



# ACCESSORIES CATALOGUE

1<sup>ST</sup> EDITION

## PASSIONATE ABOUT **RADIOLOGY**

When it comes to medical imaging, Rothband is a name you can trust.

With over 100 years experience in designing and manufacturing X-ray garments and accessories, you can be confident that when you choose us, you are buying from a company who is passionate in providing radiation protection to healthcare professionals.

All Rothband products are manufactured in the UK, to the very highest standards, using the highest quality materials which help us produce some of the most durable products on the market.



[www.facebook.com/Rothband](https://www.facebook.com/Rothband)



[@rothbandxray](https://twitter.com/rothbandxray)





## QUALITY STANDARDS

- ✓ ISO 9001:2015 compliant
- ✓ Conformity to (EU) 2016/425 PPE Regulation  
Medical Devices conform to MDR (EU) 2017/745 and  
MDD 93/42/EEC (UKCA)
- ✓ Core material testing in accordance with the  
safety requirements of IEC 61331-1: 2014 BBG\*
- ✓ Product designs comply to IEC 61331-3: 2014

To see our certifications and Declarations of Conformity please visit [www.rothband.com](http://www.rothband.com)



# PATIENT PROTECTION



## SHAWL

Can help protect breast tissue in Spinal and Mammography examinations.

800mm x 250mm  
0.5mm Pb lead equivalence

Available in Lightweight Lead and Edge Bilayer Lead Free material.

Model	Description
SH50 LW	Lightweight Lead
SH50 K	Edge Bilayer



## CHILD APRONS

A smaller version of our popular tabard designs to help protect children during X-ray examinations.

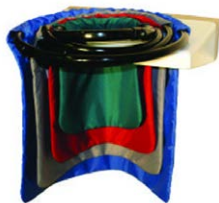
Pb mm	Size (LxW)	Lightweight Lead	Edge Bilayer
0.35	33 x 36w	CH 33 -LW	CH 33 - K
0.35	51 x 36	CH 35 -LW	CH 35 - K
0.35	66 x 36	CH 36 -LW	CH 36 - K
0.35	76 x 46	CH 37 -LW	CH 37 - K



## LB SHIELDS

Webbing belt with Velcro fastening, but a webbing belt with buckle is a no cost option.

Pb mm	Size (LxW)	Lightweight Lead	Edge Bilayer
0.50	51 x 64	LB 5 A -LW	LB 5 A -K
0.50	46 x 46	LB 5 B -LW	LB 5 B -K
0.50	40 x 40	LB 5 C -LW	LB 5 C -K
0.50	38 x 31	LB 5 D -LW	LB 5 D -K
0.50	31 x 31	LB 5 E -LW	LB 5 E -K
0.50	15 x 15	LB 5 F -LW	LB 5 F -K



## LB SHIELD SET

Shields held in place with flexible hoop.  
Comes with a wall mounted holder.

Pb mm	Size (LxW)	Lightweight Lead	Edge Bilayer
0.50	51 x 64	LB 5 A -LW	LB 5 A -K
0.50	46 x 46	LB 5 B -LW	LB 5 B -K
0.50	40 x 40	LB 5 C -LW	LB 5 C -K
0.50	15 x 15	LB 5 F -LW	LB 5 F -K



GKL Set



GFL Set



GT2 Set



GF Belt



GC1Set

## GONAD PROTECTION

A full range of shadow gonad protection for all eventualities.

Model	Pb LE	Description
GKL Set	2.0	Kings Lynn 4 sizes complete with wall rack with positioning instructions.
GC1S	1.0	Small cup shaped gonad shield, Navy PVC Material
GC1M	1.0	Medium cup shaped gonad shield, Navy PVC Material
GC1L	1.0	Large cup shaped gonad shield, Navy PVC Material
GC1Set	1.0	Set of cup shaped gonad shields (S,M,L)
GT2Set	2.0	Set of three T-shaped shadow shields. 2.0 mm lead encased within a moulded grey plastic case. Small, Medium and Large sizes.
GTBox	N/A	Wall rack for the GT2 Set
GFLSet	2.0	Flexi Type shield. Unisex Nylon Covered flexible Pb/PVC with bound edges. 3 sizes available. Option to factory fit an elasticated waist belt.
GFBelt	N/A	Factory fitted belt

## DENTAL PROTECTION

Dental X-ray protection, designed and developed by dental radiographers.



Model	Pb LE	Description
DT2A	0.25	Dental Apron With adjustable velcro neck fastening, choice of colours. Designed with higher neck for increased thyroid protection. Made from our lightweight Pb, unless specified otherwise. 760mm x 560mm
DT2C	0.25	Dental Apron With adjustable velcro neck fastening, choice of colours. Designed with higher neck for increased thyroid protection. Made from our lightweight Pb, unless specified otherwise. 580mm x 480mm
TPC2	0.25	Thyroid Collar Designed by dental radiographers for minimal masking. The neck strap does not contain any radiopaque materials, to avoid artefacts during OPG's. 200mm x 300mm



## SHIELDALL - CT DRAPE

ShieldAll wraps around patients during CT scans and therefore minimises dose to organs outside the region of interest, giving approximately 10% reduction in total patient dose.

Its unique (registered) design means ShieldAll provides the following benefits:

Fits patients of all shapes and sizes through use of the three extender top pieces.

Fits around the abdomen during all stages of pregnancy, giving up to 55% reduction in foetal radiation dose.

Places less weight on the pregnant patient's abdomen than conventional lead aprons.

Reduces moving and handling issues for staff.

Can be used on all patients; from neonates to obese adults.

Suitable for protecting chest, abdomen or pelvis.

Simple closing mechanism ensures that ShieldAll does not slide off the patient during scanning.

Designed to remain on the scanner couch between patients.

Wipe-clean surface for infection control purposes.



Model	Description
SALL5	Complete ShieldAll system.



## EYE and THYROID CT PROTECTION

The GrayShield Eye and Thyroid Protection Shields are the result of an extensive development to produce the most technically and cost effective shielding for patients undergoing CT or X-ray procedures.

The shields and material have been independently tested by the Radiation Protection Service, at the Department of Medical Physics and Clinical Engineering at Singleton Hospital in the UK.

The performance of the materials has also been certified by the Health Protection Agency, which is a department of the National Radiological Protection Board in the UK.



Model	Description
ARTS	Thyroid Shields Designed to provide maximum protection to the radiosensitive thyroid gland. This self-adhesive shield gives approx 60% dose saving.  Available in packs of 10 or 50
ARES	Eye Shields Recommended single use. Self-adhesive. Approx 50% dose reduction.  Available in packs of 10 or 50



# PATIENT POSITIONING





## LATERAL HIP LEG SUPPORT

Radiographer designed.

Unimpeded cross-table lateral X-rays.

Raises and angles the unaffected limb comfortably in a 45° position, and gives unobstructed access from the hip to the patella, reducing superimposition of thigh soft tissue on the neck of femur.

Lacquered MDF guards against knocks, provides stability and is easy to wipe clean.

Facility for additional weighting using either a water bottle or sandbags.

Size 47 x 23 x 46h cm - 4.7Kg

**ORDER CODE** LHLS



## THE ANCHOR - LEG STABILISER

The Anchor Leg Stabiliser is a patient positioning device that allows the Radiographer to position the patient's femur out of the way of the central ray.

- The gripping power on the bottom of the M-700 increases as the pressure from the foot in the strap increases.
- Can be used not only for cross-table hips but cross-table knees and bi-lateral sunrise views of the patella.
- Perfect for bariatric patients.

**ORDER CODE** ALS



## FISH TANK LEG SUPPORT

Designed as a more "infection control" friendly lateral leg support.

Rubber feet on the distal aspect to prevent slippage.

Strong PTEG design is less dense than Perspex™, creating less artefacts.

Infection control friendly PU sling, that can be removed for cleaning and if necessary, replaced.

**ORDER CODE** FTLS





## PATIENT STEP - SINGLE

Pictured on the left, the Single Patient Step. Comes with an optional handrail.

Dimensions: 36w x 28d x 22lcm high; Handrail height is 87cm.

(Base Dimensions: 30cm x 41cm)

Safe recommended working load 120kgs / 18 stone.

### ORDER CODE

S103  
S107

### Description

Single Step  
Optional Handrail



## PATIENT STEP - DOUBLE

Welded for stability.

Comes with single handrail

Low-slip treads.

Safe recommended working load 158kgs / 25 stone.

Optional Second handrail

### ORDER CODE

S105  
S107D

### Description

Double Step  
Additional Handrail



## LATERAL FOOT IMAGING STEP - BASIC

Double handrails plus frontal crossbar means that patients feel much more secure during standing lateral foot examinations.

Specially designed step height of 400mm ensures compatibility with most X-ray tubes.

Stable design tested to the requirements of EN14183 Stepstools.

Low-slip treads.

Easy to re-locate - just tilt and the step's castors then make contact with the floor for moving.

Closed cell foam lateral foot block (FP40L) included.

Depending on equipment configuration, the step can also be used for standing AP and Lateral Ankles.



### ORDER CODE

LFIS

### Description

Lateral Foot Imaging Step



## LATERAL FOOT IMAGING STEP - DELUXE

Deluxe version of the lateral imaging step with added features to make it suitable for a wider range of imaging procedures.

Added features include:

- Stainless steel, easy clean construction.
- Radiolucent top step enabling you to shoot through for ankle alignment projections.
- Non-slip steps.

Double handrails plus frontal crossbar means that patients feel much more secure during standing lateral foot examinations.

Specially designed step height of 400mm ensures compatibility with most X-ray tubes.

Stable design tested to the requirements of EN14183 Stepstools.

Easy to re-locate - just tilt and the step's castors then make contact with the floor for moving.

Closed cell foam lateral foot block (FP40L) included.

Depending on equipment configuration, the step can also be used for standing AP and Lateral Ankles.

**ORDER CODE**

**Description**

LFISD

Lateral Foot Imaging Step - Deluxe



## SIMPLE UP® PATIENT LIFT MACHINE

The Simple Up® allows you to lift your patient easily and safely to the best height to make load-bearing X-rays of lower limbs and standing long legs Simple.

Simple Up® has a very low step up height helping you to prevent patients falling. It offers unrestricted patient movement, flexible patient positioning, is safe and improves ergonomics for staff.

Optional safety bar available



ORDER CODE	Description
SIMPUP	Simple Up®
SIMPUPSB	Simple Up® Safety Bar





## Perspex™ STANDING FOOT PLATE

Polished Perspex™ with rounded edges and non-slip feet for safety.

Can accommodate a wide range of cassettes and DR plates (please specify at time of order.)

Weight Limit: 200Kg

ORDER CODE	Description
GPFC354	To accommodate a 35 x 43 size plate
GPFC243	To accommodate a 24 x 30 size plate



## DELUXE STANDING FOOT PLATE

Polished Perspex™ with a polyester frame. This unit has non-slip rubber feet and a carry handle.

Can accommodate a wide range of cassettes and DR plates.

Weight Limit: 200Kg

ORDER CODE	Description
GPFC354D	To accommodate a 35 x 43 size plate



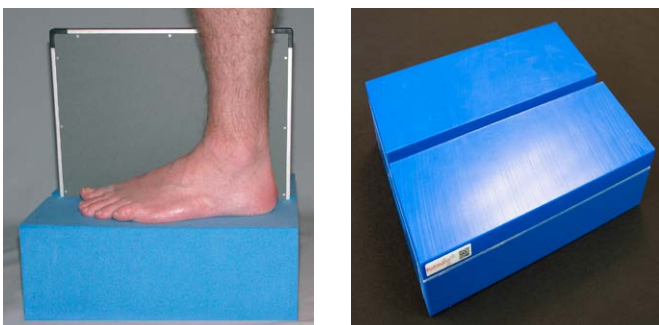
## LATERAL KNEE BLOCK

Lateral Knee Block: Chamfered edges for comfort and ease of positioning.

Closed cell foam for easy cleaning.

15mm slot width

ORDER CODE	Description
FP39L	Dimensions (mm): 360 x 300 x 120



## LATERAL FOOT BLOCK

Lateral Knee Block: Chamfered edges for comfort and ease of positioning.

Closed cell foam for easy cleaning.

15mm slot width

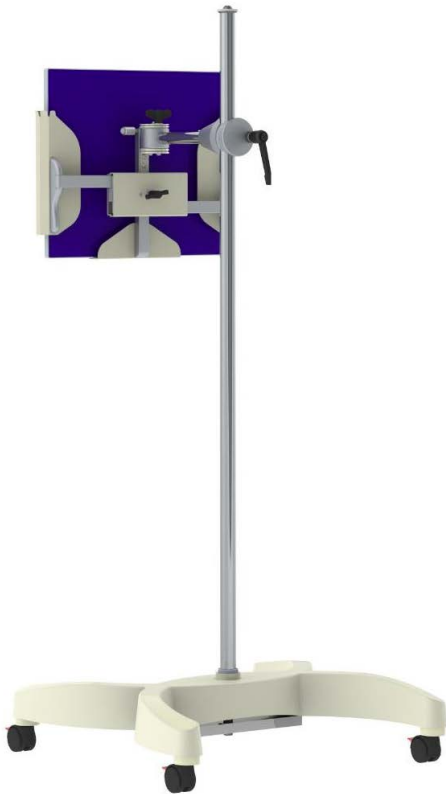
ORDER CODE	Description
FP40L	Dimensions (mm): 360 x 300 x 100
FBL40	As above but in solid, radiolucent material.

## MOBILE CASSETTE HOLDER - X

Cassettes or cassette-sized image receptors can be positioned at any angle.

- A versatile holder with universal applications.
- Telescopic width adjustable from 24.5cm to 53.5cm.
- Not counterbalanced, but with easy height adjustment from floor level to 120cm.
- Ideal for routine lateral 'shoot-through' radiographs.
- Forward reach from column to cassette front: 36cm.
- Accepts cassettes size image receptors up to 30mm thick.

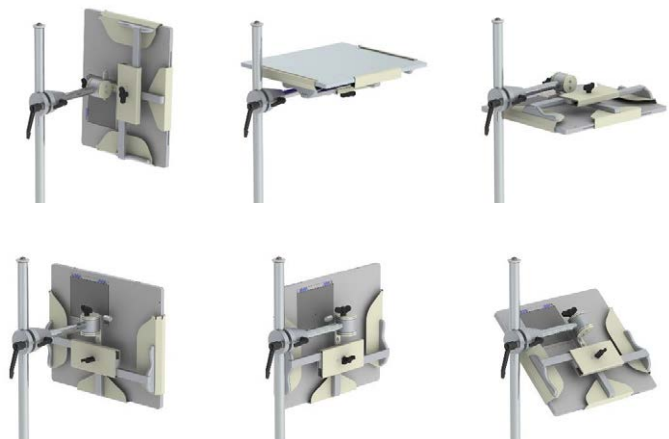
ORDER CODE CH05X



## MOBILE CASSETTE/DR PLATE HOLDER - Y

- Suitable for portable DR Panels and CR or film cassettes.
- Unlimited orientation for universal positioning possibilities.
- Telescopic width adjustable from 24.5cm to 53.5cm.
- Holds full leg/spine image receptors of any length.
- Not counterbalanced, but with easy height adjustment from floor level to 142cm.
- Overhangs table or trolley by up to 49cm.
- Accepts image receptor/cassette up to 30mm thick of any length.
- Heavy base and low centre of gravity gives added stability.

ORDER CODE CH05Y



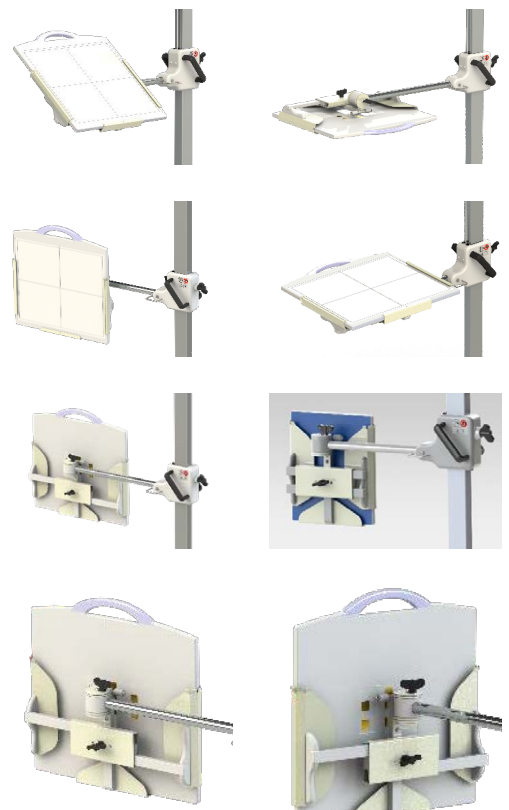
## PLATE HOLDERS



### MOBILE DR PLATE HOLDER

Stable and compact design holds portable DR Panels and CR or film cassettes from 24x30cm to 35x43cm. Also holds full leg/spine image receptors of any length.

- Unlimited orientation for universal positioning possibilities.
- Telescopic width adjustable from 24.5cm to 53.5cm.
- Height adjustable from floor level to 129cm.
- Counterbalance mechanism included for effortless raising or lowering.
- Overhangs table or trolley by up to 62cm.
- Accepts cassettes and image receptors up to 30mm thick.
- Large castors with roll and swivel locks ensure effortless movement.
- Castors are fitted with guards to prevent the pedestal running over cables.
- Heavy base and low centre of gravity gives added stability.



ORDER CODE	Description
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CH05X67	Mobile Detector Holder, counterbalance load 6.7kg
CH05X42	Mobile Detector Holder, counterbalance load 4.2kg
CH05X25	Mobile Detector Holder, counterbalance load 2.5kg

## PLATE HOLDERS



### PADDED CASSETTE BACKREST

For chest examinations.

Use behind patients when on chairs and trolleys

Helps obtain an erect position.

Wipeable and removable nylon outer covers.

2 handles for easy carrying/positioning.

Approx 150 angle 40x50x15cm.



**ORDER CODE** PCBR

### THE PADDED CASSETTE HOLDER

For use underneath patients.

Foam padded "envelope" to fit up to any plate/cassette.

Wipeable Nylon outer cover.

Other sizes can be manufactured to fit the larger DR plates.

Input by Alison Taylor (radiographer), to help create a more comfortable experience for elderly patients.



**ORDER CODE** PPCH

### TABLE TOP PLATE HOLDER

The table top plate holder allows positioning with ease.

Suitable for plates up to 35x43cm in size.

Rotation function allows caudal and cephalic angles.

**ORDER CODE** DRB002





**PLATE HOLDERS**

**SLIDERERS - DISPOSABLE CASSETTE COVERS**



Made from an extremely strong but slippery plastic which:

- Assists in cassette placement and Infection Control.
- Easier placement and removal of cassette/plate.
- Reduces back, arm and neck strain for staff.
- Minimises movement required by patient.
- Protection of cassette from fluids and contamination.
- Protection of staff and patients.
- Dispose of as clinical waste.
- Holder available for wall/mobile machine mounting.

ORDER CODE	Description
SLIDA	Sliderers 50-250
SLIDB	Sliderers 250-1000
SLIDC	Sliderers 1050+ (state volume)
SLIDH	Sliderer Holder 2 countersunk holes for wall fixing or use double sided adhesive pads for mounting on a mobile X-ray machine.

**PAG - DR PLATE HOLDER**

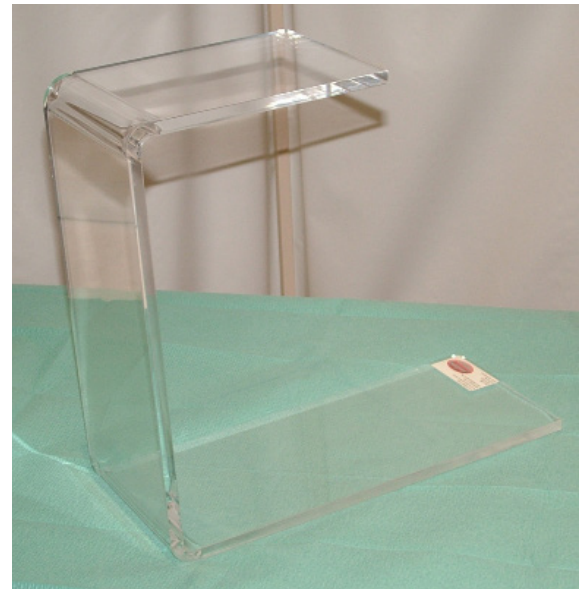
The Protect-A-Grid DR panel premium grid encasement allows for safe and effective examinations when using Direct Radiographic plates.

The PAG-DRP is a drop-on style that snaps on and off your existing DR panel quickly and effectively.

Please provide us with details of your equipment manufacturer and the size of the plate you require.

ORDER CODE	Description
PAG	Encasement without grid
PAG2430AA	PAG with grid, 24 x 30, 8:1/40 lines AL/AL
PAG3540AA	PAG with grid, 35 x 43, 8:1/40 lines AL/AL
PAG3540CA	PAG with grid, 35 x 43, 8:1/40 lines CF/AL
PAG3570AA	PAG with grid, 35 x 43, 8:1/70 lines AL/AL
PAG3570CA	PAG with grid, 35 x 43, 8:1/70 lines CF/AL





## SURGICAL DRAPE SUPPORT

The Surgical Drape Support is a simple, lightweight, radiolucent device to keep surgical drapes off a patient's face during procedures such as central line placement in any department.

The SDS reduces the feeling of claustrophobia and allows easy visual observation of the patient.

The patient's head helps secure the device in place (base slides under mattress) and by simple rotation the support can be used for both right and left sided line placement.

