Document ref **IFU-021a** rev 0 01/06/2022	**INSTRUCTIONS FOR USE FOR THE CARE, HANDLING AND REPROCESSING OF RE-USABLE WIRE CUTTERS, PLIERS & PLATE BENDERS**	BOLTON SURGICAL of SHEFFIELD

DEVICE(S)	• **These instructions apply to re-usable Wire Cutters, Pliers & Plate Benders with capacities up to Ø3mm(soft wire) or Ø2mm(hard wire), supplied by Bolton Surgical Limited.**	**INSTRUMENT CLASSIFICATION**	**Class 1**
INTENDED USE	• **Wire cutters, pliers & plate benders** - Hand-held heavy-duty manual surgical instruments intended for use by a qualified surgical practitioner to cut, grip, hold, twist & bend wires or plates that are being applied to the patient during surgical intervention.		
HOW SUPPLIED	 Bolton Surgical re-usable surgical instruments are **LATEX FREE**, including their packaging.	 Bolton Surgical re-usable surgical instruments are supplied non-sterile and must be cleaned and sterilised prior to each use.	
WARNINGS AND CONTRAINDICATIONS	• **WARNING: If this device is/was used on a patient with, or suspected of having Creutzfeld Jakob Disease (CJD), the device cannot be re-used and must be destroyed due to the inability to reprocess or sterilise to eliminate cross-contamination risk.** • **These devices are intended for use only by appropriately qualified surgical practitioners.** • Do not use the instrument if, in the opinion of the surgical practitioner, patient safety risks outweigh the benefits. • Risk of infection – Do not use any surgical instrument showing signs of corrosion or inadequate decontamination. • Do not attempt to use these instruments to cut wire or other metallic items that are beyond the stated capacity of the cutter (see 'Limitations of Use' below). Such mis-use may result in serious damage or failure of the instrument as well as unnecessary stress to the patient. Do not use damaged Instruments. • Follow instructions and warnings as issued by manufacturers of any decontaminants, disinfectants and cleaning agents used. Wherever possible avoid use of mineral acids and harsh, abrasive agents. • No part of the process to exceed 140ºC. • **When handling biologically contaminated instruments and reprocessing medical devices always handle with care wearing appropriate protective gloves, eyewear and clothing in accordance with local Health & Safety procedures.**		
LIMITATIONS OF USE	• Capacity limitations – Maximum cutting capacity of instruments covered by this IFU are Ø3mm(soft wire) or Ø2mm(hard wire). Refer to document ref MDL065 available at www.boltons.co.uk. • Only Wire Cutters with Tungsten Carbide blades should be used to cut hard wires. • Repeated reprocessing has minimal effect on the service life of surgical instruments. End of useful service life is normally determined by wear and damage in use. (See 'INSPECTION' below)		
INSTRUCTIONS:			
PREPARATION FOR FIRST USE	• **Before first use, the re-usable device(s) covered by this IFU must be cleaned, inspected and sterilised in accordance with the Instructions below.**		
FROM POINT OF USE	• At point of use, remove gross soil using absorbent wipes. Wherever possible, do not allow blood, surgical debris or bodily fluids to dry on the instruments. • For best results and to maximise their service life reprocess instruments immediately after use to minimise the potential for drying before cleaning. • If transfer to reprocessing is likely to take time, consider covering the instruments with a damp cloth or use an enzymatic foam spray cleaner to help prevent soil from drying or, soak in an enzymatic solution (prepared according to the manufacturer's instructions) to help facilitate cleaning. • Do not leave instruments soaking in saline or chlorinated solutions. • Avoid mechanical damage during transportation to the processing area (e.g. do not mix heavy devices with delicate items). Pay particular attention to cutting edges to avoid injury and damage to or by the instrument. Separate sharp and delicate surgical instruments. • Avoid unnecessary contamination or cross contamination risk by transporting used instruments for reprocessing in closed or covered containers		
