



The Image Safely® Setup
X-Ray Protection for the Cardiac Imaging Environment



X-Ray Protection at

OT58 Shielding Setup:

Two Protective Shields Combined with Connecting Curtain

Increased Image Safely® Zone with a significantly greater protection area compared to commonly used single protective shields

Flexible Lamella Curtain

The dose for the examiner's upper body decreases 85% compared to a shield without lamella.

UT70 – Table-Mounted Lower Body Protection

The up-to-date wide lower body X-ray protection shields the doctor/operator and the assistant from radiation below the table.

**Designed by MAVIG
with Your Safety in Mind.**



ST-FS5AMM / ST-RZ5AMM Uniquely Shaped Radiation Protective Drapes

Optimal protection against radiation emitting from the patient's body during both, femoral and radial access procedures.

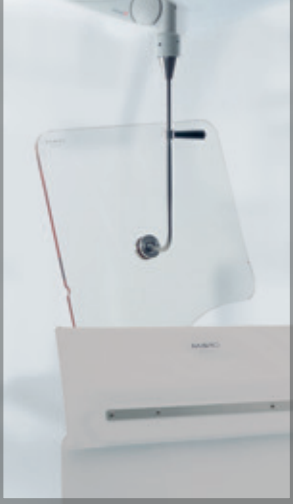
ST-OT5U5912 – Set of Two Radiation Protective Drapes

Additional rectangular protective drapes to cover any gap between patient and lower body protection.

1994 vs. 2025

1994 Standard Shielding Setup

with a small suspended shield and a lower body protection



2025 Image Safely® Shielding Setup

with two large suspended shields plus panel curtain OT58, up-to-date lower body protection UT70, and various drapes



**Image
Safely**

The new radiation protective shielding setup from MAVIG offers an extremely effective solution for every challenge in X-ray radiation protection:

- By increasing the height of the shield, even the head and especially the eye lenses of examiners up to 195 cm (6'4) are very well protected.
- The radiation protective shield's new width provides the medical staff with **greater freedom of movement**. The „protective shadow“ is increased, so that not only the primary physician, but also the medical staff standing next to the examiner is protected.
- The various drapes (femoral drape, radial drape, additional patient drapes) allow for more flexibility in the positioning of the setup to accommodate every applicable situation.

SOLUTION



Advantages / Highlights

1

Greater freedom of movement for the examiner as well as for other personnel due to large protective zone: the „Image Safely® Zone“

2

Greatest minimisation of scattered radiation exposure to the examiner and assistant due to lamella panel curtain at the bottom of the large shields in combination with multiple drapes placed on the patient

3

Optimally designed for use in both femoral and radial access procedures

4

Protection of the head (ocular lens) even for tall examiners

5

Simple integration of the radiation protection concept into room planning and especially into existing rooms where Portegra2 ceiling-mounted systems are already in place



The combined protective effect of the Image Safely® Shielding Setup allows medical staff to wear clothing with a lower lead equivalent value – taking the burden off their shoulders.