ORDER CODE	Description
SDS1	Standard Size: 400mm (L) x 250mm (D) x 200mm (H) Custom Sizes Available



## DO YOU HAVE A SPECIFIC REQUIREMENT?

We are always looking for new ways to support our customers.

If you are looking for something specific and you cannot see it in the catalogue, please get in touch to discuss your needs with our development team..

## SURGICAL LIMB SUPPORTS

Slides under a mattress pad to protect arms and keep them from falling off the procedure table.

An optional soft flexible pad provides comfortable patient cushion reducing risk of pressure related injury.

The supports are made from a durable PETG



SPSJ



SPSL



SPSC



SPSR



ORDER CODE	Description
SPSC	Standard Size: 400mm (L) x 250mm (D) x 200mm (H)
SPSCC	Cover for upright section of SPSC
SPSL	Standard Size: 600mm (L) x 250mm (D) x 200mm (H)
SPSLC	Cover for upright section of SPSL
SPSJ	Standard Size: 200mm (L) x 400mm (D) x 160mm (H)
SPSJC	Cover for upright section of SPSJ
SPSR	Standard Size: 600mm (L) x 300mm (D) x 80mm (H)
SPSRC	Cover for upright section of SPSR

**CUSTOM SIZES AVAILABLE ON REQUEST**



## MINIPAQUE®

For newborn and premature babies.  
Fits incubators and bassinets.

**Includes:**

L 50 cm, support, 2 straps, one small blanket and one "L" cushion.



## PAEDIATRIC OCTOPAQUE®

The unique paediatric immobilisation solution that takes into consideration the best possible comfort of the young patients undergoing X-rays, angiography or magnetic / nuclear resonance imaging.

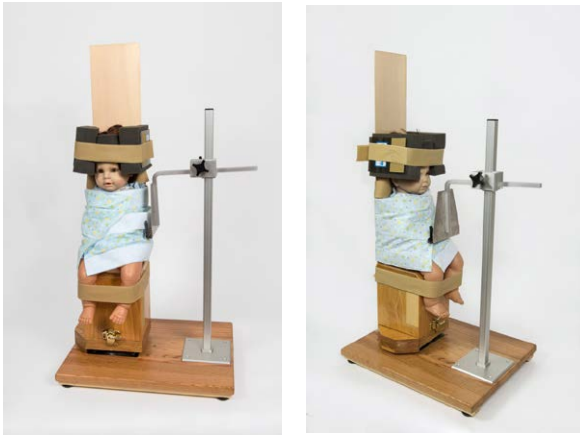
Carefully selected wooden board, verified as radio-transparent. Stable positions every 45°, on the support(s), ISOCENTRIC rotation and stability in all positions. Adapted head cushions, Velcro® straps and Velcro® blankets for fast immobilization.

Different configurations available

**Applications:**

Chest and abdomen  
Pyelography and cystography  
Upper G.I. and barium enema  
CT scan and MR





## THE PAEDIATRIC CHAIR

A unique paediatric immobilisation solution that takes into account the best possible comfort of the young patients undergoing X-rays and radiographic examinations.

The Chair rotates 360° and reclines to horizontal if needed.

A strong latch holds the chair in an upright position.

The Paediatric Chair must be used only by qualified personnel, according to appropriate procedures, and under the responsibility of qualified medical professionals.

ORDER CODE	ITEM	Description
PA-04	MINIPAQUE (kit)	L 50 cm, support, 2 straps, one small blanket and one “L” cushion.
PA-03	OCTOPAQUE (without accessories)	Board, 2 octogons and 2 supports; accessories optional. Length : 100 cm
PA-05	OCTOPAQUE (complete kit)	Length : 101,4 cm Set of cushions two “U”, large and small; one “L”. Blankets: large and small. Straps: head and arms.
PA-06	OCTOPAQUE (kit with vertical support)	Length : 101,4 cm Set of cushions two “U”, large and small; one “L”. Blankets: large and small. Straps: head and arms.
PA-07	OCTOPAQUE (wide board)	Length : 101,4 cm Set of cushions two “U”, large and small; one “L”. Blankets: large and small. Straps: head and arms.
PA-08	OCTOPAQUE – 60 cm board (complete kit)	Length : 60 cm Total weight : approximately 5,2 kg Set of cushions two “U”, large and small; one “L”. Blankets: large and small. Straps: head and arms.
PA-09	OCTOPAQUE – 75 cm board (complete kit)	Length : 75 cm Set of cushions two “U”, large and small; one “L”. Blankets: large and small. Straps: head and arms.
CH-01	Paediatric Chair - (without the optional accessories)	Base : Length : 52,5 cm – Width : 43,3 cm – Height : 5 cm Stool : Length : 25,5 cm – Width : 23 cm – Height : 27,5 cm. Board (above stool): Length : 91,2 cm – Width : 16 cm – Thickness : 0,6 cm Aluminum Cassette post : Height : 76 cm – Width : 32 cm Cassette holder : Dimensions : 1.6 cm deep and 15 cm wide.
CH-02	Paediatric Chair - (complete kit)	Includes all optional accessories listed below: <ul style="list-style-type: none"> <li>• Pair of “L”, and forehead cushions for arms and head.</li> <li>• “U” Large head cushion set 6 to 60 months.</li> <li>• Velcro® straps set #ST-04: forehead, arms and feet.</li> <li>• Blankets with incorporated Velcro®</li> </ul>



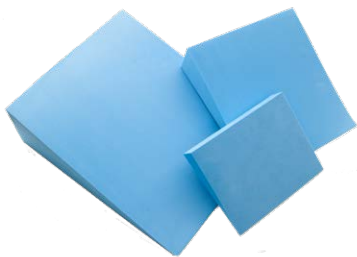
# FOAM POSITIONING

## STANDARD FOAM



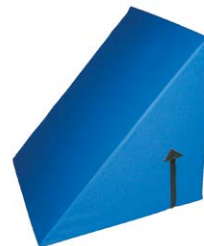
Functionally radiolucent and generally artefact-free.  
It provides a “non-slip” surface.  
Standard foam has a firmness rating of 40.

## CLOSED CELL FOAM



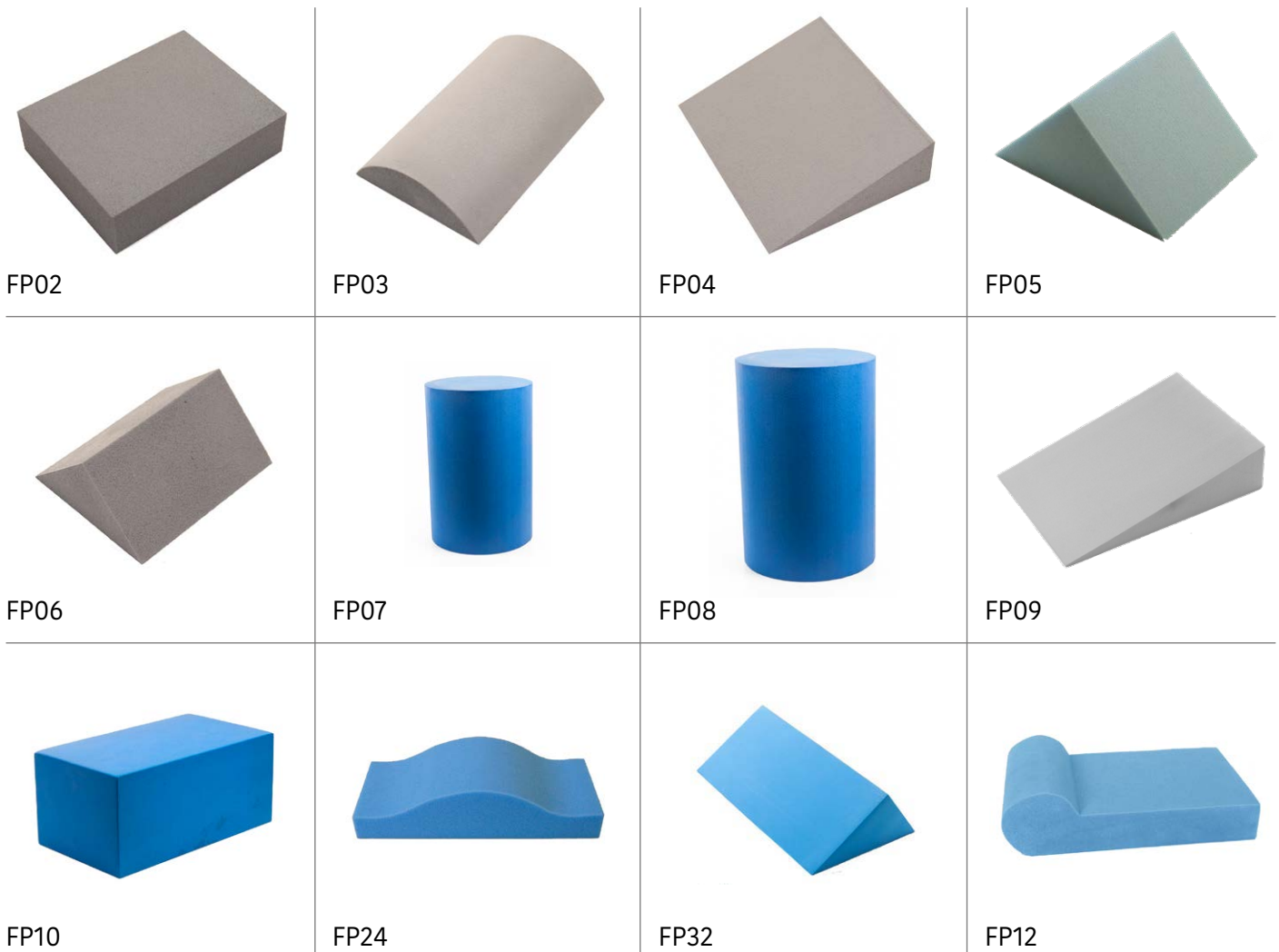
Easily wiped clean.  
Will not absorb any fluids even if torn.  
Functionally radiolucent and generally artefact-free.  
Limited to smaller angular shapes - max height 100mm

## COVERED FOAM



Sewn covers utilise our waterproof polyester/vinyl (Pv) apron cover material.  
Choice of colours.  
Easy to wipe clean.  
Larger sizes may use zips.

**FOAM - BLOCKS AND WEDGES**



Foam	Description	Dimension (cm)	Plain Foam	Covered	Closed Cell
FP02	Rectangular Block	23 x 18 x 6	FP02	FP02Z	FP02L
FP03	D Shape Block	25 x 15 x 5	FP03	FP03Z	FP03L
FP04	Wedge 20°	18 x 23 x 6	FP04	FP04Z	FP04L
FP05	Wedge 45°	18 x 18 x 18	FP05	FP05Z	FP05L
FP06	Wedge 45°	9 x 15 x 9	FP06	FP06Z	FP06L
FP07	Cylinder	15 D X 30	FP07	FP07Z	
FP08	Cylinder	30 D X 46	FP08	FP08Z	
FP09	Wedge 15°	25 x 18 x 6	FP09	FP09Z	FP09L
FP010	Long Rectangle Block	45 x 25 x 20	FP10	FP10Z	
FP24	Knee Rest	36 x 15 x 9	FP24	FP24Z	
FP32	Multi-angle Wedge: 30, 60 and 90°	25 x 60 x 18	FP32		
FP12	Lumbar Support Block	41 x 23 x 6	FP12		

## FOAM - HEAD AND NECK SUPPORT



FP11



FP13



FP14



FP15



FP59



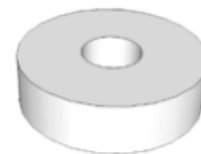
FP18



FP19



FP16

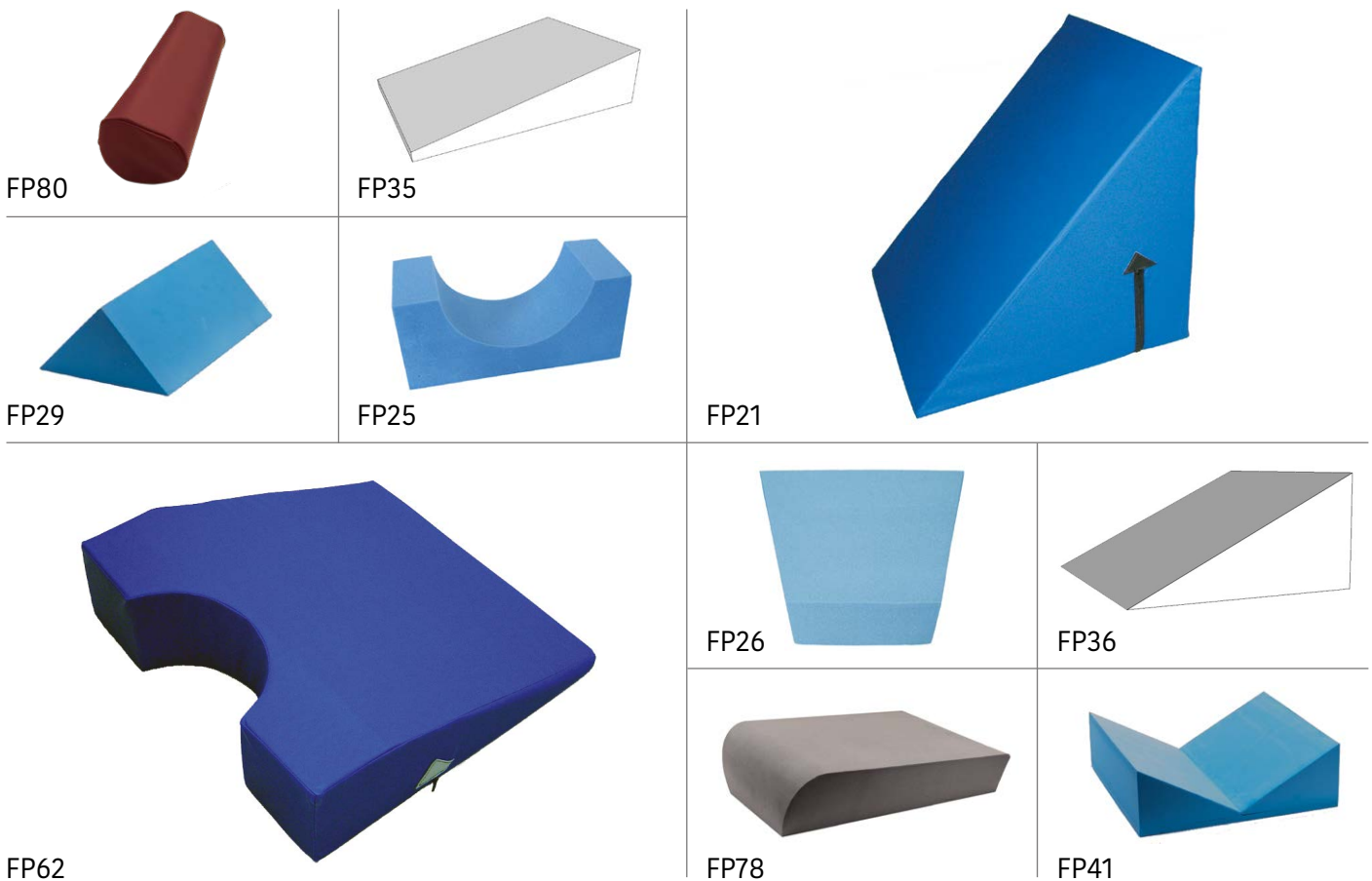


FP17

Foam	Description	Dimension (cm)	Plain Foam	Covered	Closed Cell
FP11	Scalloped Block	15 x 7 x 6 x 2	FP11		
FP13	Neck Support Block	15 x 30 x 15	FP13		
FP14	Head Rest - Low	25 x 10 x 8	FP14		
FP15	Head Rest - High	25 x 10 x 10	FP15		
FP16	Head Ring - Slim	23 D x 4	FP16		
FP17	Head Ring - Thick	23 D x 8	FP17		
FP18	Skull Block - Adult	25 x 20 x 8	FP18	FP18Z	
FP19	Skull Block - Child	8 x 15 x 5	FP19	FP19Z	
FP59	Stenson Blocks Designed by Oxford University Hospitals for immobilising trauma patients with a radiolucent, easy clean, wedge. Sold in pairs.	24 x 15 x 13		FP59Z	



**FOAM - SPECIAL**



Foam	Description	Dimension (cm)	Plain Foam	Covered	Closed Cell
FP80	Fulcrum Bending Pad	60 x 25 x 22		FP80Z	
FP35	Trendelenburg Wedge	43 X 35 X 33	FP34		
FP29	Spinal Wedge 45°	18 x 60 x 18	FP29	FP29Z	
FP25	Abdomen Block	15 x 36 x 15	FP25		
FP21	Back Rest 45°	46 x 46 x 46	FP21	FP21Z*	
FP62	Trans Vaginal Pad	46 x 46 x 46	FP62	FP62Z*	
FP26	Abducton Pillow	46 x 38 x 11	FP26	FP26Z	
FP36	Cardiac Wedge (28°)	76 x 35 x 46	FP36	FP36Z	
FP78	CT/MRI Knee Support	55 x 40 x 15	FP78	FP78Z	
FP41	Kyphotic Chest Pad	36 x 36 x 11			FP41Z

\* Upholstered Version available FP21U

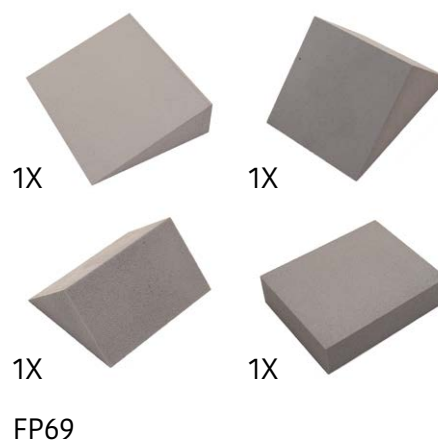
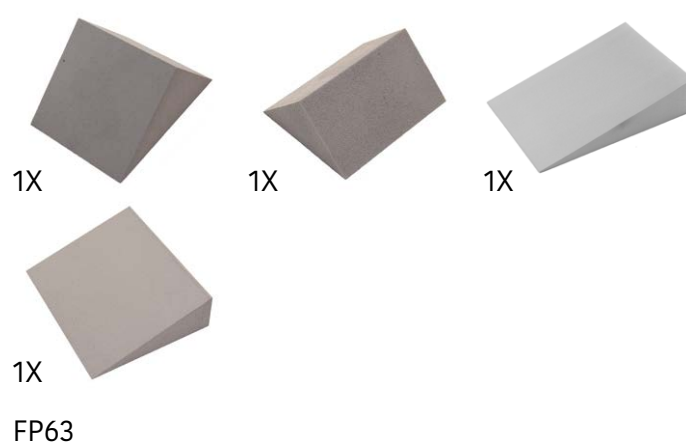
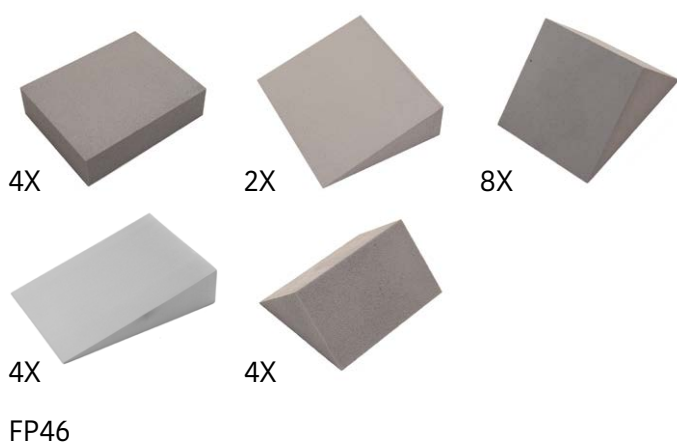
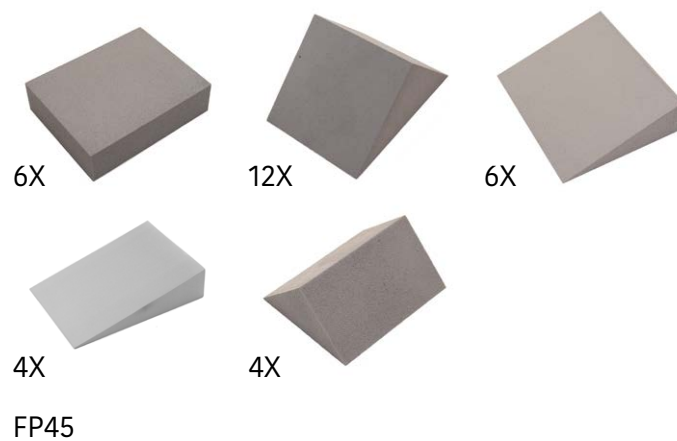
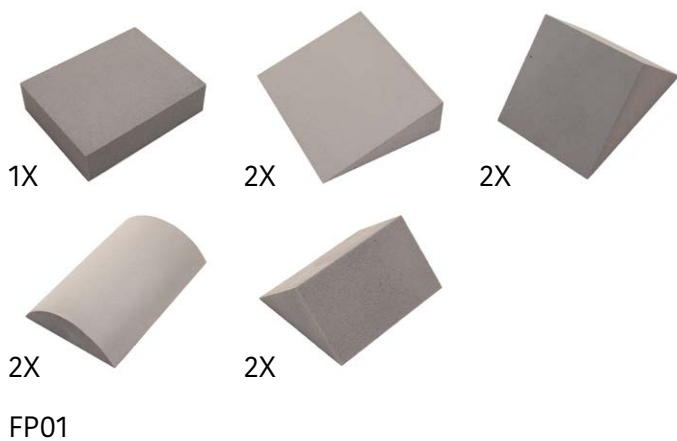


**DO YOU HAVE A SPECIFIC REQUIREMENT?**

We are always looking for new ways to support our customers.

