

# TSC LIFE

## FULL PRODUCT GUIDE

# MISTRAL-AIR®

**Complete Forced  
Air Warming System,  
from Single-use Blankets  
to Warming Suits,  
including  
Warming Unit**



[tsc-life.com](https://tsc-life.com)

# MISTRAL-AIR®

**Mistral-Air® is meticulously designed with simplicity at its core. The Mistral-Air® portfolio confidently meets your insulation and active warming needs, streamlining processes and delivering a cost-effective solution.**

The Mistral-Air® System is a forced-air warming system. Warm air is distributed by the Mistral-Air® Warming Unit through a single-use blanket over the patient for patient warming.



## Safe

- Advanced air filtration: safely warm your patients with the confidence that **99,95% of particles** have been filtered with our HEPA H13 filter<sup>1</sup>
- Forced Air Warming has proven to be safe to use in an operating room without disrupting laminar air flow<sup>2</sup>
- Advanced alarm systems allow you to safely and efficiently warm the patient without monitoring the device

## Smart & simple

- With Mistral-Air®'s user-friendly design, you can easily deliver the correct warming temperature at the push of a button
- Filter **lasts four times longer** than the other brands and can be changed with just a screwdriver<sup>3,4</sup>
- You don't need to manually monitor hours of use, as Mistral-Air® tracks them for you and alerts you when the filter needs to be changed
- You can conveniently place Mistral-Air® where you need it most with our mounting options and optional extra-long hose

The Mistral-Air® Portfolio offers Plus blankets for conventional, efficient Forced Air Warming, or Premium Blankets produced with a reflective layer that can be used as Passive Warming when the Warming Unit is not connected.

## Mistral-Air® MA1200

ONE BUTTON is all it takes to deliver the correct warming temperature quickly.

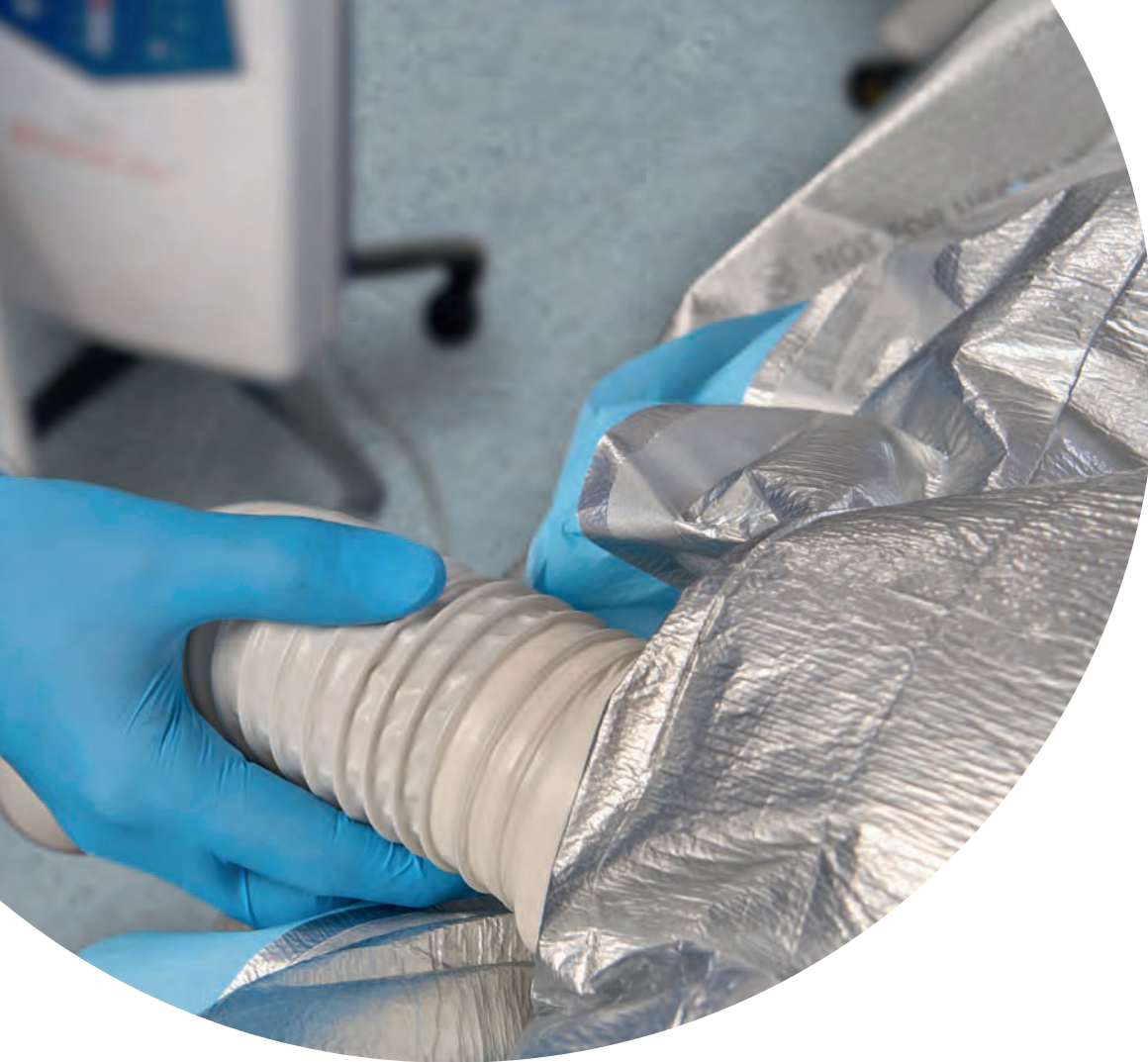
Article No.	MA1200
Length	16 cm
Width	34 cm
Height	40 cm
Weight	5.2 kg
Settings	Ambient Air
	Low 32 °C
	Medium 38 °C
	High 43 °C
Filter indicator	Every 2000 hours



