

Body-Contoured, Height-Adjustable, Encapsulating, Mobile Radiation Shield



"The new WD261 mobile shield developed by MAVIG provides mobile X-ray protection in any location where X-ray protection is currently absent or lacks flexibility, leaving your safety at risk and disrupting your work routine".







## **Protective Factors**

#### **Clinical Evaluations**

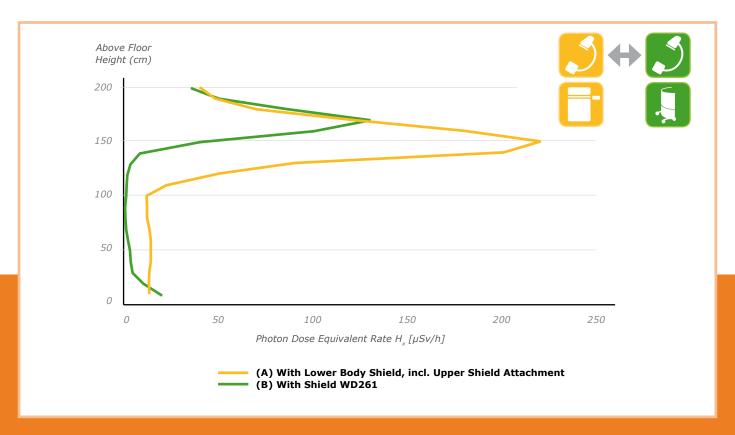
From the initial idea to the final design, our development process was influenced by the results of multiple tests and radiation measurements in different clinical areas.

The encapsulating radiation shield is body-contoured, mobile and can be adjusted to fit the individual user, resulting in a drastically reduced annual effective dose, especially in work areas in which radiation exposure is high.

## **Measurement Results** Demonstrating the Protective Effectiveness of the **WD261**

The measurements shown below were performed in a cardiac catheterisation laboratory.

The test compared a currently used lower body shield (A) and the new WD261 radiation shield developed by MAVIG (B). The graph clearly demonstrates that the radiation protection provided by our new shield is superior to that provided by the conventional lower body shield, thanks to its flexible height adjustment.



Radiation dose at the investigator's location

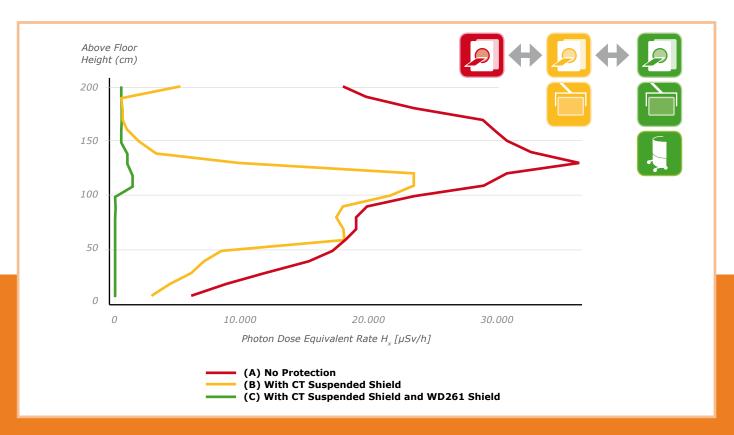
The clinical evaluations speak for themselves. Users consistently noted the high functionality and unrestricted freedom of movement provided by the product.

Another advantage, which deserves to be highlighted, is the increased workplace ergonomics. The mobile shielding system permits users to wear significantly lighter radiation protective clothing. For example, commonly used X-ray protective aprons rated with a lead equivalence of Pb 0.50 mm could now be reduced to a lead equivalence of Pb 0.25 mm.

## **Additional Measurement Results** of the Provided Protection During **CT Interventions**

The measurements shown below were performed in a CT room.

Compared were the still frequently encountered situation of no radiation protection (A), a prototype design of a new CT radiation protective suspended shield (B), as well as the combination of the radiation protective suspended shield and the WD261 radiation shield (C). Here too, the performance of the WD261 mobile shield is clearly evident, as is the need for an additional suspended shield.



