TEST REPORT EN ISO 11148-1

Hand-held non-electric power tools - Safety Requirement Part 1:

Assembly Power Tools for Non-Threaded Mechanical Fasteners (ISO 11178-1:2011)

Product	**Pneumatic Power Tool – 3/16" Air Hydraulic Riveter**
Name and address of the applicant	**WELIH TOOLS CO., LTD.** **No.200, Jingjhuang St., Dali Dist.,** **Taichung, 412 Taiwan**
Name and address of the manufacturer	**WELIH TOOLS CO., LTD.** **No.200, Jingjhuang St., Dali Dist.,** **Taichung, 412 Taiwan**
Name and address of the factory	**WELIH TOOLS CO., LTD.** **No.200, Jingjhuang St., Dali Dist.,** **Taichung, 412 Taiwan**
Rating and principal characteristics	**Max. Pressure 7.0 bar (100 psi)** **Max. Rivet Nut Size: 3/16" (4.8 mm), Max. Stroke: 14 mm**
Trade mark (If any)	Welih
Model/type	**AHR-101**
Additional information (if necessary)	**Covers all the relevant requirements in the Machinery Directive 2006/42/EC**
Tested according to	**EN ISO 11148-1:2011** **Part 1: Assembly Power Tools for Non-Threaded Mechanical Fasteners**
Name and address of the testing laboratory	PnT Consulting Co., Ltd. 9F-6, No. 186, Sec. 2, Dong Xing Rd., Taichung, 408 Taiwan, R.O.C. Telephone: +886 (0)4 2471 1985 Fax: +886 (0)4 2471 2541
Tested at: *Tested in period:*	Tested at own premise on 2012.03.03. The test results relate only to the sample(s) tested.
Tested by:	Kenny Pan — **2012-03-06** Signature — Date **Kenny Pan** Name in block letters
Verified by:	Michelle Tsai — **2012-03-06** Signature — Date **Michelle Tsai** Name in block letters

Summary of testing:
The testing is carried out at manufacturer's premise. The noise level is based on last measurement in 2010, see report dated 2009.08.17 (Order No. 133381)
Verdict: (See right column in check list, starting from page 3) **P= Pass** **F= Fail** **NA= Not applicable**
Additional documentation: 1. User's instruction containing an Exploded Drawing and Parts List 2. Noise Level Measurement Report. 3. Vibration Level Measurement Report.
Remark: 1. **EUT**: **E**quipment **u**nder **T**est. 2. It is a pistol grip type tool. The handle is at its neck section where the hydraulic parts lie in. The tool is delivered with 4 pieces of nose pieces for 2.4, 3.2, 4.0, and 4.8 mm (3/32", 1/8", 5/32", and 3/16") rivet diameter. The air inlet is located at the bottom of the air cylinder body which forms the base of the tool and the exhaust port is located at the upper front of the air cylinder body. A ring having an eyelet is assembled at the top of the tool. A lever at the inner contour of the handle is used for actuating the tool. Press the lever to pull the rivet. A mandrel cap can be screwed onto the rear part of the tool to collect the brokenstem after pulling it.
Annex: **ANNEX I:** Photos of EuT. **ANNEX II:** Copy of Marking Labels. **ANNEX III:** Photos after falling test.

