

DIRECTORY

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Medical Imaging Tables

Radiation Detector Calibration & Services

Our radiation detector calibration service offers a calibration reminder service, industry leading support and speedy turnaround times for recalibrations.

Based on the recommendation of AERB, the instrument is calibrated, once in two years from the date it was placed in service.

We are the only organization in India to offer complete service, repairs, recalibration for any kind or brand of Radiation Monitoring Instrument. We are specialized and factory trained to repair Pressurized Ion Chamber survey meters. We have the required plant and machinery to repair these instruments, set the calibration factor and recalibrate.

Our calibration facility has been recognized by AERB vide their letter no. AERB/RSD/Recog-Cal04/2014/7963 dt. 12.8.2014, and is NABL Accreditated now.

- Facility to calibrate any brand or type of Radiation Survey Meter, Area (Zone) Monitor and Pocket Dosimeters. Either analogue or digital
- Pick-up and drop can be arranged, if the need arise
- Routine turn-around calibration time is 5-6 days
- Instrument should be in working condition, to avoid delays
- Calibration validity TWO years































Klarity RT Solutions....



Klarity is committed to innovative and quality patient care.
Klarity Radiation Therapy product meets or exceed
the highest international standards for
All IMRT, IGRT & advanced Applications









Klarity AlO
Base Plate for
Elekta HexaPOD™
evo RT system



Better Products for Better Care



1987 Coffman Road Newark, Ohio 43055 USA www.klaritymedical.com 740.778.8107 ph. 740.788.8109 fax email info@klaritymedical.com

DECLARATION OF CONFORMITY

According to annex VII of the Council Directive 93/42/EEC (amended2007/47/EC) concerning medical devices:

We: Klarity Medical Products LLC 1987 Coffman Road Newark, OH 43055 USA

declare that the following non-sterile medical devices under class I (according to rule 1 of annex IX of the Council Directive 93/42/EEC):

KLARITY® Brand thermoplastic masks, vacuum bags, cushions, acrylic and carbon fiber boards, table and accessories for stabilization of patients for external beam radiation therapy

fulfill the basic requirements according to annex I no. 1-14 of the Council Directive 93/42/EEC (amended 2007/47/EC). Conformity assessment was performed according to Annex VII.

These products are registered with the United States Food and Drug Administration and conform to all FDA quality and production requirements.

The above products were manufactured under the following quality management systems:

EN ISO 9001:2000 Certificate No.: 20832

EN ISO 13485:2003 Certificate No.: Q2N 11 11 49007 004

These products are further guaranteed to perform their intended functions and are compatible with international standard treatment tables and boards as manufactured by Siemens, Elekta, Varian, Civco, Qfix and other manufacturers.

Peter M. Larson President

Klarity Medical Products LLC

Newark, Ohio USA

February 3, 2015

Authorized European Representative:

Lotus Global Co., Ltd.

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"Progress Through Innovation, Technology and Customer Satisfaction"



AKRON RUBBER DEVELOPMENT LABORATORY, INC. 2887 Gilchrist Road • Akron, Ohio 44305 1-800-830-ARDL • (330) 794-6600 • FAX (330) 794-6610 Website: www.ardl.com • E-mail: info@ardl.com

December 21, 2007

Mr. Peter M. Larson Larson Medical Products, Inc. 2844 Banwick Road Columbus, OH 43232

SUBJECT: Analytical testing on sample submitted by the above company.

PO# 00007842

RECEIVED: One sample identified as Splint Material with Coating.

TEST METHOD

Sample preparation and extraction. Samples were weighed and measured after which the samples were cut to allow buffer contact with all surfaces. Extractions were performed for 2 hours with constant agitation at 25±5°C in 100 mM phosphate buffered saline pH 7.4 (PBS). The extraction ratio used (mls buffer/gram sample) was 5:1. The extracts were centrifuged to remove particulates and then assayed.