If you are looking for something specific and you cannot see it in the catalogue, please get in touch to discuss your requirements.

## FOAM - SETS



Foam	Description	Plain Foam	Covered	Closed Cell
FP01	<b>STANDARD SET</b> FP02, 2 X FP03, 2 X FP04, 2 X FP05 2 X FP06	FP01	FP01Z	FP01L
FP45	<b>JUMBO SET</b> 6 x FP02, 4 X FP04, 12 X FP05 4 X FP06, 4 x FP09	FP45	FP45Z	FP45L
FP46	<b>LARGE SET</b> 4 x FP02, 2 X FP04, 8 X FP05 4 X FP06, 4 x FP09	FP46	FP46Z	FP46L
FP63	<b>TRIANGLE SET</b> FP04, FP05, FP06, FP09	FP63	FP63Z	FP63L
FP66	<b>FOAM BLOCK SET</b> 2 OF 10 X 15 WITH VARYING DEPTHS: 1.2, 2.5, 3.7 AND 5CM	FP66	FP66Z	FP66L
FP69	<b>MIXED SET</b> FP02, FP04, FP05, FP06	FP69	FP69Z	FP69L

**FOAM - PAEDIATRIC**



FP75



FP45

Foam	Description	Plain Foam	Covered	Closed Cell
FP75	PAEDIATRIC IMAGING SET			FP75
FP45	PAEDIATRIC CHEST SUPPORT			FP45

## FOAM - FP75 SET



Wedge Block A - 35°



Wedge Block B - 45°



Rectangular Block C



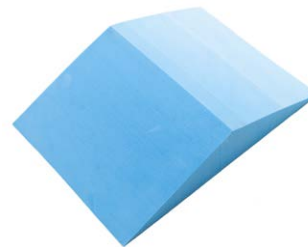
Wedge Block D - 20°



Rectangular Block E



Wedge Block F - 45°



Wedge Block I - 20°



Rectangular Block J



Sandbag Set



Perspex™ Sheet



Markers



## WOULD YOU LIKE TO LEARN MORE ?

The paediatric imaging set was designed and developed alongside Edinburgh Sick Childrens Hospital to standardise imaging for NAI cases. Find out how this set can be used: <https://www.rothband.com/certificates-downloads>

Item	Description	Dimensions	Quantity	Use
A	Wedge Block A - 35°	300mm x 100mm x 145mm	1	Wedge Block for Oblique Chest
B	Wedge Block B - 45°	300mm x 130mm x 130mm	1	Wedge Block for Lateral Spine
C	Rectangular Block C	230mm x 180mm x 30mm	1	Rectangular Block for Lower Limb
D	Wedge Block D - 20°	230mm x 180mm x 60mm	1	To aid limb positioning (used to rotate patient towards the side being imaged)
E	Rectangular Block E	100mm x 40mm x 10mm	4	Rectangular Block for DP Hand and Feet
F	Wedge Block F - 45°	150mm x 150mm x 90mm		Used anteriorly for Lateral spine positioning
G	Sandbags (5KG, 0.4KG)	600mm x 250mm, 180mm x 90mm	2,1	Immobilisation
	Wedge Block I - 20°	230mm x 360mm x 60mm	1	Supine Chest Block
	Rectangular Block J	70mm x 180mm x 60mm	2	Holding blocks for lateral extremities
	Perspex™ Sheet	175mm x 175mm x 2mm	1	Perspex™ to position hands and feet
	Markers		2 x R+L	Aspect marking

**SANDBAGS**

Standard outer cover is our easy-clean Dartex as standard.  
 Choice of three colours (Navy Blue, Grey and Berry)  
 Silica sand, limp filled for easy flow.  
 Custom sizes or weights are available to order.  
 Sturdy design that doesn't leak.



Order Code	Description	Dimension (cm)
FP82	1.5kg Sandbag	18x24
FP83	3.0kg Sandbag	15x45
FP84	5.0kg Sandbag	15x60
FP86	6.0kg Sandbag	30x30
FP88	Cervical Sandbags - Pair for Better visualisation of C7 in upright studies. Fitted with webbing handle. 4.5kg each	30x30
FP81	Standard Radiographic set: One of each of the Following: FP82, FP83, FP84, FP86	
FP89	Paediatric Set Quick and easy positioning of an infant. One for each arm, one for the legs. 3kg each.	3x15x45
FP89F	As above but in a frog design	
SBH	Additional Handle	
SBD	Additional D Ring	



FP88



**DO YOU HAVE A SPECIFIC REQUIREMENT?**

We can make sandbags to order in any dimensions.  
 If our standard range does not meet your requirements, please do not hesitate to get in touch.



# PROCEDURE CHAIRS

BACKREST PROVIDES OPTIMAL STABILITY FOR PATIENTS



ARMRESTS CAN BE ADJUSTED TO SEAT LEVEL TO MAKE TRANSFERS EASIER AND PROVIDE AN EXTRA-WIDE SEATING SURFACE

ELECTRIC HEIGHT ADJUSTMENT ENSURES EASY AND CORRECT PATIENT PLACEMENT IN RELATION TO MEDICAL DEVICES

GLIDING WHEELS MAKE LIGHT WORK OF MOVING THE CHAIR

LOCKABLE FOOT PEDALS ASSURE THE PATIENT IS SECURE

## VELA X-ray Chair

The VELA X-ray chair is used for X-rays of the upper extremities, where the patient must be stabilised to obtain correct images

Backrest provides safe support and optimal stability for patients

Armrests and stable base make it easy for patients to sit on and get up from the chair.

Gliding wheels make it effortless to move the chair for patient positioning on all floor types.

Foot pedal locking system and electric handset height adjustment ensure optimal ergonomic working positions for your staff

Patient transfers are made easier by adjusting armrests down to seat level.

Extra-wide seating is created when armrests are set at seat level

ORDER CODE

CH70030



PUSH BAR MAKES IT EASY TO MOVE THE CHAIR AND POSITION THE PATIENT CORRECTLY



ARMRESTS MAKE IT EASY FOR THE PATIENT TO SIT DOWN AND GET UP FROM THE CHAIR

THE CHAIR IS EASILY LOCKED WITH A FOOT BRAKE, WHICH ENSURES A STATIONARY AND STABLE PATIENT

ELECTRIC HEIGHT ADJUSTMENT ENSURES FAST AND CORRECT POSITIONING OF THE PATIENT RELATIVE TO THE MACHINE

FOLDING FOOTREST PROVIDES THE PATIENT WITH INCREASED STABILITY REGARDLESS OF THE HEIGHT SETTING

## VELA Mammography Chair

**The VELA Mammography Chair is optimal for patients who need to sit down during examinations, e.g. women prone to fainting, wheelchair users or patients with diseases affecting the musculoskeletal system.**

Good working position for the staff because regardless of the patient's height they can be seated at the right height for the staff, reducing stress in the back, neck and shoulders

Quick and secure patient positioning for the examination device using the chair's smooth-running wheels, push bar and foot brake

More accurate examinations for anxious or unsteady patients as they are more able to relax when seated

Optimal positioning of the patient with electric height adjustment, which makes it easy to vary the chair height to suit the equipment and staff

Forward-leaning position easily achieved and secured by adjusting the backrest

**ORDER CODE**

**CH70032**







**MC6158**

Surgeons / Sonographers chair, standard model. Height range of 45-59cm. Polished aluminium gas strut, five star base and castors.

**ORDER CODE** CHMC6158



**MC6178**

Round general medical chair, standard model. Height range of 45-59cm. Polished aluminium gas strut, five star base and castors.

**ORDER CODE** CHMC6178



**6100**

2 lever operation for height and backrest angle. Height range of 48-60cm. Black five star base and castors.

**ORDER CODE** CH6100



**6101**

High operators chair with 2 lever operation for height and backrest angle. Height range of 53-73cm. Adjustable foot support ring. Black five star base and glides.

**ORDER CODE** CH6101



**6103**

Standard operators stool with all round release lever for height adjustment with range of 48-60cm. Black five star base and castors.

**ORDER CODE** CH6103



**6104**

High operators stool with all round release lever for height adjustment with range of 53-73cm. Adjustable foot support ring. Black five star base and glides.

**ORDER CODE** CH6104



**6144**

Economy saddle stool with single lever height adjustment with a range of 48-60cm. Black five star base and castors.

**ORDER CODE** CH6144



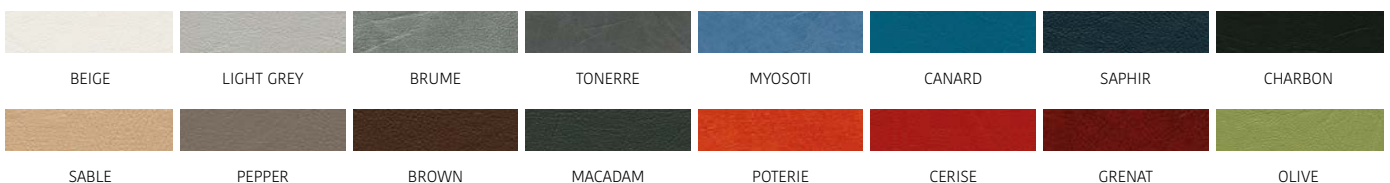
**MC6107**

Deluxe saddle chair with 2 lever operation for height and seat tilt facility. Height range of 54-71cm. Polished aluminium five star base and castors.

**ORDER CODE** CHMC6107

**FABRIC OPTIONS\***

A really hard wearing 'leather look' vinyl that will retain its performance for many years if cleaned and treated in the right manner. This fabric is fire retardant to crib 5, anti-bacterial and waterproof. Abrasion resistance to 100,000 cycles.  
 \*NOT AVAILABLE ON VELA CHAIRS

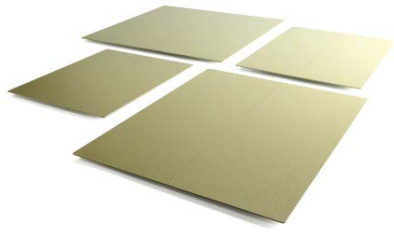




# GRIDS and FILTERS

“Not only do filters allow us to optimise image quality at the time of image acquisition, rather than rely on automated technology.

They have the added benefit of significantly reducing the patient’s exposure.”



## ALUMINIUM GRIDS

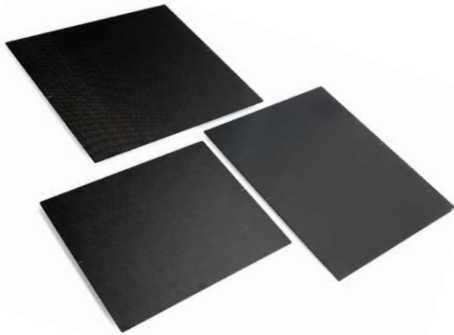
They have Aluminium interspacing and aluminium outer covers.

Available in Parallel or Focused formats.

Focused grids have a focal distance of 100-105cm - others available.

ADD (P) For Parallel or (F) for Focused to the end of the grid order code.

ORDER CODE	Size (cm)	Ratio
S243840	24x30	8:1
S354840	35x43	8:1



## CARBON FIBRE GRIDS

Available in Parallel or Focused formats.

Focused grids have a focal distance of 100-105cm - others available.

ADD (P) For Parallel or (F) for Focused to the end of the grid.

Size	ORDER CODE - 40 LINES	Ratio	ORDER CODE - 70 LINES
24 x 30	C243840	8:1	C243870
35 x 43	C354840	8:1	C354870



## GRID FRAMES

Grid frames allow a stationary grid to be fitted to most types of cassettes, allowing grid and cassette to be positioned as one object.

Fits all DR plates and Grid sizes.

We are able to configure to DR plates, please send sizes through for a quotation.

ORDER CODE	Size (cm)
GFR243	24x30
GFR354	35x43



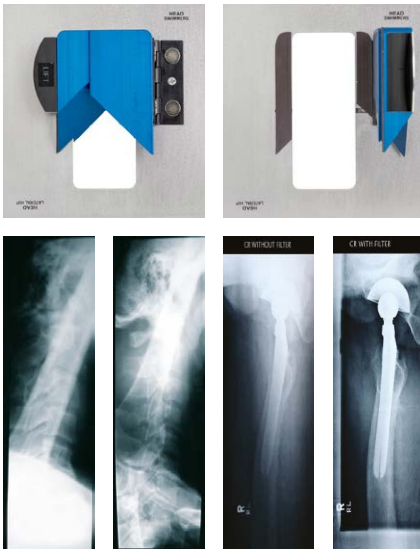
## GRID COVERS

Grid covers are a clear, rigid, plastic envelope.

They offer a degree of protection to the grid and are easy to clean.

Note: these do not attach to the cassette like grid frames.

ORDER CODE	Size (cm)
GPX243	24x30
GPX354	35x43



## FERLIC FILTER - SWIMMERS AND LATERAL HIP

### DESCRIPTION

The Ferlic Filter is a compensation filter that allows the entire cervical spine (C1-C7) and upper thoracic vertebra (T1) to be recorded on a single lateral film, significantly reducing radiation exposure and costs.

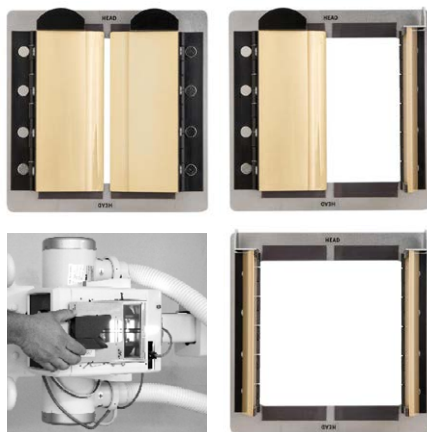
Reduces overexposure to the cervical spine to produce a balanced density from C-1 to T-1.

Reduces excessive radiation by filtering before it reaches the patient.

Increases information on the lower cervical and upper thoracic, often reducing the need for a swimmer view.

### BENEFITS

- Simple Positioning
- Increases visual detail through additional coning
- Stainless steel base custom fit for all X-ray machines (including portables) - please provide details.



## DOUBLE WEDGE FILTER

For use with AP and lateral lumbar, thoracic, sacrum and coccyx views.

\*Where the filter is present, radiation is reduced to the patient by 50% or more.

### DESCRIPTION

The Ferlic Double Wedge Filter is a compensation filter that allows the entire cervical spine (C1-C7) and upper thoracic vertebra (T1) to be recorded on a single lateral film, significantly reducing radiation exposure and costs.

### BENEFITS

- Increases image quality by reducing the scatter and increasing visualization of the spinous processes of the vertebra.
- Reduces radiation to the patient and increases information on larger patients.



## SCOLIOSIS/LEG LENGTH FILTER

For use with Spine and Lower Limb.

\*Where the filter is present, radiation is reduced to the patient by 50% or more.

### DESCRIPTION

The scoliosis X-ray filter consists of a base plate with magnetic strips to allow easy placement of both the AP and lateral wedges. The AP filter is graduated to decrease density evenly from T12 through the upper cervical spine. The lateral wedges decrease radiation in the cervical and thoracic spine areas. Where the X-ray filter is present, radiation is reduced to the patient 50% or more.

The Leg Length Filter is for both CR / DR and film. Can be used at both 72 to 100 inches. The filter is graduated to decrease exposure to the lower leg. The thin portion is positioned at mid-thigh. This graduation in the filter will even out the exposure. It has magnetic strips, which make for easy placement on the base plate. The leg filter is part of the scoliosis filter set.

To ensure the correct filter for your collimator, you must provide the vertical and horizontal lengths of the rails on the collimator that the filter will slide into. The vertical dimension is the distance between the rails (including the depth of the slot in the rail). The horizontal dimension is the length of the rails. Please use the Measuring Instructions link below to help determine these dimensions.

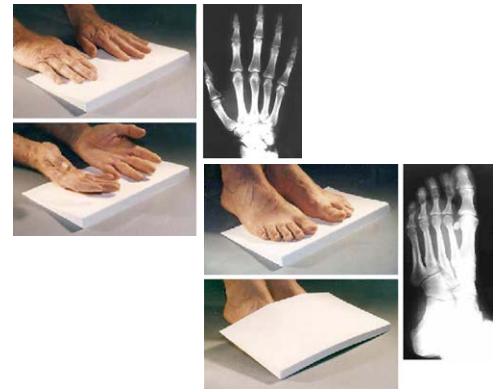
## GENTLE SLOPE®

Fingers and toes are much thinner than the wrist and back of the foot. It would be a miracle to find a technique suitable to such variations in thickness. These are precisely the marvels that the GENTLE SLOPE allows.

Cassette and filter become inseparable.

This product provides real value for patients with rheumatoid conditions.

L30 x W17 x H2.3cm approx.; 800g



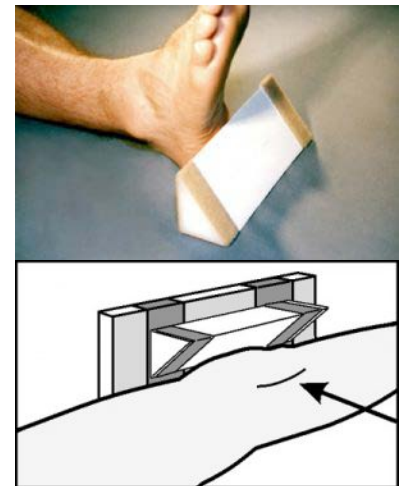
## LITTLE PRISM®

Has two gradients: 37 degree and 52 degree

Velcro® is incorporated at each end; other self-adhesive velcro® (supplied) serves to fix the filter to the collimator or to a cassette.

Suitable for:

- Calcaneum, axial view
- Olecranon, axial view
- Patella and tibial tuberosity
- Can be used next to the patient



## RIDGES PLUS®

Ridges Plus® addresses the problem of “Midline area not representative of periphery”. Ridges Plus® is also the solution to the problems of halation, flashing, motion, localisation and measurements of lesions.

With its six silicone filters, Ridges Plus® offers an absorption factor that is twice that of water and ensures an homogeneous density of 35cm in width, from the pubis to the feet of the patient. « V » shape extensions allow the perfect fit for tall legs.

Ridges Plus® weighs 13.4kg. Opaque rulers of 25cm in the inter-thighs and of 30cm in the main inter-legs components allows a better evaluation of the lesions and estimation of their extent.

The Ridges Plus® filters adhere to the examination table and to the patient. The supplied Velcro® straps and cushion provide an excellent stabilisation and efficient immobilisation of the lower limbs of the patient.



### ORDER CODE Description

FRCG	Ferlic Filter - Swimmers And Lateral Hip - 164mm rail width
FRCP	Ferlic Filter - Swimmers And Lateral Hip - 169mm rail width
FRCS	Ferlic Filter - Swimmers And Lateral Hip - 176mm rail width
FIDW	Ferlic Double Wedge Filter
FISLL	Ferlic Scoliosis/Leg Length Filter
CFSP	Gentle Slope Filter
CFPM	Little Prism
CFRP	Ridges Plus Filter





# MARKERS



CL1A/CL1P



LL1R/LL1L



TABS



LC25



LC13



LC06



RR100

ORDER CODE	Description	Dimension (mm)
CL1A	AP Clip on Marker - can be customised	50 x 20
CL1P	PA Clip on Marker - can be customised	50 x 20
CL1A/CL1P +1	1 additional Character for CL1	
CL1A/CL1P +2	2 additional Characters for CL1	
CL1A/CL1P +3	3 additional Characters for CL1	
LL1R	Right Perspex™ rectangular Marker - can be customised	25 x 20
LL1L	Left Perspex™ rectangular Marker - can be customised	25 x 20
LL1R/LL1L +1	1 additional Character for LL1	
LL1R/LL1L +2	2 additional Characters for LL1	
LL1R/LL1L +3	3 additional Characters for LL1	
TABSR	Right TAB Marker - can be customised	35 x 20
TABSL	Left TAB Marker - can be customised	35 x 20
TABSR/TABSL +1	1 additional Character for TABS	
TABSR/TABSL +2	2 additional Characters for TABS	
TABSR/TABSL +3	3 additional Characters for TABS	
TABS100	TABS L and R Marker numbered 1-100 in any colour combination	
LC06	Full selection of high density lead letters. Numbers, letters and characters available. Available in packs of 10 only (any)	6mm
RR100	Meter long Lead ruler with markings at 1mm intervals	1000mm





## AKUCAL EVO SUCTION™

Base Image Scaling Device.

Available in 25mm, 25.4mm, 30mm.

The NEW Akucal EVO Suction™ is the most versatile and best selling calibration stand on the market.

A suction base allows for use on both horizontal table tops AND on vertical wall bucky boards making this stand a single source solution for all scaling needs.

A radiolucent sphere holder and sphere size indicator unit ensures perfect visibility of the sphere in the image as well as the sphere size.

Simply place the suction base near the area of interest and use the flexible arm to position the marker at anatomy level.

Please be advised that a smooth flat surface is essential for best results.

The Akucal is available with a Perspex™ base.

ORDER CODE	Description
AKS250	25 mm Calibrated Ball Bearing
AKS254	25.4 mm Calibrated Ball Bearing
AKS300	30 mm Calibrated Ball Bearing
AKPX	Perspex™ Base



# MOBILE AND THEATRES



## SLIDERERS - DISPOSABLE CASSETTE COVERS

Made from an extremely strong but slippery plastic which:

- Assists in cassette placement and Infection Control.
- Easier placement and removal of cassette/plate.
- Reduces back, arm and neck strain for staff.
- Minimises movement required by patient.
- Protection of cassette from fluids and contamination.
- Protection of staff and patients.
- Dispose of as clinical waste.
- Holder available for wall/mobile machine mounting.

