

Camera tool (AB6015)



WARRANTY

TQC Sheen will grant a warranty for a period of 12 months for stand & LinQ, the Camera is covered by the manufacturers Warranty from the date of delivery in respect of any evidence of faulty workmanship and materials.

Should a delivered consignment prove to be contrary to contract upon inspection, the customer shall grant TQC Sheen the opportunity hereunder of removing the fault, or else the customer may demand replacement. Because of size and weight of the instrument TQC Sheen will strive to give remote support.

Should the supply or delivery of any improvement or replacement not prove possible, the customer may choose between having the purchase price reduced or in demanding the contract of sale to be rescinded (conversion). Damage resulting from natural wear and tear, mechanical or chemical damage, an act of God or non compliance with the operating instructions shall be excluded from the warranty as well as mechanical interference by the customer or by third parties with Scrub Abrasion and Washability Tester and related equipment without TQC Sheen's written permission. No liability will be accepted for defects, damage or injury caused due to use not carried out in accordance with the manufacturer's user instructions.

To claim warranty, the rejected product has to be sent to TQC Sheen together with the original invoice, any exchange before the product has been returned to TQC Sheen is not possible. TQC Sheen reserve the right to repair, exchange or supply an equivalent substitute. TQC Sheen is not liable for handling or transport costs. Warranty on the purchase price is limited, all liability for consequential damages or changes in technology is expelled.

This product complies to

- Machinery Directive 2006/42 / EC
- Low Voltage Directive 2006/95 / EC
- EMC Directive 2004/108 / EC

This product is RoHS 2 compliant (2011/65/EU)



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1 GENERAL

1.1 Importance of operating manual

This manual is written in order to become familiar with all the functions and possible applications of the instrument. It contains important instructions about how to use the instrument safely and economically; according to the purpose designated. Following these instructions is not only essential to avoid risks. It also reduces repair costs and down-time and increases the products reliability and service-life.

Anyone who works with the instrument shall follow the instructions in this manual, particularly the safety related instructions. Additionally local rules and regulations relating to environmental safety and accident prevention should be observed. It is mandatory that users have read and understand this manual prior to first operation of the Scrub Abrasion and Washability Tester.

1.2 User-responsibility

The user should

- a) Only allow persons to work with the instrument who are familiar with the general instructions on how to work safely and to prevent accidents. The use of the instrument should have been instructed duly.
- b) Regularly check the safety-awareness of personnel at work.

1.3 Responsibility of personnel

Before commencing work anyone appointed to work with the instrument should pay attention to the general regulations relating to working safety and accident prevention. The safety chapter and the warnings in this manual should have been read and understood; acknowledged as evidenced by their signature as can be placed in the Operator Qualification list Annex C.

1.4 Dangers

This instrument has been designed and constructed in accordance with state-of-the-art technology and the acknowledged safety regulations. Nevertheless, working with the instrument could cause danger to the life and health of the operator or to others, or damage to the instrument or other property. Therefore the instrument should only be used for its designated purpose, and in a perfect technical condition. Any defect that could have a negative effect on safety should be repaired and recorded.

1.5 Copyright

The copyright of this operating manual remains with TQC Sheen. This operating manual is intended solely for the user and his personnel. Its instructions and guidelines may not be duplicated, circulated or otherwise passed on to others, neither fully, nor partly. Infringement of these restrictions may lead to legal action may be taken if this restrictions are infringed upon.

1.6 Manufacturer's/Supplier's address

Industrial Physics (TQC Sheen)
Molenbaan 19
2908 LL Capelle aan den IJssel
The Netherlands
T +31(0)10 7900 100
F +31 (0)10 7900 129

2 SAFETY INSTRUCTIONS

2.1 Meaning of Symbols

The following symbols for dangers are used in this instruction manual.



Possible immediate danger to the life or health of personnel.

If this guideline is not noted it can lead to severe danger to health, up to fatal injury.



A dangerous situation could be caused.

Non observance of this guideline can lead to injury or to damage to equipment.



Special tips and particular information.

Guidelines to make optimal use of the instrument.

2.2 Availability of Safety Information

The instruction manual should be kept in proximity to where the instrument operates and should be visible and accessible at any time of operation.

In addition to the information contained in the instruction manual, general and local regulations for accident prevention and environmental protection shall be kept available and observed. Always ensure all guidelines in respect of safety and dangers on the instrument are in readable condition.

In case of danger the instrument has to be switched off by means of the on / off switch at the left back side of the instrument or by unplugging the mains power, then the danger should be eliminated.

2.3 Dangers from Electrical Energy

- Work on the electrical supply may only be done by a qualified electrician.
- The electrical equipment of the instrument must be checked regularly. Loose connections and cables damaged by heat must be corrected immediately.
- Always make sure the instrument's power is turned off while adjusting any electrical component.



