



X-Ray Protection for Patients and Personnel













.921 19

1960

1972

1985

For over **100 years**, MAVIG has specialised in personal protection at workplaces where people are exposed to risk.

What began in Leipzig in 1921 with the production of protective products for X-ray and welding has now become an internationally successful company with an excellent reputation in the field of radiation protection and medical support systems for hospitals and medical practices.

Production grew steadily in the decades that followed the founding of the company. Protective products for X-ray and welding were successfully marketed all over the world under the MAVIG® trademark. In the post-war years, the company's headquarters and production facilities were relocated to Munich.

The family-run company "MAVIG" has always maintained the principles of a modern company:

"The customer and customer satisfaction are the top priority".

MAVIG is 100% independent and owner-managed.







### **Quality Management**

MAVIG products are designed, manufactured and distributed in strict observance of all laws, regulations and standards.

Every product is tested for its safety and reliability, in some cases applying higher and stricter requirements than are prescribed by law.

#### Certifications

The intended use of our products requires the maximum reliability and quality.

To ensure the highest level of quality, MAVIG applies a consistent quality management system in accordance with

### **DIN EN ISO 13485:2016**

for medical devices. Our top priority is to provide our customers with high-quality products that are free from defects and delivered on time





#### **Protective Materials - Inside**

The quality demands on X-ray protective clothing are now greater than ever. Wearing times of the protective clothing are extended by modern, radiologically supported procedures in diagnostics and treatment. The protection requirement differs widely depending on the intended use.

MAVIG, as the international market leader for radiation protection, offers you a well thought-out variant policy and a sophisticated and wide range of models.

Three different protective materials are used to attenuate X-ray radiation. These are optimally adapted to the required radiation protection with minimal empty weight.

#### **And Exterior**

Smoothness and flexibility are special quality features of MAVIG X-ray protective clothing. In order to further optimise wear comfort for the user, special emphasis is placed in our factory on selective tailoring and top workmanship.

Like our basic material ComforTex® HPMF, the two innovative textiles ComforTex® HPMF Hybrid and Duplex offer safety and protection against electrostatic charge, which could affect the proper functioning of sensitive medical devices.

MAVIG's innovative textiles were developed in accordance with the relevant requirements of DIN EN 13795-1:2019. This series of standards sets vital, reasonable safety requirements for the necessary quality of surgical textiles for the protection of patients and staff from infections.

### **Colours and Special Designs**

A fresh look, a pleasant feel and comfort for the wearer are the first impressions of the current X-ray protection collection by MAVIG.

These demands are also reflected in the constantly evolving colour palette of our collection. The current range includes a total of 8 colours for the outer materials of ComforTex® HPMF and ComforTex® HPMF Hybrid.

Our new children's design "Happy" is exclusively available in the outer material variant of ComforTex® HPMF.



# Dental<sup>All-round</sup> RD639





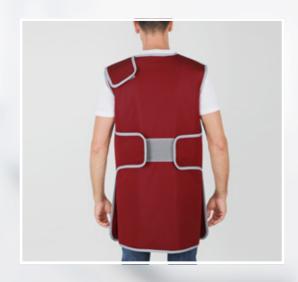
### Patient All-round Protection for Digital Volume Tomography (DVT)

The RD639 all-round protective apron offers optimum radiation protection in digital volume tomography.

The patient is protected at the front as well as the back with the full lead equivalent of 0.50 mm Pb.

The convenient hook-and-loop fastener on the shoulder allows the apron to be put on comfortably from the side. The circumference can be easily adjusted by means of the hook-and-loop fasteners in the back.

The integrated thyroid protection is height adjustable, so that it does not interfere with the imaging.