ELISA Inhibition Assay (ASTM D 6499-03):

The samples were assayed using seven 2-fold serial dilutions in duplicate. The resulting data was calculated by using latex protein extracted from non-compounded ammoniated latex as the reference standard. The data is expressed as antigenic latex protein in micrograms/gram of sample and micrograms/dm².

RESULTS:

Coating $\mu g/g = \mu g/dm^2$ <0.2 <2.6

The sample shows a "below detection" result. Therefore, no antigenic protein is present.

Prepared By: Approved By: Approved By: Ana Camelia Barbur, M.S.

Chemist Approved By: Manager, Chemical Services

PN# 76608

csn

Klarity Duo Align™ AlO Baseplate

R605-12FCF

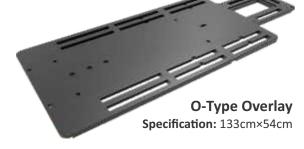
A complete solution for adaptable full-body placement

BETTER PRODUCTS FOR BETTER CARE www.klaritymedical.com

The Klarity Duo Align™ AIO Baseplate is a lightweight and adaptable positioning solution for head, neck, shoulder, thorax & pelvic placement. Made of strong and durable carbon fiber, the Duo Align™ System is fully indexable and compatible with both U-Frame and O-Type masks. The baseplate can also be used with standard Silverman headrests, AccuCushions®, vacuum bags, and indexing bars.

Flexible with three parts:

- (a) O-type AIO Overlay;
- (b) Overhead Arm Positioner;
- (c) Moveable KneeFix Set



Innovative EVA Block Set





One single block can fix both short clamp and longer clamp





- Moving Range 0-46cm
- Can be easily locked

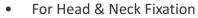
Overhead Arm Positioner

Specifications:

- Height of Arm supports is adjustable in 6 angles between 20-46°
- Rotating Arc of Arm Support: 0-170°
- Height of Wrist Cups is adjustable between 18.5-25.4 cm



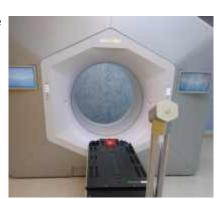
Klarity O-Type AIO System: A Product with Many Solutions



- For Head & Thorax Fixation
- For Pelvis Fixation
- Breast Fixation: Use O-type Lower Jaw Mask & Lower Waist Mask
- For Craniospinal Irradiation Whole Body Fixation: Use with O-type
 5-point Head & Shoulder Mask & O-type 4-point Pelvic Mask







06

Klarity Cadet AIO Baseplate with SBRT

BETTER PRODUCTS FOR BETTER CARE www.klaritymedical.com

R-612-NCF An all-in-one base plate for S-Type masks

The Klarity Cadet AIO Baseplate is configured for multiple treatments and has a narrow profile that is compatible with smaller bore machines.

The Carbon fiber Baseplate can be used to immobilize the head, neck, shoulder, thorax, and pelvis for targeted as well as whole-body irradiation. The baseplate includes three sink-



lock channels on either side of the pelvic area to ensure better conform ability. Custom vacuum bags attach to the baseplate for further customization. It also comes with an optional Groin Lock for Pelvic Masks. The Cadet Baseplate works with all standard S-type head masks. It is also compatible with R460-2436S5T Head & Shoulder mask, which has a narrow shoulder profile for highly specific positioning.

- It is compatible with the Overhead Arm Positioner & Leg Positioner Cushions (supplemental items sold separately)
- The same baseplate can be made to use for SBRT treatments by fixing 'Belly and Knee bridges'. A complete All-in-one solution in real sense, including SBRT.



Specification:

- Flexible with several parts: AIO Overlay, Overhead Arm Positioner, KneeFix, Belly Bridge, Knee Bridge,
 Prone Breast/Pelvis Cushions
- 124cm (Length) x 54cm (Width)

One Overlay, Many Uses







Head & Thorax



Supine Breast









Pelvis Fixation

Prone Breast

Whole body fixation

Prone Pelvis

Klarity O-Type AlO Baseplate Compatible with Elekta HexaPOD™ evo RT System



R-605-12FCFB: An all-in-One baseplate for O-type and U-frame masks (Compatible with HexaPOD™ Frame)

It is a lightweight and simple positioning solution for head, shoulder, and full body placement. Made of strong and durable Klarity-K[™] Carbon Fiber, the O Type AIO Baseplate is fully indexable, and compatible with both U-frame and O-type masks. The increased compositional consistency allows for superior attenuation factors. The baseplate can be used with standard Silverman headrests, and is compatible with the R605-WCF Overhead Arm Positioner for additional arm placement option. A narrow profile is compatible with small bore machines.