Clause	Requirement	Result – Remarks	Verdict
4 4.1	**Safety requirement and measures** **General** The machine shall comply with the following safety requirements and/or protective measures and be verified in accordance with Clause 5. In addition, the machine shall be designed in accordance with the principles of ISO 12100 for relevant, but not necessarily significant, hazards, which are dealt with by this part of ISO 11148.	OK	**P**
	The measures adopted to comply with the requirements of Clause 4 shall take account of the state-of-the-art.	OK	**P**
	It is recognized that optimizing the design with respect to some safety measures can result in a degradation of performance against other safety requirements. In such cases, it is required to strike a balance between the various requirements in order to achieve an assembly power tool design that satisfies each requirement, so far as is reasonably practicable, and remains fit for purpose.	OK	**P**
4.2 4.2.1	**Mechanical safety** **Surface, edges and corners** Accessible parts of power tool, except the inserted tool, shall not have sharp edges or angles or rough or abrasive surfaces; see ISO 12100:10, 6.2.21.	OK	**P**
4.2.2	**Supporting surface and stability** The tool shall be designed that they can be laid aside and remain in stable position on a plane surface.	OK	**P**
4.2.3	**Collection of ejected stems** Bottles and/or deflectors shall be fitted to the rear of blind riveters and break stem lockbolt tools to either collect or deflect stems in such a way that their forcible ejection does not cause operator injury.	OK, non-vacuum type. A cap can be screwed to the rear of the tool, even though there is no forcible ejection.	**P**
4.2.4	**Hydraulic fluid ejection** Hydraulic systems of the tool shall be enclosed so as to give protection against high pressure fluid ejection.	OK	**NA**
4.2.5	**Power tool construction** The tool shall be designed and used so as to prevent the loosening or loss of components during expected use, including rough handling and occasional dropping, which can compromise its safety functions. Verify in accordance with 5.5.	OK See cl.5.5	**P**
4.3	**Thermal safety** Surface temperatures of parts of the tools which are held during use or could be inadvertently touched shall follow the provisions of ISO 13732-1 and ISO 13732-3.	No significant heat is found on the surface of the tool.	**P**
	Pneumatic tools shall be designed to avoid the cooling effects of exhaust air on the handles and other gripping zones.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
4.4	**Noise** **General** The tool shall be designed and constructed so that the emission of noise is reduced to the lowest level, taking account of technical progress and the availability of means of reducing noise, in particular at the source. Principles for designing the tool with reduced noise emission are contained in ISO/TR 11688-1 and ISO/TR 11688-2. The main sources of the noise emission are - the tool itself; - the inserted tool; - the workpiece.	OK, See cl.5.2. No muffler is used.	**P**
	Typical sources of noise emitted by the tool are a) the motor and drive mechanism; b) exhaust air or gases; c) vibration- or impact-induced noise.	OK	**P**
	Where the exhaust air or gases are the major contributor to the noise, means to reduce the noise, for example a silencer or equivalent means, shall be included in the design.	OK The nosie level is relatively low, see cl.5.2	**P**
	Alternatively, where practicable, the exhaust air or gases may be piped away from the operator in a hose.	-	**NA**
	Vibration induced noise can often be reduced by vibration isolation and damping.	OK	**P**
	Where alternative technical measures for noise reduction, with greater efficiency, are available, they should be used by the manufacturer.	OK	**P**
4.5	**Vibration** The tool shall be designed and constructed so that the vibration is reduced to the lowest level at the handle and at any other parts of the tool in contact with the operator's hands, taking account of technical progress and the availability of means of reducing vibration, in particular at source. Principles for designing tools with reduced vibration emission are contained CR 1030-1.	OK See cl.5.3.	**P**
	Typical sources of vibration emitted by the tool are - impact; - poorly designed motors; - resonances in the structure of the machine, particularly the handles and their mounts.	OK	**P**
	The following design features have been found effective and should be considered by manufacturers when designing tools: a) reaction mases and springs; b) increasing inertia; c) isolated casing or handles.	OK	**P**
	Where alternative technical measures for vibration reduction, with greater efficiency, are available, they should be used by the manufacturer.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
4.6 4.6.1	**Materials and substances processed, used or exhausted** **Exhaust air** The exhaust air from a compressed air driven tool shall be directed in such a way that it cannot cause a hazard to the operator and so that any sec. effects are minimized. e.g. blowing the dust and reflected air from workpiece onto the operator.	OK The exhaust port is located at the top of the air cylinder body.	**P**
4.6.2	**Lubricants** When specifying lubricants, the manufacturer shall take environmental and occupational health aspects into account.	OK No harmful effect is known.	**P**
4.7 4.7.1	**Ergonomics** **Design of the handle** Gripping areas of the tool shall be designed to provide a convenient, effective means for the operator to exercise full control over the tool.	OK. The neck of the tool is its handle. A lever actuating the pulling is located on the inner contour of the handle.	**P**
	Handles and other parts used for gripping the tool shall be designed to ensure that the operator is able to grip the tool correctly and to perform the expected work. Handles shall suit the functional anatomy of the hands of operator population. (ref. EN 614-1)	The handle is designed suitable to grip and perform the expected work.	**P**
	Tool (including inserted tool) having a mass > 2 kg shall be capable of being supported by two hands whilst being lifted or operated.	OK EuT weights 1.5 kg net.	**P**
	The grip shall be such that normal feed force and reaction torque can be transmitted in an ergonomic way from the hand of the operator to the tool.	OK	**P**
4.7.2	**Suspension device** Provision shall be made, where appropriate, to enable the attachment to the tool of a suspension device in order to reduce, where practicable, the physical strain placed on the operator by the weight of the tool. The fitting of a suspension device shall not introduce an additional hazard.	OK. There is a ring having an eyelet on the top of the tool.	**P**
4.8 4.8.1	**Controls** **Start-and–stop device** The tool shall be equipped with a single control device to start or stop it. It shall be adapted to the handle or to the part of the tool being gripped, so that it can be held comfortably in the run position, and so that the operator can activate it without releasing the grip of the handles.	A lever located on the inner contour of handle is used as the “Start/Stop” device.	**P**
	Start-and-stop devices shall so designed that the inserted tool ceases to be powered when the start-and-stop device is released. Without manual effort and when completely released, the device shall move to the stop position, i.e. shall be of the hold-to-run type.	Hold to run lever.	**P**
	Start-and-stop devices shall be in the stop position or immediately move to the stop position when the tool is connected to the energy supply.	OK	**P**
	It shall not be possible to lock the start-and-stop device in the running position.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
4.8.2	**Unintentional start** The start-and-stop device shall be so designed, positioned or guarded that the risk of unintentional start is minimized. Verification shall be made according to cl. 5.4.	OK. See cl. 5.4	P
4.8.3	**Actuating force** For tools that are intended for frequent starts or for use with precision works, the actuating force should be small.	OK	P
5 5.1	**Verification** **General conditions for tests** Tests according to this part of ISO 11148 are type tests.	-	-
5.2	**Noise** The noise-emission values shall be measured and reported in accordance with ISO 15744. The noise emission values and their uncertainties shall be declared in accordance with ISO 4871.	No load: LpA = 77.8 dB LwA = 88.8 dB LpC = 81.4 dB Uncertainty (K_{pA} / K_{wA} / K_{pC}): K= 3 / 3 /3 dB	P
	Compliance with 4.4 may be verified through the comparison of the noise emission values with those for other machines of the same family or with machines of similar size and performance characteristics.	OK	P
5.3	**Vibration** The vibration total value shall be measured and reported in accordance with ISO 20643. The vibration-emission value and its uncertainty shall be declared in accordance with EN 12096.	Loaded: a_h= 1.2 m/s^2 Uncertainity: K= 0.61 m/s^2	P
	Compliance with 4.5 may be verified through the comparison of the vibration emission values with those for other machines of the same family or with machines of similar size and performance characteristics.	OK	P
5.4	**Unintentional start** Compliance with 4.8.2 shall be verified as follows:	-	-
	The tool shall be connected to the energy supply and placed in any possible position and pulled over the horizontal plane by its hose and continuous operation of the start-and-stop device shall not occur.	No actuation of the start/stop lever.	P
5.5	**Power tool construction** Compliance with 4.2.5 shall be verified as follows:	-	-
	Dropping a sample of tool without inserted tool three times onto a concrete surface from a height of 1 m without affecting its operational and safety functions. The sample shall be positioned to vary the point of impact.	OK, operation and safety functions are not affected. See also photo on Annex III	P
6 6.1	**Information for use** **Marking, signs and written warnings** Tools shall be marked visibly, legibly and indelibly with the following information:	OK	P
	- name and full address of the manufacturer and, where applicable, his/her authorized representative; (The address can be simplified if there is not really enough room on small machines, as long as the manufacturer and, where applicable, his/her authorized representative can always be identified so that mail is able to reach the company.)	OK.	P

