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Surgical Protection System

OR personnel being the primary source of microbial contamination in up to 98% of cases has led to the creation of the surgical protection systems. The patient is protected by the sterile hood which does not contaminate the operative area with splashes and particles that may fall back and the surgical staff is protected from blood splashes, body particals and aerosols.

AresAir Surgical System consists of a surgical helmet and a sterile disposable surgical hood.

The AresAir Surgical Helmet has been designed as a unique product with respect to material and manufacturing processes in order to provide an economical, modular, durable and a very comfortable solution.

The helmet is designed to work with a power supply that can be provided from the local market in order to eliminate the extra paperwork and additional costs with respect to the worldwide regulations of transportation of batteries. Any 2 amp, minimum 10,000 mAH Li-Ion power supply with a USB port will be sufficient for the helmet to work with ultimate efficiency up to 8-9 hours.

Comfortable

AresAir helmet is the base structure that enables the protective hood to be put on during surgery while providing comfort with the help of the lightweight fans that create a flow of fresh air. The design of the case, the position of the fans, the precise angle and structure of the headband are all combined together to create a helmet that stays balanced and comfortable during long hours of surgery.

The control button on top of the main case enables the user to adjust the fan speed with five options. Two fans working quietly circulate the cool, fresh air through the helmet into the hood. The angle of the flow is designed so that the surgeon receives the air from the front without any discomfort to the eyes.

Practical

The fourteen point ratchet headband allows the user to precisely adjust the position of the helmet. The modular pad on the headband provides cushion and can be replaced easily.

Customization

The Main Frame is light weight and can be adapted to user's requests. The color and design on the main frame can be custom-made. The hospital's brand name & logo, surgeon's name and even the colors of user's favorite sports team...

Protection

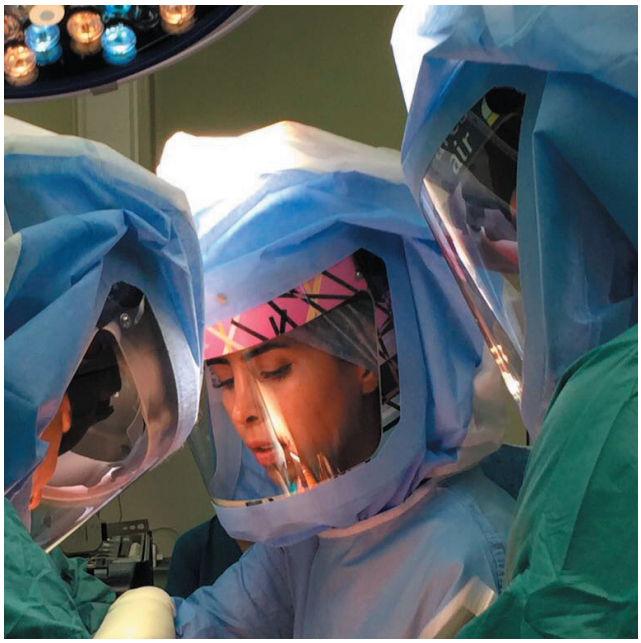
The Aresair Surgical Hood basically consists of two materials, a PET-G visor which protects the surgical staff from potentially infectious blood splashes and particles generated by power tools and 2 types of non-woven SMS fabric.

Non-woven fabrics are special liquid-repellent materials which block the passage of any liquid, blood and bacteria during the surgical procedure. The combination of spunbond (S) and meltblown (M) gives the non-woven material its structure which consists of two spunbond layers and a meltblow layer in between. The result is a composite fabric which has excellent physical properties (strength, elasticity, abrasion, secondary tearing, tear strength etc.) and excellent barrier qualities preventing leakage of very fine particles and micro-organisms and aggressive liquid. SMS composite material has very good hydrophobic qualities.

The manufacturing of the non-woven material complies with EN 13795 and has been certified. The SMS non-woven product has been tested for biocompatibility and certified with respect to ISO 10993.

Packaging and Sterilization

Aresair Hood is a disposable EO sterile product with a three-year shelf life. It is packed within a TYVEK Pouch that consists of an additional sterile indicator. The product is supplied as 5 units within a sealed pouch for extra safety and protection.



Easy

Aresair Helmet and the Hood are designed to fit perfectly with each other. The packaging and the folding of hood let the OR personnel work easily with product and surgeon.

Aresair Surgical Hood is positioned easily on the helmet with the help of the magnets that are placed both on the helmet and the hood.

Following the «click» sound, two velcro tags on both sides of the hood will connect with each other and finally the velcro at the lower center of the front panel.

Larger Range of View

The visor is made of PET-G which provides a smooth and crystal clear view of the surgical site. The shape of the visor is specifically designed to provide a superior wide range of view for the operating room personnel and also provide a silent and comfortable environment within the helmet.

CE Certification

The hood is classified as class I - sterile according to EU regulations and is CE Certified.

Tests

Resistance to microbial penetration
Lint Log 10
Particulate Matter Pollution
Residual EO analysis by gas chromotography
Sterility
Bioburden
Biocontamination