### ORDER CODE

### Description

ORDER CODE	Description
SLIDA	Sliderers 50-250
SLIDB	Sliderers 250-1000
SLIDC	Sliderers 1050+ (state volume)
SLIDH	Sliderer Holder 2 countersunk holes for wall fixing or use double sided adhesive pads for mounting on a mobile X-ray machine.

## PADDED CASSETTE BACKREST

For chest examinations.

Use behind patients when on trolleys/beds.

Helps obtain an erect position.

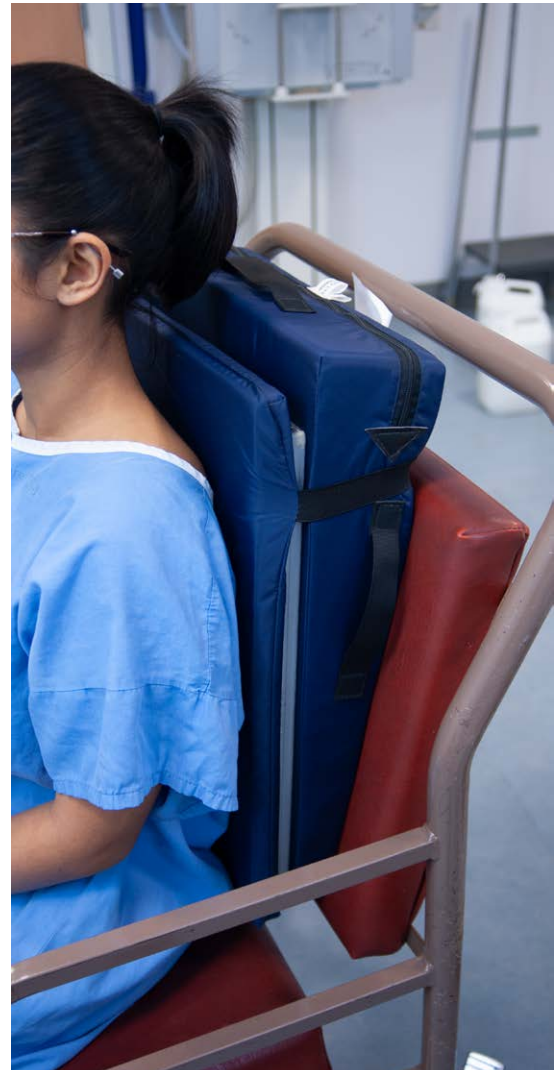
Fits any DR Plate, please specify.

Wipeable and removable Nylon outer covers.

Two handles for easy carrying/positioning.

Approx 150° angle 40 x 50 x 15cm

**ORDER CODE**    **PCBR**



## TRI-HANDLE HANDLE MOBILE DR PANEL HOLDER

The Tri-Handle Mobile DR Panel Holder is a lightweight protective case for your expensive flat panel detector.

This holder features three handles on the long and short axis, providing a sure grip on your detector which reduces the chance for drops and fatigue.

The case is milled from a single piece of HDPE yielding a durable and easy to clean, hand-made cover.

The bidirectional Twin-Lock™ system keeps the panel safe and secure during use and will never fall out under regular use.

- Made from resilient, shock absorbent HDPE featuring radius edges for deflection and extra drop protection
- Smooth, non-porous surface allows for effective cleaning and superior infection control
- Three ergonomic handles allow for a variety of exams and a sure grip on expensive DR panels
- Lightweight, robust uni-frame design made from a single piece of HDPE
- Curved corners and radius edges don't catch on bedsheets for easy placement in the mobile imaging environment
- Air-Ride corners and shock absorbent milled handles for additional drop protection



ORDER CODE	Dimensions
3HNG14	54.6 x 44.3 x 2.54 cm

## MOBILE DR PANEL - FULL ENCLOSURE

The Mobile DR Panel Full Enclosure provides additional fluid and drop protection to expensive flat panel detectors.

With quick release locks and an ergonomic single handle, the fully enclosed case is both easy to use and efficient at keeping the panel clean and safe, allowing the radiographer to focus on what matters most, positioning and patient care. Ideal for the ER, OR, disaster relief and any environment that is subject to particulates, fluid, or accidental drops.



- Superior particulate and dust protection (IP 5X rating)
- Shock absorbent foam lining
- Single ergonomic handle on long axis (and short axis on some models)
- Quick release locks
- Curved corners
- Smooth non-porous surface
- Lightweight
- Optional cutouts for LEDs and power button

ORDER CODE	Dimensions
FE14-702C	49.12 x 42.44 x 2.39 cm

## MOBILE DR PANEL HOLDER

The Mobile DR Panel Holder is a lightweight protective case for your expensive flat panel detector.

Available in a variety of sizes, this holder features a single ergonomic handle on the long axis, providing a sure grip on your detector which reduces the chance for drops and fatigue. The case is milled from a single piece of HDPE yielding a durable and easy to clean, hand-made cover. The bidirectional Twin-Lock™ system keeps the panel safe and secure and will never fall out under regular use.

**PLEASE SPECIFY YOUR DR PLATE MANUFACTURER AND TYPE WHEN ORDERING**

- Designed and engineered for precise fitment of any ANSI standard cassette size panel
- Made from resilient, shock absorbent HDPE featuring radius edges for deflection and extra drop protection
- Simple bi-directional Twin-Lock eliminates accidental release of the panel from the holder
- Smooth, non-porous surface allows for effective cleaning and superior infection control
- Single handle on the long axis allows for a variety of exams and a sure grip on expensive DR panels
- Lightweight, robust uni-frame design made from a single piece of HDPE
- Curved corners and radius edges don't catch on bedsheets for easy placement in the mobile imaging environment
- Air-Ride corners and shock absorbent milled handles for additional drop protection



ORDER CODE	Detector
PDRNG14WCCV2	Rayence WCC
PDRNG3543EZ	Thales Pixium 3543EZ
PDRNG70C	CXDI 70c/701c
PDRNG710C	CXDI-710/710c
PDRNGAERO	Konica Aero
PDRNGB6R	Varian 4336 Bare
PDRNGD2	Fuji D-Evo 2
PDRNGDEVO	Fuji D-Evo
PDRNGDRX	Carestream DRX-1

## VERTICAL DR PANEL HOLDER

The Vertical Mobile DR Panel Holder is a lightweight protective case for your expensive flat panel detector.

This holder features a single ergonomic handle on the short axis, providing a sure grip on your detector which reduces the chance for drops and fatigue.

**PLEASE SPECIFY YOUR DR PLATE MANUFACTURER AND TYPE WHEN ORDERING**

ORDER CODE	Dimensions
PVDRNG14	454.5 x 39.1 x 2.38 cm





## MOBILE X-RAY PARKING SPACE

---

Ideal for identifying the parking space of mobile X-ray equipment to ensure access to charging points.

Hardwearing textured surface.

Suitable for almost all indoor floor materials.

R12 slip resistance and B1 fire safety certified.

Fully customisable.

Easy to apply.

**ORDER CODE**    **MOBPS**

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## C-ARM COVER SET

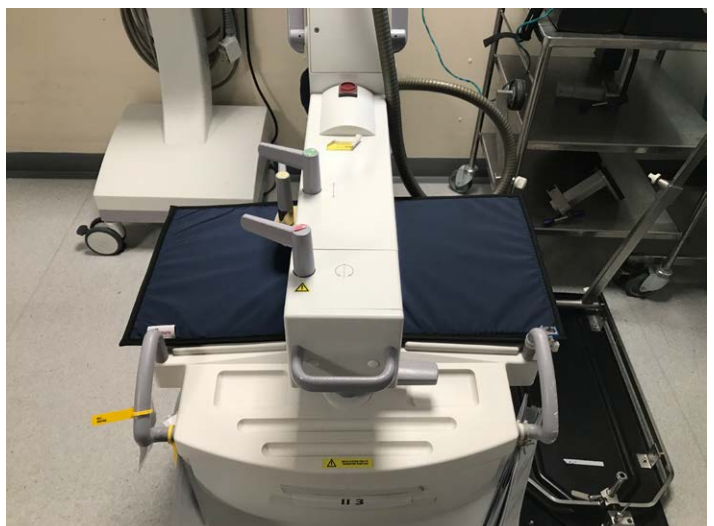
Designed to offer scratch protection to imaging equipment whilst in storage on busy operating theatre corridors. The covers contains a tough polyprop board with cushioning.

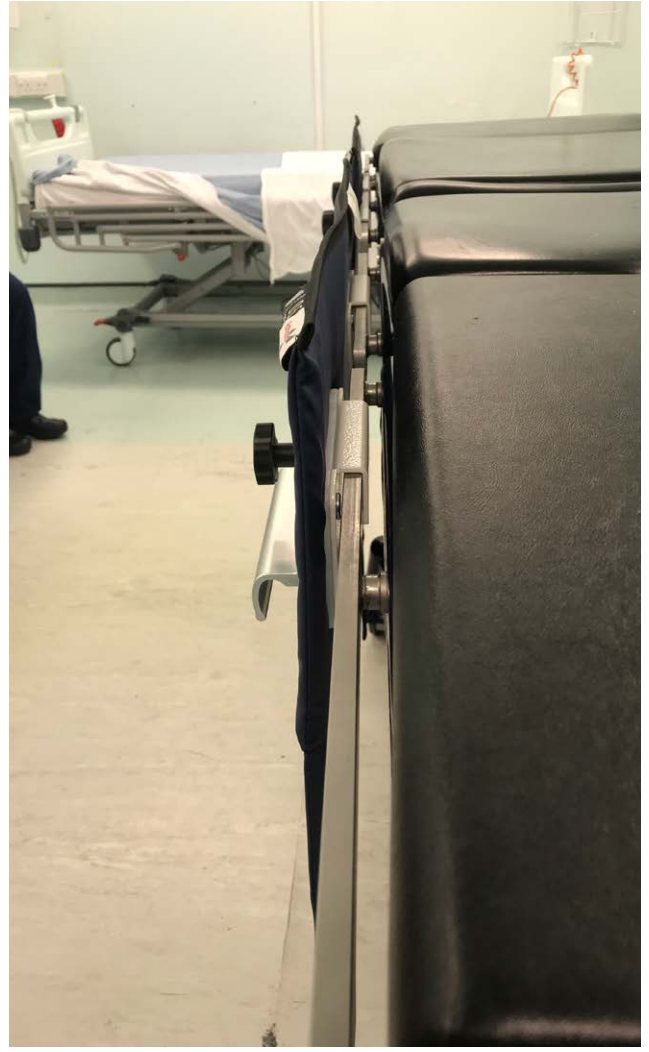
Includes:

- Intensifier Cover
- Monitor Cover
- Control Panel Cover

Please contact your representative for help in measuring the required dimensions.

**ORDER CODE**    **CARMCSET**





## MULTI USE TABLE SHIELD

CAN BE USED IN THEATRE SCENARIOS OR AS A BACKSTOP IN MOBILE RADIOGRAPHY

(WIDER CLAMPS FOR BEDS HEADBOARDS ARE AVAILABLE - STATE YOUR REQUIREMENT ON THE ORDER)

The Multi-Use Table shield comprises of a 0.5mm Pb LE flexible screen with a unique and versatile handle

The handles are constructed of light weight aluminium and include an ergonomic grip with DIN rail attachment which can be fitted to most operating or hybrid tables.

This is a versatile table shield that can be used in a variety of X-ray environments.

Lead Curtain is 0.5mm Pb LE as standard. Other options are available.

Lead sections can be any size and available in either a full curtain or 200mm wide slats.

When ordering, please take note of where the DIN rail connects to the table as the handles need to be positioned in order to fit fully over the DIN rail.

Please provide length and width measurements when ordering.

**ORDER CODE** TS03







# IMAGING MATTRESSES



## THE WAR AGAINST PRESSURE SORES

Pressure ulcers develop when there is a prolonged reduction in blood flow to the layers of the skin which subsequently leads to skin tissue break down. Pressures above capillary pressure,  $>32\text{-}35\text{mmHg}$  for a period longer than 2 hours have been demonstrated to lead to capillary occlusion and ischemia (Daniel, Priest and Wheatley, 1981).

Furthermore, the length of surgery time has been identified as an independent risk factor for pressure ulcer incidence for periods longer than 2 hours (Chen, Jiang, Zhu, Cai and Sang, 2019).

However, more recently it has been recognised that vulnerable patients may be susceptible to skin tissue damage after as little as 20 minutes of pressure exposure (Angmoterh, S.K., 2016; Moore and Patton, 2019). Whilst interventions to reduce the risk of pressure ulcers including high specification mattresses, pressure redistribution aids and offloading equipment have been considered in relation to pressure relief on hospital wards, the medical imaging context has only more recently been considered in relation to pressure ulcer risk (Alresheedi, Walton, Tootell, Webb and Hogg, 2020; Angmoterh, 2016).

Medical Imaging covers a broad range of procedures which vary in time frame. A patient may be in position for as little as 10 minutes (for example a peripheral limb X-ray), or 40-60 minutes for Radiotherapy planning, or at the upper end for 2 hours or more for interventional procedures, such as stent insertion.

Whilst bed mattresses tend to be relatively thick and offer pressure relieving properties, X-ray mattresses are typically 2.5-5cm thick and therefore relatively high interface pressures have been recorded for patient equivalent weights on X-ray mattresses (Alresheedi et al., 2020).

In clinical studies of wheelchair users, patients exposed to higher peak pressures are more likely to experience pressure ulcers, with few patients with peak pressures lower than 60mmHg experiencing pressure ulcers (Borojny, Albatineh, Dehkordi and Gheshlagh, 2020; Conine, Hershler, Daechsel, Peel and Pearson, 1994).



## PERFORMANCE

Performance range combines maximum functionality with all round product performance, making it ideal for a wide range of medical support surface applications.

## KEY BENEFITS

- A medical support surface cover should ALWAYS be made of a polyurethane-coated (PU) fabric, as its unique combination of properties are ideal for helping to minimize the risk of avoidable pressure injuries:
- Contact with skin requires a safe material
- Optimal barrier against fluid ingress
- Vapour release to maintain healthy microclimate
- Extension prevents hammocking through sufficient stretch
- Reliable and designed for purpose to maximise lifetime

## RECOMMENDED CLEANING

### GENERAL GUIDANCE

Cleaning and disinfection may be carried out with warm water and a neutral detergent or with a sodium hypochlorite solution (1% or 10,000 parts per million available chlorine).

Proprietary disinfectants may be used provided manufacturer's instructions are followed.

All cleaning agents and disinfectants must be thoroughly rinsed off and the item dried before storage.

Failure to do this may result in the accumulation of reagent that could damage the polyurethane coating or negate the biocompatibility results of the Dartex® fabric.

It is essential that articles be thoroughly dried after all cleaning procedures and before storage.

Dartex MUST NOT BE CLEANED with abrasive cleaning agents, hydrogen peroxide, iodophors, phenolics or ammonium compounds. These may cause irreversible swelling or blistering of the fabric and make it more prone to mechanical damage.

### 4 Way Stretch

No Delamination

### Bio-compatibility

(ISO10993-5) Cytotoxicity =  
< Grade 1 (ISO10993-10) Skin Irritation –  
classified as non-irritant; Skin Sensitisation  
– considered to be non-sensitiser

### Eco flame retardant: Crib 5 and 7

BS7175, sources 0, 1, 5 and 7 conforms  
when used with a suitable combustion  
modified foam RoHS Directive 2011/65/  
EU compliant

### Fungistatic

Contains an anti-fungal / anti-microbial  
agent to control microbial deterioration;  
The products do not contain any  
nano materials

### MVP

(g/m<sup>2</sup>/24hours)  
Payne Cup ASTM D1653: 450-650  
ASTM E96 method BW:

### Waterproof

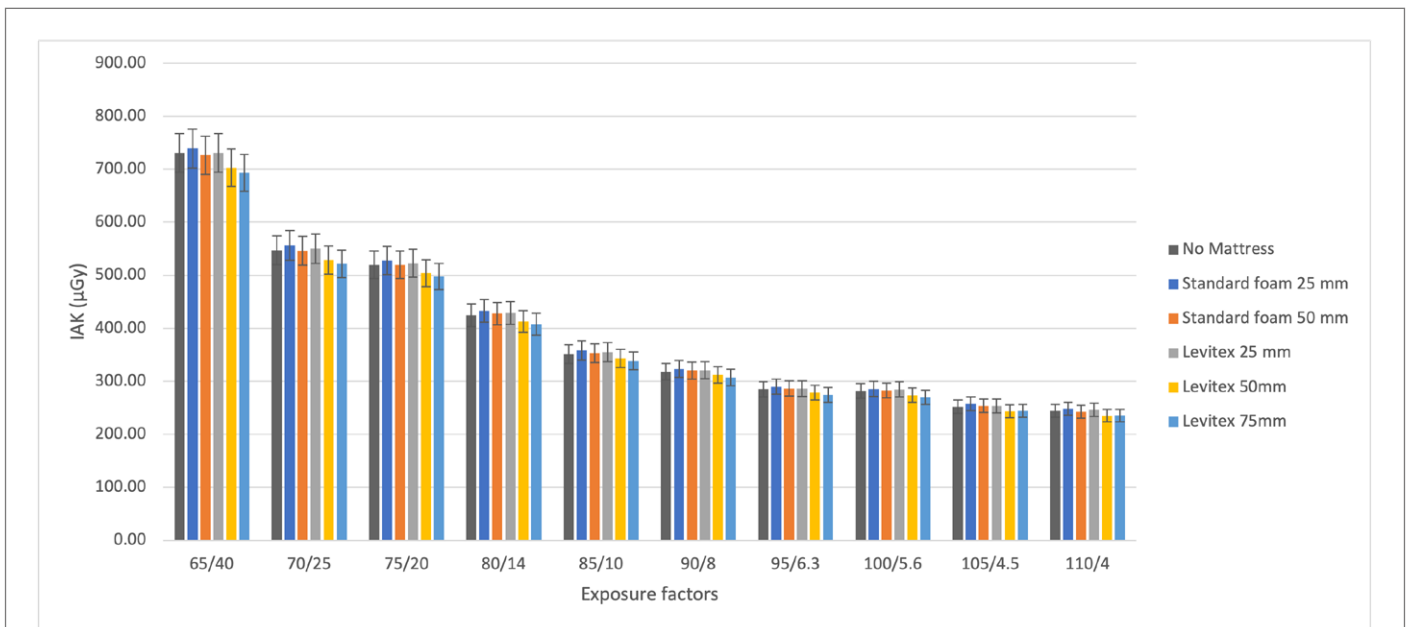
Water penetration resistance/  
Hydrostatic head (kPa) 35 minimum;  
typical 100 (BS3424-26)

### Wipe Clean

For infection control

# X-RAY ATTENUATION

kV/mAs	No Mattress	Standard Foam 25	Standard Foam 50	Levitex™ 25	Levitex™ 50	Levitex™ 75
65/40	731.03	739	726.2	730.9	702.5	692.9
70/25	547.00	556.3	546.5	550	528.3	521.7
75/20	519.50	527.7	519.7	522.7	503.9	497.4
80/14	424.47	433	427.5	428.4	413	407.7
85/10	351.43	358.4	352.8	354.8	343.5	338.3
90/8	317.97	323.4	320.1	320.8	312.4	307.1
95/6.3	284.97	289.8	286.5	286.1	278.3	274.3
100/5.6	281.87	285.5	282.7	284.6	273.8	270
105/4.5	252.07	257.8	253.5	253.4	243.7	243.8
110/4	244.30	248.2	242.8	246.3	235.1	235.5



## IMAGING PILLOW

Our Imaging Pillow is a great addition to an imaging room.

Constructed of Dartex Material and Levitex™ foam, it helps provide a high level of patient comfort and helps to protect important pressure points on the back of the head.



ORDER CODE	Description
------------	-------------

**Pillow Dimensions:**  
400mm x 600mm x 120mm

PILL12	Plain Foam Pad (No Fabric)
PILL12SS	Dartex Fabric With Sewn Seam
PILL12WS	Dartex Fabric With Welded Seam
FPZIP	Add Zip

## FOOT SUPPORT PAD

Our Foot Support Pad can help support important pressure points in frail patients

Constructed of Dartex Material and Levitex™ foam



ORDER CODE	Description
------------	-------------

**Foot Support Dimensions:**  
400mm x 600mm x 80mm

FTPILL8	Plain Foam Pad (No Fabric)
FTPILL8SS	Dartex Fabric With Sewn Seam
FTPILL8WS	Dartex Fabric With Welded Seam

## 25mm X-RAY TABLE MATTRESSES - PLAIN FOAM

Our X-ray mattresses are a popular choice for customers looking to provide a layer of comfort for patients undergoing X-ray procedures.



### Recommended Use

Recommended maximum time for a patient:

**< 1 hour**

Based on a peak pressure value <35 mmHg for the sacrum in a medium sized patient - weight group 3 - (fig 1)

Use a head and heel support for high risk patients.

### Peak Pressure Index

Figure 1. Peak Pressure Index for the jeopardy areas, head (red), sacrum (yellow) and heels (blue). Weight groups are representative of a range of human equivalent body masses ranging from approximately 50 kg (Weight Group 0) up to 150 kg (Weight Group 5).