### Additional Features

- Default startup temperature of 38° C
- Over and under temperature alarms
- Quiet<sup>5</sup>, high-air flow Warming Unit

Innovation with purpose



## Optional Accessories MA1200-(-QC\*)

<b>MA1200-1001</b>	MA1200 HEPA Filter
<b>MA1018 (-QC)</b>	1.8 meter hose
<b>MA1018XL (-QC)</b>	3 meter hose
<b>MA5250</b>	Height adjustable stand with basket
<b>MA5002 Mounting Kit</b>	Standard Mounting – Universal mounting options Trolley or IV Pole ISO Bed Rail
	Optional Mounting Extension Kit – Extend the number of options Extension Kit Bed Brackets Wall Mount Option

\* QC = Quick Connector: the Quick Connector makes the hose easy to attach, release and clean, while reducing the risk of damage to the Warming Unit and hose.

# Mistral-Air® Blanket Portfolio

**Mistral-Air® Warming Blankets** are available in numerous configurations for patient size and position-specific warming. The blankets are adaptable to most surgical cases, offering a safe, comfortable solution for the patient and a simple, effective tool for caregivers.

## Mistral-Air® Premium Blankets Reflective Technology

Mistral-Air® Premium Blankets are designed to reduce heat loss from the skin to the environment. This gives our blankets a dual functionality:

- Passive warming through thermal insulation
- Active warming with additional insulation properties that minimize heat transfer to the surgeon

### Premium blankets are up to 10% more efficient in heat transfer than our Plus blankets<sup>6</sup>

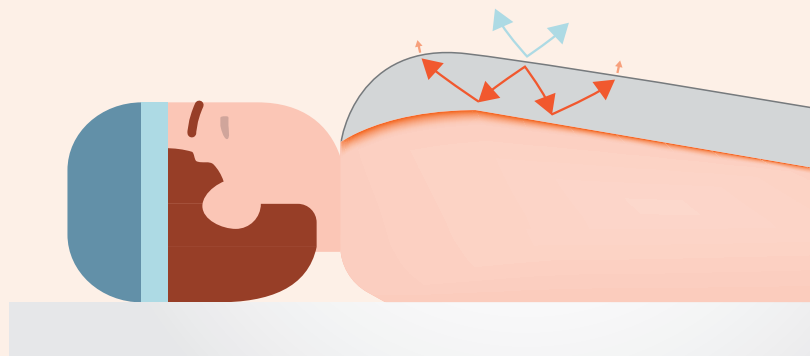
If a hospital typically uses multiple cotton linens per patient during pre, intra, and postoperative stages, switching to our Premium Blankets can cut linen use by at least 50%.<sup>7</sup>

This means:

- **Less work for staff handling linens**
- **A reduced environmental impact from washing and reprocessing**
- **Significant savings from updated practices**

Indication of perioperative moment of use:

<b>pre</b>	preoperative
<b>intra</b>	intraoperative
<b>post</b>	postoperative



# Mistral-Air® Standard Blankets

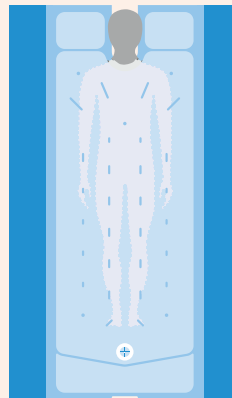
## Adult Blankets

**Plus:** MA2220  
**Premium:** MA3320  
**Size:** 227 x 133 cm

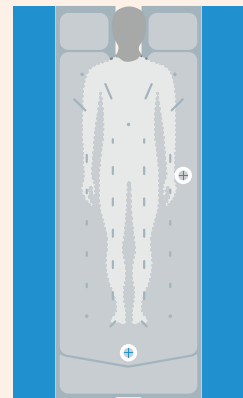
- 2 x air inlets Premium / 1 x air inlet Plus
- Integrated tuck-in flaps for optimum fixation of the blanket
- U-Shape neck space for optimum patient comfort

### Ideal for neck/head procedures:

- Maxillo-Facial
- Ear, Nose and Throat (ENT)
- Neurosurgery
- Thyroid
- Carotid
- Post-anesthesia Care Unit (PACU) & Intensive Care Unit (ICU)



MA2220



MA3320



pre intra post

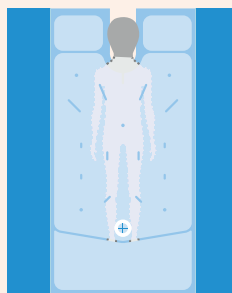
## Pediatric Blankets (>1 year old)

**Plus:** MA2230  
**Premium:** MA3330  
**Size:** 166 cm x 133 cm

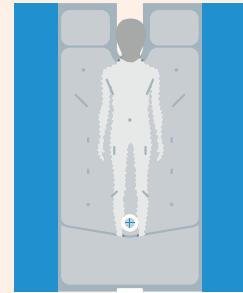
- 1 x air inlet
- Integrated tuck-in flaps for optimum fixation of the blanket
- U-Shape neck space for optimum patient comfort

### Ideal for neck head procedures:

- Cleft Palate Repair
- Facial/Ear Surgery
- Ped. Neurosurgery
- PACU & ICU



MA2230



MA3330



pre intra post

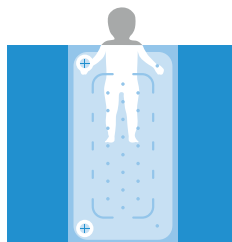
## Neonatal Blankets (<1 year old)

**Plus:** MA2240  
**Premium:** MA3340  
**Size:** 116 cm x 133 cm

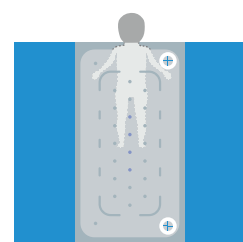
- 2 x air inlets
- Removable face shield
- Unique multifunctional positioning: can be used as underbody blanket as well as a blanket to cover the pediatric patient

### Ideal for neonatal surgery:

- Congenital Abnormalities
- Hernia
- Cardiac
- Fistula
- PACU & ICU



MA2240



MA3340



MA2240



pre intra post



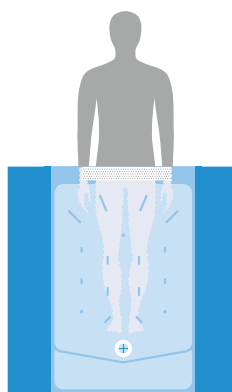
## Lower Body Blankets

**Plus:** MA2250  
**Premium:** MA3350  
**Size:** 132 cm x 133 cm

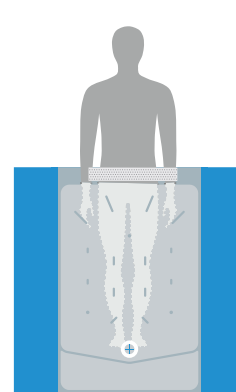
- Side tuck-in flaps
- Adhesive tape
- 1 x air inlet

### Ideal for upper body/limbs procedures:

- Orthopedics (Shoulder, Arms, Clavicle)
- Neurosurgery
- Plastic (Breast & Face)
- General Surgery
- Thoracic (VATS, MICABG)
- Vascular Surgery