Make sure that no paint or other liquids are spilled on the electronics

2.4 Modifications to the Equipment

- Any modifications or additions or alterations to the instrument may solely be made with permission from the manufacturer otherwise the warranty will be void.
- Instruments which are not in fault-free condition must immediately be switched off
- Only use replacement parts from the original supplier. Parts used from other sources aren't guaranteed to take the loading and meet the safety requirements.

3 TRANSPORT AND STORAGE

3.1 Packing

- Please take note of pictorial symbols on the packing.
- Check for transport damages. If the packaging is damaged only accept it with a written approval of the transporter that the package was damaged.

3.2 User: Check on Receipt

- Check packing for damage
- After unpacking check complete supply.

3.3 Reporting Transport Damage and Documentation

- Any damage should be documented as accurately as possible (possibly photographed) and reported to the relevant insurers or, in the case of sales "delivered to customers works", to the supplier.

3.4 Storage and Protective Measures when not in use

- The instrument must be stored in a dry place at a temperature between 10 - 40°C / 50 - 104°F.
- If packing is damaged upon receipt immediately inform the forwarder and make a note on the packing list and have it signed by the forwarder. Ideally make some pictures of the damage as well.
- Store instrument in the original packing if possible.

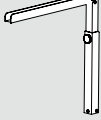

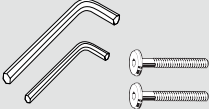

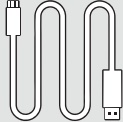
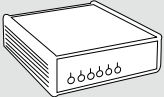
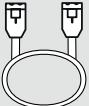
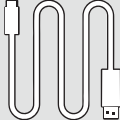


4 INSTRUMENT DATA

4.1 Name / Article

AB6015 Camera Tool

4.2 Scope of Supply

Standard supplied

 1x Stand	 1x Base Plate	 2x Allen Keys 2x Hex screw	 1x Camera	 1x Micro USB Cable
 1x LinQ	 1x Ethernet kabel	 1x USB Kabel A to B	 1x Software	 1x Manual

4.3 Technical Data Camera tool

Camera Tool

min. height	360 mm / 14.17 inch
max. height	480 mm / 18.89 inch
weight	1,6 kg
complete length	415 mm / 16.53 inch
width	150 mm / 5.90 inch
camera hight	20 mm / 0.78 inch
Sensor	OmniVision's 5.04 MPix CMOS
Resolution	15.0 fps at full resolution (2592 x 1944 pixels)
Focus	variable
pixel size	1.4 µm
Colour	colour reproduction

LinQ

Power supply	Not necessary
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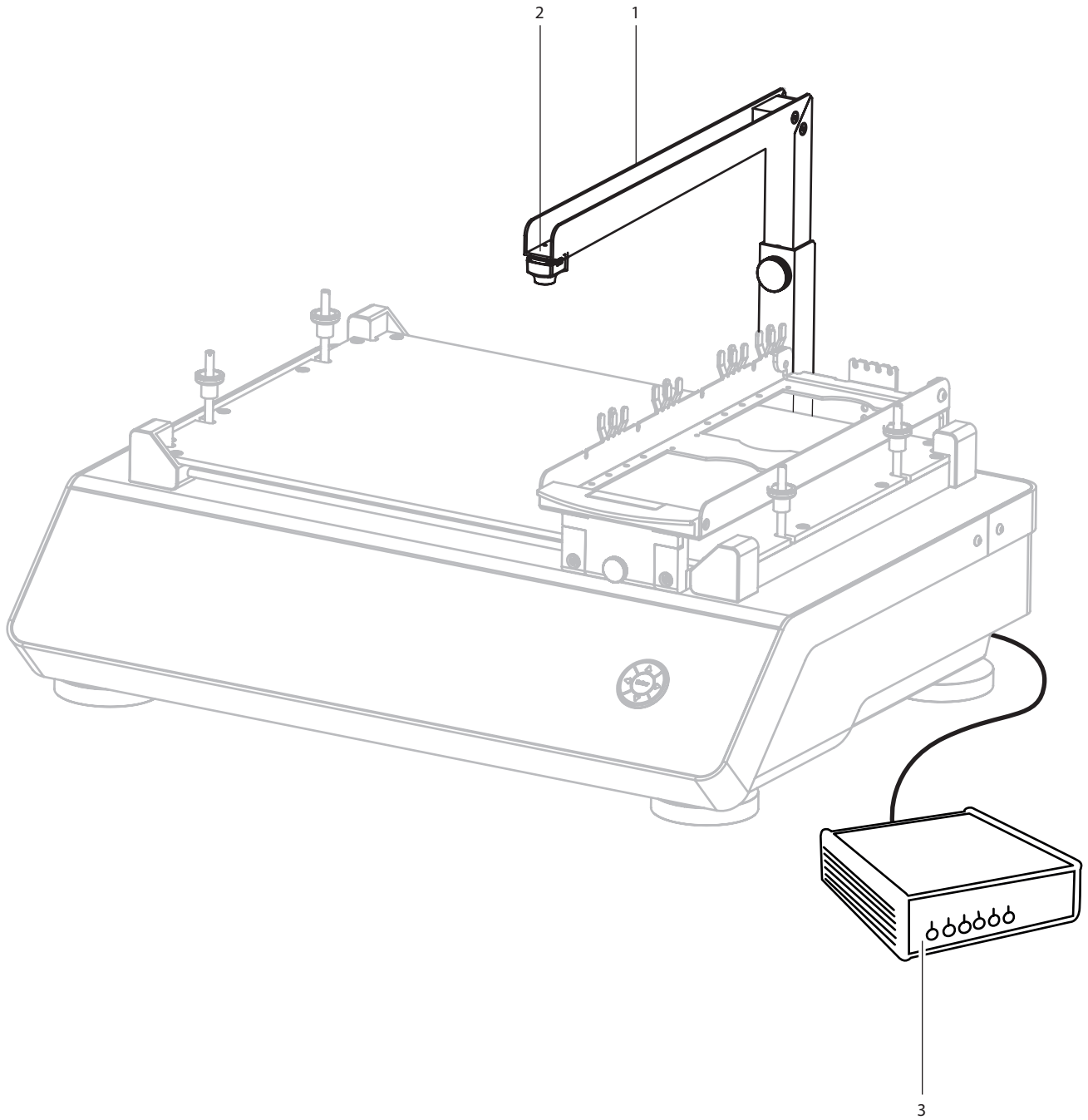
Software