Scientific Data

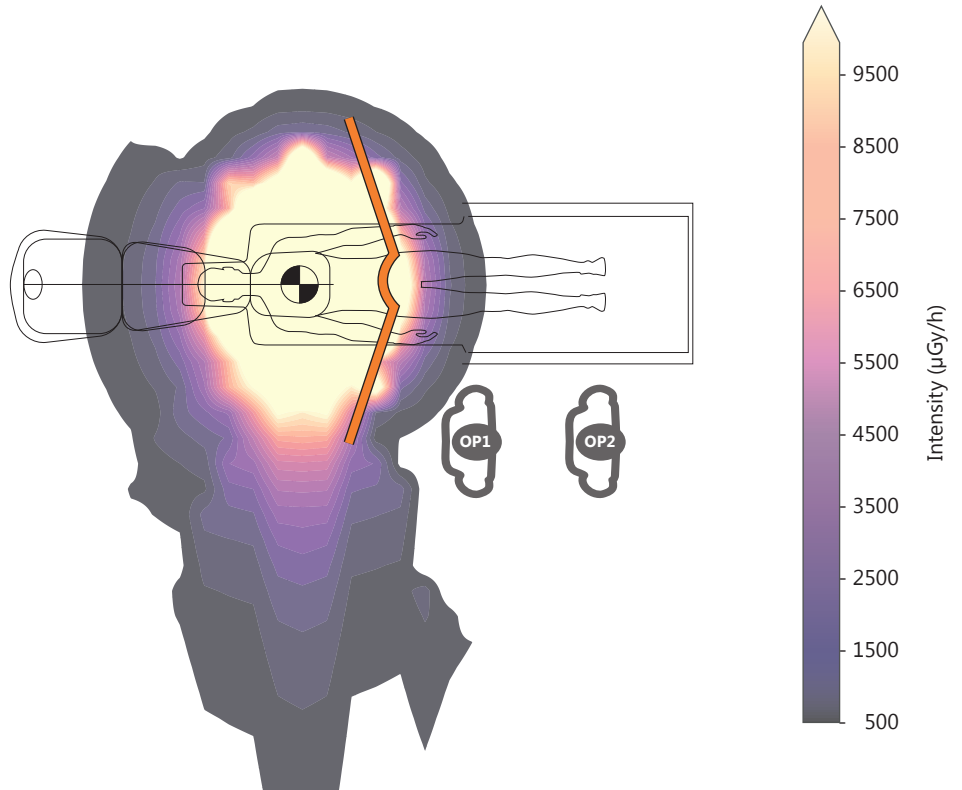
At 100 cm Height

Measured Dose Rate at Positions of 1st and 2nd Operator

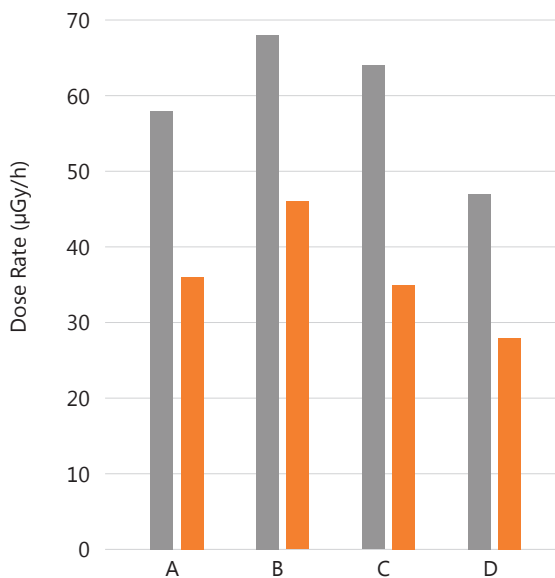
Image Safely[®]
Shielding Setup



32.3 - 61.2%
Additional
Protection



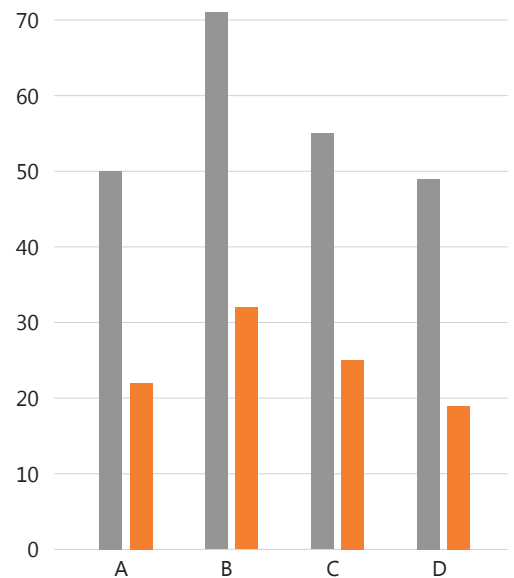
OPERATOR 1



A = 0,0 PA

B = 10,40 RAO CRAN

OPERATOR 2



C = 20,20 RAO CAUD

D = 30,0 LAO

Proof of Concept

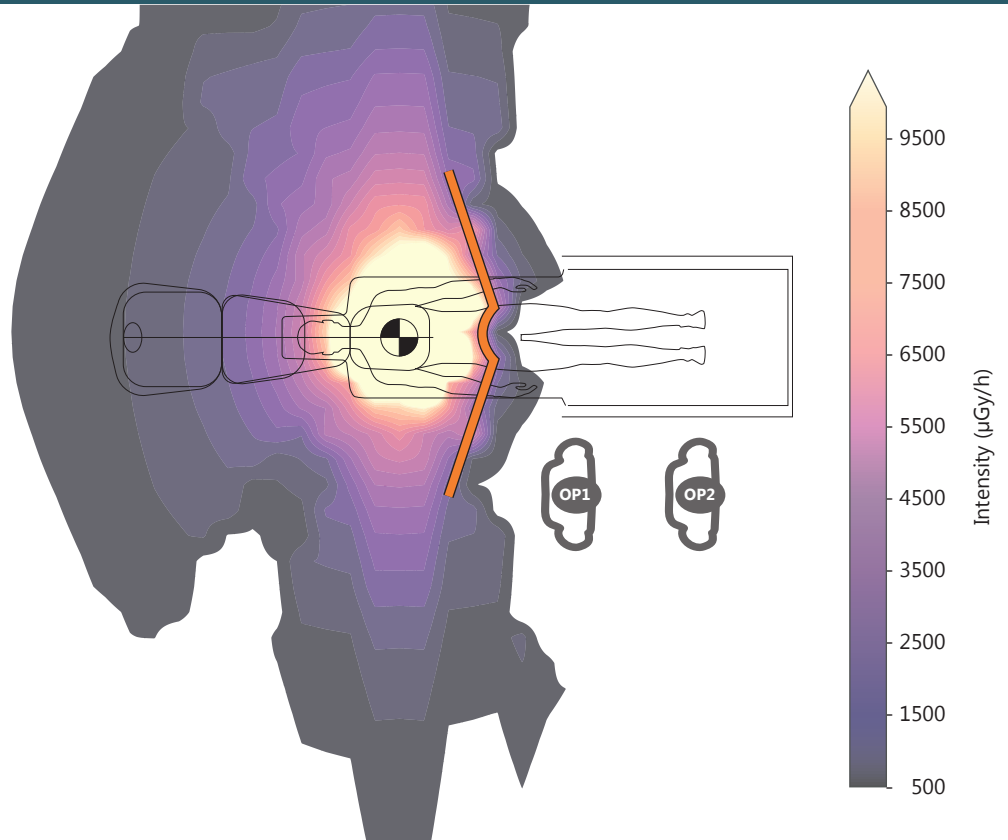
At 150 cm Height

Measured Dose Rate at Positions of 1st and 2nd Operator

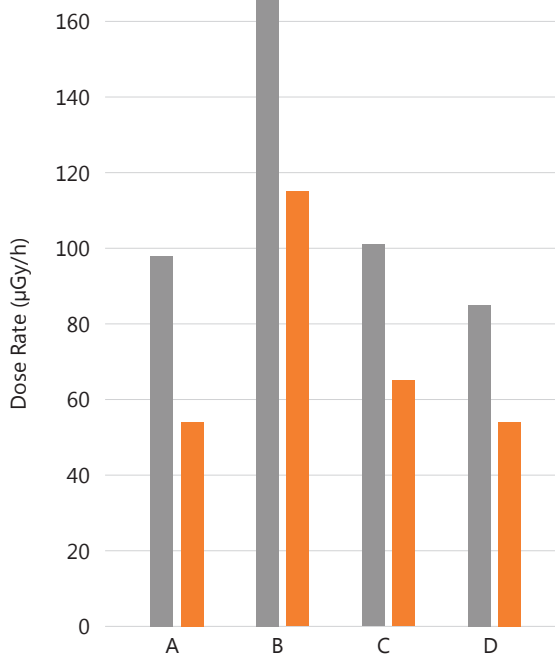
Image Safely®
Shielding Setup



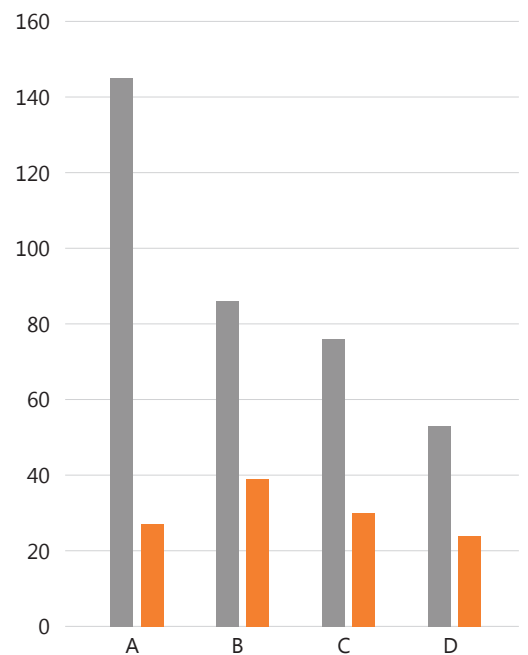
33.1 - 81.4%
Additional
Protection



OPERATOR 1



OPERATOR 2



A = 0,0 PA

B = 10,40 RAO CRAN

C = 20,20 RAO CAUD

D = 30,0 LAO