MA2250



MA3350

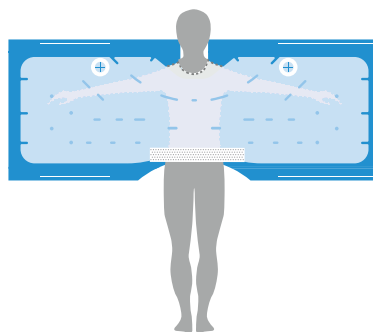


pre intra

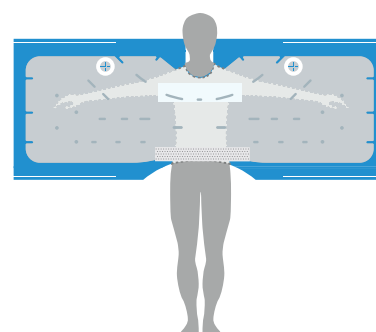
## Upper Body Blankets

**Plus:** MA2260  
**Premium:** MA3360  
**Size:** 201 x 76 cm

- U-Shape neck space
- 2 x air inlets
- Adhesive tape
- Fixed face shield
- 2 x 2 integrated tie strips



MA2260



MA3360

Turn the blanket 90 degrees during the preoperative phase for pre-warming!

### Ideal for lower body/limb procedures:

- Orthopedics (Lower Limbs, ORIF, DHSIMHS)
- General Surgery (Hernia, Appendectomy, Laparoscopic)
- Gynecology
- Urology (TURP, TURBT, PCNL Cystectomy)

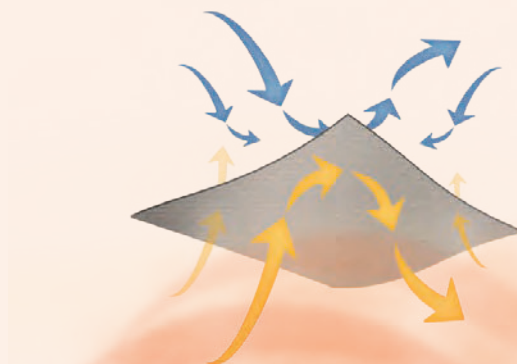


pre intra

## Reflective technology

Approximately 90% of patients' temperature loss during surgery occurs from the skin into the environment through radiation, convection, and evaporation. "Thus, minimizing heat loss during the perioperative period is (also) a priority."<sup>7</sup>

**Mistral-Air®'s Premium blankets with a reflective layer provide a dual benefit: superior patient insulation for passive warming and an efficient Forced Air Warming blanket.**



Innovation with purpose

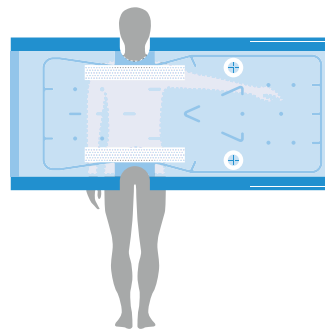
# Mistral-Air® Standard Blankets

## Half Upper Body Blanket

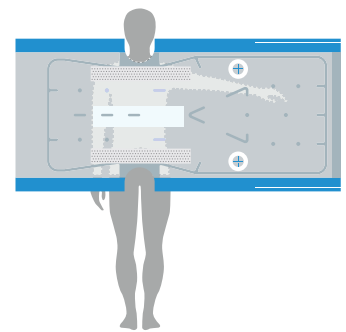
**Plus:** MA2265  
**Premium:** MA3365  
**Size:** 160 x 76 cm

- U-Shape neck space
- 2 x air inlets
- Adhesive tape
- Fixed face shield (Only Premium)
- 2 x 1 integrated tie strips

Turn the blanket 90 degrees during the preoperative phase for pre-warming!