### **Protection/Lead Equivalent**

Standard lead, Leadfree



As standard: 0.50 mm Pb (front and back)

### **Outer Material**

8 Colours/1 Design (see left)



Optional: ComforTex® HPMF, ComforTex® HPMF Hybrid

### Closure

Convenient hook-and-loop fastener on the shoulder and in the back

### Sizes/Dimensions

Recommended for:

 $Small \\ 80.0 \times 60.0/60.0 \text{ cm} \\ (Length \times Width front/back)$ 

 $\label{eq:medium} Medium \\ 80.0 \times 70.0/60.0 \text{ cm} \\ \text{(Length x Width front/back)}$ 

(for children please use our children's coat RP668 combined with our thyroid shield RD614)



## Dental Panorama RD635





### Patient X-Ray Apron for Panorama Shots While Standing

The RD635 protective apron for patients offers optimum radiation protection for standing X-ray exposures on panoramic or teleradiographic units.

The protective clothing is particularly comfortable to put on, as it can be individually adjusted to the patient's body circumference with a quick and easy movement.

The closure system in the front prevents parts of the protective clothing from entering the image-relevant area if the clothing is not closed properly. The back lies smooth and flat against the body.



### **Protection/Lead Equivalent**

Standard lead, Leadfree



As standard: 0.50 mm Pb (front and back)

### **Outer Material**

8 Colours/1 Design (see left, page 4)



Optional: ComforTex® HPMF, ComforTex® HPMF Hybrid

### Closure

Convenient hook-and-loop fastener in the front

### **Sizes/Dimensions**

Recommended for:

 $\begin{array}{c} \text{Adults} \\ \text{Front: 80.0 x 60.0 cm (L x W)} \end{array}$ 

Children Front: 60.0 x 45.0 cm (L x W)

### Accessory

Thyroid/sternum protection for patients (page 8)



## Dental<sup>Chair</sup> RD642

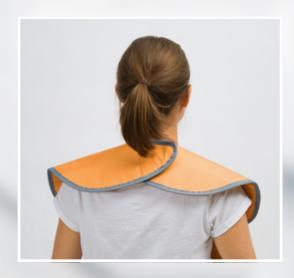




### Patient X-Ray Apron for X-Rays in a Seated Position

The MAVIG patient protective apron RD642, which is used for dental X-rays in a seated position, is flexible and comfortable to wear.

The high-quality hook-and-loop fasteners are conveniently placed in the shoulder area, making it precise, secure and quick to put on and remove.



### **Protection/Lead Equivalent**

Standard lead, Leadfree



As standard: 0.50 mm Pb (front)

### **Outer Material**

8 Colours/1 Design (see left)



Optional: ComforTex® HPMF, ComforTex® HPMF Hybrid

### Closure

Convenient hook-and-loop fastener on the shoulder

### Sizes/Dimensions

Recommended for:

Adults Front: 80.0 x 60.0 cm (L x W)

Children Front: 60.0 x 45.0 cm (L x W)

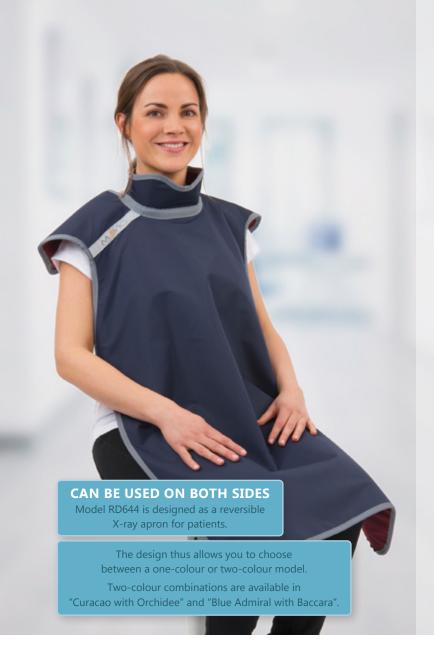
### Accessory

Thyroid/sternum protection for patients (page 8)





# Dental Bicolour RD644





## Patient X-Ray Apron with Thyroid Protection, for X-Rays in a Seated Position

Just like the classic dental apron (RD642), this model offers high flexibility and wearing comfort.

In addition to the large-area protection up to the gonads, the thyroid gland is also covered when taking X-rays of the seated patient.