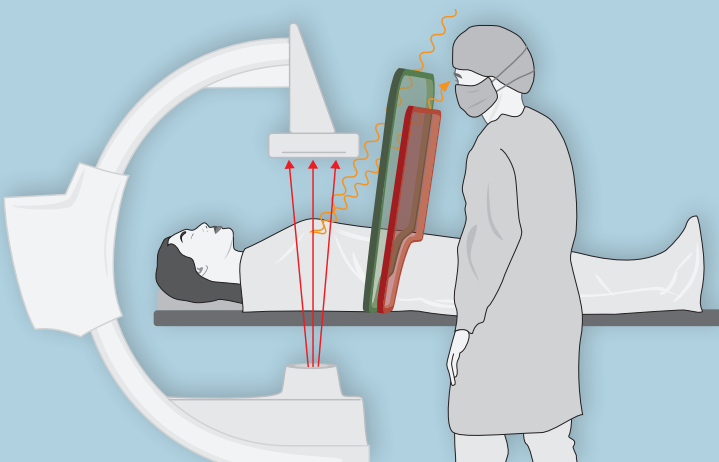
All Key Features



Optimal Shielding

People are not all the same. A classic example is height.

With the standard radiation protective shields currently used, it is possible that the top part of the head is unprotected. But, in particular the eye lenses require protection due to their high sensitivity to X-rays.

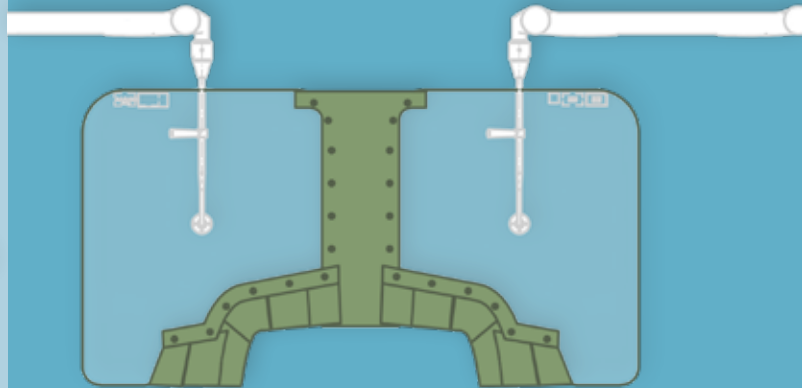


By increasing the height of the protective shield (green shield), even examiners up to 195 cm (6'4) tall are very well protected.

Freedom of Movement

During a complex intervention, people do not always stay behind the radiation protection necessary for that procedure. The examiner turns and changes his/her position or posture depending on the procedure.

In doing so, the user may not always be in the ideal position exactly behind the protective shield. Parts of the body, especially those parts that are not covered with personal protective equipment (e.g. shoulders, arms, hands), are then exposed to considerable radiation.



The radiation protective shield's new dimensions provide the user with **greater freedom of movement** meaning that changes in the examiner's position do not increase the exposure dose. Additionally, the other medical personnel standing next to the examiner is also better protected thanks to the increased width.

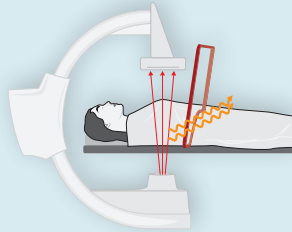
„The new Image Safely® shielding setup ensures consistent performance in radiation protection for both femoral and radial artery access.“