Clause	Requirement	Result – Remarks	Verdict
	- designation of series or type; (by a combination of letters and numbers)	OK	**P**
	- serial number or batch number;	OK	**P**
	- year of construction;	Part of batch number.	**P**
	- for pneumatic tools, the rated air pressure as (max.);	OK	**P**
	- for hydraulic tools, the nominal pressure and flow;	-	**NA**
	- for hydraulic tools, the maximum allowable setting for the pressure relief valve.	-	**NA**
	Power tool shall be permanently marked with a symbol, stating that the operators' instruction shall be read before work stars, according to Annex C.	OK	**P**
	- the CE marking;	OK	**P**
6.2 **6.2.1**	**Instruction handbook** **General** For the information provided to the user, the content of Clause 6 together with ISO 12100:2010, 6.4.5.2 and 6.4.5.3, apply.	-	**-**
	The information provided by the manufacturer is an important but not exclusive basis for the safe use of the power tool. It shall provide sufficient information for the end user to perform an initial risk assessment.	OK	**P**
	The hazards identified in 6.2.2.3 to 6.2.2.12 are foreseeable in the general use of hand-held power tools. The information provided with the tool shall state that the user or the user's employer shall assess the specific risks that can be present as a result of each use.	OK	**P**
	The instructions handbook shall contain information relating to at least the following: - name and address of the manufacturer or supplier or any other agent responsible for placing the power tool on the market;	OK	**P**
	- designation of the series or type;	OK	**P**
	- operating instructions; see 6.3;	OK	**P**
	- information on noise emission; see 6.4.2;	OK	**P**
	- information on vibration transmitted to the hands of the operator; see 6.4.3;	OK	**P**
	- maintenance instructions; see 6.5;	OK	**P**
	- explanations of any symbols marked on the power tool; see Annex C;	OK	**P**
	- information about residual risks and how to control them.	OK	**P**
6.2.2 **6.2.2.1**	**Operator's instruction** **General** The instructions and warnings stated in 6.2.2 to 6.2.4 shall be given unless the risk assessment shows that they are not relevant to a particular tool. Words of equivalent meaning may be used.	OK	**P**
6.2.2.2	**Statement of use** The operator's instruction shall include a description of the correct use of the tool and make reference to the appropriate inserted tools.	OK	**P**
	The operator's instruction shall state that any other use is forbidden.	OK	**P**
	Foreseeable misuse of the tool, which experience has shown to occur, shall be warned against.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
6.2.2.3	**Allowance for user** The operator's instructions shall be written primarily for professional users. Where a tool can be used by non-professional users, additional information for use shall be provided.	OK	P
6.2.2.4	**Genernal safety rules** - For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the power tool. Failure to do so can result in serious bodily injury.	OK	P
	- Only qualified and trained operators should install, adjust or use the power tool.	OK	P
	- Do not modify this power tool. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.	OK	P
	- Do not discard the safety instructions; give them to the operator.	OK	P
	- Do not use the power tool if it has been damaged.	OK	P
	- Tools shall be inspected periodically to verify that the ratings and markings required by this part of ISO 11148 are legibly marked on the tool. The employer/user shall contact the manufacturer to obtain replacement marking labels when necessary.	OK	P
6.2.2.5	**Projectile hazards** - Disconnect the tool from the energy source when changing inserted tools or accessories..	OK	P
	- Be aware that the failure of the workpiece, or accessories, or even of the inserted tool itself can generate high-velocity projectiles.	OK	P
	- Always wear impact-resistant eye protection during the operation of the power tool. The grade of protection required should be assessed for each use.	OK	P
	- The risk to others should also be accessed at this time.	OK	P
	- Ensure that the workpiece is securely fixed.	OK	P
	- Check that the means of protection from ejection of fastener and/or stem is in place and is operative.	OK	P
	- Warning against the possible forcible ejection of installation mandrels from the front of the tool.	OK	P
6.2.2.6	**Operating hazards** - Use of the tool can expose the operator's hands to hazards including crushing, impacts, cuts and abrasions and heat. Wear suitable gloves to protect hands.	OK	P
	- Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.	OK	P
	- Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available.	OK	P
	- Maintain a balanced body position and secure footing.	OK	P
	- Release the start-and-stop device in the case of an interruption of the energy supply.	OK	P
	- Use only lubricants recommended by the manufacturer.	OK	P
	- Avoid unsuitable postures as it is likely for these positions not to allow counteracting of normal or unexpected movement of the tool.	OK	P