The practical hook-and-loop fastener in the back of the neck of the thyroid protection collar ensures a snug, secure and quick fit.

Loops on the back allow an easy attachment to the dental chair.



### **Protection/Lead Equivalent**

Standard lead, Leadfree



As standard: 0.50 mm Pb (front)

### **Outer Material**

8 Colours/1 Design (see left, page 6)



Optional: ComforTex® HPMF, ComforTex® HPMF Hybrid

### Closure

Convenient hook-and-loop fastener in the back of the neck, plus loops on the back for attachment to the chair

### Sizes/Dimensions

Recommended for:

Adults Front: 80.0 x 60.0 cm (L x W)

Children Front: 60.0 x 45.0 cm (L x W)

### **Optional**

Also available in two-colour design



Optional: Curacao with Orchidee or Blue Admiral with Baccara



# Model RD614

### Thyroid & Sternum Protection, Suitable for Models RD635 & RD642

### **Thyroid and Sternum Protection** for Patients

The thyroid is a radiation-sensitive organ of the human body and therefore in particular need of protection.

The MAVIG thyroid sternum protection for patients is optimally cut and has the best fit, and, of course, it also takes all radiation protection aspects into account.

An uncomplicated magnetic or hook-and-loop fastener, which can also be replaced as an option, provides sufficient scope for adjustment.



Children Size in Design Happy



hook-and-loop fastener



With uncomplicated magnetic closure



With exchangeable hook-and-loop fastener

### **Protection/Lead Equivalent**

Standard lead,



As standard 0.50 mm Ph

### **Outer Material**

8 Colours/1 Design



Optional: ComforTex® HPMF, ComforTex® HPMF Hybrid

### **Sizes According to Fastener Type**

Recommended for:

### Magnetic/hook-and-loop fastener:

Adults

Standard size fits

neck sizes of 32 - 45 cm

Children Standard size fits neck sizes of 28 - 36 cm

### Exchangeable hook-and-loop fastener:

Adults Standard size fits

neck sizes of 37 - 50 cm

Children Standard size fits

neck sizes of 28 - 36 cm

### **Accessories/Replacement**

Hygienic cover



Spare Hook-and-loop fastener (Adjustment via snap buttons)



### Classic<sup>Mini</sup> RP668



High quality, flexible
NovaLite material with
lead equivalent values
of 0.50 mm Pb in the front
and 0.25 mm Pb in the back

Ideal fit for children

Time-saving hook-and-loop fasteners

Type testing and certification in accordance with (EU) 2016/425 and (EU) 2017/745, as well as IEC 61331-1:2014 / DIN EN 61331-3:2014 / DIN EN 61331-3:2016





### Children's All-round Protection Coat

This model provides practical all-round protection for your little patients.

Children's X-ray protection, in particular, must be easy to put on and take off.

Small patients rarely have enough patience for long actions. Therefore our RP668 children's coat can be adjusted quickly and closed securely using the hook-and-loop fasteners in the front.

Children's X-ray protection is manufactured by MAVIG with the innovative NovaLite radiation protection material to achieve the best possible weight ratio and thus impose only the most necessary physical strain on the children.



<b>Protective Material</b>	NovaLite	<b>Lead Equivalent Values</b>	Front: 0.50 mm Pb Back: 0.25 mm Pb	9.0
<b>Outer Material</b>	ComforTex® HPMF			
Colours	8 Colours/1 Design (see left, pa			
Sizes Recommended for:	SMALL Length: 60 cm Hip circumference: 68 - 75 cm for children aged approx. 3 - 5 years	MEDIUM Length: 80 cm Hip circumference: 76 - 83 cm for children aged approx. 6 - 8 years	LARGE Length: 84 cm Hip circumference: 84 - 95 cm for children aged approx. 9 - 12 years	
Accessory	RD614 - Thyroid/sternum			

## **Basic RA640**



NEW: Optionally available with temperature regulating Outlast inlay material.