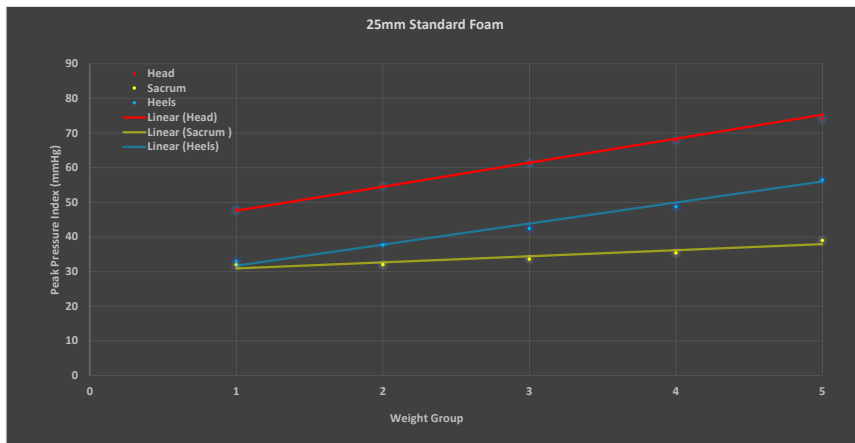


Figure 1

### Interface Pressure Map

Figure 2. Displays the Interface Pressure for a 25mm depth, standard foam mattress and the jeopardy areas including the Head, Sacrum and Heels. The map displayed is a representative pressure map for Weight Group 5, a patient of approximately 150kg.

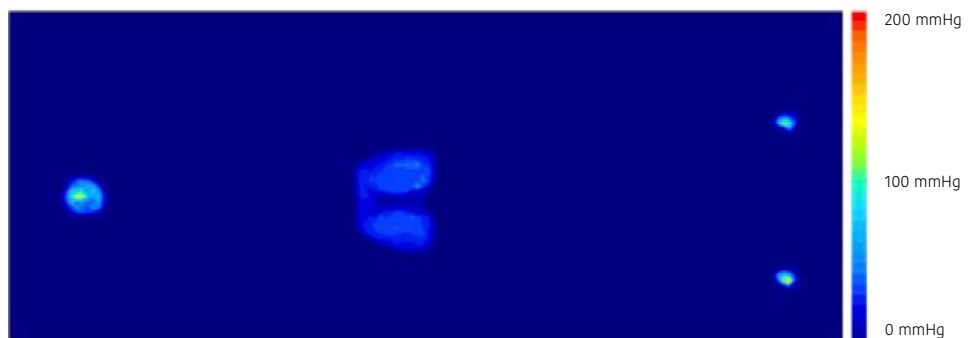


Figure 2

### ORDER CODE Description

#### Standard Mattress Dimensions:

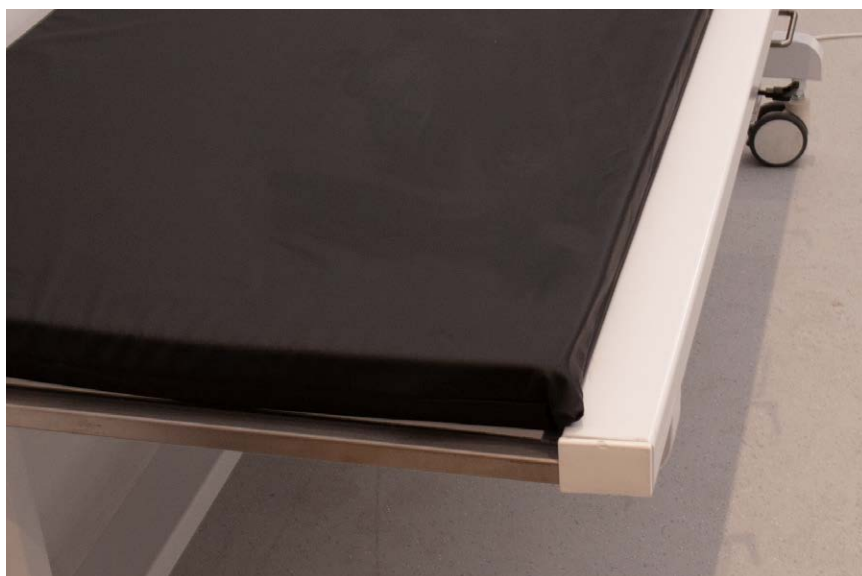
1980mm x 610mm

Two And Three Step Mattresses Available

FP22	Plain Foam Pad (No Fabric)
FP47	Dartex Fabric With Sewn Seam
FP67	Dartex Fabric With Welded Seam
FPVEL	Add Velcro
FPGL	Add Griplock Base

## 50mm X-RAY TABLE MATTRESSES - PLAIN FOAM

Our X-ray mattresses are a popular choice for customers looking to provide a layer of comfort for patients undergoing X-ray procedures. The thicker mattress adds a little more patient comfort and is well suited to procedure rooms when the patient is on the mattress for a longer periods



### Recommended Use

Recommended maximum time patients

**< 1 hour**

Based on a peak pressure value <35 mmHg for the sacrum in a medium sized patient - weight group 3 (fig 3)

Use a head and heel support for high risk patients.

### Peak Pressure Index

Figure 5. Data presented for a 50mm depth, standard foam mattress. Peak Pressure Index for the jeopardy areas, head (red), sacrum (yellow) and heels (blue). Weights groups are representative of a range of human equivalent body masses ranging from approximately 50kg (Weight Group 0) up to 150kg (Weight Group 5). For further information please refer to methodology.

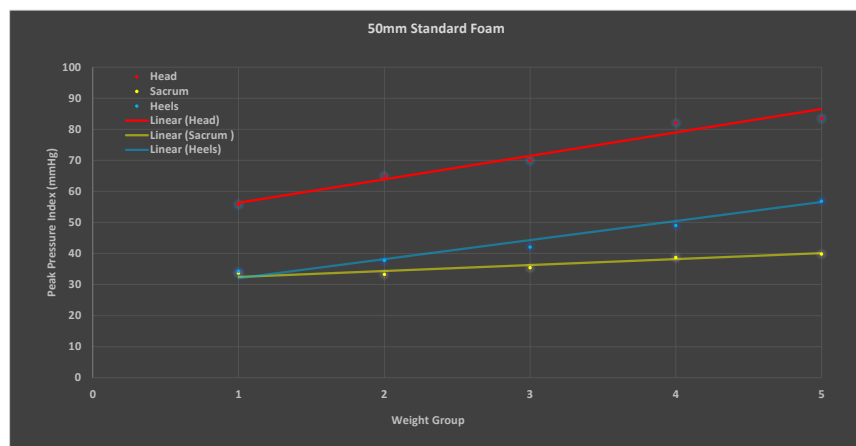


Figure 3

### Interface Pressure Map

Figure 4. Displays the Interface Pressure for a 50mm depth, standard foam mattress and the jeopardy areas including the Head, Sacrum and Heels. The map displayed is a representative pressure map for Weight Group 5, a patient of approximately 150kg.

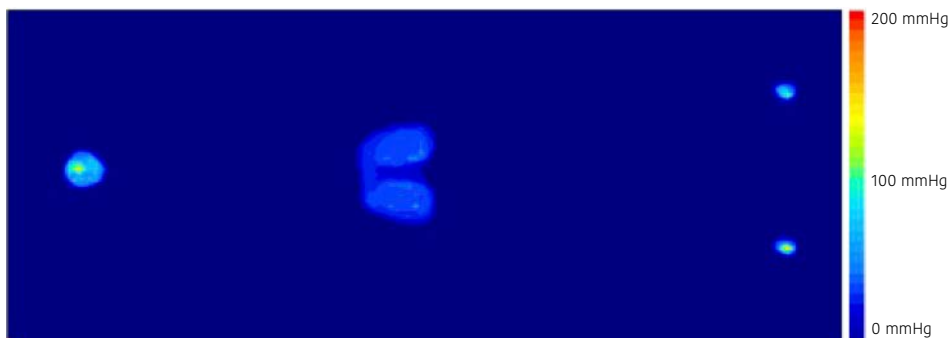


Figure 4

### ORDER CODE Description

#### Standard Mattress Dimensions:

1980mm x 610mm

Sectioned designs available

FP23	Plain Foam Pad (No Fabric)
FP48	Dartex Fabric With Sewn Seam
FP68	Dartex Fabric With Welded Seam
FPZIP	Add Zip
FPVEL	Add Velcro
FPGL	Add Griplock Base



## 50mm X-RAY TABLE MATTRESSES - Levitex™ FOAM

The Levitex™ foam version of our 50mm thick mattress offers an increased degree of comfort for patients undergoing X-ray procedures. The thicker, Levitex™ foam mattress adds a little more patient comfort than the standard foam version and the pressure data supports longer procedure times.



### Recommended Use

Recommended maximum time patients

**< 2 hour**

Based on a peak pressure value <35 mmHg for the sacrum in a medium sized patient - weight group 3 (fig 5)

Use a head and heel support for high risk patients.

### Peak Pressure Index

Figure 5 Data presented for a 50mm depth, Levitex™ foam mattress. Peak Pressure Index for the jeopardy areas, head (red), sacrum (yellow) and heels (blue). Weights groups are representative of a range of human equivalent body masses ranging from approximately 50kg (Weight Group 1) up to 150kg (Weight Group 5). For further information please refer to methodology.

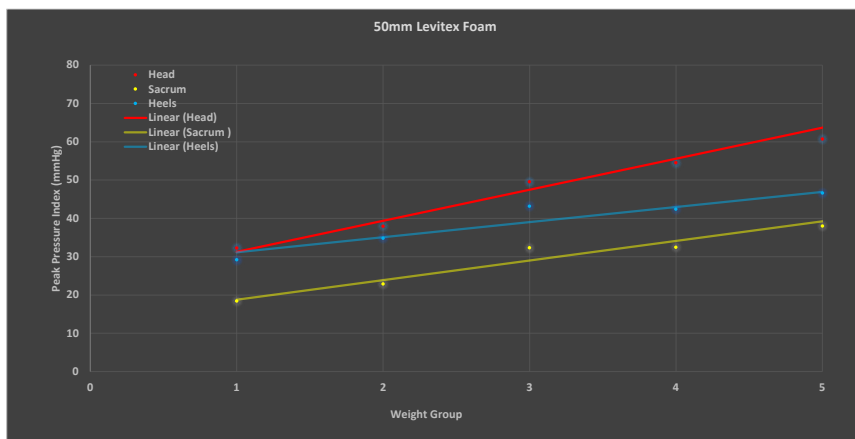


Figure 5

### ORDER CODE Description

#### Standard Mattress Dimensions:

1980mm x 610mm

Two And Three Step Mattresses Available

FPL23	Plain Foam Pad (No Fabric)
FPL48	Dartex Fabric With Sewn Seam
FPL68	Dartex Fabric With Welded Seam
FPZIP	Add Zip
FPVEL	Add Velcro
FPGL	Add Griplock Base

### Interface Pressure Map

Figure 6. Displays the Interface Pressure for a 50mm depth, Levitex™ foam mattress and the jeopardy areas including the Head, Sacrum and Heels. The map displayed is a representative pressure map for Weight Group 5, a patient of approximately 150kg.

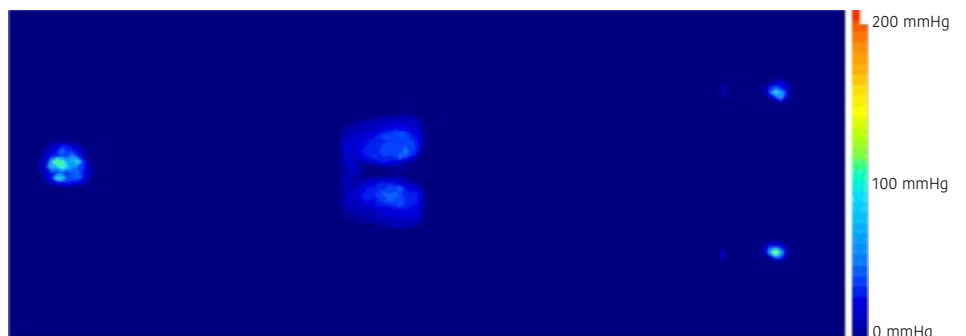
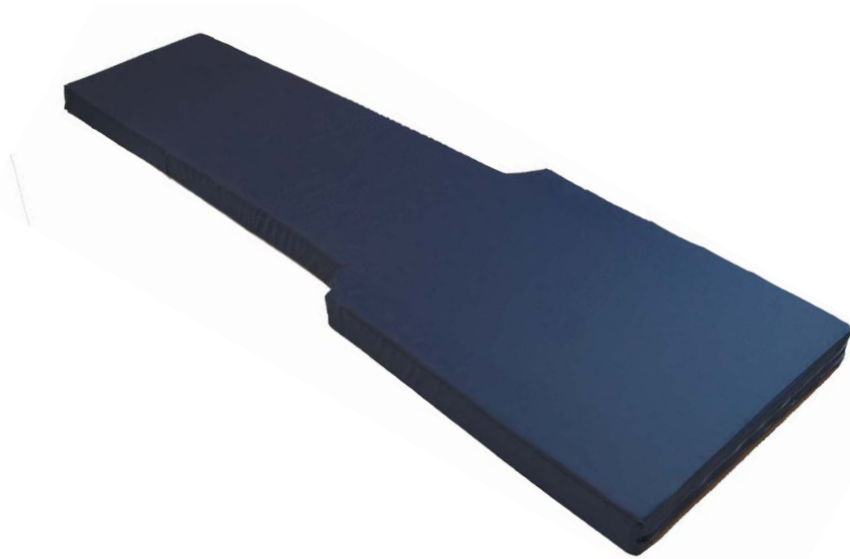


Figure 6

## 75mm ANGIO TABLE MATTRESSES - Levitex™ FOAM

Our Levitex™ foam, 75mm thick mattress offers a premium level of comfort for patients undergoing longer X-ray procedures.



### Recommended Use

Recommended maximum time patients

**>2 hour**

Based on a peak pressure value <35 mmHg for the sacrum in a medium sized patient - weight group 3 (fig 5)

Use a head and heel support for high risk patients.

### Peak Pressure Index

Figure 7. Data presented for a 75mm depth, Levitex™ foam mattress. Peak Pressure Index for the jeopardy areas, head (red), sacrum (yellow) and heels (blue). Weights groups are representative of a range of human equivalent body masses ranging from approximately 50kg (Weight Group 1) up to 150kg (Weight Group 5). For further information please refer to methodology.

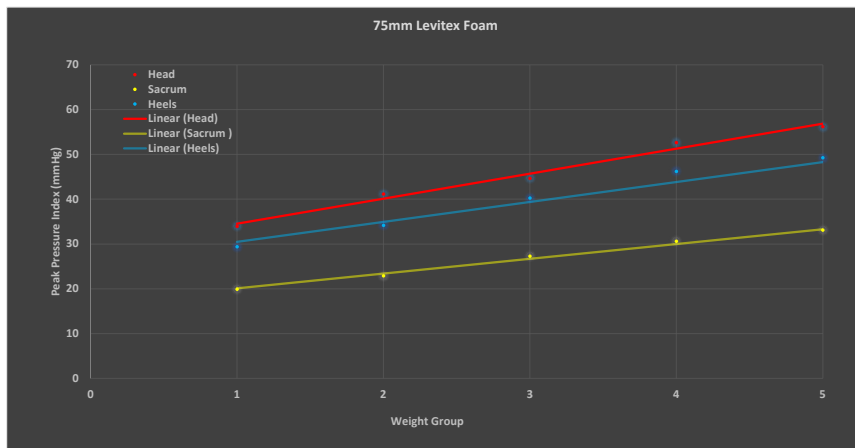


Figure 7

### Interface Pressure Map

Figure 8. Displays the Interface Pressure for a 50mm depth, Levitex™ foam mattress and the jeopardy areas including the Head, Sacrum and Heels. The map displayed is a representative pressure map for Weight Group 5, a patient of approximately 150kg.



Figure 8

### ORDER CODE Description

#### Standard Mattress Dimensions:

1980mm x 610mm

Two And Three Section Mattresses Available

FPL1033	Plain Foam Pad (No Fabric)
FPL148	Dartex Fabric With Sewn Seam
FPL168	Dartex Fabric With Welded Seam
FPZIP	Add Zip
FPVEL	Add Velcro
FPGL	Add Griplock Base

## CUSTOMISATION

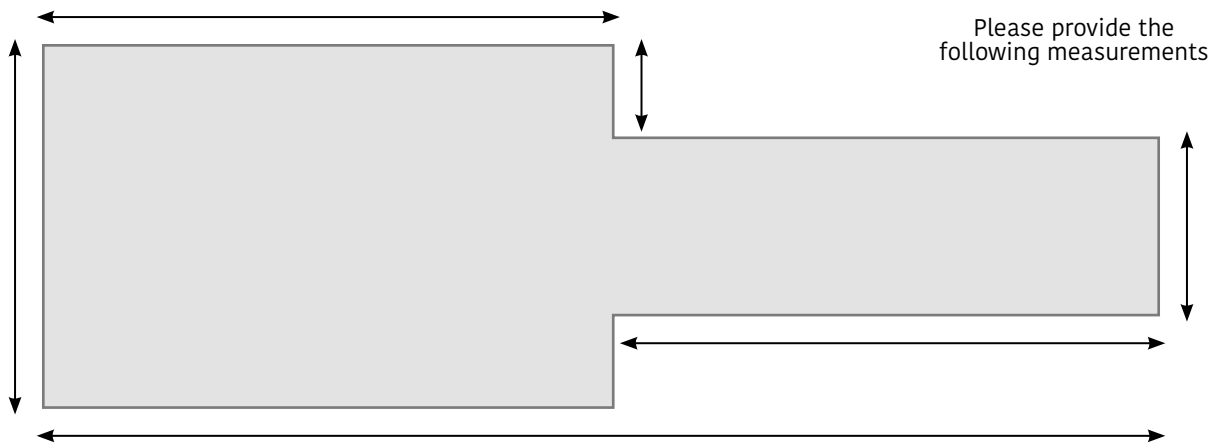
NOTE: IN LONGER MATTRESSES IT MAY BE NECESSARY TO INCLUDE A JOINT. UNLESS SPECIFIED, THIS WILL BE AT THE FOOT OF THE MATTRESS.

## STANDARD X-ray MATTRESS



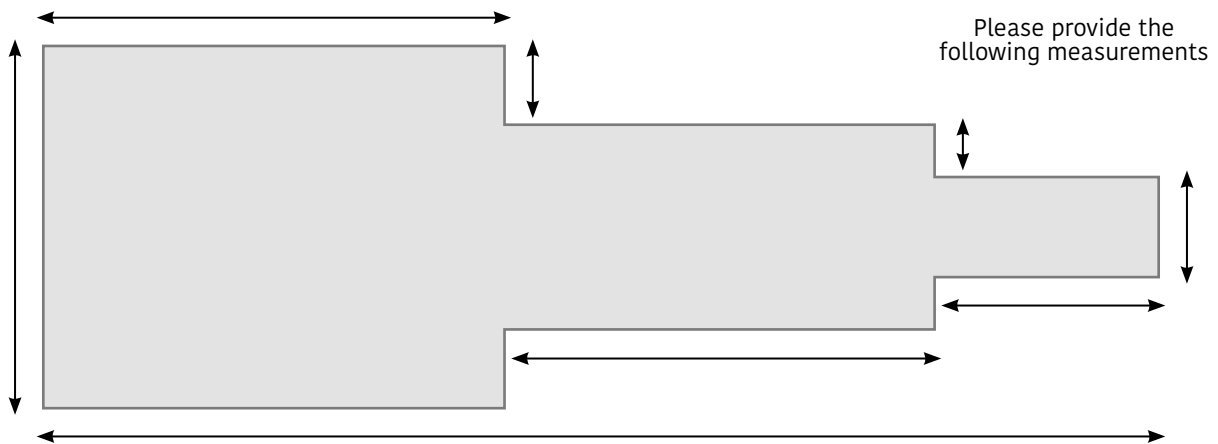
DEPTH: 25MM / 50MM / 75MM

## TWO SECTION MATTRESS



DEPTH: 25MM / 50MM / 75MM

## THREE SECTION MATTRESS



DEPTH: 25MM / 50MM / 75MM

## OPTIONS

### FOAM



PLAIN FOAM

Levitex®

Levitex™

### Outer Fabric



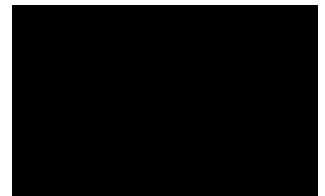
DARTEX - NAVY



DARTEX - GREY



DARTEX - BERRY



DARTEX - BLACK

### SEAMS



SEWN



WELDED

### OPTIONS



GRIP LOCK

PREVENTS MATTRESS SLIP WHEN PLACED ON  
SMOOTH SURFACES



ZIP

## POLYTHENE OVERSLIPS

Clear polythene cover for mattresses.

Suitable for: 1980mm x 610mm x 25mm mattress

Sold in packs of 10



ORDER CODE

FP42

## WHITE VINYL COVER

White vinyl protective cover.

Suitable for: 1980mm x 610mm x 25mm mattress



ORDER CODE

FP43

## TRANSFER MATTRESS

50mm or 75mm thick for long-term comfort.

Designed with a polypropylene base for rigidity.

Webbing loop handles each side assist horizontal transfer.

NOT designed for Patient lifting - ONLY for sliding between trolley and imaging table tops.