Size: 133cm (Length) × 54cm (Width)-48cm (Central Portion)



Klarity HexaPOD[™] evo RT System Base Plate

Compatible with:





Overhead Arm Postioner (R605-WCF)

One Base Plate: Many Uses For Head & Neck Fixation

Required:
Baseplate R605-12FCFB
O-Type 3-point Head Mask or
O-Type 4 or 5-Point Head & Shoulder Mask
U-Frame Head Mask
Optional:

- H&S Vacuum Bag (R7222-3NLR2-O)
- Movable KneeFix Set (R612-LCF)
- Head Support R507



Head Mask U-Type



Head Frame (3 Clamp)



Head & Shoulder Masks (4 or 5 Clamp)

Klarity O-Type AlO Baseplate compatible with Elekta HexaPOD™ evo RT System



R-605-12FCFB



For Head & Thorax Fixation

Required:

Baseplate R605-12FCFB Overhead Arm Positioner R605-WCF Head & Thorax Mask RD313A-2436 Optional:

- Movable KneeFix Set (R612-LCF)
- Head Support R507

For Thorax Fixation

Required:

Baseplate R605-12FCFB Overhead Arm Positioner R605-WCF

O-Type 4-point Pelvis Mask RD901-3242 Optional:

- Body Vaccum Bag R7569-12NLR-O, R7586-11NLR-O
- Movable KneeFix Set (R612-LCF)
- Head Support R507





For Pelvis Fixation

Required:

Baseplate R605-12FCFB

Overhead Arm Positioner (R605-WCF)

O-type 6-point Pelvis Mask

(R402L-3242)

Optional:

Head Support - R507

Compatible Masks









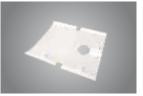
RDLG105-2412C

RDLG206-2412C

RDLG207-2412C

RG464-1W

RD901-3242









RD402L-3242

RD313A-2436

RD313B-2436

RD313C-2436

MultiFix™ AIO Baseplate R605-FCF

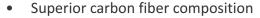
Simple...Strong...Indexable...Affordable



One baseplate for multiple treatment options

The Klarity MultiFix™ Baseplate system is a unique patient positioning board that allows for multiple treatment options. The MultiFix™ Baseplate offers treatment options for head, head & shoulder, pelvic and full body support. Made of strong and durable carbon fiber. MultiFix™ Baseplates are lightweight, fully indexable, and compatible with all U-Frame and O-Type masks.





- Light weight and durable
- Minimal attenuation
- For Head-Neck-Shoulder and Pelvic treatments in supine and prone position
- Engineered for negligible setup time
- CT compatible
- No use of high attenuation PU cushions in treatment areas, as they lack in reproducibility and working life
- Stand alone separate Breast Board, Prone Breast & Belly board system provide ease of flexibility while treating different patients simultaneously in multiple Linac departments
- Indexable to any couch top
- Custom design storage rack available for each individual order





Prone Breast System





Klarity SRS System

Simple...Precise





Klarity SRS Baseplate

The Klarity SRS System consists of an SRS Baseplate, a Double Masks System, a unique Shim System with three changeable mask fixing frame, and the Klarity BiteLokTM or EasyBITETM. **Spec.:** L57×W53×H12cm

Specifications:

- Klarity SRS Masks A Double-Masks System made of super strong and great conformability thermoplastic
- Klarity SRS Shim System with three changeable frames
- Two type of bite locks available from Klarity BiteLok[™] or EasyBITE[™]
- Compatible with Elekta HexaPOD[™] evo RT System