Operation System	Windows 10
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5 INSTRUMENT LAYOUT AND FUNCTIONS

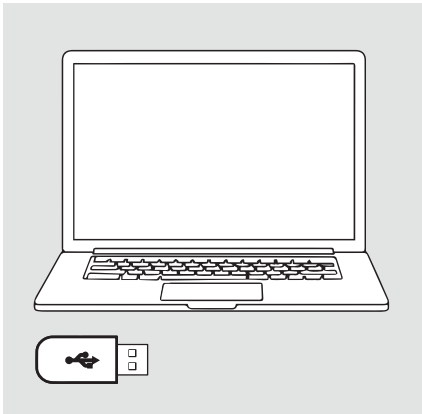
5.1 Instrument Layout

- 1 Stand
- 2 Camera tool
- 3 LinQ



6 INSTRUMENT PREPARATIONS

6.1 Installation



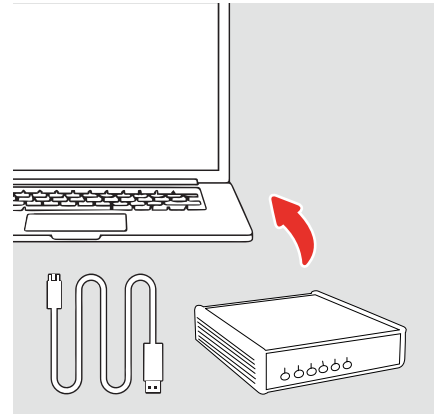
① Install the software

6.2 Software installation on computer



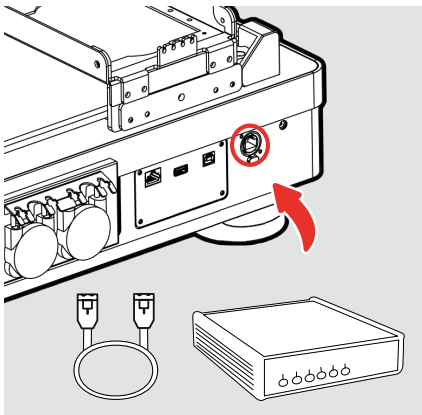
② Install the software

6.3 LinQ connecting with the computer



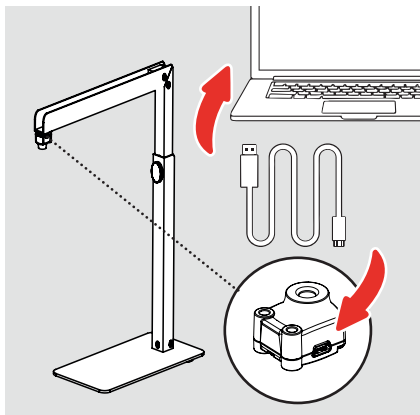
③ Connect the LinQ with the USB A to B-cable to the USB-A port at the back of the Computer.