Transfer Aids are only recommended for use on Patients up to 250Lbs/114Kg in weight



ORDER CODE

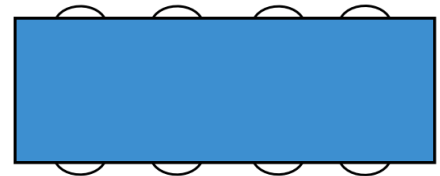
Description

Dimensions:

1980mm x 610mm

FP58-50 50mm Mattress

FP58-75 75mm Mattress



**THE TRANSFER MATTRESS HAS BEEN DESIGNED TO AID IN THE MANAGEMENT OF TRAUMA PATIENTS. ITS RADIOLUCENT FEATURES MAKE IT SUITABLE FOR TRANSFERRING PATIENTS TO IMAGING MODALITIES.**







# QUALITY ASSURANCE

## QUART didoNEO R

ORDER CODE WSR11120

The QUART didoNEO series of diagnostic dosimeters introduce a new approach to X-ray multimeters: they feature the most compact and robust basic unit as well as the most compact detector for X-ray QA operations.

Users can access a waveform preview on the unit's display in the field – without the need to access a PC or laptop. Up to 20,000 exposures can be stored in full for future reference or reporting purposes.

- Multi-functional quality control platforms
- Optimised size and design
- Compact multi-functional state-of-the-art solid state detector
- Downsize-detector design
- Enables measurements in spots with limited space
- Straight-forward and easy detector positioning
- Measurements behind scatter radiation grids without limitations
- No influence on the automated exposure control (aec)
- Direct dose-length product (dlp) measurement at dental opgs\*

\*REFERENCE: S A Mitchell and C J Martin, Comparison of ionisation chamber and semi-conductor detector devices for measurement of the dose-width product for panoramic dental units, *J. Radiol. Prot.* 33 321 (2013).

### Technical Specifications

DOSE	Range Uncertainty	1 $\mu$ Gy – 1 Gy < 3%
DLP dental*	Range Dynamic Range Uncertainty	0.25 $\mu$ Gy*cm – 999 mGy*cm 40–150 kV < 3%
DOSE RATE	Range Uncertainty Dose Rate Modes (4)	0.5 $\mu$ Gy/s – 1 Gy/s < 3% • Real-Time (Refresh after 25ms) • Total Average (avg.) • Rate at half exposure • Maximum Dose Rate (max.)
kV	Range Uncertainty kV Modes (2)	40 – 125 kV < 4% • kVp • effective kV (PPV)
PULSES	Range Uncertainty	1 – 65,000 +/- 1 Pulse
PULSE RATE	Range Uncertainty	0.1 – 250 Pulses/s +/- 0.05 Pulses/s
TIME	Range Uncertainty Time Modes (2)	0.2 ms – 300 s < 0.1% (+/- 0.2 ms) • Exposure Time • ImagingTime (IEC 60601-2-54)
FILTRATION	Range Uncertainty	1.0 – 8.5 mm Al +/- 8%
HVL	Range Uncertainty	0.8 – 13.3 mm Al < 10% or better, depending on radiation quality

## QUART NEO\_TEC Software

ORDER CODE WSR11128

The QUART NEO\_TEC is used for transferring measurement data directly into a computer where each exposure is stored with corresponding date and time stamp. The full set of exposure data can be imported into Excel templates and processed from there according to the user's requirements inclusive of protocol printing. QUART NEO\_TEC also allows thorough evaluation of X-ray waveform data, complete management of X-ray device portfolios and customer data.

### Technical Specifications

OPERATING SYSTEM	Windows 10/8/7
DATA TRANSFER	Cable based / Standard USB connectivity





## Basic X-ray Multimeters

ORDER CODE

**QUART didoEASY(+)(++) R**

**WSR11115(+)(++)**

**QUART didoEASY(+)(++) M**

**WSR11116(+)(++)**

**QUART didoEASY(+)(++) MR**

**WSR11117(+)(++)**

The *QUART didoEASY* meters are designed for users who require high precision in dosimetric applications but do not require the performance of a full-range multi-meter package.

- Simple but very precise dose measurements
- No pre-setting procedure required
- Quick measurement acquisition
- Simple setup procedure: position - expose - evaluate
- Automatic compensation for all radiographic beam qualities
- No further corrections or compensations required
- Measures dose, dose rate, pulses and exposure time
- Automatic direct dose-width product (dwp) measurement at dental opgs \*

\*REFERENCE: S A Mitchell and C J Martin, Comparison of ionisation chamber and semiconductor detector devices for measurement of the dose-width product for panoramic dental units, J. Radiol. Prot. 33 321 (2013).

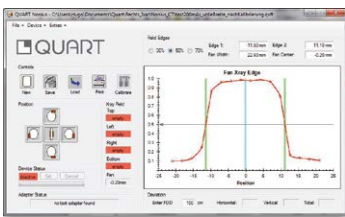
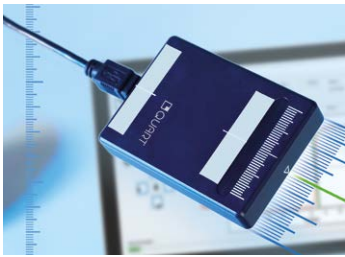
DEVICE OPTIONS

QUART didoEASY	Dose, DWP/DLP, Rate, Pulses, Pulse Rate, Exposure time
QUART didoEASY+	Dose, DWP/DLP, Rate, kV, Pulses, Pulse Rate, Exposure time
QUART didoEASY++	Dose, DWP/DLP, Rate, HVL, kV, Pulses, Pulse Rate, Exposure time

Technical Specifications

APPLICATION	Range	50 to 130 kV 25 to 35 kV 25 to 130 kV	didoEASY R(+)(++) didoEASY M(+)(++) didoEASY MR(+)(++)
SPECIAL FEATURE		Automatic compensation for main radiation qualities and beam filtration in: <ul style="list-style-type: none"> <li>• Dental</li> <li>• RAD and Fluoro</li> <li>• Mammography (Mo/Mo, didoEASY M and MR only)</li> </ul> No pre-setting procedure required Correction factors provided for main Mammo qualities	
CUSTOMISATION SERVICE		Customisable beam quality calibration available	
DOSE	Range Uncertainty	0.3 µGy - 999 mGy < 5 %	
DWP	Range Uncertainty	0.25 µGy*cm - 99 mGy*cm between 60 - 140 kV < 5 %	
kV	Range Uncertainty kV Mode (2)	25-35 kV (Mo/Mo / HVL 0.6-2.2mm Al eq. > didoEASY+/++ M/MR) 50 - 130 kV (HVL 1.4-7.0mm Al eq. > didoEASY+/++ R/MR) < 3 % at calibrated reference points <ul style="list-style-type: none"> <li>• kVp</li> <li>• Effective kV (PPV)</li> </ul>	
Direct-HVL	Range Exposure Conditions Uncertainty	0.1-11 mm Al > didoEASY++ R/M/MR Internal filtration of 0.1 - 12.5 mm Al eq. +/- 8 %	
DOSE RATE	Range Uncertainty Dose Rate Modes (3)	0.25 µGy/s - 99 mGy/s < 5 % • Real-Time (Refresh after 25 ms) • Average • Maximum Dose Rate	
TIME	Range Resolution Uncertainty Time Mode (1)	0.5 ms - 300 s 0.1 ms < 0.5 % (+/- 0.5 ms) Exposure Time	
PULSES	Range Uncertainty	1 - 9999 +/- 1 Pulse	
PULSE RATE	Range Uncertainty	0.1 - 250 Pulses/s +/- 0.05 Pulses/s	





## QUART Nonius

ORDER CODE: WSR13209

The QUART Nonius is an easy-to-use and very sophisticated measuring instrument to verify size and geometrical properties of X-ray fields and characteristics of fanned X-ray beams.

The system analyses how the light visor matches the actual X-ray field. In addition, it checks the position and width as well as the dose profile of fanned X-ray beams.

Since the Nonius is incredibly flexible, it can be used with digital and conventional X-ray applications. In any case, its precision is a strong point – as it analyses in the Nonius range of 0.1mm.

Digitisation in X-ray technology makes traditional screen-films less available. Originally, they were used for checks on X-ray beam properties. Today, the QUART Nonius performs the same task. But it provides more substantial features.

The Nonius can be used to verify if the light visor matches the actual X-ray field. In addition, it provides the option to assess the position and width as well as the dose profile of fanned X-ray beams.

- Measurement data and results transferred to pc in real time
- Display of test result and visualisation in unique nonius software programme
- All results automatically saved and stored on pc hardware
- Can be loaded into the software at a later point of time for evaluation purposes
- Software provides protocol function including hardcopy print-out
- Nonius is equipped with usb cable and comes with associated software
- Compact carrying case included
- Can be hooked up to any laptop or tablet pc with windows os
- Easy and quick device positioning (also in vertical position)
- Optional quart bridge holder available as accessory

Because of its excellent precision and resolution properties, enhanced product research has validated the Nonius to be suitable for QA application in Radiation Therapy.

REFERENCE: Y. Popova, G. Hersemeule, R. Klausz, H. Souchay – Digital Guidance Solution GE Healthcare, Description and Benefits of Dynamic Collimation in Digital Breast Tomosynthesis, Radiat. Prot. Dosim. (2015) 165 (1-4); 321-4.

### Mode of Operation

Operating the QUART Nonius is easy and straight-forward:

1. Connect the device via USB to a Laptop or Tablet PC (Windows OS or emulator required).
2. Position the head unit at the respective position.
3. Use light field or a reference point for alignment.
4. Trigger the QA/QC exposure.
5. Immediately evaluate the results.

### Technical Specifications

Accuracy / Resolution	+/- 0.1 mm
Exposure Threshold	Dose $\geq$ 200 $\mu$ Gy Dose Rate $\geq$ 20 $\mu$ Gy/s
Minimum Exposure	Variable; depends on application
Measurement Method	Open measurement – no added filtration
Connectivity	Standard USB (2.0) Plug and Play Component
Operation Temperature Range	15 – 40 °C
Storage Temperature Range	0 – 50 °C
System Requirements	Pentium III, 128 Mb RAM, min. 1x USB
Operating System	Windows 10 / 8 / 7
Sensor Area	40 mm Length (16 Active Sensor Elements) Radiopaque center marker (Visible in test exposure) Improved sections for light field and laser markings
Weight	190 g (without USB Cable)
Size of Head Unit	55 x 75 x 15 mm (W x L x H)

# Light and Luminance

ORDER CODE

## MaVo\_lux 5032B Medical

WSR11709

### Technical Specifications

APPLICATION	Modes	Distance and proximity/contact measurement
APPLICATION	Range cd/m <sup>2</sup> , fc	0.1 cd/m <sup>2</sup> to 1 999 990 cd/m <sup>2</sup> or 0.01 fL to 199 900 fL 5 dynamic ranges, auto-setting
	Range lx	0.01 lx to 199 990 lx 5 dynamic ranges, auto-setting
ACCURACY		+/- 3 %
MEMORY		Storage of up to 1000 measurements
DISPLAY		3½ digits, Liquid crystal
CONTROLS		Intuitive, 6 Button operation
POWER		1 AA battery (BATTERY LIFE typically 45 hours)
CALIBRATION		2 years (recommended)
WARRANTY		2 years
WEIGHT		200 gr. (w/o battery)
CONTENTS		Base unit / Lense head Luminance lense Lense cover and contact ring Standard software Transport case



## QUART MONI\_lux - Ambient Light Monitoring

WSR11701

The QUART MONI\_lux is designed for real-time monitoring of light and ambient light conditions.

The QUART MONI\_lux automatically checks if the ambient light is suitable to assure proper viewing conditions. For this purpose it has been factory calibrated to signal the appropriate (green) range between 20 – 50 lux.

The device also signals when the room light is too dark for critical image assessment (yellow). The reason for this is that in too dark environments, light areas in an X-ray image tend to glare when viewed on a viewbox or on a digital monitor. The prevention of this assures an ergonomic image viewing environment where the radiologist's concentration is kept up. Thus, the ability to recognise important details in the image is ensured.

The device is designed for continuous long-time use.

The power supply can be established from an available USB port at any workstation.

The QUART MONI\_lux complies with IEC 61223-2-5 and DIN 6856-1.

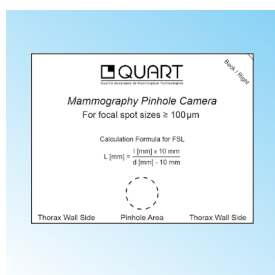
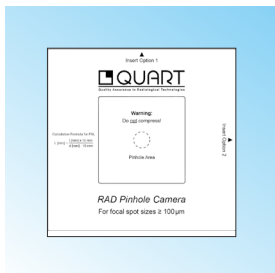
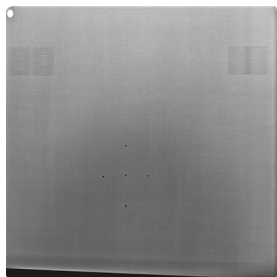
### Technical Specifications

APPLICATION	Range	Yellow < 20 lux Green 20 – 50 lux Red > 50 lx (blinking)
PLACEMENT		On top of viewing device (in line with monitor front)
SIZE		7.5 x 5.5 x 1.5 cm (W x L x H)
WEIGHT		50 g
POWER		USB direct



## Focal Spot Measurement Tools

ORDER CODE



The *QUART Pinhole Cameras* are test tools designed to be used in conventional as well as digital radiographic applications where focal spot assessment is required.

The tools are designed to precisely measure both length and width of the effective focal spot size of X-ray equipment projected down the central ray in the X-ray field. Contrary to a slit camera, both of these focal spot properties can be identified in only ONE exposure!

- Tools enable analyses if ageing effects are present in the x-ray tube
- Hot spots within projected focal spot are imaged as well as areas with less intensity
- Density distribution analysis of the focal spot directly by using focal spot image
- Materials of pinhole masks provide ideal contrast and sharpness
- Automatic exposure control (aec) can be used for the test
- Time saving procedure for focal spot property assessment
- All versions comply with essential requirements of nema, din, iec, aapm, ipem, and other standards and regulations

### Test Procedure

The application of the pinhole cameras is very simple and straight forward:

1. Position the test tools as close to the focal spot as possible.
2. Set the X-ray equipment for an exposure using the AEC function.
3. Expose.
4. Access the test image (or develop the film with the image).
5. Geometrically evaluate the bead pattern in the image.
6. Finally, apply a formula to determine true focal spot sizes (printed on the tools).

### QUART RAD Pinhole Camera

WSR13231

DIMENSION	176 x 169 mm, marked pinhole area Can also be used with light visor adapter (see art. 13240)
THICKNESS	3.1 mm
PINHOLE MASK	Metal foil w/ bead pattern Covered by 2 protective AEC compliant layers
DETAILS	Can be inserted into the light visor rails on the tube head Fits every major brand's equipment, two insert options

### QUART MAMMO Pinhole Camera

WSR12301

DIMENSION	108 x 80 mm, marked pinhole area
THICKNESS	2.0 mm
PINHOLE MASK	Metal foil w/ bead pattern Covered by 2 protective AEC compliant layers
DETAILS	Can easily be fixed on the tube head due to light weight and compact size

### QUART DENTAL Intra-Oral Pinhole Camera

WSR12180

HEIGHT	210 mm, pinhole area visible
PINHOLE MASK	Metal foil w/ bead pattern
DETAILS	Accepts all tube beam applicators with standard size Flexible rods for universal handling possibilities Positioning close to the focal spot enabled Slot(s) prepared to accept variety of image receiving media

# Radiography / Fluoroscopy Test Phantom

ORDER CODE

QUART SP\_dl

WSR12204

QUART SP\_dl Extension

WSR12205

kV Calibration for SP\_dl Test Object

WSR12204K

The QUART SP\_dl phantom is designed to be used for QA/QC routine testing in Digital and Conventional X-ray applications ranging from DR, CR to Fluoroscopy equipment. Only one exposure is required to collect all necessary parameters to determine the imaging quality of the X-ray system. After the exposure, the test image is evaluated visually.

The QUART SP\_dl phantom complies with IEC, DIN 6868-150 and DIN 6868-4 as well as IPEM, ONORM, PN-EN standards and AFSSAPS regulations.

### Test Procedure

QC tests are carried out at initial equipment installation to establish a visual reference. On a regular routine basis, they are meant to ensure the constancy of the system's imaging capabilities. Any deterioration in imaging performance is revealed by the visual evaluation of the test images. A single image of the QA/QC phantom contains a lot of information for that purpose.

The QUART SP\_dl can also be used as a Pediatric Phantom (Child Phantom), if no additional filtration, i.e. Al or PMMA/Cu, is used in QA/QC test procedures.

### Genuine Feature: kV Stability Test

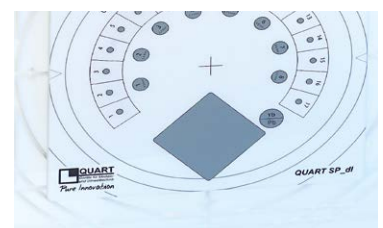
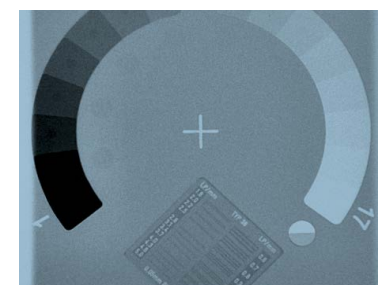
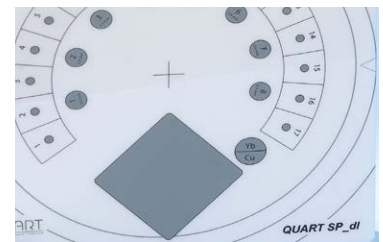
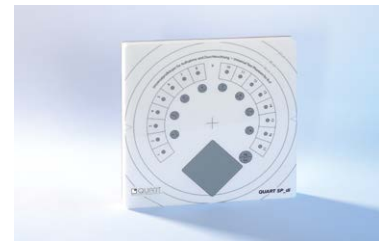
The phantom's special feature is an optional kV test object. With it, the generator output stability can be monitored on a regular basis without performing invasive or non-invasive kV measurements. As the kV test object consists of 2 different materials, 2 transition points can be defined for a specific radiation quality. The accuracy of the method is +/-2 kV for a pure visual evaluation. When measured with a luminance meter (digital) or a sensitometer (film/screen), the accuracy of the method will increase to +/- 0.5 kV.

### Parameters

- Spatial Resolution
- Low-Contrast Resolution
- Radiation Field Alignment
- Image Homogeneity
- Artefacts, Image Flaws, etc.
- Generator Stability
- Radiation Quality
- Dose Indicator

### Technical Specifications

INTERNAL FILTRATION	1.5 mm standard compliant copper filtration 17 mm PMMA for tissue simulation
DYNAMIC STEP WEDGE	17 Steps; thickness 0 - 3.5 mm
LOW-CONTRAST RESOLUTION	8 Test objects (Aluminium; 0.4 - 4 mm; Ø 15 mm) 17 Additional test objects; 1 object per step (Ø 4 mm)
HIGH-CONTRAST RESOLUTION	Line pair bar pattern (Type 38 / Pb 0.05 mm / 45°)
kV STABILITY	Unique kV test object (Yb + Pb)
X-ray FIELD ALIGNMENT	Field size markings
CENTERING	Radio-opaque center marker
SIGNAL NORMALISATION	Homogeneous area in phantom center
VERTICAL POSITIONING	Wire mount system available for tests of wall-mounted units
SIZE	200 x 200 x 18.5 mm (L x W x H)
LARGE FIELDS	<b>Extension</b> available to provide a homogeneous surface and field markings for formats <b>up to 33 cm x 33 cm</b>



## Beam Alignment / Contrast Detail / Homogeneity

ORDER CODE



### QUART ZTB

WSR3201

The QUART ZTB Beam Alignment Test Tool is very easy to use due to pre-defined positioning options: center marker of QUART image quality test phantoms / center marker of specifically prepared dental test phantoms / center of X-ray fields.

The tool has a concentric two-ring structure for checks on alignment accuracy. Four ring contact options correlate with different quantities of alignment between 0 – 6°.



### Collimator and Beam Alignment Test Tool

QA1812

The Collimator Tool is a flat radiopaquely marked sheet

Enables the testing of the relationship between light beam field and corresponding area on a test radiograph.

Beam Alignment tool is a Perspex™ cylinder with top and bottom radiopaque beads

Beads should appear superimposed on test radiograph if alignment is correct.

Bubble level for accuracy.



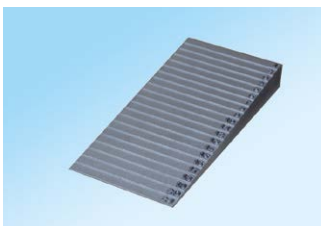
### QUART NKK

WSR13207

The QUART Low-Contrast Wedge is compact and small in size. It is designed to evaluate contrast detail for a wide range of X-ray equipment. The wedge contributes to a precise identification of visual perceptibility limits (limiting contrast detail similar to an IQF or Contrast Detail curve) by providing the specific information if the wedge structure is still visible against the noise in the image. In addition, it provides the possibility to relate perceptibility levels to specific image receiver doses or rates.\*

The positioning is straightforward as the tool is directly placed on the phantom top side. The wedge features 3 low-contrast holes Ø 2.0 mm / wedge length: 4.0 cm / predefined wedge constant.

\* REFERENCE: Schoefer H, Quantification Potential of Low-Contrast Imaging at Image Intensifier Units for Acceptance Tests according to DIN 6868-50, Z. Med. Phys. 4 (1994) 221-223 (in Germany).



### RAD Step Wedge

WSR12206

21-step aluminium wedge for tests of dose reproducibility and sensitometric properties of radio-graphic screen-film systems. Features numbers to mark each step.