Thermoplastic Masks



SRS Front Mask



SRS Posterior Mask



SRS Mask





Change Frame #0 to Frame #-1 if the masks are getting loosened during patient's repositioning



Use Frame #0 for first time molding the double masks



Change Frame #0 to
Frame #+1 if the masks are getting
tighten during patient's repositioning

Two types of bite locks available from Klarity

Klarity Easy Bite[™]

- The bite block molds into the mask easily
- Thermoplastic attachment is moldable for precisely conforming to the teeth, which provides best stability
- Dual Airway for patient's easy breathing
- Easy for therapists to use with a handle

Klarity BiteLok™

The BiteLok[™] developed by Klarity comes with fast-setting dental putty, Tongue Depressors and Tongue Diverter.



RKY01



RKY01



RKY01



RKY01



RKY01

11

^{*}Compatible with Elekta HexaPOD[™] evo RT System

Klarity SBRT System



Provides an easy to use modular structure keeping treatment needs in mind for setting up complex streotactic body Radiotherapy Treatments.

Klarity® SBRT System provides comfortable immobilization for lengthy hypo-factionation treatments and is compatible with other treatment types, including Rapid Arc™, VMAT, IMRT, IGRT, SBRT, Protons and more.

Can be indexed to any treatment couch from Varian, Siemens, Elekta and Tomotherapy.



Easy to use

Scalloped edges allow the bridges to be fixed at any point.



Height of bridge is easily adjustable and can be locked or unlocked by switch-on/off



Bridges can be easily locked or unlocked to the board by switch-on/off



KneeFix and Foot Positioner can be moved easily and locked or unlocked by switch-on/off.

Better Immobilization

Ample Scale Marks make repositioning easy and accurate



Position of Belly compression Paddle can be easily recorded



Position of movable KneeFix and Foot Postioner can be recorded



Height and position of bridges can be easily recorded

Three ways of breath restriction



Belly Compression Paddle



Respiratory Belt



Thorax Mask



KneeFix Device Item No.: R624-**SCF**1-3



Foot Positioner Device Item No.: R624-**SCF**1-4



SBRT Indexing Bar (2)
Item No.: RE-15CF
MR Safe: RE-15GF

Klarity SBRT System



SBRT System for Linac & MR Safe

Standard Unit	Components Item No.		No.
		For Linac	MR Safe
	SBRT Base Plate Set	R624SCF1	R624-SGF1
	Wing Board	R632BTCF	R632-BTGF
	Knee Fix & Foot Positioner	R634LE	R634-LE
	Vacuum Cushion for Body Support	R764125NLB2	R7641-25NLB2
	Vacuum Cushion for Knee Support	R71315NL-O	R7131-5NL-O
Optional	SBRT Thorax Mask	R323B2436	R323-B2436
	Respiratory Belt	R624-SCF15	N/A
	Indexing Bar for Elekta Couch	RE630E	RE-630EGF
	Indexing Bar for Varian Couch	RE7B	RE-7BGF
SBRT Base Plate	SBRT Board (Carbon Fiber Baseplate	CF-2200X530	CF-2200X530
Set	Height-Adjustable Bridge (Belly)	R624SCF11	R624-SCF1-1
	Height-Adjustable Bridge (Knee)	R624SCF12	R624-SCF1-2
	Knee Fix Device	R624SCF13	R624-SCF1-3
	Foot Positioner Device	R624SCF14	R624-SCF1-4
	SBRT Indexing Bar (2)	RE15CF	RE-15GF

More Comforts

Klarity SBRT System is a total positioning solution with the use of Wingboard, Vacuum Cushions, KneeFix, Foot Positioner, which provides the best comforts to patients.





Use with Klarity® Wing Board



Use with Body Vacuum Cushion



Height-adjustable Bridge (Belly) Height-adjustable Bridge (Knee) Belly Compression Paddle



Knee Fix Foam Cushion



Feet Fix Foam Cushion



Use with Thigh Compression Vacuum Cushion

Klarity AccuCushions®

BETTER PRODUCTS FOR BETTER CARE www.klaritymedical.com

Advanced indexing tools for highly accurate, customized support



KlarityAccuCushions® are advanced indexing tools that provide secure, customized head and neck support for patients. These cushions are made from low-density thermoplastic-based materials that become soft and pliable when heated in an oven or water bath.

