



**MDT<sup>®</sup> X-RAY**

# ABOUT **MDT**

MDT is one of Europe's most innovative and experienced developers of X-ray protection materials for more than 35 years. MDT manufactures and distributes a full line of radiation shielding products throughout Europe. They include X-ray aprons, leadglasses, thyroid shields and many other X-ray products.

MDT creates innovative products and services that promote a healthier, more sustainable, enjoyable and efficient way of working. Our products reflect our continuous drive to improve and simply prove that MDT is constantly pushing back the frontiers of science, with high-quality and innovative products, tested quality, fashionable colours and high functionality.

Many people rely on the protection our products provide every day and we are aware of the great responsibility this entails.

MDT has designed and created **Pureproteq®** in its entirety, based on its experience of the sector. This new **Pureproteq®** material enhances our high qualitative standards and is manufactured in The Netherlands using the best materials on the market.

In order to reduce the weight of our aprons we offer super light lead composite material. This material has an average weight of 3kg/m<sup>2</sup>. The weight is based on a lead equivalent value of 0.25mm Leq.



*Protecting people is both our aim and our motivation*





## COAT MODEL ▷

Intervention X-ray apron with a overlapping front side. The wide and in height adjustable comfort belt ensures an optimal weight distribution and support of the lower back.

### Features:

- Breast pocket
- Soft padded shoulders
- Wide and in height adjustable comfort belt
- Split on the bottom part of the apron
- Shorter backside
- Supporting and adjustable click closures on the upper and bottom side
- Push button for fixating MDT thyroid protectors
- RFID



### Options:

- Front panels
  - 0.25mm Leq → overlapping 0.5mm Leq
  - 0.35mm Leq → overlapping 0.7mm Leq
- Backside 0.25mm Leq or 0.35mm Leq
- Custom made possibilities
- Choice in 11 different colours
- Embroidery of choice
- TAG® control system





The two piece Vest & Kilt unites an optimal comfort with a maximal protection for the entirely overlapping front sides.

The two loose parts guarantee weight distribution between shoulder and hip, maneuverability and flexibility.

Features:

- Breast pocket
- Soft padded shoulders
- Shorter backside of the kilt
- Kilt with elastic inside support belt
- Kilt with hanging loops
- Kilt is standard fitted with a pocket
- Additional closure of kilt by supporting click closure
- Sizes Vest & Kilt can be combined
- Push button for fixating MDT thyroid protectors
- RFID

Options:

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## FRONT CLOSURE VEST

This newly designed vest has a Velcro closure in the front. This model has 0.35 mm Leq front parts according to the 61331&3 with a small overlap in the middle (about 5cm) with 0.7mm Leq. The backside is available in 0.25mm Leq or 0.35mm Leq.

- Breast pocket
- Soft padded shoulders
- Sizes Vest & Kilt can be combined
- Push button for fixating MDT thyroid protectors
- RFID
- Embroidery of choice

The Vest is always supplied in combination with a Kilt



## SHOULDER CLOSURE VEST

Comfortable vest with a shoulder closure with Velcro

- Breast pocket
- Soft padded shoulders
- Sizes Vest & Kilt can be combined
- Push button for fixating MDT thyroid protectors
- RFID
- Embroidery of choice
- Front panels
  - 0.25mm Leq → overlap 0.5mm Leq
  - 0.35mm Leq → overlap 0.7mm Leq
- Backside 0.25mm Leq or 0.35mm Leq

The Vest is always supplied in combination with a Kilt





## ◁ MODEL FRONT

A traditional front apron with a modern elastic backside for extra support in the back and weight distribution.

### Features:

- Breast pocket
- Soft padded shoulders
- With click closure or Velcro closure
- Push button for fixating MDT thyroid protectors
- RFID

### Options:

- Available in 0.5mm Leq or 0.35mm Leq
- Custom made possibilities
- Choice in 11 different colours
- Embroidery of choice
- Velcro closure on the back
- TAG® control system

## ▽ MODEL U-FRONT

Due to the unique design this apron is suitable for various sitting procedures and very comfortable with a greatly reduced backload and excellent protection of the gonads.





## ◁ THYROID PROTECTOR

The MDT thyroid protectors are supplied as standard in 0.5mm Leq and are available in three models.

The thyroid protectors are made of a flexible anti-bacterial PU fabric and are very pleasant to wear because of their design.