6.4 LinQ connecting to WBT



④ Connect the Ethernet-cable to the LinQ port at the back of the TQC BUS on the device.

6.5 Connecting camera tool to Computer

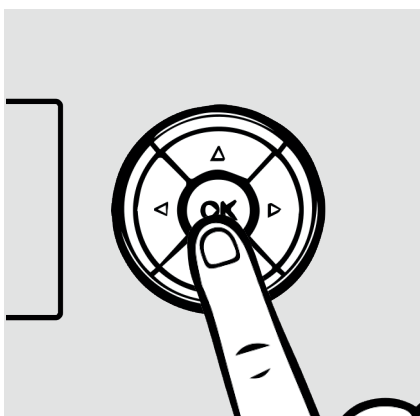


⑤ Place the Tool Holders first, then place the Tools.

6.6 Starting the Instrument



⑥ This screen will be displayed after turning on the instrument.



⑦ Press **OK** for 5 sec.



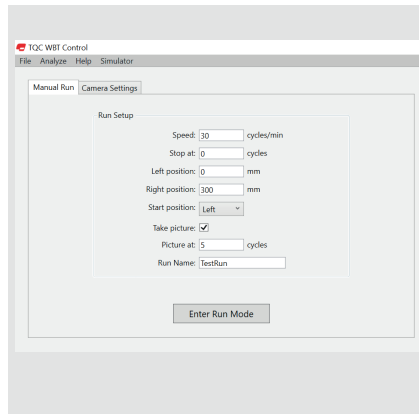
⑧ This screen will be displayed after connecting.

7 SOFTWARE INSTALLATION

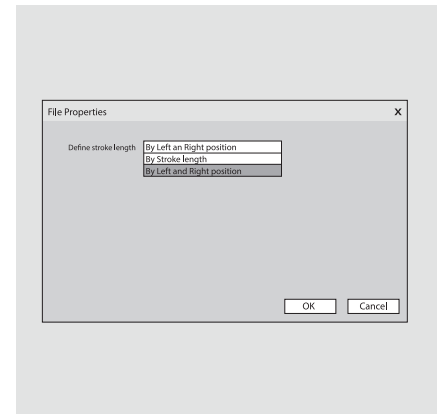
7.1 Software installation on computer



① Software download

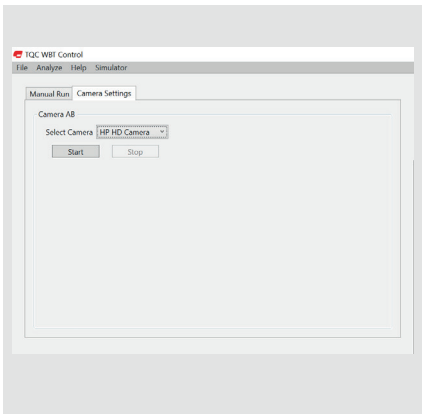


② Open Software and add the parameters on Manual Run. Press Enter. The device will run the defined Setup.



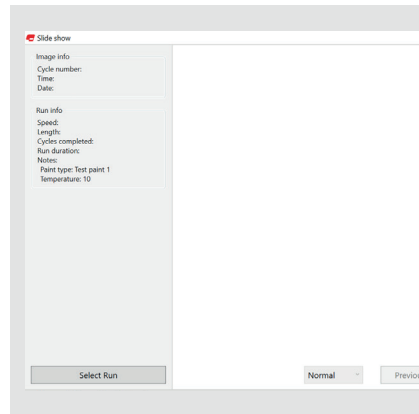
③ On File Properties it is possible to define the position.

7.3 Camera Settings



④ Open Camera Settings and Select the Camera. Press Start Button to continue.

7.4 Analyze the video



⑤ To Analyze the Video, open Analyze and choose the Slide Show. Here you can Select the Run and Play the Video .

8 CARE AND MAINTENANCE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over.
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Never bend or exert extreme forces on the tool carrier
- Generally the TQC Sheen Scrub Abrasion and Washability Tester does not require any maintenance.



Make sure that no paint or other liquids are spilled on the electronics or left in the tubing.

8.1 Disposal of Materials

Disposal of materials used in the operation of the instrument or for auxiliary functions and exchanged items should be dealt with safety and in a manner that will not harm the environment. Follow the local regulations.

8.2 Customer Service

Customer service is provided on request by

Industrial Physics (TQC Sheen)
Molenbaan 19, 2908LL Capelle aan den IJssel - The Netherlands,
T +31(0)10 7900100, F +31 (0)10 7900129 or by local representatives.

9 DISCLAIMER

The right of technical modifications is reserved.

The information given in this manual is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this manual without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavor to ensure that all advice we give about the product (whether in this manual or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this manual is liable to modification from time to time in the light of experience and our policy of continuous product development.