After heating, AccuCushions® offer warm and comforting support that has a calming effect on most patients.

T-Cushions Once cool, AccuCushions® become firm and rigid, ensuring excellent reproducibility and precise placement for highly accurate treatment. AccuCushions® can be used with Silverman headrests, and they also fit under a thermoplastic mask to create 360-degree custom support and immobilization.

New AccuCushions® with Neck Insert can be used without a Silverman headrest, enabling optimal cervical spine support and immobilization. The inner cushion contains a proprietary mix of high-quality, lightweight polystyrene surrounded by a thin layer of thermoplastic. The soft and stretchable outer covering is made of simple nylon fabric. All AccuCushions® are 100% nontoxic, with minimal shrinkage and no odor. AccuCushions® can be reheated and reformed.



Patient with AccuCushion

- 100% nontoxic and odorless
- Can be reheated and reshaped
- Increased control of cervical spine area with low attenuation
- Comforting and calming for patients
- Preferred by therapists and clinics worldwide



R550-S (Size: 15 x 20 cm) A Universal AccuCushion®



Proton AccuCushions R550-BOS (Size: 46×45cm)



R550-L (Size: 20 x 45 cm) A Universal AccuCushion®



Compatible with the Qfix® BoS™ System

Proton AccuCushions R550-BOS3 (Size: 48×63cm)



R550-Cel (Leksell Gamma Knife™ Icon System)



R550-T (Size: 46×41cm) (Head & Shoulder)



R550-P (Pediatric) (Size: 30 x 36 cm)



R550-T2L (Size: 46×46cm) (Head & Shoulder)



Klarity ShellMold (3 Sizes)



3 Klarity Shell Cushions[™]



AccuCushion sizes 15×10, 20×25, 25×30, 20×45, 45×60cm

*Compatible with the Qfix® BoS™ System

^{**}Compatible with Klarity Optek Board, S-Type & U-Type Baseplates, O-Type Baseplates & Klarity Multifix Baseplate

Klarity MR Safe Positioning Products



- Baseplates
- Masks
- Vacuum Cushions
- Accucushions

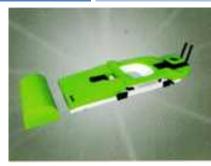


Klarity supplies a full range of MR Safe baseplates which comply with the carbon fiber baseplates. Klarity MR Safe baseplates are made from composite material of fiberglass and kevlar.

Item	Item No.	
	For CT or Linac	MR Safe
KlaritySBRT System	R62400	R62400-GF
Prone Pelvis/Belly System	R620ACF2	R620-AGF2
Cadet AIO Base plate	R612NCF	R612-NGF
Optek™ Overlay Board	R6303SCF	R630-3SGF
KlarityWingboard	R632BTCF	R632-BTGF
Leg Positioner	R634LCF	R634-LGF
Indexing Bar	RE-630E	RE-630EGF
	RE7B	RE-7BGF



Klarity **SBRT** System R62400-**SGF1**



Prone Pelvis/Belly System R620-**AGF**2



Cadet **AIO** Baseplate R612-**NGF**



Optek**TM** Overlay Board w/hand grips R630-3**SGF**



Klarity Wingboard R632-**BTGF**



Leg Positioner R634-**LGF**



Movable Kneefix Set R612-L



Indexing Bar RE-7BGF



SBRT Board GF-2200×530

Klarity Masks, Vacuum Cushions, Accucushions are all MR-safe.

Head & Neck Positioning





Multifix[™] Head & Shoulder Base Plate

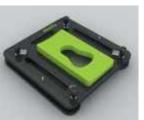
'Universal' Head & Neck Base Plate

A unique base plate for positioning of Head-Neck-Shoulder using Klarity 'O' Type precuts and uniframes. Features a cutout area below the head to accommodate any kind of head rest (Carbon Fibre or Silverman or TIMO) or Prone Head Holder. Fixation slots for adult and paediatric Patients. Indexable to any couch top.