Radiation dose at the investigator's location



Depending on the beam path (pa or ap), the radiation exposure is highest in an area between the knees and the chest.

The new WD261 radiation shield with its lead equivalence of Pb 0.50 mm provides the physician with up to 99 % protection from this scattered radiation.

## **Radiation Protection**

#### The Optimal "Rolling" Radiation Protection

A number of medical procedures which use X-rays, such as working with a C-arm, CT systems or above-table fluoroscopy equipment, require flexible radiation protection that reduces the weight stress put on the user's body.

Permanently installed radiation protection is not feasible in many cases. In these circumstances, the WD261 series shield is a mobile solution that offers optimal radiation absorption up to chest height, which is far beyond what is provided by lower-body radiation protection alone.

- The anatomically adapted shape of the WD261 series does not restrict arm mobility. This means that the shield can in many cases be set to axillary height.
- The user remains unimpeded in their activities because the shield follows every movement, even with the slightest contact from her/his body.
- A dampened spring mechanism ensures smooth and absolutely effortless height adjustment of the shield. This ensures an optimal fit for any height and for every discipline. The user can also adjust the height of the shield during the procedure to fit the specific task.
- Despite the space-saving design concept, there is enough leg room to permit the user to walk unhindered with the body-contoured radiation shield.

## "Specifically during longer procedures, lowering the weight of the protective clothing substantially reduces the physical stress of the physician."

Because the WD261 shields the user from scattered radiation from the floor to the upper chest area, lighter radiation protective clothing of Pb 0.35 mm for the upper area and Pb 0.25 mm for the lower area could be worn, rather than clothing with a complete equivalence of Pb 0.50 mm which is otherwise commonly used. The result is significantly reduced weight, which protects the spine and joints.

## **Advantage: Mobility**

#### **Body-Contoured Protection Where You Need it.**

The compact, body-formed shield has been designed for up-close, unimpeded access to the patient and high mobility to move freely throughout the procedure, especially where table and ceiling installed protection is not possible or where other shields cannot provide the free motion needed.

# "The time of being unprotected is a thing of the past."



## **Sterile Disposable Covers**

The shield can be handled at any time when used with the special sterile disposable covers.

The disposable covers are quick and easy to put on and meet the strict hygiene requirements for clinical use.





**Access Assured:** Thanks to the special design, the step-in shield permits the unimpeded use of the control pedals.

## Adjustment

#### **Adjustable to Your Needs**

The WD261 mobile radiation shield series offers smooth and feather-light height adjustment so that the protective zone can be conveniently adjusted to fit different heights and work conditions.

There are no complicated releases or levers to adjust height. That means in one fluid motion, height and position can be changed and aligned throughout the procedure as required.

In cases where a fixed height is required, a brake can be activated with a turn of one hand.





#### **Farewell to Metal Armour**

A mobile shield that effectively replaces your protective clothing up to chest height.

This beginning thought in the development process resulted in the frame not being designed with a lead lining but rather with a flexible, soft and smooth curtain. This guarantees an enclosed radiation protective zone when set at any height as well as a protective overlap and minimum lead equivalence of Pb 0.50 mm in any position.



#### **Trouble-Free Movement**

Anti-tipping measures were integrated into the design to provide the required stability and fluid mobility to eliminate any dangers of falling over or tripping during usage.

Specially selected, electrically conductive casters with rear brakes and front cable deflectors ensure that the shield can be positioned safely and moved freely within the room.

The rapid removal of the shield in an emergency is also not a problem.



#### **Specifications**

Article Number WD26105

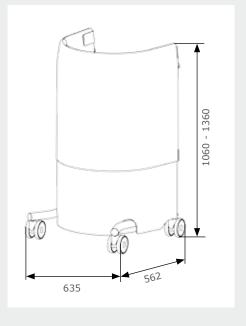
Dimensions Height: 1,060 mm – 1,360 mm

Width: 635 mm Depth: 562 mm

Lead Equivalence Pb 0.50 mm

Curtain Material ComforTex® HPMF

Bicolour Design Mandarin/Titan



Accessories STEA-WD261

Box of 20 sterile, disposable covers for the WD261





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