One Goal – Reduction

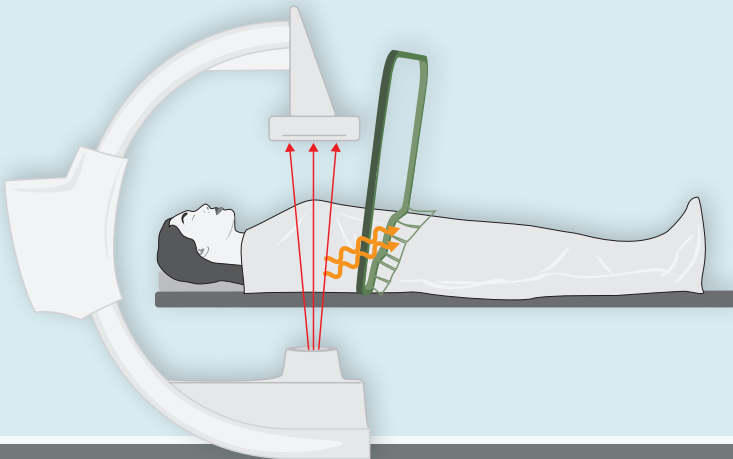
No Underpassing Radiation

Another problem in the application of radiation protection has been the release of radiation from below the shield.

This results from the scattered radiation originating in the patient volume radiographed, a considerable proportion of which travels through the patient's body tissue.



The examiner is thus exposed to the scattered radiation that has traveled underneath the shield and then exited the patient's body.

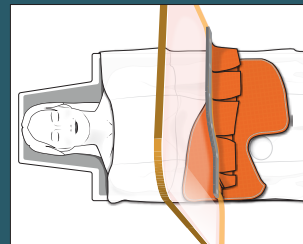


The flexible panel curtain lays perfectly flush to the patient's body when the protective shield is positioned and stops a significant proportion of the scattered radiation coming from the patient's body. At the same time the gap between the shield and the surface of the patient's body is closed.

Radiation Protective Drapes

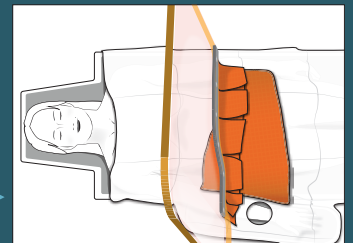
Radiation protection drapes, that are positioned on the patient extend the protection of the panel curtain. With the use of drapes, considerably more of the scattered radiation coming from the radiographed mass of the patient's body is blocked and the protection of the curtain is accordingly increased.

The shape of each drape is designed specifically for its intended purpose: With a cut-out for femoral puncture and without a separate cut-out for radial puncture.



Radiation protective drape specifically for femoral puncture

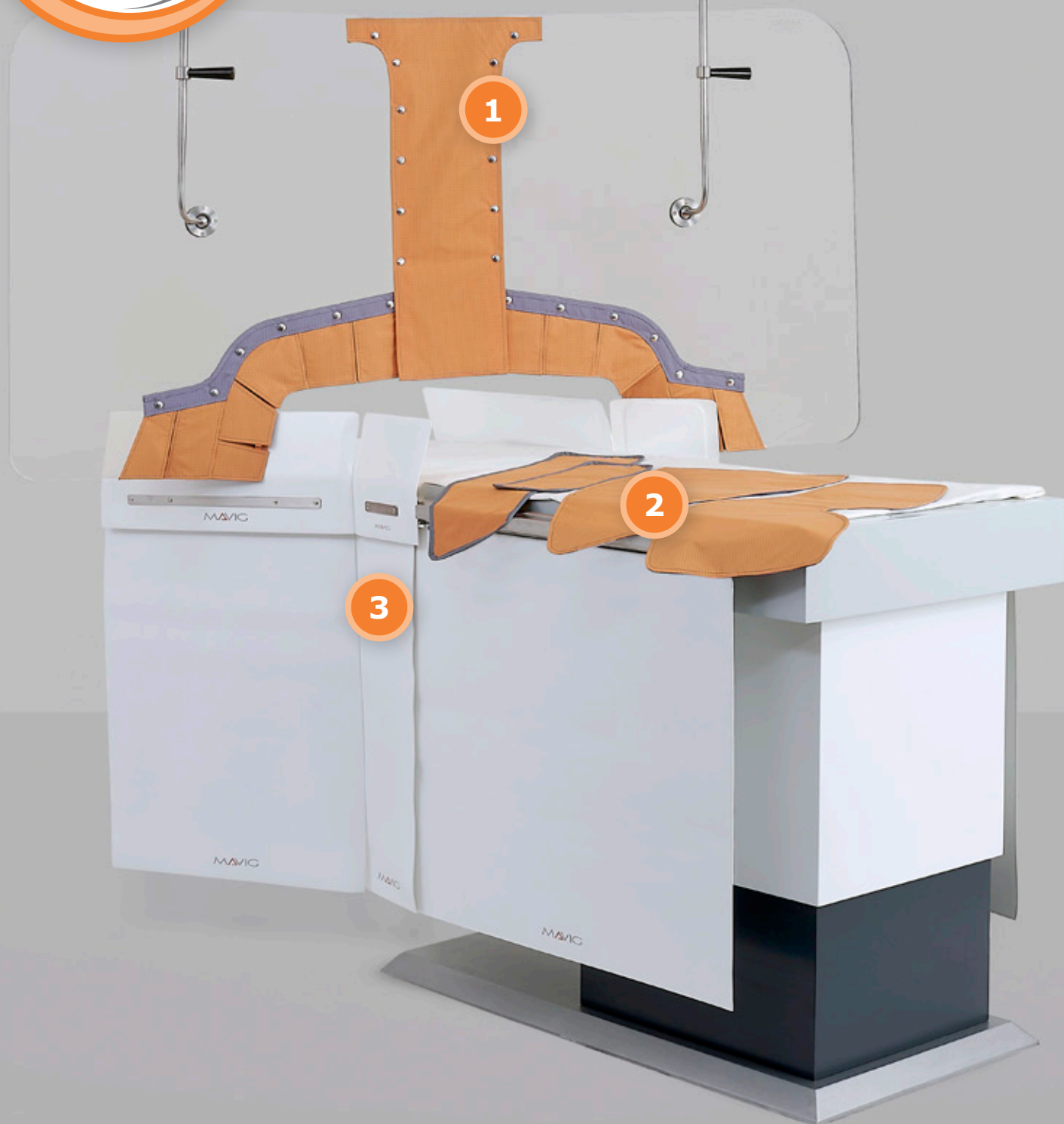
Radiation protective drape designed for radial puncture