Patient markings and centre line are standard features in all base plates.



Multifix™ Tilting Head Baseplate



Multifix™ Lateral Head Support



Multifix™ Supine Head Baseplate



Multifix™ Prone Head Support



Prone Head Cushion with Indexing Plate for Breast Board



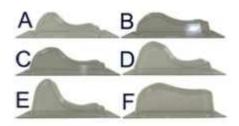
Carbon Fibre Head Rest (A-F)

Carbon Fibre Head Rests

The head rests are constructed to meet the requirements demanded by many customers. They are produced in only 0.4mm carbon material.

These head rests will give you improved performance compared to the conventional products. Low absorption through the material and a very stable position of the patient. Six different shapes A, B, C, D, E, F. They can be made compatible to your existing base plates.

All head rest have different elevation contours to suit treatments requirements and are marked from 'A' to 'F', for ease of identification. No need of elevation wedges below head rest, this is a single piece solution.



Silverman Head Rests (A-F) Low Density



TIMO Head Rests (A-F)
Polyurathene



Timo (set of six; A-F) with Wedges 2,3,4 cm and 9°, 13.5°, 18°

Breast Positioning

Breast Board

The Klarity Breastboard comes as a complete system and includes two arms cups, two hand grips, a removable head cup, adjustable bottom-stopper, The Klarity Breastboard is made of strong, lightweight carbon fiber, and is CT compatible. Fiducial markers allow for easy tracking of the spine in relation to the board. The Klarity Breastboard can also be used with the Klarity Wing Board for additional support. 142.7cm (Length) x 41.1cm (Width). Indexable to any couch top.









Overhead Arm Positioner



Wing Board



Klarity TrioTM Kit



Digital Breast Bridge



Treatment Chair



Attenuate Arm Positioner



Klarity Prone Breast System

Treatment Brassieres

- Reshapes the ipsilateral breast more favourably for radiation treatments
- Eleminates inframammary folds
- Reduces dose to the lungs, heart and ribs
- Both shape and position area accurately repeatable, treatment after treatment
- More uniform dose
- Simplifies the application of IMRT to breast treatment
- Reshapes the contra-lateral breast to move it away from the beam
- Full Brassiere Library of 40 cups is available for nearly all patients



Treatment Brasserie



Lady during treatment

Pelvic Positioning



Thorax & Pelvis Baseplate

A popular choice for Hip-Pelvic immobilization in prone and supine position. Available in acrylic and full carbon fibre. Indexable to any couch top. For adult and paediatric patients. **Size:** 85cm (L) x 50cm (W)



Thorax & Pelvis Baseplate



Patient on Thorax & Pelvis Baseplate

Klarity Prone Belly/Pelvis System

The Klarity Prone Pelvis/Belly System is a complete prone treatment system for increased patient comfort. The light weight carbon fiber baseplate is easily transportable, and provides a secure base for the Klarity Foam Cushions. The system is compatible with Klarity Pelvic Masks, creating secure and comfortable immobilization. The Klarity Prone Pelvis/Belly System is sold as a complete system that includes the baseplate, adjustable head cushion, standard belly plate, pelvis cushion and leg cushion. The small belly plate may ordered as an additional item.



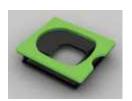
Klarity Prone Belly/Pelvis System



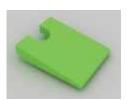
Carbon Fiber Baseplate



Adjustable Head Cushion



Standard Belly Plate with Foam Cushion (Hollow 39x29cm)