Clause	Requirement	Result – Remarks	Verdict
	- If the tool is fixed to a suspension device, make sure that he fixation is secure.	OK	**P**
	- Beware of the risk of crushing or pinching if nose equipment is not fitted.	OK	**P**
6.2.2.7	**Repetitive motions hazards** - When using a power tool to perform work-related activities, the operator can experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.	OK	**P**
	- While using a power tool, the operator should adopt a comfortable posture whilst maintaining secure footing and avoiding awkward or off-balanced postures. The operator should change posture during extended tasks, which can help avoid discomfort and fatigue.	OK	**P**
	- If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness, these warning signs should not be ignored. The operator should tell the employer and consult a qualified health professional.	OK	**P**
6.2.2.8	**Accessory hazards** - Disconnect the power tool from the energy supply before fitting or changing the inserted tool or accessory.	OK	**P**
	- Use only sizes and types of accessories and consumables that are recommended by the power tool manufacturer; do not use other types or sizes of accessories or consumables.	OK	**P**
6.2.2.9	**Workplace hazards** - Slips, trips and falls are major causes of workplace injury. Be aware of slippery surfaces caused by the use of the tool and also of trip hazards caused by the air line or hydraulic hose.	OK	**P**
	- Proceed with care in unfamiliar surroundings. Hidden hazards, such as electricity or other utility lines, can exist.	OK	**P**
	- The power tool is not intended for use in potentially explosive atmospheres and is not insulated against coming into contact with electric power.	OK	**P**
	- Ensure that there are no electrical cables, gas pipes, etc., that can cause a hazard if damaged by use of the tool.	OK	**P**
6.2.2.10	**Noise hazards** - Unprotected exposure to high noise levels can cause permanent, disabling, hearing loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Therefore, risk assessment and the implementation of appropriate controls for these hazards are essential.	OK	**P**
	- Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpieces from “ringing”.	OK	**P**
	- Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
	- Operate and maintain the power tool as recommended in the instruction handbook, to prevent an unnecessary increase in noise levels.	OK	**P**
	- Select, maintain and replace the consumable/inserted tool as recommended in the instruction handbook to prevent an unnecessary increase in the noise level.	OK	**P**
	- If the power tool has a silencer, always ensure it is in place and in good working order when the power tool is operating.	OK	**P**
6.2.2. 11	**Vibration hazards** The information for use shall draw attention to vibration hazards that have not been eliminated by design and construction and remain as residual vibration risks. It shall enable employers to identify the circumstances in which the operator is likely to be at risk from vibration exposure. If the vibration emission value obtained using ISO 20643 does not adequately represent the vibration emission in the intended uses (and foreseeable misuses) of the machine, additional information and/or warning shall be supplied to enable the risks arising from vibration to be assessed and managed.	OK	**P**
	- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.	OK	**P**
	- Wear warm clothing when working in cold conditions and keep your hands warm and dry.	OK	**P**
	- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the power tool, tell your employer and consult a physician.	OK	**P**
	- Support the weight of the tool in a stand, tensioner or balancer, because lighter grip can then be used to support the tool.	OK	**P**
6.2.3	**Additional safety instructions for pneumatic power tool** - Air under pressure can cause severe injury	OK	**P**
	- Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs	OK	**P**
	- Never direct air at yourself or anyone else.	OK	**P**
	- Whipping hoses can cause severe injury. Always check for damaged or loose hoses and fittings.	OK	**P**
	- Cold air shall be directed away from the hands.	OK	**P**
	- Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whipcheck safety cables shall be used to safeguard against possible hose-to-tool and hose-and-hose connection failure.	OK	**P**
	- Do not exceed the maximum air pressure stated on the tool.	OK	**P**
	- Never carry an air tool by the hose.	OK	**P**
6.2.4	**Additional safety instructions for hydraulic power tool** - Do not exceed the maximum relief-valve setting stated on the tool.	-	**NA**
	- Carry out a daily check for damaged or worn hoses or hydraulic connections and replace if necessary.	-	**NA**

