Personal Protection Against Diagnostic or Therapeutic Radiation Exposure
High Performance Radiation Protection

A medical fabric of the highest performance class has been used for the first time as an outer cover for X-ray protective clothing, which is based on DIN EN 13795.

The demands for disinfection in the healthcare industry are continually growing. This has created a higher strain on X-ray protective clothing and its performance, especially in regards to chemical durability from cleaning agents.

In response MAVIG has set a new standard with its ground breaking ComforTex® HPMF material.

Our innovative outer textile ensures considerably higher protection for the radiation protective inlay than was previously possible. The barrier effect has also increased to meet the high requirements of hygiene in today's work environment.
ComforTex® HPMF – Designed for a Sense of Well-being

A fresh appearance, pleasing to touch and comfortable to wear are the first impressions of the new textile collection from MAVIG.

Rough, worn, or plastic like surfaces are not found on our products.

ComforTex® HPMF new colours:
- Curacao
- Regatta
- Ocean
- Limette
- Indian Summer
- Orchidee

Please note that the actual colours can differ slightly from their printed representation.
Primary Tasks of a Functional Outer Textile

The newly developed material from MAVIG fulfils the relevant requirements of an OR textile in the high performance category.

**Protection of Personnel and Patients Against Health Risks**

The special material composition creates a highly effective protective barrier which prevents any penetration of pathogens and their carrier media, such as fluids and solid particles.

Additionally, the material structure repels liquids and counteracts any growth of micro-organisms on the surface. The special micro-fibre fabric also provides maximum freedom from the release of textile particles.

To ensure the protection of patients and personnel against infections, important and sound safety requirements for the necessary quality of an OR textile are regulated in the DIN EN 13795 standard.

This standard was applied in the development of our innovative textile collection for an effective basis:

- Barrier function
- Cleanliness
- Particle release
- Strength

**Robustness for Protecting the Inner Layers from Damage**

A usable textile as the outer cover for X-ray protective clothing must provide a high degree of robustness to ensure permanent protection and safety.

If unsuitable materials are used, external influences, mechanical forces and normal wear can drastically diminish or destroy the protection it provides.

The performance criteria of the new ComforTex® HPMF from MAVIG define a new standard in X-ray protective clothing.

**Safety does not End with Radiation Protection**

Electrostatic charging when wearing personal protective equipment is uncomfortable and endangers the proper operation of sensitive medical equipment.

With ComforTex® HPMF, MAVIG puts the problems of electrostatic discharges to rest.
Quality and Comfort

The quality of X-ray protective clothing is more important than ever today. Modern radiological diagnostic and therapeutic procedures have extended the wearing times of the aprons. The protective requirements also differ according to each individual application.

Our large product portfolio allows us to provide you with a well-developed and wide range of models which can be expected of us as the international market leader in radiation protection.

Lead Rubber Multilayer Material

Our natural rubber based protective material has helped us maintain our leading position in the manufacturing of X-ray protective clothing for many years. Our high-grade, flexible material provides radiation protection in accordance with DIN EN 61331-1 and DIN 6857-1 in the 50 to 150 kV range of X-ray tube voltages.

NovaLite X-Ray Protective Material

This X-ray protective material achieves an outstanding balance between weight and radiation protection. NovaLite assures the fulfilment of fundamental occupational health requirements, especially in workplaces where X-ray protective clothing is worn for long periods. This, of course, also includes X-ray protection in accordance with DIN EN 61331-1 and DIN 6857-1 in the 50 to 120 kV range of X-ray tube voltages.

Flexible Wearing Comfort and Finest Workmanship

Movability and flexibility are special features of MAVIG’s X-ray protective clothing. To further optimise the wearing comfort for the user, special attention is paid to the clothing’s cut and finest workmanship in production. In our factory, the latest production technology and numerous quality controls ensure constant implementation of our brand-value concept.

CE / PSA

X-ray protective clothing for radiation exposure falls under the legally binding EU Directive 89/686/EU relating to personal protective equipment (PPE).

The directive not only stipulates strict penalties for producers and those placing it on the market, but also for those responsible for its purchase, and its users in case of non-compliance. It is imperative to check that the product you want to use is correctly marked!

The well-known CE mark alone does not suffice here. The four-digit registration number of the authorised certification office (Notified Body) must also be specified.

Of course, all MAVIG products are properly certified. You are always on the safe side with our products.