Available in 11 colours and embroidery of name or department is possible.



**TM-3**



**TS-4**



**VIPE**

## COVERS ▷

Washable covers for the MDT thyroid protector for optimal absorbance of perspiration, aftershave, perfume, odor and make-up. This cover is 95% cotton and 5% elastan.

Covers are also available in disposable material.

D-TM3: Disposable cover for TM-3

D-TS4/Vipe: Disposable cover for TS-4 of Vipe





# Discovery: Meets the eyes!





Focus

MDT offers you a large choice of X-ray glasses that protect your eyes from the harmful influences of X-ray radiation. All models offer an optimal protection for your eyes, 0.5mm Leq. Ask for our detailed documentation.



Nike blue



Nike Silver



Discovery



Cross



Delta



Discovery



Discovery



Cross



Nike Silver



Focus



Delta



Nike Blue



## FACE MASK ▷



This mask consists of a radiation protective, with 0.1mm Leq impregnated acryl, and is equipped with a twofold adjustable headband. The acrylic screen can be positioned at various angles of the face to minimize the scatter radiation. Ask for our detailed documentation.

Mask 006 → Height of the screen 12cm



Mask 007 → Height of the screen 20cm



## HEAD PROTECTION ▷



The SportsCap guarantees maximum head protection and respects optimal hygiene, 0.5mm Leq.

The SportsCap is available in 11 different colours and in 4 different sizes, and has a breathable cotton top.

- RFID



The Total Head Protection, covering the entire head and neck, allowing full protection of this area, 0.5mm Leq.

In addition, the Pureprotec® material ensures perfect hygiene!

- RFID

## GONAD PROTECTION ▷



- Interchangeable lead parts for gonad protection with Velcro fastening
- 0.5mm Leq - 1.0mm Leq
- Belt sizes S - M - L

These accessories are available in:

- PU Pureprotec®
- 11 Colours



- Lead part with belt for gonad protection with Velcro fastening
- 0.5mm Leq - 1.0mm Leq
- Sizes S - M - L
- RFID

## HAND PROTECTION ▷



- Unique pair of protective gloves, thumb and finger parts are very flexible while the protection level is at the highest levels. They can be used in multiple ways by clever design Available in 0.35mm of 0.5mm Leq.
- RFID
- Only available in navy blue



## ◁ SHOULDER PROTECTION

For the protection of the humerus, the shoulder joint, and the lateral thorax against scattered radiation. This removable sleeve attaches easily to the apron by a Velcro fixed on our Coat and Vest & Kilt aprons.

- Unisex
- 0.5mm Leq
- Choice in 11 different colours
- Adjustable by Velcro closure
- Left or right side
- Custom made possibilities
- RFID

## ◁ LEG PROTECTION

- Unisex
- 0.5mm Leq
- From above the knee to, and including, the foot
- Choice in 11 different colours
- Adjustable by Velcro closure
- Custom made possibilities
- RFID



## ▽ WALL MOUNTED RACK



MDT-E

Suitable for 1 Front, Coat or Vest & Kilt  
Measurements:  
W: 68cm x D: 22cm x H: 32cm  
weight 4.5kg

## HANGER ▽



The MDT hanger is made of anodised aluminium and is particularly suitable for hanging a personal apron, like a Front, Coat or Vest & Kilt.  
Hanger wide: 59cm

## ▽ MULTIFORM APRON WALL CONSOLE

These wall mounted storage racks have shoulder shaped arms that fan out 180 degrees for easy access. The design of the rack and position of the heavy duty arms enables them to remain flush with the wall even when fully loaded. The left swivel version (MAW-5L) and right swivel version (MAW-5R) can be mounted adjacent to each other to provide storage for up to 10 aprons.

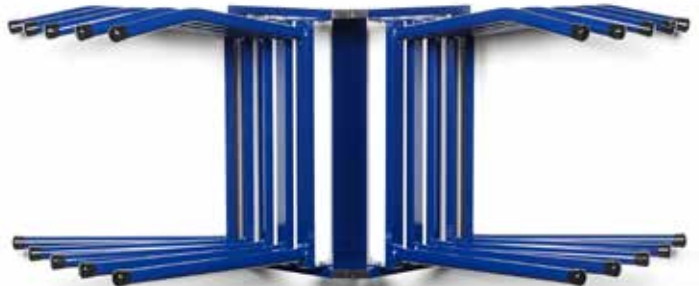
Measurements:

MAW-5 L or R W: 76cm x D: 78cm x H: 60cm ( 5-arms) weight 5kg

MAW-5 L and R W: 152cm x D: 78cm x H: 60cm (10-arms) weight 10kg

MAW-5 L

MAW-5 R



## MOBILE SWIVEL ARM APRON CARRIER ▷

This carrier can be positioned at any convenient location. Ideal for departments with limited wall space or where the wall construction does not allow mounted apron racks. Exceptional access allows aprons to be selected, removed and replaced with ease. Shoulder shaped pivoting arms prolong the life of expensive aprons. The compact and solid design guarantees the simple selection and hanging of aprons like Front, Coat or Vest & Kilt. Rack available with 5 swivel arms or with 10 swivel arms.

Measurements:

MAR-M5 W: 69cm x D: 60cm x H: 155cm ( 5-arms)  
weight 15kg

MAR-M10 W: 96cm x D: 60cm x H: 155cm (10-arms)  
weight 22kg

TRACK-5/10

The mobile apron rack can be equipped with an extendable system TRACK-5/10 to store thyroid protectors. The TRACK-5/10 is optional.

Measurements:

Track-5/10 W: 69-96cm (extendable) x H: 27cm,  
suitable for MAR-M5 or MAR-M10.  
weight 1,5kg

MAR-M10

MAR-M5





## ***MDT GOES GREEN***

Conserving the world around us and the existing resources in it for the following generations is our most important concern. Take advantage of MDT's free apron recycling program for the return/recycling of your retired lead aprons!

Please contact a MDT representative for more details about our environmentally friendly and cost saving program, and to obtain a return authorization.

MDT minimizes the environmental impact of its business management and products by:

- Reduction of the needed material, creating a lifespan extension by choosing sustainable materials and recycling lead material.
- Purchasing/buying less environmentally harmful products and reducing packaging.
- Made to measure aprons so no material is wasted.
- Saving energy and prevention and separation of waste.
- Giving advice to our customers about our product and supporting materials that raise sustainability.



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## GENERAL INFORMATION

### Innovative antibacterial fabric of MDT

After a period of innovation and modification of the already available fabrics, MDT has applied a new technique with unique antibacterial properties named **Pureproteq®**.

**Pureproteq®** is a strong, flexible and comfortable material with cooling and odour neutralizing properties, and has been proven effective on salmonella, listeria, E.coli, staphylococcus, aspergillus, MRSA, pneumococcus and prevents cross contamination.

This antibacterial treatment has been anchored in the fabric and will remain active, even after intensive wet cleaning. Also dirt, barium etc. cannot penetrate the **Pureproteq®** material, so it is very easy and quick to clean.

### Features and benefits MDT aprons:

- Soft padded shoulders
- Height adjustable belt
- Different models for men and women
- Custom made aprons on demand
- Embroidery with individual names, department, logos or registration number
- MDT aprons are latex-free
- TAG® control system
- MDT app
- RFID (Radio Frequency Identification) is applied standard in all aprons and accessoires

### Apron Care & Guidelines:

- Cleaning  
The aprons should be cleaned immediately after each use, with care taken to remove contaminating substances. Under no circumstances should our aprons be immersed in any liquid or subjected to cleaning with solvent based or abrasive materials. Inadequate cleaning will shorten the useful protective life of the apron.
- Storage  
Don't fold, crease, drape or sit down in your MDT garments. Aprons should always be stored on an appropriate storage system.
- Examination  
Each apron should be subjected to checking by fluoroscopy at least every six months to ensure no internal damage has been caused to the inner protective material.

### Repair service

Our factory provides a repair service.

An MDT representative will gladly provide you with information regarding this service.

### WARRANTY

Depending on use and care, the product life of the X-ray protection garments can vary enormously.

Therefore it is necessary to check the protective function on a regular basis, in accordance with Euratom 2013/59.

MDT warrants the protective material of MDT X-ray protection apparel from material defects and workmanship for a period of five years and two years of general warranty from the date of purchase. Our warranty does not cover damage from misuse, accident or neglect. MDT's obligation is hereby limited exclusively to repair and replacement of any defective products.

MDT hereby disclaims all other warranties, either expressed or implied including any implied warranty of merchantability.