Clause	Requirement	Result – Remarks	Verdict
	- Use only clean oil and filling equipment.	-	**NA**
	- Power units require a free flow of air for cooling purposes and should, therefore, be positioned in a well ventilated area free from hazardous fumes.	-	**NA**
	- Ensure that couplings are clean and correctly engaged before operation.	-	**NA**
	- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.	-	**NA**
	- Do not install or remove the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.	-	**NA**
	- Be sure all hose connections are tight.	-	**NA**
	- Wipe all couplers clean before connecting. Failure to do so can result in damage to the quick couplers and cause overheating.	-	**NA**
	Instructions shall be given that only hydraulic fluid recommended by the manufacturer shall be used.	-	**NA**
6.2.5	**Specific safety instructions** Warnings shall be given about any specific or unusual hazards associated with the use of the power tool. Such warnings shall indicate the nature of the hazard, the risk of injury and the avoidance action to take.	OK	**P**
6.3	**Operating instructions** The instructions shall include, where appropriate, - instructions for setting up or fixing the power tool in a stable position as appropriate for power tools that can be mounted in a support;	OK	**P**
	- assembly instructions, accessories and inserted tools;	OK	**P**
	- illustrated description of functions;	OK	**P**
	- limitation on tool use due to environmental conditions;	OK	**P**
	- instructions for setting and testing;	OK	**P**
	- general instructions for use, including changing inserted tools and limits on the size and type of workpiece.	OK	**P**
6.4 **6.4.1**	**Data** **General** The instructions shall include the information on the data plate and the following: - mass of the power tool;	OK	**P**
	- for hydraulic assembly power tools, specification of the coupling;	-	**NA**
	- for hydraulic assembly power tools, specification of hoses with regard to pressure and flow	-	**NA**
	- for hydraulic assembly power tools, maximum inlet temperature of the inlet fluid.	-	**NA**
6.4.2 **6.4.2.1**	**Noise** **Declaration of emission** The instructions shall include the noise-emission values and uncertainties as specified in 5.2 and the reference number of the test code, ISO 15744.	OK	**P**