SIZE	231 x 110 x 31.5 mm
STEPS	21, 1.5 mm graduation per step



## DO YOU HAVE A SPECIFIC QA REQUIREMENT?

The catalogue contains a sample of the QA and measurement equipment we are able to provide.

If you have a need that isn't catered for in our catalogue, please visit [www.rothband.com](http://www.rothband.com).

## QA TEST SETS

ORDER CODE

### QUART konkord 2.0

WSRQKON2

Digital Direct Radiography / Fluoroscopy including Acceptance Testing

PHANTOMS	QUART SP_dl SP_dl Extension	Fluoro phantom w/ line pair pattern Phantom frame for large image formats 20–33 cm
	QUART SP digi	DR phantom w/ line pair pattern
METERS Option 1	Routine: QUART dido/time RF	Dose/exposure time meter / patient-equivalent filtration
Option 2	Expert: QUART didoEASY++ R QUART al25.0 QUART FST MaVo_lux 5032 B USB	Multimeter Filtration Filter stand for meter detector Luminance/light meter Class B
ACCESSORIES	QUART cu1.0 - Standard required added filtration QA software optional	



### QUART Dental

WSRQUDEN1

Complete Set for Dental QA/QC

PHANTOMS	QUART DVT_AP QUART dent/digitest 3.1 QUART dentFS	CBCT Test phantom Dental 2D Test phantom formats 20–33 cm
METERS	QUART didoEASY++ R MaVo_lux 5032 B USB	Multimeter Luminance/light meter Class B
ACCESSORIES	QUART cu1.0 - Standard required added filtration Ceph holder - Universal OPG/CEPH holder QUART DVT_TEC - CBCT QA software Universal Dental OPG test stand - For dent/digitest phantom	



### QUART CT

WSRQUCT1

Computerised Tomography

PHANTOM	CTDI Phantom	Nested Head/body/pediatric phantom
METER Option 1	QUART didoCT	Dosimeter
Option 2	QUART didoCT+ CT chamber	Dosimeter w/ direct HVL feature 100 mm ionisation chamber
ACCESSORIES	QA software optional	



### QUART konkoma 2.0

WSRQUM1

Digital Mammography including Imaging Chain Assessment

PHANTOM	QUART mam/digi EPQC	IQ phantom Assortment of PMMA sheets
METERS Option1	Routine: QUART dido/time M	Dose/time meter
Option 2	Expert: QUART didoEASY++ M MaVo_lux 5032 B USB	Multimeter Luminance/light meter Class B
ACCESSORIES	QA software optional	









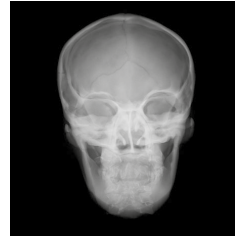
# PHANTOMS





## SECTIONAL X-RAY PHANTOMS

Opaque and transparent types for diverse training possibilities

- Opaque: advanced version with close-to-reality challenges in imaging
- Transparent: visible bones facilitate understanding in keys for positioning
- Movable joints of the knee and the elbow for realistic positioning

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**



Region	Description	Order Code	Notes
	Head (Opaque)	41926-000	Stand-alone design can be used with the adjustable head positioning stand to demonstrate accurate skull positioning
	Head (Transparent)	41926-010	
	Thorax (Opaque)	41926-060	Includes thoracic skeletal system with embedded mediastinal space and bronchus to provide realistic imaging. The scapulae are rotated outside of the lung fields for proper PA chest imaging
	Thorax (Transparent)	41926-070	
	Pelvic (Opaque)	41926-080	Includes lumbar/sacral spine, pelvic bony anatomy and proximal femur
	Right Elbow (Opaque)	41926-140	Natural flexion range allows for AP/lateral and partial flexion views with one phantom
	Right Elbow (Transparent)	41926-150	
	Right Hand (Opaque)	41926-020	Movable patella and joint with flexion allow for realistic positioning of the knee for AP, lateral, oblique, sunrise and tunnel views
	Right Hand (Transparent)	41926-030	
	Left Hand (Opaque)	41926-040	
	Left Hand (Transparent)	41926-050	
	Right Knee (Opaque)	41926-180	
	Right Knee (Transparent)	41926-190	
	Right Foot (Opaque)	41926-100	
	Right Foot (Transparent)	41926-110	
	Left Foot (Opaque)	41926-120	
	Left Foot (Transparent)	41926-130	



## LOOKING FOR SOMETHING IN PARTICULAR?

### MANY MORE PHANTOMS ONLINE

The full range of X-ray phantoms and further information and resources are available on our website: [www.rothband.com](http://www.rothband.com)

## PAEDIATRIC IMAGING PHANTOM

Training in paediatric radiography can be enriched with clear and subtle bone fractures  
Radiology absorption and HU number approximate to human body

Main joints have close-to human articulation

Phantom can be disassembled into 10 individual parts

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**



## FULL BODY PHANTOM

Radiology absorption and HU number approximate to human body.

Main joints have close-to human articulation

Phantom can be disassembled into 10 individual parts

skull / spine / clavicles / scapulae / ribs / sternum / coxal bones / lungs with pulmonary vessels / trachea (up to primary bronchi) / heart / liver with portal and hepatic veins / kidneys / humerus / antebrachial bone / bones of hand / femur / patella / lower leg bones / bones of foot

### SET INCLUDES

whole body phantom 1  
head supporter  
flat head screwdriver  
set of sample X-ray data (DVD)  
manual

### OPTIONAL EXTRAS

41363-070 storage cases (consist of 2 boxes)  
41350-200-16 body plates for PH-2/2B (BMI 32)  
41350-200-17 body plates for PH-2/2B (BMI 40)

Phantom weight:  
50 kg / 110 lb

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**



### Description

Paediatric Imaging Phantom

Full Body Imaging Phantom (For plane film)

Full Body Imaging Phantom (For CT)

### Order Code

PH-2D

PH-2

PH-2B



# MAMMOGRAPHY

## VELA Mammography Chair

The VELA Mammography Chair is optimal for patients who need to sit down during examinations, e.g. women prone to fainting, wheelchair users or patients with diseases affecting the musculoskeletal system.

Good working position for the staff because regardless of the patient's height they can be seated at the right height for the staff, reducing stress in the back, neck and shoulders

Quick and secure patient positioning for the examination device using the chair's smooth-running wheels, push bar and foot brake

More accurate examinations for anxious or unsteady patients as they are more able to relax when seated

Optimal positioning of the patient with electric height adjustment, which makes it easy to vary the chair height to suit the equipment and staff

Forward-leaning position easily achieved and secured by adjusting the backrest

PUSH BAR MAKES IT EASY TO MOVE THE CHAIR AND POSITION THE PATIENT CORRECTLY

ARMRESTS MAKE IT EASY FOR THE PATIENT TO SIT DOWN AND GET UP FROM THE CHAIR

THE CHAIR IS EASILY LOCKED WITH A FOOT BRAKE, WHICH ENSURES A STATIONARY AND STABLE PATIENT



ELECTRIC HEIGHT ADJUSTMENT ENSURES FAST AND CORRECT POSITIONING OF THE PATIENT RELATIVE TO THE MACHINE

FOLDING FOOTREST PROVIDES THE PATIENT WITH INCREASED STABILITY REGARDLESS OF THE HEIGHT SETTING

ORDER CODE

VL70032

## QUART konkoma 2.0

WSRQUM1

Digital Mammography including Imaging Chain Assessment

PHANTOM	QUART mam/digi EPQC	IQ phantom Assortment of PMMA sheets
METERS	Option1 Option 2	Routine: QUART dido/time M Expert: QUART didoEASY++ M MaVo_lux 5032 B USB Dose/time meter Multimeter Luminance/light meter Class B
ACCESSORIES	QA software optional	



## CompFor MTS ref CompFor MTS

WSR12332

WSR12331

This set to measure compression force of mammography systems was compiled to meet all requirements of DIN 6868-152 and 6868-7 as well as IEC 61223-3-2 and 61223-2-10.

The compression force of mammography systems should be measured in both automatic and manual mode to assure accuracy and reliability. Appropriate compression of the breast is one of the essential parameters to achieve an ideal imaging quality in mammography.

The test set consists of a foam cube of a pre-defined size and density, electronic scales to fit the bucky, and a tape measure.

The recommended compression force per DIN standard can be checked as well as the maximum force which is not to be exceeded. The top plate of the scales is made of stainless steel and can be taken off for cleaning or sanitisation purposes.

### Technical Specifications

SCALE Option 1	Size L Platform Size Measuring Range	320 x 300 x 60 mm 320 x 260 mm 0 - 490 N of force (or 0 - 50 kg)
SCALE Option 2	Size S Platform Size Measuring Range	228 x 205 x 71 mm 203 x 160 mm 0 - 245 N of force (or 0 - 25 kg)
FOAM BLOCK	Size Density	80 x 80 x 40 mm 30 ± 5 kg/m <sup>3</sup>
TAPE MEASURE	Units Length	mm / cm / m 2 m





## QUART mam FS

WSR2303

The QUART mam FS phantom is designed to be used for QA/QC testing in conventional mammography applications according to DIN/IEC requirements and basic digital image QA. Only one exposure is required to collect all parameters to determine the imaging quality of the X-ray system. After the exposure, the test image is evaluated visually.

The QUART mam FS phantom complies with IEC 61223-3-2, DIN 6868-7 and DIN 6868-152, as well as the, European Guidelines for Quality Assurance in Mammography Screening” (EPQC), Part 1.

### MODE OF OPERATION

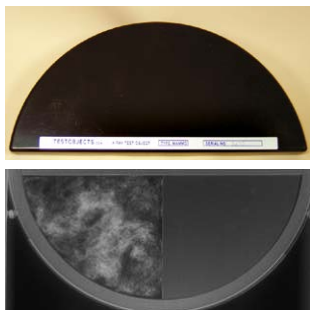
QC tests are carried out at initial equipment installation to establish a visual reference. On a regular routine basis, they are meant to ensure the constancy of the system’s imaging capabilities. Any deterioration in imaging performance is revealed by the visual evaluation of the test images. The evaluation of grey values, as traditionally required for conventional X-ray technology, is carried out using a densitometer.

### PARAMETERS

- Spatial Resolution
- Low-Contrast
- Radiation Field Alignment
- Image Homogeneity
- Optical Density
- Artefacts, Image Flaws, etc.
- Dose Indicator

### Technical Specifications

INTERNAL FILTRATION	45 mm PMMA
SPATIAL RESOLUTION	Line pair pattern at 0/45/60/90° arrangement; 0.05 mmPb <ul style="list-style-type: none"> <li>• Basic digital resolution test: 5/6/7/8/10 lp/mm</li> <li>• Film-screen resolution test: 6/8/10/12/16 lp/mm</li> </ul>
REFERENCE MARK	60 mm from thorax wall side
LOW-CONTRAST	7 objects
DENSITOMETRY	3 objects for densitometric / grey value evaluation
DOSIMETRY	Insert area for dosimeter detector
FIELD ALIGNMENT	2 rows of radiopaque spheres to check field alignment at thorax wall side
GEOMETRIC ACCURACY	Various structures for field geometry evaluation
ADDED ATTENUATION OPTIONS	Additional 20 mm PMMA slab available on request
SIZE	240 x 180 x 45 mm (L x W x H)



## MAMMO TOR TEST TOOL

QA120

THE MAMMO TOR TEST TOOL contains the following features:

- 6 groups of multi-directional filaments.
- 6 groups of micro-calcification.
- 6 groups of 3, low contrast details groups.
- 6 groups of micro-calcifications (as in the above) with a clinically realistic breast tissue feature.

Should be used in combination with the appropriate volume attenuation.



## BREAST STEP WEDGE

QA118

9 steps

Homogenous high purity aluminium



## X-RAY SHAWL

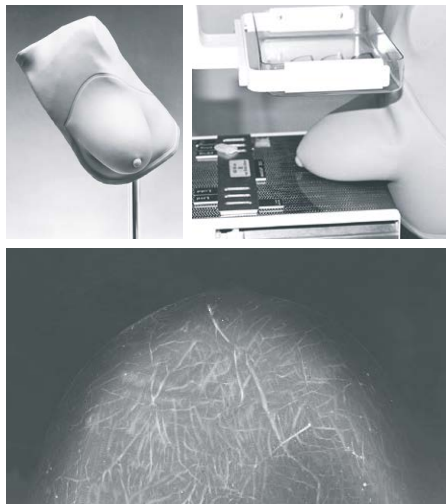
Can help protect breast tissue in Spinal and Mammography examinations.

800mm x 250mm

0.5mm Pb lead equivalence

Available in Lightweight lead and Edge Bilayer Lead Free material.

Model	Description
SH50	Lightweight Lead material - 0.5mm Pb LE



## MAMMOGRAPHY PHANTOM

USMAM

For training staff in positioning and compression techniques.

Mounted on a height and angle adjustable mobile stand so that positioning for medio-lateral oblique view is easily achieved.

Indicator box shows when ideal 5cm thickness reached with a Red light indicating the likely point of discomfort.

Realistic Mammography images with high contrast.



## DIGITAL MAMMO QA PHANTOM

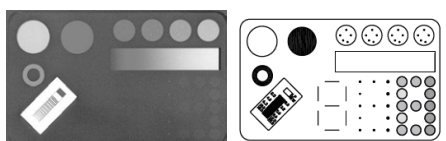
PH13

### FEATURES

Outer shape of the phantom simulates a compressed breast of D shape Targets includes simulated microcalcifications, nylon fibrils, acrylic disks, an aluminum ring, Teflon disks, a Teflon ruler (slope) and a resolution test chart

### EVALUATION PARAMETERS

Contrast resolution  
Frequency enhancement  
Noise and contrast transfer function





# ULTRASOUND



## MEDICARE ULTRASOUND COUCH - 3 SECTION



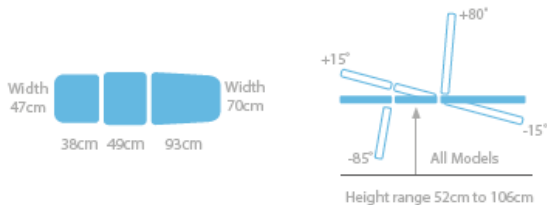
Providing smooth electric positioning of height, tilt and backrest angle, these couches feature a compact base frame and are ideal for both supine and seated procedures. The deluxe model includes the base frame cover and matching operators chair.

The new SM9696 models additionally feature an electric footrest for patient positioning. The slightly narrow foot section enables the additional fitting of leg supports or stirrups for gynaecological procedures.

Model	Description
SM9686	Electric height, tilt and backrest - manual foot section
SM9686D	Deluxe Model with base cover and matching operators chair
SM9696	Electric height, tilt, backrest and foot section
SM9696D	Deluxe Model with base cover and matching operators chair

### FEATURES

- Safe working load and lifting capacity of 240Kg (37.5 St)
- Easy adjustment of height, tilt, backrest and foot section
- Electric adjustable backrest from horizontal to +80°
- Adjustable angle footrest from horizontal to -85°
- Electric trendelenburg angle to -15°
- Choice of gas power assisted or electric operated foot section
- Electric height elevation via hand control
- Excellent height range from 52cm to 106cm
- Supplied with paper roll holder and matching head cushion
- Compact frame design with retractable wheel system
- Adjustable foot for stability on uneven surfaces
- Purpose made precision bearings on all pivot points
- Anti-bacterial powder coated frame
- Clearance beneath frame for mobile hoist



### FOR A FULL RANGE

The full range of examination couches is available on our website: [www.rothband.com](http://www.rothband.com)



## STERLING 3 SECTION COUCH

The Sterling 3 Section Couch provides a more versatile and comfortable position for seated procedures and examinations. The backrest support can be raised and fully adjusted from horizontal to +85 and the foot section is adjustable from -20 to +40 degrees and can also be used as the head end for prone treatments with the option of adding a breathing hole and plug. The couch is suitable for a wide range of examination and minor treatment procedures. A hand switch is fitted as standard for height control with a foot switch available as an option.

### Model

SX3008

### Description

Electric with hand switch for height operation

### FEATURES

Safe working load and lifting capacity of 200Kg

Electric height elevation via hand switch

Gas assisted backrest adjustable from -20° to +85°

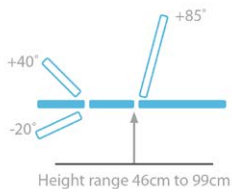
Gas assisted footrest adjustable from -20° to +40°

Excellent height range from 46cm to 99cm

100mm diameter individual locking castors

Purpose made precision bearings on all pivot points

Clearance beneath frame for mobile hoist



## OUR MOST COST EFFECTIVE OPTION

The full range of examination couches is available on our website: [www.rothband.com](http://www.rothband.com)

## CLINNOVA 3 SECTION COUCH

A very strong and rigid couch, with adjustable hed and leg sections which increases versatility. Available with a wide range of accessories, suitable for supporting heavier patients for examination and minor treatment procedures.



Model	Description	Model	Description
NV3550-CLS	Hydraulic Height Elevation Gas Assisted Head Section Gas Assisted Foot Section Classic Base	NV3570-CLS	Electric Height Elevation Electric Head Section Electric Foot Section Classic Base
NV3560-CLS	Electric Height Elevation Gas Assisted Head Section Gas Assisted Foot Section Classic Base	NV3550-PRM	Hydraulic Height Elevation Gas Assisted Head Section Gas Assisted Foot Section Premium Base
NV3560-PRM	Electric Height Elevation Gas Assisted Head Section Gas Assisted Foot Section Premium Base	NV3560-PRM	Electric Height Elevation Electric Head Section Electric Foot Section Premium Base

### FEATURES

Strong and sturdy design, supporting and lifting patients up to a maximum weight of 265Kg (41.5 St)

Gas assisted or electric head section, adjustable from -20° to +80°

Gas assisted or electric foot section, adjustable from 0° to +85°

Anti-trap gas assisted sections prevent risk of crushing and harm to patient, user or furniture

Hydraulic pump action or electric height elevation

Variable height range of 46 to 95cm for individual working heights

Linked retractable wheels with adjustable foot for uneven floors

Lock and Go transport mode for easy moving

Purpose-made precision bearings ensure quiet, reliable operation and increase product life expectancy

Frame design enables use of mobile hoist

Electric models include a hand switch as standard

Laser cut fixing points to easily retrofit approved accessories

Anti-microbial paint additive on framework prevents growth of bacteria, fungi and viruses

70cm wide Easy Clean Upholstery

Choice of 15 standard vinyl colours



TOWEL RAIL AS STANDARD



### OUR HEAVY DUTY OPTION

BARIATRIC VERSIONS ARE AVAILABLE ON OUR WEBSITE:

[WWW.ROTHBAND.COM](http://WWW.ROTHBAND.COM)

## OPTIONAL EXTRAS

If you have any queries on any of the optional accessories listed below please contact us for further details. Please note some of the accessories are supplied as standard with specific couches so please ensure you check before purchasing your chosen product as all other options come at an additional cost.

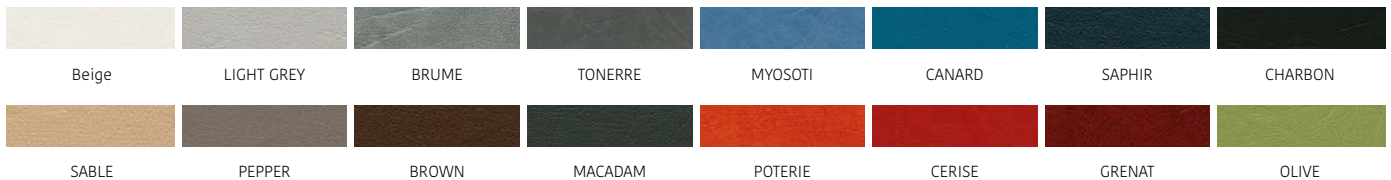
NB/ NOT ALL OPTIONS ARE AVAILABLE WITH ALL COUCHES - CALL THE OFFICE FOR DETAILS

 <b>6200</b> Single foot switch option (alternative to standard single hand switch).	 <b>6207</b> Double foot switch option (alternative to standard double hand switch).	 <b>6041</b> Side support loops provide patient support and security and are easily removable.	 <b>6054</b> Telescopic IV pole has fixing points on both sides of the couch and is easily adjusted to the required height.
 <b>6209</b> Triple foot switch option (alternative to standard triple hand switch).	 <b>6001</b> The perimeter foot switch is a "hands free" foot operated system for height adjustment. Medicare 2 & 3 sections only.	 <b>6005</b> The paper roll holder provides a protective barrier between the patient and the upholstered surface.	 <b>6004</b> Breathing hole & plug for improved patient comfort for prone treatments.
 <b>6057</b> Battery back-up available for most electric operated models.	 <b>6052 &amp; 6053</b> An easy to clean protective base frame cover that conceals the moving parts of the framework.	 <b>6007</b> The head support cushion is easily attached to the couch and can also be used as a support for lower limbs.	 <b>6006</b> The upper limb support has multi-angular adjustment and can be fitted to either side of the couch.
 <b>6002 &amp; 6003</b> Fold-down side support rails for 2 & 3 section couches, providing patient support and security.	 <b>6002P &amp; 6003P</b> Upholstered cushions can be added to the side support rails for additional comfort, support and protection.	 <b>5008</b> The knee roll support set is an ideal accessory for supporting limbs during medical procedures.	 <b>6020</b> A light weight free-standing adjustable leg support for lower limb procedures. Supplied with carrying case.
		 <b>6044</b> Traditional lithotomy stirrups for gynaecology procedures.	 <b>6045</b> Leg supports for gynaecology procedures. Fully adjustable for patient comfort and security.