MA2265



MA3365

### Ideal for lower body/limb procedures (half crucifix):

- Orthopedics (Lower Limbs, ORIF, DHSIMHS)
- General Surgery (Hernia, Appendicectomy, Laparoscopic)
- Gynecology
- Urology (TURP, TURBT, PCNL Cystectomy)



pre intra

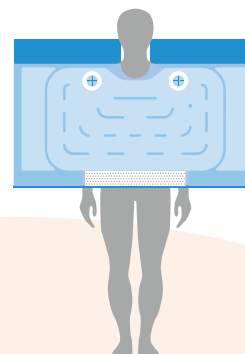
## Torso Blanket

**Plus:** MA2270  
**Size:** 124 x 76 cm

- U-Shape neck space
- 2 x air inlets
- 1 x adhesive tape
- Fixed face shield

### Ideal for lower body/limb procedures (arms to body):

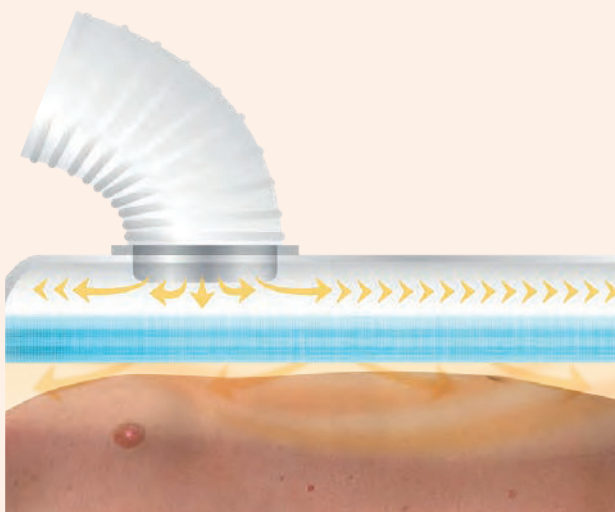
- Orthopedics (Lower Limbs, ORIF, DHSIMHS)
- General Surgery (Hernia, Appendicectomy, Laparoscopic)
- Gynecology
- Urology (TURP, TRUBT, PCNL Cystectomy)



MA2270



intra



**Large volume of air +  
Low pressure blanket**

## Controlled air diffusion

Mistral-Air® Blankets in combination with the Mistral-Air® Warming Unit **do not float, they stay in position** keeping warm air on the patient and helping to minimize the disruption of air flow in the surrounding environment. Also, there is no need for extra cotton blankets to hold the forced air blanket in place.



# Mistral-Air® Underbody Blankets

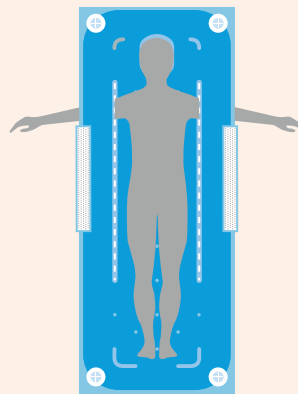
## Full Underbody Blankets

**Plus:** MA2400  
**Premium:** MA3400  
**Size:** 220 x 90 cm

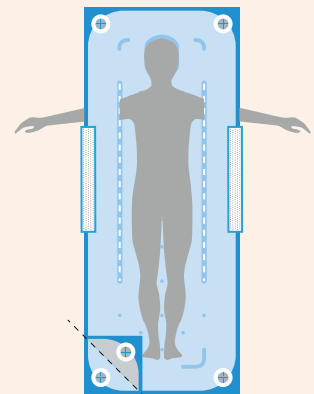
- 4 x air inlets
- 2 x adhesive tape (1 piece each side)
- Removable face shield (Only Premium)
- Large warming surface (84% of blanket surface)
- Extra long perforated slits to put the arms through

### Our most flexible blanket. Ideal for:

- Orthopedics
- Cardiac Surgery: CABG, Valve Replacement, CBP
- Liposuction
- General Surgery: Open and Laparoscopic
- Robotic surgery
- Thoracic surgery



MA2400



MA3400



pre intra

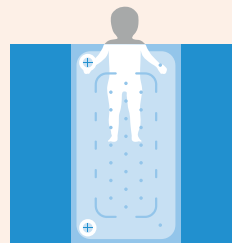
## Neonatal Blankets (<1 year old)

**Plus:** MA2240  
**Premium:** MA3340  
**Size:** 116 x 133 cm

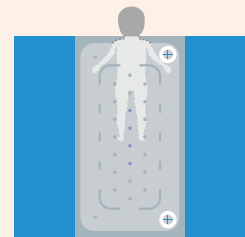
- 2 x air inlets
- Removable face shield
- Unique multifunctional positioning: can be used as underbody blanket as well as a blanket to cover the pediatric patient