Clause	Requirement	Result – Remarks	Verdict
6.4.2.2	**Additional information** If the values for noise emissions obtained using the appropriate tests defined in 5.2 do not adequately represent the emissions during the intended uses of the machine, additional information and/or warnings shall be supplied to enable an assessment and the management of the associated risks.	OK	P
	Information on noise emission should also be provided in the sales literature.	OK	P
6.4.3 6.4.3.1	**Vibration** **Declaration of emission** The instruction handbook shall include the vibration-emission value and uncertainty as specified in 5.3 and the reference number of the test code, ISO 20643.	OK	P
6.4.3.2	**Additional information** If the values for vibration emissions obtained using the appropriate tests defined in 5.3 do not adequately represent the emissions during the intended uses of the machine, additional information and/or warnings shall be supplied to enable the potential risks to be assessed and managed.	OK	P
	Information on vibration emission should also be provided in the sales literature.	OK	P
6.5	**Maintenance instructions** The maintenance instructions shall contain: - instructions to keep the power tools safe by regular preventative maintenance;	OK	P
	- information on when the regular preventative maintenance shall be carried out, for instance, after a specified time of operation, a specified number of cycles/operations or a stated number of times per year;	OK	P
	- instructions for disposal so as not to expose personnel and the environment to hazards;	OK	P
	- list of the service operations that the user should carry out;	OK	P
	- instructions for lubrication, if required;	OK	P
	Maintenance instructions shall include the precautions to take to avoid exposure to hazardous substances deposited (due to work processes) on the tool.	OK	P

