MAVERA
medical devices

MINUS™

NEGATIVE PRESSURE WOUND THERAPY SYSTEM
MAJOR

… with a focus on
micro level stimulation

MAVERA
Surgery

“Minus™ Negative Pressure Wound Therapy System A “Revolutionary” Device Offering Better Results

- **Creating a Sub-atmospheric Pressure with Vacuum Source**
- **Maintaining Wound Temperature and Moisture**
- **Wound Infection and Inflammation**

Minus™ Negative Pressure Wound Therapy *system orchestrate the wound healing process, Cleaning of wound bed, stabilize the wound bed temperature at optimum, washing the wound bed with a dwelling time to reach dead corners of the wound bed.*

Mechanism of Action

Negative pressure interacts at distinct levels with the wound environment. It works on both the lesion's macrostructure and microstructure and combines all these effects into one complicated operation that facilitates wound healing in all wound growth phases. At the macro level, NPWT extracts secretions and fluids from the lesion, decreases periwound edema, increases local blood flow and reduces ulcer size and the possibility of external sources of wound infection.

The stimulation that the negative pressure exerts on the cell surfaces and on many of the cellular elements present in the lesion induces positive changes in both the shape and function of the cells at the micro level. NPWT has been shown to promote angiogenesis, fibrogenesis and the macrophages and leukocytes activity.

A number of NPWT studies have been conducted in virtually all clinical conditions related to wounds and wound management, acute and chronic, from heart surgery to diabetic feet and venous leg ulcers to pressure ulcers. For most of the conditions under which it was tested, its activity has been confirmed.

An interesting choice with NPWT is that it can be integrated into an antiseptic application. This occurs when antiseptics have entered the system to regularly flush wound areas (as was the case with osteomyelitis) or when they are absorbed into the material used to fill the lesion, this occurs. An antimicrobial effect to the indirect debridement of NPWT is added, as the newer antiseptics have a better efficacy and safety profile and have been tested successfully under a range of conditions.

Creating a Sub-atmospheric Pressure with Vacuum Source

The film has an opening where a tube is attached. The tube leads to a vacuum pump and a canister where fluids are collected. The vacuum pump can be set to run or start&stop intermittently using its modes. The vacuum pump removes fluid and infection from the wound. The edges of the wound bring together with the help of vacuum. It also helps the wound healing by promoting the growth of new tissue. When necessary, antibiotics and saline can be introduced into the wound bed.

