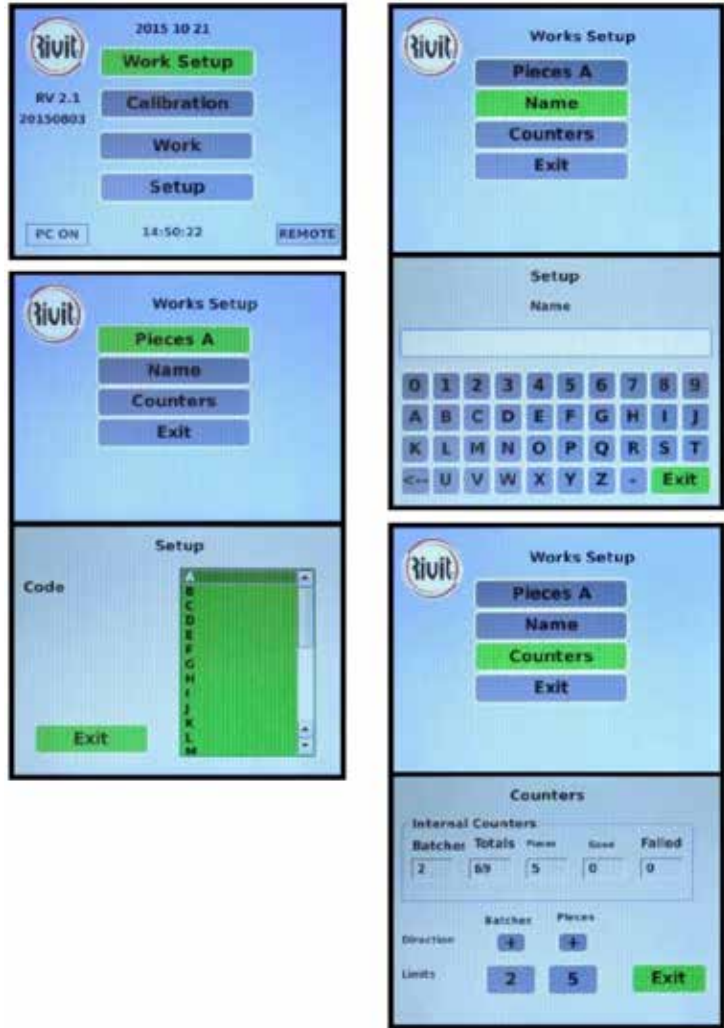
Choose NAME to name your work.

Choose COUNTERS and set the number of batches and the relevant pieces/batch needed.

The first line shows the information relevant to the job. BATCHES (is the number of batches that you are processing), TOTALS (is the sum of all controlled pieces), PIECES (is the total number of installed pieces, both valid and failed), VALID (reports only the number of pieces that conform to the curve recorded during calibration), WRONG (reports only the pieces that do not conform to the curve recorded during calibration).

TOLERANCE, set in SETUP, remains the same for all processes.

Exit WORK SETUP by pressing EXIT, and confirm with OK.



**WORK**

During the working phase, a curve indicating the acquisition of the piece is superimposed on the curve of reference accepted in the calibration phase.

This shows whether the peak and the mid-range of the curve are within the set tolerances.

The left column displays the data relevant to the pieces of the batch: VALID (is the sum of the correct pieces), WRONG (is the sum of the wrong pieces),

TOTALS (is the sum of all controlled pieces), TO DO (indicates how many pieces are left to complete the batch).

In the event that a piece proves WRONG you can choose :

- CONFIRM: to confirm the detected error;
- ACCEPT: to accept the detected error as valid;
- CLEAR: to erase the workpiece without changing the counters (as if it has not been worked);
- EXTEND: to change the TOLERANCES so that the curve is accepted.

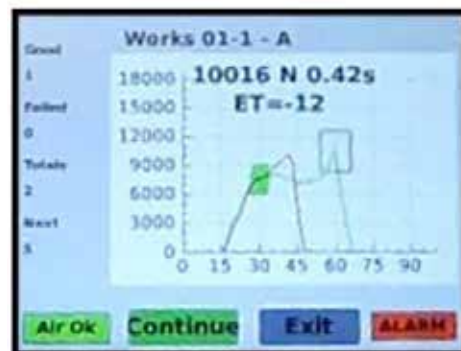
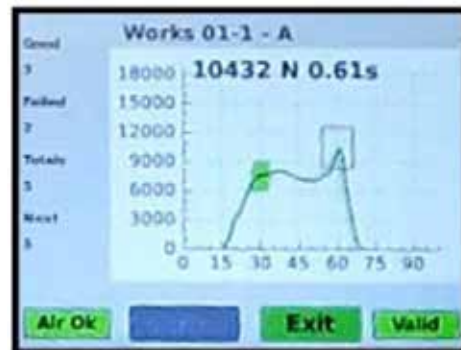
The graph displays now the following of abbreviations:

- EP: indicates the error in pressure/force;
- ET: INDICATES the error in the duration of the operation.

**BATCH END**

When the quantity of set pieces has been reached, the compressed air supply to the tool is turned off and only the EXIT command remains operative to return to the main screen.

If the repetition of the batch is not active, you must reload the counters in order to continue with another batch.



## MAINTENANCE

Maintenance operations must be carried out with the tool stopped and disconnected from the pneumatic supply line.

### **Warnings:**

- *The system maintenance instructions must be followed carefully.*
- *To ensure safety and perfect efficiency, it is recommended to use exclusively ORIGINAL spare parts.*

## CLEANING

It is a good rule to completely clean and grease the system on a periodic basis (depending on the type and frequency of use). These operations must be carried out at least once a year. Clean the front panel with a dry, solvent-free cloth.

***Shut-off all sources of power to the tool.***

***The operator must wear and use suitable personal protections before cleaning.***

## ORDINARY MAINTENANCE

In order to prevent stoppages and faults of the system, an ordinary maintenance (including inspections, checks and operations) must be scheduled to keep the following under systematic control:

- ***State of lubrication of the system.***
- ***Status of cables and electrical/pneumatic connections.***

## FAULT DIAGNOSIS AND REPAIRS

### REPAIRS

To ensure the operational efficiency and safety, all repair jobs shall be carried out exclusively by the local authorized dealer or by ATLAS® Technical Assistance Service.

### REQUESTING ASSISTANCE

For any information concerning Use, Maintenance, Installation, Repair etc., contact ATLAS® customer service. When making inquiries, the customer is requested to be absolutely clear and to always refer to this Manual.

## DISMANTLING INSTRUCTIONS

### DISMANTLING INSTRUCTIONS

When disposing the system, separate the plastic parts and the electronic components (RAEE), which are to be disposed of in compliance with current Regulations.

As for the bulk metal part of the tool, simply split-up the steel parts from those in other metals or alloys and send to be melted down and recycled.

Material release into the environment is not permitted.