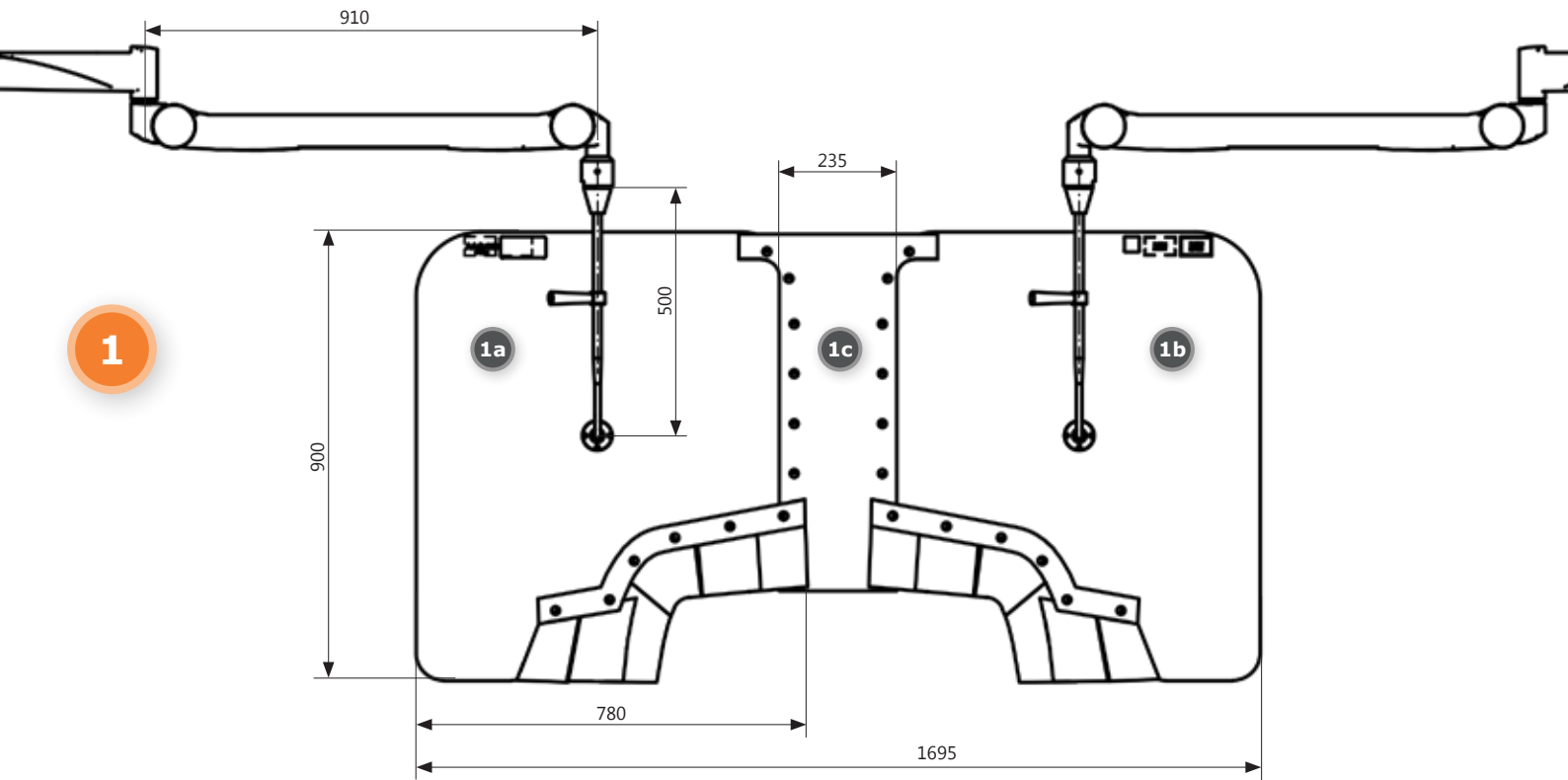
The protective zone becomes considerably larger. This provides better protection not just for the examiner, but also for the co-examiner and assistant in the room. When compared to using the shield with just the curtain, the radiation exposure is reduced by an additional 30 - 40 %.

