

The cleaner way to operate

The innovative VERSAJET® Hydrosurgery system is a specialised powered surgical tool designed to improve care for patients undergoing wound debridement.

This unique system can reduce the number of procedures some patients may have to undergo.⁴ This is not only better for the patient and surgeon; it can also reduce the cost of debridement, providing a better way to operate.

 **smith&nephew**
VERSAJET®
Hydrosurgery System

The VERSAJET Hydrosurgery System is designed for easy set-up. It utilises a reusable power console with foot pedal activation, disposable handpiece and tubing assembly in conjunction with sterile saline and standard waste receptacle (not supplied).

System operation

- Sterile saline flows through low-pressure tubing to the pump cartridge where it is pressurised
- Pressurised saline is forced under very high pressure through a tiny jet nozzle at the end of the handpiece, producing a high-velocity stream
- Saline stream is directed backwards across operating window and into the evacuation collector tube in the handpiece, which is connected to a waste container

Technology

Venturi effect

- A high velocity stream of sterile saline jets across the operating window and into an evacuation collector
- By utilising the Venturi effect, a localised vacuum is created across the operating window
- This holds and cuts targeted tissue while aspirating debris from the site

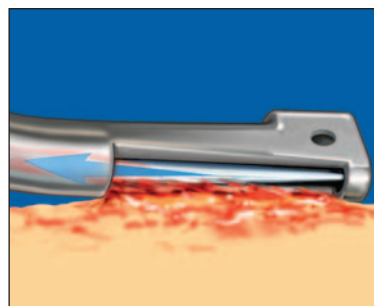
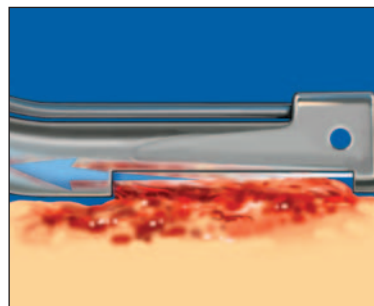
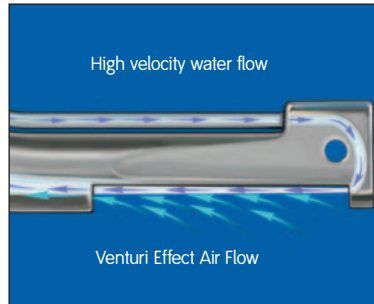
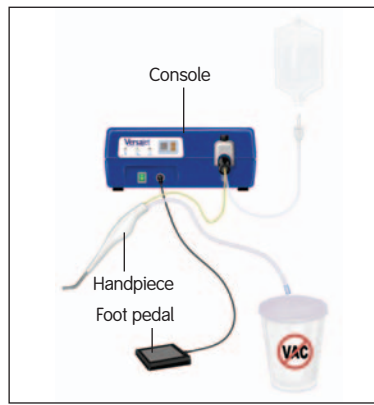
Applications

Tissue excision

- When the operating window is orientated parallel to the tissue, excision and aspiration are performed
- At higher power levels, harder or tougher tissue can be excised
- The cutting and aspiration effects can be controlled by adjusting the console power settings, handpiece orientation and handpiece pressure

Contaminant removal

- When the operating window is orientated obliquely to the tissue, the primary action becomes vacuuming and irrigation of the contaminated tissue
- The closer the operating window is to parallel, the more aggressive the tissue excision
- A more oblique angle gives more gentle contaminant vacuuming



Benefits

Effective

- Clean wounds promote more rapid wound healing
- Enables surgeon to precisely target damaged tissue and spare viable tissue^{1,2}
- Provides the control to hold targeted tissue during irrigation and excision^{1,2}
- Offers multiple power settings for controlled excision around delicate tissue³

Efficient

- Enables rapid debridement, likely resulting in short procedure times⁴
- Clean wounds potentially reduce the number of required debridement procedures⁴
- Single device technique combining lavage and sharp debridement
- Multiple tip configurations enhance procedural flexibility

Easy to use

- Single step debridement combining excision, cleansing and aspiration^{5,6,7}
- Single handed operation due to holding and treating with one device
- Designed for easy set up, operation and cleaning
- Utilises sterile saline and a disposable single use handpiece and tubing set for optimal infection control³
- Minimal aerosol generation^{1,9}

Indications

- Effective in debriding damaged and necrotic tissue in traumatic wounds, chronic wounds, surgical incisions and burns⁵⁻⁸
- Cleaning debris and foreign matter from acute and traumatic wounds⁵⁻⁷

VERSAJET Hydrosurgery Console Order Codes

Catalogue Number	Description
50700	Power console
Power console includes Foot pedal and Power cord	

VERSAJET Hydrosurgery Handpiece Order Codes

Catalogue Number	Description
50635	Disposable Handpiece (15°/14mm)
50636	Disposable Handpiece (45°/14mm)
50637	Disposable Handpiece (45°/8mm)
Handpiece includes Tubing Set	

References

- 1 "Wound Debridement Using VERSAJET A Novel Hydrosurgery System", Hsu, Christina and Breuing, Karl, HydroCision Doc. No. 1000-1232 Rev A 09/03.
- 2 "Traumatic and Chronic Wound Debridement with a Novel Fluidjet Device: The VERSAJET Hydrosurgery System", Tortella, Bartholomew J., HydroCision Doc. No. 1000-1249 Rev A 08/03.
- 3 "Fluidjets in Surgery", Freeman, D.C., Jr., and Moutafis, T.E.
- 4 "A Pilot Study of Two Techniques for Wound Debridement", Webb, Lawrence X., et al, HydroCision Doc. No. 1000-1255, Rev. A 09/03.
- 5 "Wound Debridement: A Comparison for Two Techniques for Particle Clearance", Webb, Lawrence X., et al, HydroCision Doc. No. 1000-1161, Rev. A 09/03.
- 6 "High Pressure Parallel Fluid Flow for Debridement of Contaminated Wounds in a Pig Model", Webb, Lawrence X., et al, HydroCision Doc. No. 1000-1173, Rev. A 01/03.
- 7 "A Phenomenological Description of Fluidjet Cutting", Freeman, D.C., Jr., and Moutafis, T.J., HydroCision Doc (unnumbered) Rev. 07/02.
- 8 "Use of the VERSAJET Hydrosurgery System on a Burn Victim", Tortella.
- 9 "Aerosol Study", Webb, Lawrence X., et al, HydroCision Doc. No. 1000-1172, Rev. A 09/03.

Wound Management

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