AUTOMATED CLEANING	• Whenever possible automated cleaning methods are preferable to manual methods to provide a more consistent and reliable process and, reduce staff exposure to contaminated devices and the cleaning agents used. • **Use suitably authorised washer-disinfector machines and low foaming, non-ionising cleaning agents and detergents following the manufacturer's instructions for use, warnings, concentrations and recommended cycles.** • Surgical instruments covered by these instructions can withstand alkaline cleaning agents up to 12.5 pH. • Surgical instruments covered by these instructions can withstand thermal disinfection at 90ºC to 95ºC for a minimum of 1 minute. • Load instruments carefully in the open position for cleaning so that the instruments can drain. • Place heavy instruments with care into the bottom of containers, taking care not to overload wash baskets. • Avoid contact between devices if movement during washing could cause damage or impair the washing action. • Soft, high purity water which is controlled for bacterial endotoxins or mains supplied potable tap water is suitable for use in the final rinse stage. • On completion of the cleaning cycle, visually inspect each device for dryness and any remaining soil. If soil remains, repeat the cleaning process. • Remaining wetness may be removed with medical grade compressed air or by heating in an oven below 110°C **Note:** *These instructions have been validated for the products detailed above using a washer-disinfector operated in accordance with the recommendations included in this IFU. The detergent used was 12.6pH.*		
MANUAL CLEANING	• **Manual cleaning is not advised if an automatic washer-disinfector is available. If this equipment is not available, use the following process:** 1. Use a double sink system (wash/rinse) dedicated for instrument cleaning (not used for hand washing). Ensure that the water temperature does not exceed 35ºC. 2. In the first sink, keeping the instrument submerged, with an autoclavable brush, apply suitably approved cleaning solution to all surfaces until all soil has been removed, always brush away from the body. Ensure pivot jointed instruments are thoroughly cleaned in both open and closed positions. 3. In the second sink, rinse instruments with soft, high purity water which is controlled for bacterial endotoxins or, mains supplied potable tap water so that water reaches all parts of the instrument, then carefully hand dry or use a drying cabinet.		
CLEANING INSPECTION	• After cleaning, visually inspect *all* surfaces paying particular attention to joints and spring mounting points for complete removal of soil and fluids. If ANY soil or fluid is still visible, return for repeat decontamination.		
MAINTENANCE	• Apply surgical grade lubricants to pivot joints in accordance with the lubricant manufacturer's instructions • Lubrication is essential every time instruments are processed. Only lubricate dry instruments. • Proper cleaning, handling, sterilisation and standard routine maintenance will ensure that instruments perform as intended and will maximise their useful life.		