„The best possible reduction in radiation exposure for the examiner and assistant is achieved by combining the large shield with panel curtain with the radiation protective drapes.“

Components



Technical Data



1 OT58 – Upper Body Protection

(left shield, right inverse shield, connecting drape)

- Total width: up to 1695 mm (66.7 in)
- Length of suspension arm: 75 + 91 cm
- Lead equivalent: 0.50 mm Pb

Article-No.: OT58001 Shields with lamella curtains, and connecting curtain

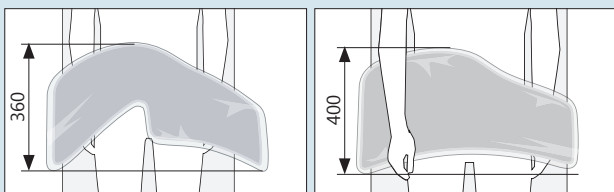
OT58 Parts

- 1a • Left shield (W x H: 78 x 90 cm)
- 1b • Right inverse shield (W x H: 78 x 90 cm)
- 1c • Connecting curtain, with snap buttons (W: 23.5 cm)

2 Radiation Protective Drapes

(1x femoral drape, 1x radial drape, 2x rectangular drapes)

- 2a • Femoral drape with a specific cut-out
- 2b • Radial drape ergonomically formed
- Widths: femoral/radial drape: 75 cm
- 2c • Size rectangular drapes: 15 x 50 cm and 20 x 80 cm
- Lead equivalent drapes: 0.50 mm Pb

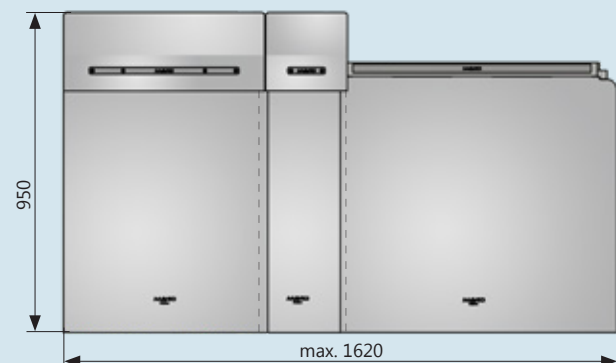


Article-No.: ST-FS5AMM femoral drape (29.5 x 14.2 in)
 ST-RZ5AMM radial drape (29.5 x 15.7 in)
 ST-OT5U5912 set rectangular drapes

3 2x UT70 Lower Body Protection

(one for left plus one for right side of the table)

- Total width: up to 1620 mm
- Three overlapping, flexible X-ray protective shields (main shield + narrow side shield + wide side shield)
- Two removable upper shields (narrow + wide)



Article-No.: UT70-77NSWS with 7.7 mm accessory rail
 UT70-90NSWS with 9 mm accessory rail
 UT70-10NSWS with 10 mm accessory rail



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