Be sure to inspect all products at time of delivery. (This is mandatory by Euratom 2013/59)

### CERTIFIED PROTECTION

MDT's X-ray products have conformity with (EU) 2016/425 and are CE certified.

Our materials guarantee maximum protection in accordance with European guideline IEC 61331-1/3.

MDT guarantees the quality of its products by means of a series of tests: attenuation, lead equivalence, weight, equalized weight, as well as material resistance and durability.

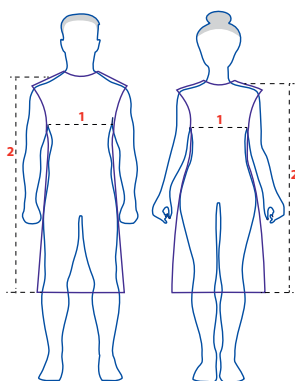
These are carried out and certified by Dutch and foreign university centers, in keeping with currently applicable standards.



## Size table MDT aprons

All aprons are tested in the 50-150Kv Energy range  
Sizing is according to IEN:EN 61331-3:2014

### Front



- 1 Chest size in cm  
Measured at the widest point around the chest.
- 2 Length of the Front apron in cm  
Measure the length from mid-shoulder to below the knee.

### Front

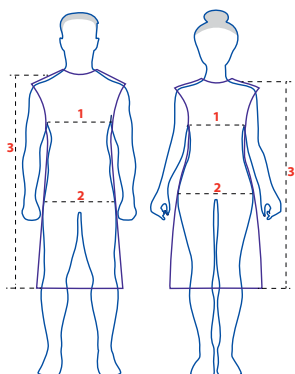
Size	Chest size	Length
S	till 90cm	100cm
M	till 100cm	100cm
L	till 110cm	100cm
XL	till 120cm	105cm

### U-Front

Size	Chest size	Length
S	till 90cm	110cm*
M	till 100cm	115cm*
L	till 110cm	120cm*
XL	till 120cm	120cm*

\*Length is extended compared to a traditional Front because of the seated use.

### Coat



- 1 Chest size in cm  
Measured at the widest point around the chest.
- 2 Hip circumference in cm  
Measured at the widest point at the hip.
- 3 Length of the Coat in cm  
Measured from mid-shoulder to below the knee.

### Coat

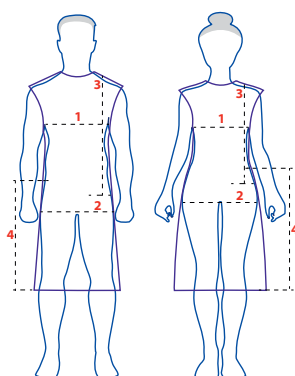
#### Men

Size	Chest size	Hip	Length
Coat-A	till 90cm	95-100cm	100cm
Coat-B	till 110cm	110-115cm	100cm
Coat-C	till 115cm	115-120cm	100cm
Coat-CXL	till 120cm	120-125cm	105cm

#### Women

Size	Chest size	Hip	Length
Coat-D	till 85cm	90-100cm	100cm
Coat-E	till 95cm	100-110cm	100cm
Coat-F	till 105cm	110-115cm	100cm
Coat-FXL	till 115cm	115-120cm	105cm

### Vest & Kilt



- 1 Chest size in cm  
Measured at the widest point around the chest.
- 2 Hip circumference in cm  
Measured at the widest point at the hip.
- 3 Length of the vest in cm  
Measured from mid-shoulder to the middle of the hip
- 4 Length from the kilt in cm  
Men:  
measured from the hip to just below the knee  
Women:  
measures from the waistline to just below the knee

### Vest & Kilt

#### Men

Size	Chest size	Hip	Vest length	Kilt length
VK-A	till 90cm	95-100cm	57cm	59cm
VK-B	till 110cm	110-115cm	62cm	64cm
VK-C	till 115cm	115-120cm	65cm	67cm
VK-CXL	till 120cm	120-125cm	68cm	70cm

#### Women

Size	Chest size	Hip	Vest length	Kilt length
VK-D	till 85cm	90-100cm	51cm	55cm
VK-E	till 95cm	95-100cm	55cm	58cm
VK-F	till 105cm	100-110cm	56cm	61cm
VK-FXL	till 115cm	115-120cm	57cm	63cm

Above are our standard sizes. If these are not fitting for your particular size please contact our customer service.



MDT aprons are available in 11 fresh colours





Made in Holland  
EN Versie 2020

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