INSPECTION	• Visually inspect and check: - all instruments for completeness, damage, distortion, excessive wear, staining and corrosion; cutting edges are free from nicks, present a continuous edge and align correctly and joints have a smooth movement without excess play. • ***Remove for repair or replacement any worn out, cracked, fractured or otherwise damaged instruments.*** **Note:** *If a used instrument is returned to the manufacturer / supplier for any reason, the instrument **must** be decontaminated and sterilised and be accompanied with the relevant documented evidence.*
PACKING FOR STERILISATION	• All instruments to be packed following local protocol, in accordance with ISO11607-1
STERILISATION	• **Use suitably authorised vacuum autoclave operating at 134°C to 137°C, with a minimum holding time of 3 minutes (see 'Additional Information' below for alternative sterilisation parameters)** • **Always follow the instructions of the machine manufacturer.** • Ensure instruments are dry before sterilisation. • Sterilisation cases should be loaded just prior to the sterilisation step. • When sterilising multiple instruments in one autoclave cycle, ensure that the steriliser manufacturer's stated maximum load is not exceeded.
STORAGE	• Ensure instruments are dry before storage and stored in dry, clean conditions at an ambient room temperature.
GENERAL CLEANING PRECAUTIONS	• Do not soak instruments in hot water, alcohol, disinfectants or antiseptics to avoid coagulation of mucus, blood or other body fluids. Do not exceed two hours soaking in any solution. • Do not use steel wool, wire brushes, pipe cleaners or abrasive detergents. • The quality of the water used for diluting cleaning agents and for rinsing medical devices should be carefully considered. Mineral residues from hard water can result in staining of the device or prevent effective cleaning and decontamination. De-scaling agents, if used, will not harm the devices. • If practicable, avoid processing instruments of different metallic composition close together to minimise risk of electrolytic action between the metals that can result in corrosion. • Delicate instruments require careful handling to prevent damage. Use caution during cleaning and sterilisation. A non-fibrous sponge should be used to wipe off all blood and debris. Do not apply excessive force at pivots and joints.
ADDITIONAL INFORMATION	• Other forms of cleaning** (i.e. Ultrasonic) and sterilisation (i.e. Low temperature steam and Formaldehyde, Ethylene Oxide and Gas Plasma) are available. However, always follow the instructions for use as issued by the equipment manufacturer and always consult with them if in any doubt over the suitability of any process used. • Alternative sterilising parameters** - vacuum autoclave operating at 132°C to 135°C, with a minimum holding time of 4 minutes. • Cleaning and sterilising guidelines are available in UK Health Technical Memorandum - HTM01-01 and ISO17665-1 ** Products covered by this IFU have not been validated for these forms of cleaning and sterilisation. **Note:** *It is the responsibility of the reprocessor to ensure that the reprocessing that is actually carried out, using the equipment, materials and personnel in the reprocessing facility, achieves the desired results. This requires validation and routine monitoring of the process. Likewise, any deviation by the reprocessor from the instructions provided must be properly evaluated for effectiveness and potential adverse consequences.*
MAINTENANCE AND REPAIR	• Instruments can be returned to Bolton Surgical for repair but ***must*** be decontaminated and sterilised and be accompanied with the relevant documented evidence. Failure to supply decontamination/sterilisation certification will result in products being returned untouched for re-processing and delayed repairs. • Repairs carried out by Bolton Surgical are guaranteed for 12 months to be free from defects in workmanship, materials and parts used to carry out the repair providing the instrument is used normally for its intended surgical purpose. Any repair parts or workmanship proving to be defective will be replaced or repaired, at our discretion, at no charge to the customer.
LIMITED WARRANTY	• Bolton Surgical re-usable surgical instruments are guaranteed for a period of 15 years from the date of purchase (terms & conditions apply) against product failure resulting from defective materials and workmanship, when used by persons with the required specialist knowledge and training, for the purpose for which the device is intended and, properly maintained in accordance with this IFU. • Liability is refused for products which have been modified as compared to the originally supplied product, misused, incorrectly handled or, used for a purpose that differs in any way from product's stated Intended Use.
RETURNED GOODS POLICY	• Customers wishing to return goods for any reason must do so in accordance with Bolton Surgical's Returns Policy (ref. POL 009) a copy of which is supplied with each order or, is available online by visiting www.boltons.co.uk. • Determination of a product defect will be made by Bolton Surgical Ltd.
DISPOSAL	• End of service life instruments must be decontaminated and sterilised prior to disposal. Disposal should be in accordance with local waste management protocols.
INCIDENT REPORTING	• Report any serious incident that has occurred in relation to the use of the device to the manufacturer and the competent authority of the country in which the user and/or patient is established and in accordance with the reporting rules applicable in that country.
VALIDATION	• These instructions have been validated for the products detailed above using a washer-disinfector operated in accordance with the recommendations included in this IFU. The detergent used was 12.6pH.

EXPLANATION OF SYMBOLS USED ON LABELS						
 Manufacturer	 Manufacturer's Product Code	 Manufacturer's Batch Code	 Supplied Non- Sterile	 Supplied Latex Free	 Caution	 Consult Instructions for Use

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MEDILINK MEMBER

NHS Supply Chain

UK CA

Manufactured under an ISO 13485 registered Quality Management System

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