### Ideal for neonatal surgery:

- Congenital Abnormalities
- Hernia
- Cardiac
- Fistula
- Recovery



MA2240



MA3340



pre intra post

# Mistral-Air® Underbody Blankets

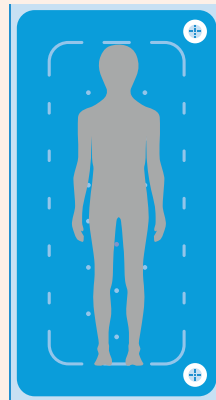
## Pediatric Underbody (>1 year old)

**Plus:** MA2475  
**Premium:** MA3475  
**Size:** 168 x 90 cm

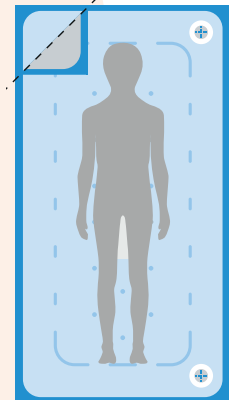
- 2 x air inlets
- Removable face shield
- Multifunctional positioning: can be rotated to have the air inlets on either side

### Ideal for full access to pediatric patients:

- Orthopedics (Lower Limb Arthroscopy, Femoral Osteotomy)
- Cardiac (Open Chest, CBP)
- General (Hernia, Appendectomy, Laparoscopic, Robotic)



MA2475



MA3475



pre intra post

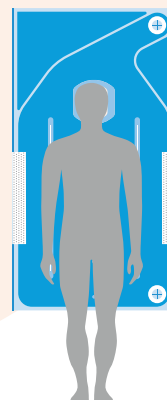
## Half Underbody Blankets

**Plus:** MA2450  
**Premium:** MA3450  
**Size:** 168 x 90 cm

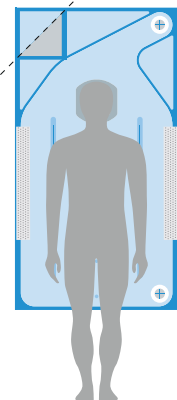
- 2 x air inlets
- 2 x adhesive tapes (1 piece each side)
- Removable face shield (Only Premium)
- Perforated slits to put the arms through

### Ideal for lower body and full access procedures:

- Orthopedics (Pelvis ORIF)
- Gynecology (Hysterectomies, Vulval Resection, Laparoscopic)
- Urology (TURP, TURBT, PCNL, Radical Prostate, Cystectomy)
- Robotic Surgery



MA2450



MA3450

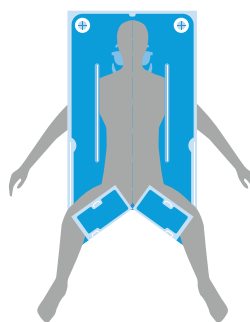


pre intra post

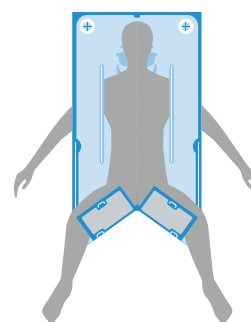
## Lithotomy Underbody Blankets

**Plus:** MA2455  
**Premium:** MA3455  
**Size:** 168 x 90 cm

- 2 x air inlets
- Perforated slits to put the arms through
- One tie strip per side to tie the blanket to the leg
- Unique leg cover to reduce heat loss from the upper leg



MA2455



MA3455

### Ideal for Gynecology and Urology procedures:

- Orthopedics (Pelvis ORIF)
- Gynecology (Vaginal Hysterectomy, Vulval Resection, Vaginoplasty, Prolapse, Hysteroscopy)
- Robotic Surgery
- Urology (TURP, TURBT, PCNL, Radical Prostate, Cystectomy)



pre intra post

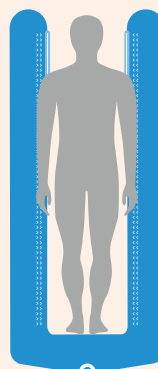
## Tube

**Plus:** MA0510  
**Size:** 175 x 150 cm

- 1 x air inlet
- Can be used in different settings

### When full body cover is not possible, our Tube is ideal for full unrestricted access:

- Cath lab
- Procedures where blanket positioning is difficult.
- Ideal use in combination with a reflective Thermoflect® passive blanket



MA0510



pre intra

# Mistral-Air® Specialty Blankets

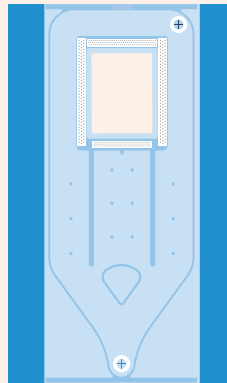
## Surgical Access Blanket (Sterile & Non-sterile)