PRODUCT LIST	REF NO
NPWT PUMP HMI MAJOR (Non-Sterile, Reusable)	MNSHMIMJR
NPWT PUMP ADAPTOR (Non-Sterile, Reusable)	MNSADPT
NPWT PUMP SERUM HANGER (Non-Sterile, Reusable)	MNSHNG
NPWT PUMP CARRYING BAG (Non-Sterile, Reusable)	MNSCBG
NPWT CLOSURE SET O2 DELIVERY EXTRA SMALL (Sterile – Single Use)	MNS02CSDEXS
NPWT CLOSURE SET O2 DELIVERY SMALL (Sterile – Single Use)	MNS02CSDES
NPWT CLOSURE SET O2 DELIVERY MEDIUM (Sterile – Single Use)	MNS02CSDEM
NPWT CLOSURE SET O2 DELIVERY LARGE (Sterile – Single Use)	MNS02CSDEL
NPWT CLOSURE SET O2 DELIVERY EXTRA LARGE (Sterile – Single Use)	MNS02CSDEXL
NPWT CLOSURE SET O2 DELIVERY ABDOMINAL (Sterile – Single Use)	MNSO2CSDEA
NPWT CLOSURE SET HAND (Sterile – Single Use)	MNSO2CSDEH
NPWT CLOSURE SET O2 DELIVERY FOOT (Sterile – Single Use)	MNSO2CSDEF
NPWT CLOSURE SET O2 DELIVERY BRIDGE (Sterile – Single Use)	MNSO2CSDEB
NPWT CLOSURE SET EXTRA SMALL (Sterile – Single Use)	MNSXSI
NPWT CLOSURE SET SMALL (Sterile – Single Use)	MNSSI
NPWT CLOSURE SET MEDIUM (Sterile – Single Use)	MNSMI
NPWT CLOSURE SET LARGE (Sterile – Single Use)	MNSLI
NPWT CLOSURE SET EXTRA LARGE (Sterile – Single Use)	MNSXLI
NPWT CLOSURE SET ABDOMINAL (Sterile – Single Use)	MNSAI
NPWT CLOSURE SET HAND (Sterile – Single Use)	MNSHI
NPWT CLOSURE SET FOOT (Sterile – Single Use)	MNSFI
NPWT CLOSURE SET BRIDGE (Sterile – Single Use)	MNSBI
NPWT INCISION DRESSING SET LARGE (Sterile – Single Use)	MNSLID
NPWT INCISION DRESSING SET MEDIUM (Sterile – Single Use)	MNSMID
NPWT INCISION DRESSING SET SMALL (Sterile – Single Use)	MNSSID
NPWT ZIPPER DRESSING SET LARGE (Sterile – Single Use)	MNSSZD
NPWT ZIPPER DRESSING SET MEDIUM (Sterile – Single Use)	MNSMZD
NPWT ZIPPER DRESSING SET SMALL (Sterile – Single Use)	MNSLZD
NPWT MCT DRESSING SET LARGE (Sterile – Single Use)	MNSSMD
NPWT MCT DRESSING SET MEDIUM (Sterile – Single Use)	MNSMMD
NPWT MCT DRESSING SET SMALL (Sterile – Single Use)	MNSLMD
NPWT UNIBODY DRESSING SET XSMALL (Sterile – Single Use)	MNSXSUD
NPWT UNIBODY DRESSING SET SMALL (Sterile – Single Use)	MNSSUD
NPWT UNIBODY DRESSING SET MEDIUM (Sterile – Single Use)	MNSMUD
NPWT UNIBODY DRESSING SET LARGE (Sterile – Single Use)	MNSLUD
NPWT UNIBODY DRESSING SET XLARGE (Sterile – Single Use)	MNSXLUD
NPWT UNIBODY DRESSING SET SACRUM (Sterile – Single Use)	MNSDS
NPWT UNIBODY DRESSING SET KNEE (Sterile – Single Use)	MNSDK
NPWT UNIBODY DRESSING SET CORNER (Sterile – Single Use)	MNSDC
NPWT UNIBODY DRESSING SET FOOT (Sterile – Single Use)	MNSDF
NPWT UNIBODY DRESSING SET BRIDGE (Sterile – Single Use)	MNSDB
NPWT FOAM STANDARD EXTRA SMALL (Sterile – Single Use)	MNSFXS
NPWT FOAM STANDARD SMALL (Sterile – Single Use)	MNSFS
NPWT FOAM STANDARD MEDIUM (Sterile – Single Use)	MNSFM
NPWT FOAM STANDARD LARGE (Sterile – Single Use)	MNSFL
NPWT FOAM STANDARD EXTRA LARGE (Sterile – Single Use)	MNSFXL
NPWT FOAM STANDARD ABDOMINAL (Sterile – Single Use)	MNSFA
NPWT FOAM STANDARD HAND (Sterile – Single Use)	MNSFH
NPWT FOAM STANDARD FOOT (Sterile – Single Use)	MNSFF
NPWT FOAM STANDARD BRIDGE (Sterile – Single Use)	MNSFB
NPWT FOAM SLIM EXTRA SMALL (Sterile – Single Use)	MNSSFXS
NPWT FOAM SLIM SMALL (Sterile – Single Use)	MNSSFS
NPWT FOAM SLIM MEDIUM (Sterile – Single Use)	MNSSFM
NPWT FOAM SLIM LARGE (Sterile – Single Use)	MNSSFL
NPWT FOAM SLIM EXTRA LARGE (Sterile – Single Use)	MNSSFXL
NPWT FOAM SLIM ABDOMINAL (Sterile – Single Use)	MNSSFA
NPWT FOAM SLIM HAND (Sterile – Single Use)	MNSSFH
NPWT FOAM SLIM FOOT (Sterile – Single Use)	MNSSFF
NPWT FOAM SLIM BRIDGE (Sterile – Single Use)	MNSSFB
NPWT FILM DRAPE STANDARD (STERİL DETAYI YAZMIYOR)	MNSFDS
NPWT FILM DRAPE LARGE	MNSFDL
NPWT IRRIGATION TUBING N/A (Sterile – Single Use)	MNSTI
NPWT VACUUM ACCESS PORT™ STANDARD (Sterile – Single Use)	MNSVAPS
NPWT VACUUM ACCESS PORT™ IRRIGATION (Sterile – Single Use)	MNSVAPIR
NPWT VACUUM ACCESS PORT™ O2 DELIVERY (Sterile – Single Use)	MNSVAP02DE
NPWT VACUUM TUBING N/A (Sterile- Single Use)	MNSVT
NPWT O2 DELIVERY TUBING N/A	MNSO2DET
NPWT PERILSTATIC PUMP TUBING N/A	MNSPPT
NPWT Y CONNECTOR TUBING N/A	MNSYT
NPWT EXTRA LONG TUBING N/A (Sterile – Single Use)	MNSXTRLT
NPWT CONNECTOR N/A (Sterile – Single Use)	MNSCON
NPWT Y CONNECTOR N/A (Sterile – Single Use)	MNSYCON
NPWT MULTI LUMEN CONNECTOR (Sterile – Single Use)	MNSMLCON
NPWT CONNECTOR STANDARD (Sterile – Single Use)	MNSCONS
NPWT SERUM TUBING (Sterile – Single Use)	MNSST
NPWT COLLECTION SET 250ML (Non-Sterile)	MNS250
NPWT COLLECTION SET 500ML (Non-Sterile)	MNS500
NPWT COLLECTION SET 600ML (Non-Sterile)	MNS600
NPWT COLLECTION SET 1000ML (Non-Sterile)	MNS1K
NPWT CANISTER 250ML N/A (Non-Sterile)	MNSCNS25
NPWT CANISTER 500ML N/A (Non-Sterile)	MNSCNS50
NPWT CANISTER 600ML N/A (Non-Sterile)	MNSCNS60
NPWT CANISTER 1000ML N/A (Non-Sterile)	MNSCNS1K
NPWT FILTER CARTRIDGE FOR HMI GAMECHANGER PUMP (Non-Sterile, Reusable)	MNSFLTRGMC
NPWT FILTER CARTRIDGE FOR HMI MAJOR PUMP (Non-Sterile, Reusable)	MNSFLTRMJR
NPWT FILTER CARTRIDGE FOR 571 PUMP (NonSterile, Reusable)	MNSFLTR571
NPWT FILTER CARTRIDGE FOR 646 PUMP (NonSterile, Reusable)	MNSFLTR646