## FABRIC OPTIONS\*

A really hard wearing 'leather look' vinyl that will retain its performance for many years if cleaned and treated in the right manner. This fabric is fire retardant to crib 5, anti-bacterial and waterproof. Abrasion resistance to 100,000 cycles.

\*NOT AVAILABLE ON VELA CHAIRS



## Economy Saddle



Economy saddle stool with single lever height adjustment with a range of 48-60cm. Black five star base and castors.

**ORDER CODE** **ST6144**

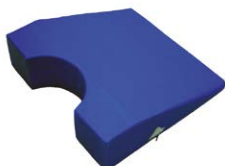
## Deluxe Saddle



Deluxe saddle chair with 2 lever operation for height and seat tilt facility. Height range of 54-71cm. Polished aluminium five star base and castors.

**ORDER CODE** **S505**

## TV PAD



Trans vaginal positioning pad  
Coated in Dartex Fabric  
Navy, Grey, Berry

**ORDER CODE** **FP62Z**

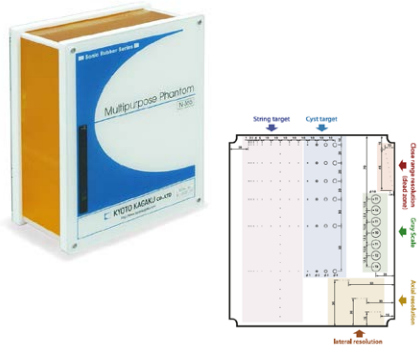
## SIMPLE UP®



A great solution for lifting patients to a manageable height for lower limb examinations.

See Pg 12

**ORDER CODE** **SIMPLEUP**



## ULTRASOUND QA PHANTOM - MULTI PURPOSE

Useful both for daily assessment and further research. Greyscale for evaluation, cyst targets with non-resonance cylinders, line targets for geometrical evaluation including close range (dead zone) resolution, axial and lateral resolution are prepared for scanning. The phantom is designed to allow scanning from all four side walls.

Sonic velocity: 1432m/ sec at 25°C  
 Attenuation coefficient: 0.57 dB/ cm MHz at 25°C  
 Acoustic impedance: 1.38 rayl at 25°C

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**

**ORDER CODE**

**US-2**



## BREAST US QA PHANTOM

Ultrasound QA phantom for high precision imaging in the high frequency sonography (around 10 MHz) that is required in breast examination.

For monthly basic quality check of ultrasound images, as well as longer term quality assurance to maintain consistency of the performance of scanners and transducers.

Set consists of a Mass Target Block and a Dot Target Block:

### Mass targets block

Sonic velocity: 1434 m/sec at 25 degrees C  
 Attenuation coefficient: 0.59 dB/ cm MHz at 25 degrees C  
 Acoustic impedance: 1.37 rayl at 25 degree C  
 Integrated target: greyscale targets/ cyst targets

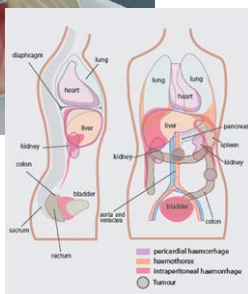
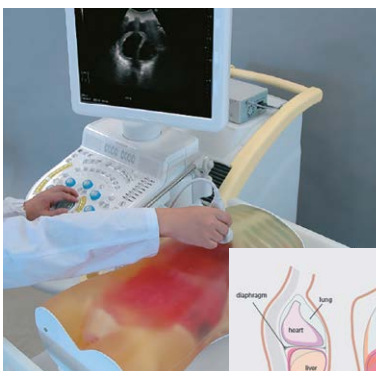
### Dot targets block

Sonic velocity: 1442 m/sec at 25 degrees C  
 Attenuation coefficient: 0.73 dB/cm MHz at 24 degrees C  
 Acoustic impedance: 1.39rayl at 25 degree C  
 Integrated target: dot targets/ 45 degrees line target

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**

**ORDER CODE**

**US-4**



## FASTER ABDOMINAL PHANTOM

This Phantom has been developed to provide simulated training in FAST (Focused Assessment with Sonography for Trauma); an ultrasound examination directed at identifying the presence of free intra-peritoneal or pericardial fluid in trauma patients.

This allows the detection of the possible cause of shocks such as:

- Mass haemothorax
- Intra-peritoneal haemorrhage
- Cardiac tamponade
- Size: approx. 40 x 80 x 31 cm
- Weight: approx. 35 kg

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**

**ORDER CODE**

**US-5**



## ABDOMINAL TRAINING PHANTOM - ABDFAN

Abdominal ultrasound phantom with pathologies

Unique high-fidelity abdominal ultrasound phantom that facilitates effective training compatible with your own clinical devices

### Useful for:

Instrumentation and probe manipulation.

Basics of abdominal sonography - Cross sections and sonographic anatomy.

Sonographic demonstration of each individual organ.

Localization of hepatic Couinaud's segments.

Lesion detection training.

### Contains:

Liver (segmental anatomy, portal and hepatic venous systems, ligamentum teres and ligamentum venosum.)

Biliary tract (gallbladder, cystic duct, intrahepatic and extrahepatic bile ducts.)

Pancreas (pancreatic duct).

Spleen.

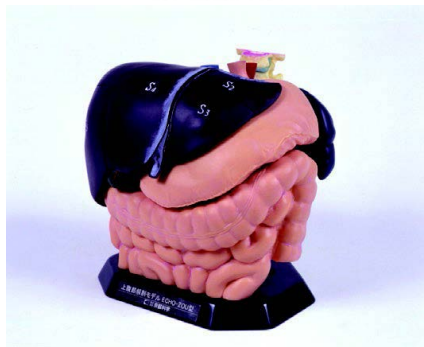
Kidneys.

Detailed vascular structures (aorta, vena cava, celiac artery and its branches, Portal vein and its branches, superior mesenteric vessels, renal vessels, etc.)

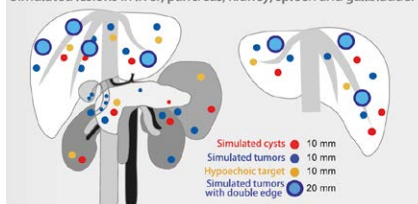
**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**

**ORDER CODE**

**US-1B**



Simulated lesions in liver, pancreas, kidney, spleen and gallbladder



## US BREAST PHANTOM

A unique phantom for training in basic breast ultrasound examination.

Simulated targets with different echogenicities and elasticities are embedded in the phantom mammary gland.

The targets can be examined with ultrasound elastography as well as basic breast sonography

**PLEASE VISIT WEBSITE FOR FURTHER INFORMATION**

**ORDER CODE**

**US-8**



### MORE US PHANTOMS ONLINE

The full range of US phantoms is available on our website: [www.rothband.com](http://www.rothband.com)

# TERMS AND CONDITIONS

## 1. Parties

- a) The "Company" means WSR Medical Solutions Ltd.  
 b) The "Customer" means the person, firm or company buying goods from the Company to whom the goods are to be invoiced (unless the context otherwise requires) and any person to whom or for the benefit of whom the goods may be delivered.  
 c) The "Goods" means the goods described on our invoice.

## 2. Application Of Conditions

- a) No contract shall exist between the Company and the Customer except upon the conditions set out herein and shall not be varied or excluded by the terms and conditions of any Order or any other terms and conditions sought to be imposed by the Customer including but without limitation to the Customer's Conditions of Purchase. These Terms and Conditions embody the entire understanding of the parties and supersede all and any prior promises, representations, undertakings or implications. No variation of these Terms and Conditions is permitted unless expressly accepted by a director of the Company, in writing.  
 b) If the Customer shall make default in or commit a breach of any of its obligations under this contract or any other Order or Contract with the Company, the Company shall at anytime thereafter be entitled to determine the contract and without prejudice to its other rights hereunder recover from the Customer any loss arising.  
 c) No statement, illustration or drawing in any circular, catalogue, advertisement or other communication in whatsoever form shall be deemed to imply any warranty or condition unless the same is specifically incorporated in this contract.

## 3. Orders

- a) Orders with a value of less than £20 (excluding VAT, net discounts) will attract a £2.50 low order surcharge to cover administration costs.  
 b) Orders requesting the Company to provide the goods may be submitted or varied either orally or in writing, to either the Sales Representative, Customer Care department or other authorised Sales/Marketing personnel. Any orders submitted or variations made orally must be confirmed in writing within seven days.  
 c) All orders to be forwarded to the address below.

## 4. Quotations

Any estimate or quotation shall comprise an invitation to treat and will remain open for a period of thirty days only from the date thereof, unless varied by the Company in writing. Any order issued by the Customer is subject to acceptance by the Company and a contract will only be formed when the Company has accepted the Customers offer to buy either in writing or by the processing of the order.

## 5. Specification

The Goods are supplied in accordance with specifications (if any) submitted to the Customer and any additions and alterations thereto shall be the subject of an extra charge. The Company reserves the right to change the construction or design of the Goods or the specification thereof and the Customer shall accept the Goods so changed in fulfillment of the Order.

## 6. Prices

- a) All prices quoted are exclusive of Value Added Tax which shall be payable by the Customer at the rate prevailing at the date of the applicable tax point.  
 b) The Company reserves the right, by written notice at any time before despatch, to vary the price of the Goods to take account of any increases in the cost of raw materials, manufacture, packing, transport or wages or otherwise.  
 c) Prices charged will be those effective at the date of Order as per the current price list.

## 7. Payment

- a) Unless the Company otherwise agrees, payment is due in full within 30 days net of the invoice date to WSR Medical Solutions Ltd., at the address below.  
 b) If payment is not made in accordance with paragraph (a), or if at any time the credit standing of the Customer has (in the opinion of the Company) been impaired, the Company may refuse delivery of any Goods required under the Contract until arrangements as to payment or credit have been established which are satisfactory to the Company.  
 c) Time of payment shall be of the essence and if payment is not made on the due date, the Company reserves the right to charge interest on all overdue payments and outstanding balances at the rate (both before and after judgement) of 5% above the Bank of England base rate in force on the due date for payment (under clause 7 [a]) such interest being deemed to accrue on a daily basis from the due date for payment until receipt of payment by the Company.  
 d) The Customer shall not be entitled to withhold payment either wholly or in part once the same has become due except where expressly agreed with the Company.

## 8. Delivery I Carriage Charges

- a) Unless the Company otherwise agrees, delivery shall be made to the delivery point specified in the Order.  
 b) Time of delivery is not of the essence. Stated delivery times are no more than an estimate on the part of the Company and shall not be binding upon the Company which shall not be liable for any costs or damage caused by reason of any delay in delivery.  
 c) The Company reserves the right to make delivery by instalments and to tender a separate invoice in respect of each instalment.  
 d) The Company will usually make a charge for Carriage and packing and unless otherwise instructed by the Customer will choose the method of shipment.

## 9. Cancellations

- a) No notice of cancellation of an Order shall be valid unless given in writing and agreed to by an authorised representative of the Company.  
 b) If written notice of cancellation is received by the Company, the Company reserves the right to levy a cancellation charge up to 25% of the amount of the Order which shall be paid by the Customer to the Company forthwith.  
 c) If the Contract provides for delivery by instalments, each instalment shall be deemed to be the subject of a separate contract and non delivery or delay in the delivery of any instalment shall not entitle the Customer to repudiate the contract as regards the balance thereof.

## 10. Passing Of Title

- a) The legal title to the Goods shall not pass to the Customer until all sums due or payable by the Customer to the Company whether in respect of the Goods or otherwise howsoever shall have been received by the Company. Until such time the Customer shall hold the Goods as bailee of and in a fiduciary capacity for the Company and shall further:  
 i) store the Goods separately from any other goods so as to be identifiable as the property of the Company;  
 ii) be responsible for any loss or damage to the Goods howsoever caused; iii) except as provided in sub-clause (b) hereof, not sell, pledge, assign, charge or otherwise dispose of the Goods or any interest therein;  
 iv) deliver up the Goods to the Company at any time on demand and/or permit the Company, its servants or agents, at any time without notice to enter upon the Customer's premises and retake possession of the Goods.  
 b) The Customer shall be entitled to sell in the ordinary course of its business any of the Goods, in which title shall not have passed to it, on condition that the Customer shall hold on trust for and (on demand made by the Company) pay or transfer to the Company the proceeds of such sale and all claims that the Customer may have against its purchaser as the result of such sale.  
 c) The Customer (if so requested by the Company) and any liquidator or receiver of the assets of the Customer shall pay into a separate bank account for the sole benefit of the Company all sums received in respect of any sale under the powers out in sub-clause (b) above, by the Customer or the liquidator or receiver of any of the Goods in which title has not passed to the Customer.

## 11. Passing Of Risk

The risk in the Goods shall pass to the Customer when the Goods are tendered for delivery at the delivery point specified in the Order. In the event that the Goods are collected by the Customer from the Customer's works the risk of the Goods shall pass to the Customer when they are loaded onto the vehicle of the Customer or of his carrier or other agent.

## 12. Warranty

- a) The Company warrants that the Goods shall at the time of delivery correspond to the specifications published by the Company when used for purposes for which goods of that type are ordinarily used. In the absence of any such published specifications applicable to the Goods, the Company warrants that the Goods shall at the time of delivery be of merchantable quality. If any Goods do not conform to that warranty the Company will at its option:  
 i) replace the Goods found not to conform to the warranty;  
 ii) bring the Goods into conformity with the published specifications of the Company or (as the case may be) merchantable quality; or  
 iii) take back the Goods found not to conform to the warranty and refund the appropriate part of the purchase price.

## Provided that:

- aa) the liability of the Company shall in no event exceed the purchase price of the Goods; and  
 bb) performance of any one of the above options (as limited by (iii) (aa) above) shall constitute an entire discharge of the Company's liability under this warranty.  
 b) The foregoing warranty is conditional upon:  
 i) the Customer giving written notice to the Company of the alleged defect in the Goods such notice to be received by the Company within seven days of the time when the Customer discovers or ought to have discovered the defect;  
 ii) the Customer affording the Company a reasonable opportunity to inspect the Goods;  
 iii) the Customer making no further use of the Goods that are alleged to be defective, or any plant machinery or other equipment into which the same

shall have been incorporated after the time at which the Customer discovers or ought to have discovered that they are defective.

- c) No representation or warranty is given as to the suitability or fitness of the Goods for any particular purpose and the Customer shall satisfy himself in this respect and shall be totally responsible therefore.  
 d) Save as provided in paragraph (a) hereof and in Section 12 of the Sales of Goods Act, 1979:  
 i) all conditions and warranties express or implied are to the extent permitted by law hereby expressly excluded;  
 ii) the Company shall be under no liability for any loss or damage (other than in respect of personal injury or death) whether direct, indirect or consequential howsoever arising which may be suffered by the Customer.  
 e) Without prejudice to the generality of paragraph (c) all recommendations and advice given by or on behalf of the Company to the Customer as to the methods of storing, applying or using the Goods, the purposes to which may be applied and the suitability of using the Goods in any manufacturing process or in conjunction with any other materials are given without liability on the part of the Company its servants or agents and where the Goods are intended for use in connection with any foods, drugs, or other goods or substances whatever, or for the packaging or securing of goods or articles of any kind the Customer shall be responsible for ensuring that such articles will not be, or not liable to be adversely affected by contact with or proximity to the Goods supplied and all liability to the Customer or any third party in respect of any damage so caused is hereby expressly excluded.  
 f) In the event that, notwithstanding the provisions of paragraphs (c) and (d) above, the Company is found liable for any loss or damage suffered by the Customer, that liability shall in no event exceed the purchase price of the Goods.  
 g) To the extent that any provision herein contained or becomes unlawful by virtue of any statutory provisions or any other rule of law the words or phrases which so offend shall be deemed to have been deleted herefrom to the extent necessary to remove the invalidity, but no further or otherwise, and the remaining words, phrases and clauses shall remain operative, notwithstanding the deletion, and shall be construed, where possible, to give effect to the intentions of the parties as evidenced by the terms hereof.  
 h) No representation shall be taken to have been given or implied from anything said or written in the negotiations between the parties hereto or their representatives prior to any agreement entered into between the Company and the Customer but nevertheless if any representation shall subsequently be found or deemed to have been given it is hereby expressly excluded or restricted to the extent permitted by Section 3 of the Misrepresentation Act 1967 as amended by the Unfair Contract Terms Act 1977.

## 13. Force Majeure

The Company shall not be liable for any loss or damage caused by the delay in the performance or non-performance of any of its obligations hereunder where the same is occasioned by any cause whatsoever that is beyond the Company's control including but not limited to an act of god, war, civil disturbance, requisitioning, governmental or parliamentary restrictions, prohibitions or enactments of any kind; import or export regulations, strike, lock-out or trade dispute (whether involving its own employees or those of any other person), difficulties in obtaining workmen or materials; breakdown of machinery, fire or accident. Should any such event occur the Company may cancel or suspend this contract without incurring any liability for any loss or damage thereby occasioned.

## 14. Notice Of Damage, Non-Delivery Or Wrong Delivery

- a) The Company shall not be liable to the Customer in the event that the Goods, at the time of delivery, do not comply with the warranty in Clause 12(a) and the non-compliance is one which should have been apparent on a careful visual inspection of the Goods unless the Customer shall have notified the Company and the Carrier within three days of delivery that such inspection was impossible and shall have confirmed such notification in writing received by the Company within seven days of delivery.  
 b) The Company gives no guarantee of the exact quantity of goods delivered and in the event that quantity of Goods delivered does not correspond with the quantity stated on the Order the Customer shall only be liable to pay for the quantity delivered in the case of short-delivery and for the contract price in the event of over-delivery (subject in the latter case to permitting the Company to collect the surplus goods) provided that in the case of short delivery the Company is given an opportunity to inspect Goods before any use is made thereof or any alteration or modification is made thereto and that in no event shall such short or over-delivery entitle the Customer to damages or give the Customer the right to rescind.  
 c) Claims for non delivery must be notified to the Company and the Carrier within twenty one days from date of invoice, failing which the Company shall be under no liability for non delivery.  
 d) Any surplus goods delivered shall remain the property of the Company and the Customer shall take all reasonable precautions for the safe custody and protection of such surplus goods until the time of their removal by the Company.  
 e) In the event of goods being wrongly delivered in no circumstances shall any of the Goods be returned to the Company without its prior written consent, otherwise liability is not accepted. Where the Company has made the error, full credit will be given on uplifted goods in good condition.  
 f) The Company is under no obligation to accept goods for return, e.g. in the case of Customer ordering error, surplus stock, etc., but where it agrees to do so in writing a 15% handling charge will apply. Goods held by the Customer for more than 3 months from delivery will not normally be accepted for return. Only complete units of sale may be returned and all goods are to be in good condition. Any goods returned in unsealable condition will be paid for in full by the Customer. The Company will, in all cases, organise the collection of goods.  
 g) Refused Deliveries. The Company reserves the right to make a carriage charge plus 15% handling charge on all consignments tendered for delivery, which are refused without justification. All goods to be in good condition. Goods returned in an unsealable condition will be paid for in full by the Customer. Goods should not be returned without the prior agreement of the Company.

## 15. Disputes And Set-Off

Any liability of the Company under the contract shall be subject to and conditional upon the due performance and observance by the Customer of all its obligations under these conditions and subject to these conditions the Customer shall not be entitled to withhold or delay payment or exercise any right or set-off whatsoever and howsoever arising or arisen which might otherwise be available to it.

## 16. Copyright

All copyrights shall remain the property of the Company alone unless otherwise expressly agreed in writing with the Customer.

## 17. Patent Rights

The Customer warrants that any instructions furnished or given by the Customer shall not be such as will cause the Company to infringe any letters patent or trade mark or other intellectual property right in execution of the Customer's order and shall indemnify the Company against all actions, proceedings, costs, claims and such demands arising therefrom to the extent that such instructions lead to such infringements.

## 18. Government Charges

The Customer will reimburse the Company for any increase in tax or Governmental charge, or for any new tax or Governmental charge hereafter becoming effective which the Company may be required to pay to any Government upon the sale, production, or transportation of the Goods and which has the effect of increasing the cost of the Goods sold hereunder.

## 19. Assignment

This contract is personal to the Customer and may only be assigned by it with the prior written consent of the Company.

## 20. Bankruptcy I Liquidation

If the Customer being an individual (or, when the customer is a firm, any partner in that firm) shall at any time become bankrupt, or having a receiving order made against them or shall make any composition or arrangement with or for the benefit of the creditors or, if the Customer being a company, an order for winding up is made or a resolution for winding up is passed or if a receiver or manager is appointed on behalf of a creditor or otherwise, the Company shall have the right to stop Goods in Transit, to suspend further deliveries and to determine any subsisting contract with the Customer and (in any case where title to the Goods has passed to the Customer but payment is due and has not been made) the Company shall have a lien over the Goods and right of resale provided that any such action shall be without prejudice to any right or claim the Company may have against the Customer.

## 21. Waiver

No neglect, delay or indulgence on the part of the Company in enforcing the terms and conditions of the contract shall prejudice the rights of the Company hereunder or be construed as a waiver thereof.

## 22. Terms Of Contract And Controlling Law

These conditions shall constitute the whole terms of any contract entered into between the Company and the Customer and shall be read and construed in accordance with the laws of England and all disputes arising in connection with the contract shall be submitted to the jurisdiction of the English courts.

## 23. Company Details

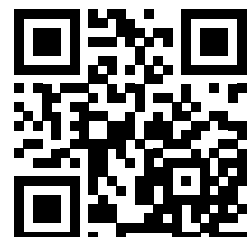
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