**Sterile:** MA2280

**Non-sterile:** MA2290

**Size:** 220 x 133 cm

- 1 x air inlet
- Integrated tuck-in flaps for optimum fixation of the blanket
- 4 x adhesive tapes secure the surgical access window to the patient
- Surgical access window (53 x 41 cm)
- Fixed face shield
- Positions easily in the sterile field
- Surgeons can easily enlarge the surgical field up to 70 cm



MA2280 / MA2290

### Ideal for critical upper body procedures:

- Orthopedics (Spinal)
- Transplants (Kidney, Liver, Bowel)
- Liver Resections
- Thoracic (Lobectomy, Bullectomy, Pneumonectomy)
- Gynecology (Abdominal Hysterectomy)
- Urology (Nephrectomy, Radical Prostatectomy)
- Robotic Surgery



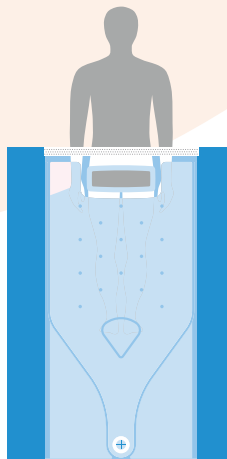
intra

## Lower Surgical Access Blanket (Sterile)

**Sterile:** MA2285

**Size:** 183 x 133 cm

- 1x air inlet
- 4 x adhesive tapes secure the surgical access window to the patient
- Integrated tuck-in flaps for optimum fixation of the blanket
- Surgical access window (40 x 16 cm)
- Positions easily in the sterile field. The clear groin/femoral access window allows for easy access to the femoral artery



MA2285

### Ideal for upper body critical procedures:

- Cardiac (CABG, Valve Replacement Mitral/Aortic, TAAA CPB procedures, Thoracic Aortic Surgery, Pulmonary Thromboembolism)



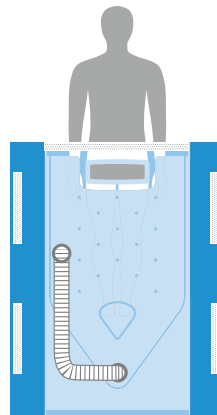
intra

### Cardiac Blanket (Sterile)

**Sterile:** MA2286  
**Size:** 170 x 133 cm

- 1 x air inlet (sterile hose extension)
- 4 x adhesive tapes secure the surgical access window to the patient
- Adhesive tape secures the surgical access window to the patient.
- Surgical access window (40 x 16 cm)

Positions easily in the sterile field. The pre-attached 3-foot (91 cm) hose allows for placement of the warming unit outside the sterile field



MA2286

#### Designed for Cardiac procedures:

- Cardiac (CABG, Valve Replacement Mitral/Aortic, TAAA CPB Procedures, Thoracic Aortic Surgery, Pulmonary Thromboembolism)



intra

### Mistral-Air® Warming Suits: 3 solutions in one

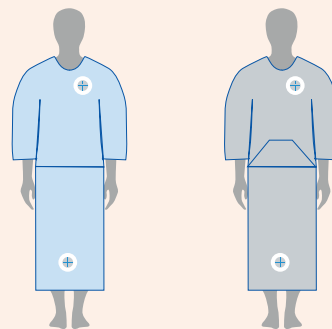
The Mistral-Air® Premium Warming Suit is very well suited to being used in cases of high hypothermia risk surgeries such as organ transplants and liver and robotic surgeries. The suit ensures that the patient's entire body can be kept warm and does not cool down before, during or after a surgery.

#### 3 in One:

1. Hospital gown
2. Upper or lower body Forced Air Warming blanket
3. Extra cotton blankets

#### Additional features:

- Adjustable Velcro fastener ensures the suit can easily be opened and then shut again for such things as ECG cables
- Full back access for procedures like Lumbar Puncture
- The sleeves are readily detachable for such things as infusion lines and the blood pressure meter
- Soft non-woven material combined with efficiently insulating Thermoflect reflective material
- Also available in Plus (non-reflective)