DIN 6857-1

DIN 6857-1 is used as the correct determination of shielding properties of lead-free or lead-reduced protective clothing. If products for X-ray protective clothing are manufactured based on this standard, they achieve the same screening effect as pure lead.

In the manufacturing of X-ray protective clothing, MAVIG only uses materials which are classified according to this standard.
The stretch belt can be attached to the coat with snap buttons and varied in height. If the coat is combined with a webbing belt, it is attached by loops.

Our first-class NovaLite X-ray protective material option is the choice for radiological workplaces that require long wearing periods and ensures the fulfilment of fundamental occupational health requirements.

The NovaLite X-ray protective material achieves an outstanding balance between weight and X-ray protection.

**Material**
NovaLite X-ray protective material

**Lead Equivalent Value**
Front protection Pb 0.35 mm or Pb 0.50 mm
Back protection Pb 0.25 mm

**Outer Cover / Colour**
ComforTex® HPMF available in the colours:
- Curacao
- Regatta
- Ocean
- Limette
- Indian Summer
- Orchidee

**Edging**
All edges covered with a seam band

**Shoulder Padding**
Standard.

**Sizes**
- SMALL recommended for chest sizes of approx. 95 - 105 cm and hip girths of 104 - 112 cm
- MEDIUM recommended for chest sizes of approx. 100 - 110 cm and hip girths of 112 - 120 cm
- LARGE recommended for chest sizes of approx. 111 - 118 cm and hip girths of 121 - 135 cm

**Lengths**
- 90 cm (recommended for heights of approx. 145 - 155 cm)
- 100 cm (recommended for heights of approx. 155 - 165 cm)
- 110 cm (recommended for heights of approx. 165 - 175 cm)
- 120 cm (recommended for heights of approx. 175 - 185 cm)

**Breast Pocket**
Available on request.
(see information on page 22)

**Embroidery**
Available on request.
(see information on page 22)

**Stretch Belt**
Can be ordered separately:
Model RA632SG

**Webbing Belt**
Can be ordered separately:
Model RA636GG

**Customisation**
Available on request.
Ensemble 637

All around protection that is comfortable to wear due to optimal weight distribution. The skirt takes part of the weight off your shoulders.

In this model once again, the garments are easy to put on and take off. The top quality Velcro fasteners at the front of the vest and skirt also allow for individual adjustments. As a rule, there is an overlap of about 15 cm, if the garments are properly closed.

The skirt is fitted with a waist webbing belt for a secure fit.

Our first-class NovaLite X-ray protective material option is the choice for radiological workplaces that require long wearing periods and ensures the fulfilment of fundamental occupational health requirements.

The NovaLite X-ray protective material achieves an outstanding balance between weight and X-ray protection.

This model complies with DIN EN 61331-1, DIN EN 61331-3, DIN 6857-1, and the German X-ray ordinance. Naturally, MAVIG X-ray protective clothing also has passed EC-type examination and is certified in accordance to PSA 89/686/EU (CE/PSA).

MAVIG X-ray protective clothing provides the assurance of fulfilling all applicable legal specifications.
**Embroidery**

In many cases, it is advisable to mark X-ray protection clothing with embroidery to indicate that it belongs to a certain person or department. We offer the following possibilities:

- Embroidery on the left shoulder seam
- Embroidery on the breast pocket
- Interchangeable embroidery
- Embroidery on the skirt border
- Logos and letter styling (e.g. cyrillic, arabic)

**Breast Pocket**

The breast pocket is an outer storage pocket, positioned on the left chest side.

Provide us with your desired text and we will carry out the embroidery in top quality. Block letters are standard for clear legibility. The height of the lettering is determined by the length of the text and number of lines.

**Sleeves**

For all models (except for the RA650), you can select optional sleeves to extend protection. The exposure of the shoulder joint to radiation can be significantly reduced by wearing aprons with sleeves. This also reduces laterally occurring radiation.

MAVIG offers the sleeves as a button-on or a permanent stitched-on solution. You can select only a right or left sleeve, or a pair.

The standard lead equivalent value is Pb 0.25 mm, which ensures good mobility during the daily work routine.

<table>
<thead>
<tr>
<th>Size</th>
<th>Sleeve Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>XS</td>
<td>21 cm</td>
</tr>
<tr>
<td>S</td>
<td>23 cm</td>
</tr>
<tr>
<td>M</td>
<td>25 cm</td>
</tr>
<tr>
<td>L</td>
<td>26 cm</td>
</tr>
<tr>
<td>XL</td>
<td>29 cm</td>
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</table>
This data sheet has been developed in order to assist with taking correct measures for taylor-made aprons. Before ordering a taylor-made apron, please double check with our customer service if not a standard size of our extensive product range would be suitable.