- Ideal fit, maximum comfort for the wearer
- Ideal for short and infrequent wear
- Soft shoulder pads as standard equipment
- ✓ Various closure types to choose from
- ✓ Type testing and certification in accordance with (EU) 2016/425, IEC 61331-1:2014 / DIN EN 61331-3:2014 / DIN EN 61331-3:2016



Crossband (KB) in the back



### Front Protection Apron, For Medical Personnel

The basic RA640 model has proved effective for years and is used as a front protection usually for short and rare wearing times in conventional X-ray situations without fluoroscopy.

For model RA640 it is also possible to choose whether protection of 0.25 mm Pb should be maintained in the back wings or dispensed with to reduce the weight of the apron.

We offer different closure systems for this series of aprons. Choose your favourite:



Snap fastener closure



Crossband closure



Strap closure



Snap buckle closure

Protective Materia	rial NovaLite, Leadfree or Standard lead Le		ad <b>Lead Equ</b>	Lead Equivalent Values		0.25 mm Pb, 0.35 mm Pb, or 0.50 mm Pb 0.25 mm Pb or without protection				
Outer Material	ComforTex® HPMF,	mforTex® HPMF, ComforTex® HPMF Hybrid								
Colours	8 Colours (see left)	Colours (see left)								
Type of Closure	ou can choose: Snap Fasteners (DK), Crossbands (KB), Straps & Snap Buckle (GB), or Snap Buckles (SV)									
<b>Sizes*</b> Chest Girth Waist-/Hip Girth	<b>XS</b> ≤ 84 cm ≤ 91 cm	<b>S</b> 85 - 95 cm 92 - 102 cm	<b>M</b> 96 - 106 cm 103 - 112 cm	<b>L</b> 107 - 117 cm 113 - 123 cm	<b>XL</b> 118 - 128 ct 124 - 134 ct		<b>3XL</b> 140 - 150 cm 146 - 156 cm			
<b>Lengths</b> Recommended height	<b>90 cm</b> 150 - 160 cm	<b>100 cm</b> 160 - 170 cm	<b>110 cm</b> 170 - 180 cm	<b>120 cm</b> 175 - 190 cm	<b>130 cm</b> 185 - 195 cm	<b>140 cm</b> m 195 - 205 cm				
Accessory	RA614 - Thy	RA614 - Thyroid/sternum protection for medical personnel								



### Storage, On Site and Mobile X-Ray Protection

### **Wall System AW412**

For one dental or panoramic apron

With this practical wall system, your radiation protection product is always at hand, stored carefully and in a space-saving manner.



Functional metal construction

For one radiation protection product

- 140 x 500 x 160 mm (H x W x D)
- Lacquered in the colour "medico-white" (RAL 9002)
- Max. 10.0 kg weight capacity
- Empty weight: 1.5 kg



### **Protective Curtains**

Leading technology is manifested in detail

Our engineering and design concepts have allowed us to conquer the heavy weight of the curtains as well as to meet the stringent requirements for radiation protection.

At MAVIG, you will encounter a well-versed team, competent in the areas of radiation protection installations, system technology, and department planning.

Faultless radiation protection, attractive appearance, and functional installation will lead to the desired ideal result.



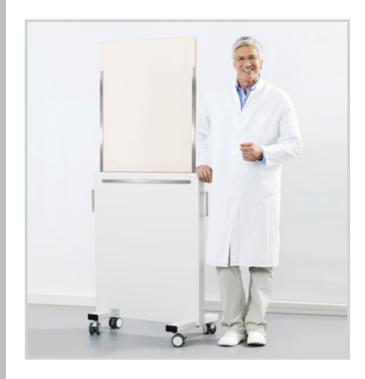
### **Mobile X-Ray Protective Shields**

For a flexible use



In order to avoid being a disturbing factor in the room, all requirements of equipment and procedural methodology of the operation room as well as all demands of the personnel have to be taken into consideration during the conception and development of a mobile shield.

MAVIG produces mobile shields with modern protective materials in a variety of options. Of course, we also welcome specific needs of our clients in addition to our standard offerings.







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