pre intra post

# Product list and details

	Reference number	Blanket size (mm x mm)	Warming surface (mm x mm)	Weight (grams)	Air inlets Qty	Face shield	Adhesive Tape on width
Standard Blankets							
Adult Plus	MA2220	2270 x 1330	1730 x 790	180	1		
Paediatric Plus	MA2230	1660 x 1330	790 x 1010	131	1		
Neonatal Plus	MA2240	1160 x 1330	1080 x 570	126	2	Removable	
Lower Body Plus	MA2250	1320 x 1330	945 x 790	115	1		1
Upper Body Plus	MA2260	2010 x 760	1880 x 580	110	2	Fixed	1
Half Upper Body Plus	MA2265	1600 x 760	1375 x 580	98	2	Fixed	1 per side
Torso Plus	MA2270	1240 x 760	900 x 530	78	2	Fixed	1
Premium Adult	MA3320	2270 x 1330	1730 x 790	198	2		
Premium Paediatric	MA3330	1660 x 1330	790 x 1010	144	1		
Premium Neonatal	MA3340	1160 x 1330	1080 x 570	132	2	Removable	
Premium Lower Body	MA3350	1320 x 1330	945 x 790	124	1		1
Premium Upper Body	MA3360	2010 x 760	1880 x 580	120	2	Fixed	1
Premium Half Upper Body	MA3365	1600 x 760	1375 x 580	109	2	Fixed	1 per side
Speciality Blankets							
Lower Surgical Access Plus Sterile	MA2285	1830 x 1330	890 x 840	174	1		1
Surgical Access Plus Sterile	MA2280	2200 x 1330	1297 x 840	203	2	Fixed	inside surgical access
Surgical Access Plus	MA2290	2200 x 1330	1297 x 840	194	2	Fixed	inside surgical access
Cardiac Blanket Plus Sterile	MA2286	1700 x 1330	745 x 840	410	1		1
Underbody Blankets							
Full Underbody Plus	MA2400	2200 x 900	2160 x 840	184	4		
Half Underbody Plus	MA2450	1680 x 900	1020 x 840	141	2		
Paediatric Underbody Plus	MA2475	1680 x 900	1630 x 840	133	2	Removable	
Tube	MA0510	1750 x 150	170 x 150	65	1		
Lithotomy Plus	MA2455	1675 x 900	1200 x 840	129	2		
Premium Full Underbody	MA3400	2200 x 900	2160 x 840	219	4	Removable	
Premium Half Underbody	MA3450	1680 x 900	1020 x 840	168	2	Removable	
Premium Paediatric Underbody	MA3475	1680 x 900	1630 x 840	163	2	Removable	
Premium Lithotomy	MA3455	1675 x 900	1200 x 840	140	2		
Neonatal Plus	MA2240	1160 x 1330	1080 x 570	126	2	Removable	
Premium Neonatal	MA3340	1160 x 1330	1080 x 570	132	2	Removable	



Adhesive Tape on length	Qty blankets per box
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs
1 per side	40 pcs
	20 pcs
	20 pcs
	10 pcs
1 per side	40 pcs
1 per side	40 pcs
	40 pcs
	100 pcs
	40 pcs
1 per side	40 pcs
1 per side	40 pcs
	40 pcs
	40 pcs
	40 pcs
	40 pcs

Scan QR-code for  
more information



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## Innovation with purpose

1. Filtration HEPA H13 class filter, conform EN 1822-1:2019 / ISO 29463-5:2022
2. Shirozu K, Kai T, Setoguchi H, Ayagaki N, Hoka S. Effects of forced air warming on airflow around the operating table. Anesthesiology. 2018;128(1):79-85. doi:10.1097/ALN.0000000000001922.
3. Internal document: DMT Test Report No. APS 2 00 056 17.1, by DMT GmbH & Co. KG, Germany. 2000 hours Filter Service Alarm.
4. Bair Hugger Service Manual, Bair Hugger Model 775 Warming Unit. 19th ed. Eden Prairie, MN: 3M Health Care; p. 19. & Cincinnati Sub Zero Warmair Model 135 Manual. 4th ed. Cincinnati, OH: Cincinnati Sub Zero Products, Inc.; p. 17. Test. 48 dB with blanket attached. 2220997.50 by DEKRA, February 2018
5. Test. 48 dB with blanket attached. 2220997.50 by DEKRA, February 2018
6. Perl T, . Efficacy of Mistral® blower with corresponding two upper body forced-air warming blankets and BairHugger® blower with an upper body blanket. Universitätsmedizin Göttingen Klinik für Allgemein-, Viszeral- und Kinderchirurgie. 2021.
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