Please always consider the following points in order to achieve the best protection:

- Measure precisely: tape should be snug, but not restrictive
- According to RoV and DIN EN 61331-3 the front of the body should be covered from the lowest point of the neck down incl. knee caps
- MAVIG recommends to even measure to the point underneath the knees for max. safety
- All of the below measures are relevant, regardless if a coat, apron or costume is requested

Please fill in this chart completely.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Description</th>
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<tbody>
<tr>
<td>1 cm</td>
<td>Width of Back</td>
</tr>
<tr>
<td>2 cm</td>
<td>Breast Girth</td>
</tr>
<tr>
<td>3 cm</td>
<td>Waist Girth</td>
</tr>
<tr>
<td>4 cm</td>
<td>Waist Level</td>
</tr>
<tr>
<td>5 cm</td>
<td>Hip-/Bottom Girth</td>
</tr>
<tr>
<td>6 cm</td>
<td>Length of Apron / Coat</td>
</tr>
<tr>
<td>7 cm</td>
<td>Length of Costume Skirt</td>
</tr>
<tr>
<td>8 cm</td>
<td>Total Body Height</td>
</tr>
<tr>
<td>9 cm</td>
<td>Model, Pb Value Front</td>
</tr>
</tbody>
</table>

Please fill in the chart completely.

- Model:
- Pb Value Front (Pb value back, standard: 0.25 mm)

10 Apron for
   - Lady
   - Gent

11 Measured by: ___________________________ (Name)

    Date: ___________________________ (Date)

    By/From:
    - Hospital
    - Supplier
    - MAVIG Employee
### WORLDWIDE MAVIG OFFICES

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>Phone</th>
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<tbody>
<tr>
<td><strong>Nordic &amp; Baltic Countries</strong></td>
<td><strong>MAVIG Nordic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stockholm, Sweden</td>
<td>+46 (0) 722 25 25 68</td>
<td></td>
<td><a href="mailto:larsson@mavig.com">larsson@mavig.com</a></td>
</tr>
<tr>
<td><strong>Benelux, GB, Ireland</strong></td>
<td><strong>MAVIG B.V.</strong></td>
<td>+31 (0) 70 345 99 85</td>
<td>+31 (0) 61 595 43 48</td>
<td><a href="mailto:simmonds@mavig.nl">simmonds@mavig.nl</a></td>
</tr>
<tr>
<td><strong>France</strong></td>
<td><strong>MAVIG France SAS</strong></td>
<td>+33 (0)1 30 59 46 23</td>
<td>+33 (0)1 30 59 46 23</td>
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</tr>
<tr>
<td><strong>China</strong></td>
<td><strong>MAVIG Healthcare Beijing Co., Ltd.</strong></td>
<td>+86 - 10 - 46 79 62 88</td>
<td>+86 - 10 - 46 79 62 88</td>
<td><a href="mailto:zhang@mavig.com">zhang@mavig.com</a></td>
</tr>
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</table>

### REPRESENTATION

<table>
<thead>
<tr>
<th>Region</th>
<th>Company Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USA &amp; Canada</strong></td>
<td>Ti-Ba Enterprises, Inc.</td>
<td>25 Hytec Circle, Rochester, NY 14606</td>
<td>+1 (1) 585 247 1212</td>
<td>+1 (1) 585 247 1395</td>
<td><a href="mailto:mavig@ti-ba.com">mavig@ti-ba.com</a></td>
</tr>
<tr>
<td><strong>Middle East &amp; Northern Africa</strong></td>
<td>Menia Medical Development</td>
<td>Ashrafieh – Adlieh Square – Al Faras St. - Alboustany Building, 5th Floor, Beirut, Liban</td>
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<td>+961 14 26 499</td>
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</tr>
<tr>
<td><strong>Aria Arman Pars Co.</strong></td>
<td>MAVIG Distributor for the IRAN</td>
<td>Unit 1, No. 20, Goldis 1 Alley, Aria Far Ave. Marzdaran Blvd, Tehran, IRAN</td>
<td>+98 21 46 09 43 86</td>
<td>+98 21 46 09 43 86</td>
<td><a href="mailto:info@aria-arman.com">info@aria-arman.com</a></td>
</tr>
</tbody>
</table>