# **Pulse lavage System**

## **Instruction Manual**

REF

2500248

model no. SMX-2500B2-DP-ST01Z-CT02Z-3M

#### **General Description**

This Pulse lavage System has a suction adaptor and BUILT-IN Battery Pack, which avoids bulky cables and motion limitation.

It is fully disposable single use, minimizing potential contamination, designed for use in orthopaedic surgical procedures, trauma and general wound care.

#### Orthopaedic Bone Bed Preparation

Pulse lavage System is an important equipment used to prepare bone bed before orthopaedic cementing during arthroplasty. It has been proven to increase cement penetration into the cancellous bone, potentially improving fixation strength leading to longer survival of implants, thus reducing revision rates.

#### **Wound Care**

With the adequate steady pressurized, pulsed solution it can achieve a mechanical debridement for wounds, removing dirt, infectious microorganisms, wound exudates, necrotic tissue and debris. Thereby assisting visual examination and optimizing wound healing by stimulating granulation tissue formation.



Read the operating instruction carefully before use. Failure to follow may cause damage or injuries.



Standard package includes:

- 1 Hand piece
- 1 Small cone tip (ST01Z) Optional
- 1 Coaxial canal tip (CT02Z) Optional
- 1 Suction tube (3 meters) Optional

#### **Indications**

- Arthroplasty bone cleansing
- Wound cleaning

#### **Warnings**

Failure to follow may cause harm to person.

- The device must be carried out solely by Orthopedic surgeons and health professionals with wound care knowledge.
- Wear protective equipment, such as fluid-proof gown, gloves, mask or face shield, hair cover to avoid infectious splash backs.
- Use a drape or towel to cover all patient lines, ports, and wounds that aren't being treated.
- When applied on nerves, tendons and bones, should take precautions depending on tissue condition and the judgement of professional personnel.
- Follow standard practices to minimize potential contamination.
- Sterile only if package is unopened and undamaged.
- Single use only! DO NOT Re-sterilize!
- DO NOT operate damaged or malfunctioning instrument.

### Contraindications

 Should not be performed in the presence of active profuse bleeding (precautionary measures for patients on anticoagulation medication)



#### Caution

Failure to follow may cause damage to product.

- DO NOT use this product in any other manner other than the purpose or the operation method described in this instruction manual.
- DO NOT submerge instrument in liquid.
- DO NOT drop or hit the instrument.
- Store in a cool dry place.
- No modification of this equipment is allowed
- Do not mix with used or other types of batteries
- Some national laws restricts this device to sale by or on the order of a physician.
- The user/patient should report any serious incident relating to the device to the manufacturer and competent authority of its Member State.



Please dispose of the device in accordance with EC Directive – WEEE (Waste Electrical and Electronic Equipment).

#### **Instructions for Use**

- 1. Peel open the package and remove all the items in a sterile way.
- 2. Push up the Locking Ring (A).
- Attach the selected tip (B) to the handpiece.
   (When using the Intramedullary Tip ensure the tip cover has been removed before use)
- Lock the selected tip in place by pushing back the Locking Ring. (Retract the Locking Ring for tip removal (A))
- 5. Attach the irrigation tube to the irrigation solution (D)
- 6. Attach the suction tube to the suction system (F) (G).





7. Remove the protector from the Trigger Switch (C). High speed: depress the upper half. Low speed: depress the lower half. Stop the flow: return to the original position.

#### NOTE:

• Both irrigation and suction tubes has clamps to prevent leakage of fluids.

### In Case of Tip Obstruction: (Optional)

Insert the cleaning rod (HA 250) from the distal end of the tip and push until the obstruction has been released.



#### **Battery Removal**

- Rotate to remove battery cap (E) and pull out the Battery Pack.
- 2. Disconnect the small cable connection by pulling.





#### **Shelf Life**

3 years

#### Disposal

- Make sure to remove the battery pack in case of disposal.
- Ensure that the device is disposed of safely and in accordance with all current national and international waste disposal directives.
- Please contact the local authorities responsible for waste disposal if questions arise.

#### Operation

• Temperature: 10°C ~ 40°C

• Relative Humidity: 30%~75%RH

• Atmospheric Pressure: 80kPa~106kPa

Altitude limit: 2,000 meter

#### **Transportation and Storage**

• Temperature: 5°C ~ 40°C

Relative Humidity: 15%~75%RH

• Atmospheric Pressure: 860hPa~1060hPa

Distributed by Kaiser Medical Technology Ltd Brinkworth House Business Centre Brinkworth, Wiltshire, SN15 5DF.UK

UK RP

Medimap Ltd 2 The Drift, Suffolk, Thurston, IP31 3RT, United Kingdom EC REP

**MedNet EC-REP GmbH**Borkstrasse 10, 48163 Muenster,
Germany.







DO NOT dispose battery in fire DO NOT recharge

SUCTION TUBE (OPTION)

#### **Specifications**

- · Adjustable spray speed: High or Low
- Pressure: <15 PSI
- Pulse rate: 1500~1700 cycle/min
- High speed flow rate:1100~1400ml/min (30mm cone tip)
- High speed flow rate: 1000~1300mil/min (coaxial tip)
- · Low speed flow rate 700ml/min
- Tube Length 3 meters
- Batteries: == 10.5V / AA Alkaline Batteries x7 cells.
- High speed power rate: == 10.5V / 25W
- Low speed power rate: === 6.0V / 14.5W
- Type B applied part: small cone tip (optional), coaxial canal tip (optional).

(Data may vary according to type of power source, type of tip, distance and length of operation)

### Labeling Symbols

Refer to instruction manual/booklet

⚠ General warning sign / CautionDo not use if package is damaged

② Do not re-use

Keep dry

Temperature limit

Sterilized using ethylene oxide

Complies with EU directives

Manufacturer

IP2X Solid particle protection:> 12.5mm

(AXEX) Not made with latex

MD Medical Device

=== Direct current REF Catalog number

Recycle alkaline battery

Date of manufacture

European Union WEEE Directive Logo

(i) Consult instructions for use

EC REP Authorized representative in the

European Community

UK Responsible Person

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