ANNEX I Photo of EuT

Fig. 1 Right view and accessory nose pieces

ANNEX II Copies of Marking Labels

Fig. 2 Marking labels

ANNEX III Photos after falling test

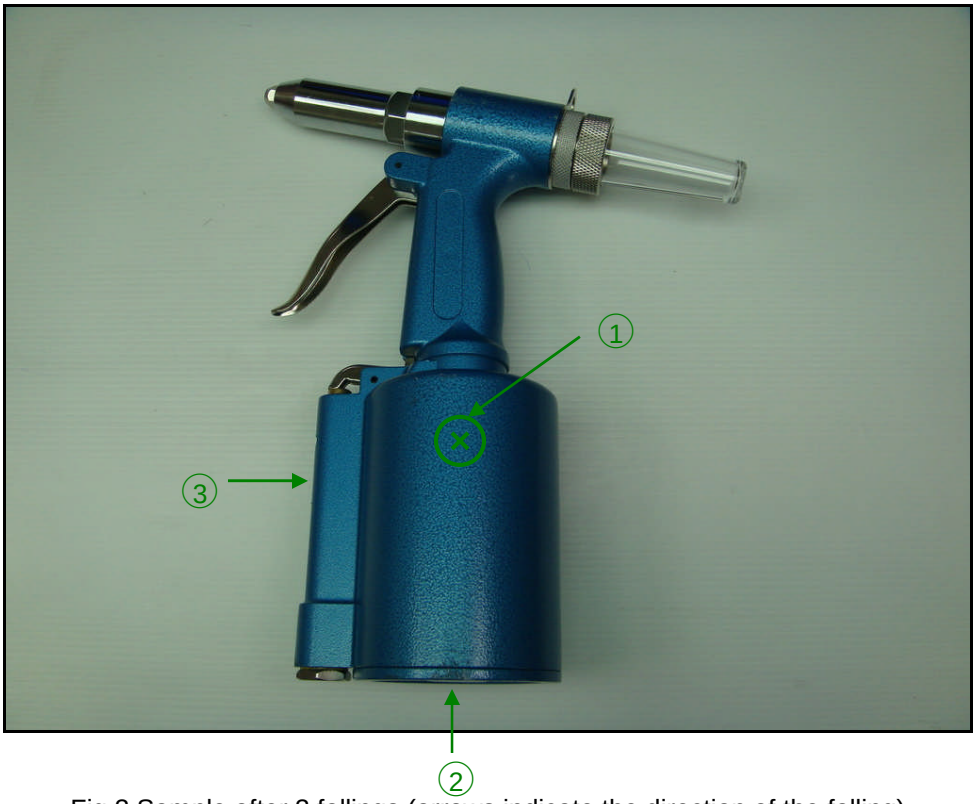

Fig.3 Sample after 3 fallings (arrows indicate the direction of the falling)

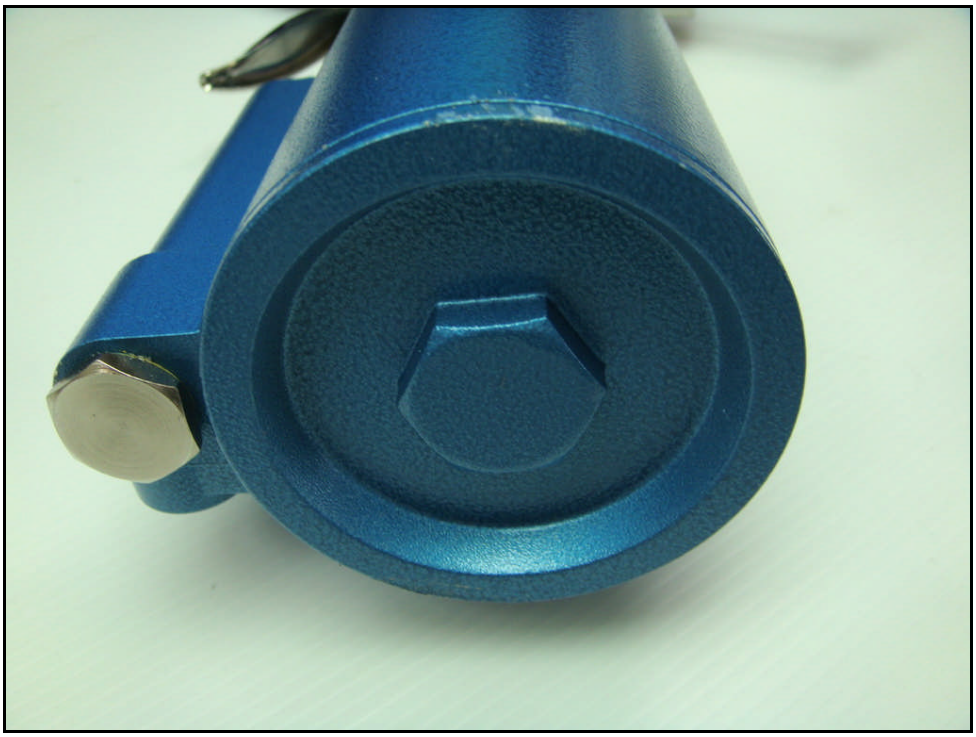

Fig.4 Close look, after 3 fallings