Indications

MINUS™ Negative Pressure Wound Therapy System is a non-pharmacological method for the patients who would benefit from a suction device. It is intended to use to physically promote wound healing by means of removal of fluids, including irrigation, and body fluids wound exudates and infectious materials. The patients with the following wounds are indicated: Acute Wounds, Chronic Wounds Pressure Ulcers, Diabetic Foot Ulcers, Venous Leg ulcers, Traumatic wounds, Dehisced wounds, Partial thickness burns, Flaps, and grafts. No Studies are done on the use of Minus™ NPWT System on pregnant and pediatric patients. To use the device on such patients is at surgeons' own disposal. Patient size and age should be considered when prescribing the device. The Minus™ Negative Pressure Wound Therapy System is intended for use in acute and chronic wounds at continual, intermittent and variable mode of settings.

Major HMI pump can be offered with with/without irrigation options.

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Mavera Medical Devices Inc. guarantees that the products are designed, manufactured and packaged on application of the EN ISO 13485 certified quality management with all possible care, using the most suitable state-of-the-art processes and applying the principle of integrating safety into its design and manufacture. This system is designed to guarantee the safe use of device when it is employed under condition and for the purposes for which it is intended, in accordance with precautions described in the operator's manual and/or instructions for use and to minimize the risks associated with the use of the device as far as possible, although they cannot be totally eliminated. The device must only be used under the responsibility of specialist medical personnel, taking account of the unavoidable risks and the possible side effects and complications of the treatment for which, it is designed, including those referred to in other sections of these instructions for use.

U.S. and foreign patents pending
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