Foam Pelvis Cushion



Foam Leg Cushion



Combi-fix Baseplate



Knee Wedge & Feet Positioner Combination



Elevation Blocks



Leg Positioner



PelvicFix™ Baseplate



Thigh Spacer



Shoulder Retractor



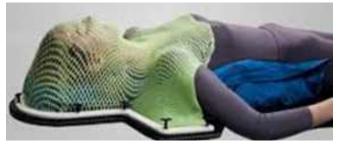
Patient on Shoulder Retractor

Vacuum Cushions

Klarity Vacuum Cushions are stronger and much reliable. All cushions are completely air-tight and leak-proof, filled with low density polystyrene mini-spheres. A corner grommet allows for easy storage. Our vacuum cushions are designed for long-term multi-patient use. The nylon shell can be easily cleaned between patient use. The durable design ensures that cushions need to be replaced less often. Our vacuum cushions come with replaceable valves. Additionally, the cushions can be equipped with valves to fit all standard vacbag systems for additional cost-saving measures.

- Designed for long-term-multi-patient use
- Strong, durable nylon shell to prevent punctures and tears
- Leak proof and airtight
- Ultra rigid and firm for stability
- Available with valves to fit all standard vacbag systems
- Comes with trueline indexing holes and compatible with Elekta Body Fix System





Patient with Body Cushion

The vacuum bag fits Elekta BodyFix System

Available as a complete package including Cushion Manager Support, Stainless Steel Stand, 'S' Hook for hanging and dual functioning pump.



R7202-9NL: H&S Support



Trueline[™] Indexing (Printed Marking Scale)



Angled Valve for convenient use



Angled Valve for convenient use



Pelvic Cushion with Centre Cutout



Pelvic Cushions



R7505-30NL for Body Support (30 Liter fill)



TruelineTM Indexing (Printed Marking Scale)



2-Way Vacuum Pump

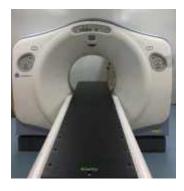


Cushion Storage Cart

Klarity ID	Dimension	Capacity	Description
R7100-01	20x25cm	1 liter fill	Vacuum Cushion for Head Support
R7101-03	30x40cm	3 liter fill	Vacuum Cushion for Head Support
R7200-05	50x70cm	5 liter fill	Vacuum Cushion for Head & Shoulder Support
R7202-09	67x62cm	9 liter fill	Vacuum Cushion for Head & Shoulder Support
R7301-15	50x70cm	15 liter fill	Vacuum Cushion for Breast Support
R7407-30	100x70cm	30 liter fill	Vacuum Cushion for Pelvic Support (25x25cm center cut)
R7504-30	100x70cm	30 liter fill	Vacuum Cushion for Body Support
R7504-35	100x70cm	35 liter fill	Vacuum Cushion for Body Support
R7504-35B	100x70cm	35 liter fill	Vacuum Cushion for Body Support with indexing bar
R7505-30	100x80cm	30 liter fill	Vacuum Cushion for Body Support
R7506-40	100x100cm	40 liter fill	Vacuum Cushion for Body Support
R7512-55	150x80cm	55 liter fill	Vacuum Cushion for Body Support
R7524-120	200x100cm	120 liter fill	Vacuum Cushion for Body Support
R7626-20	104x53cm	20 liter fill	Wing Board Vacuum Cushion for Body Support

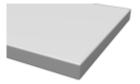
CT Flat Carbon Fibre Couch Top





Carbon Fiber flat couch tops securely lock onto a cradle, providing a surface consistent with treatment couch tops. They are lightweight and durable, allowing them to be easily removed or reinserted for use on non-dedicated imaging machines. The attachment mechanics ensure that once the top is reinserted on the cradle, it will be level and stable throughout the imaging process. Overlays are made of carbon fiber. All overlays have marking for indexing identical to Linac Couch Top. Provides reproducibility of patient positioning during treatment on Linear Accelerator.

Choose the couch type, (usually same design as the Linac couch top).





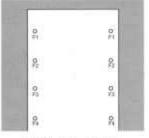


Non-indexed Couch types

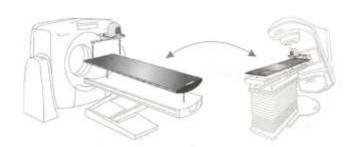
Exact indexing Couch types

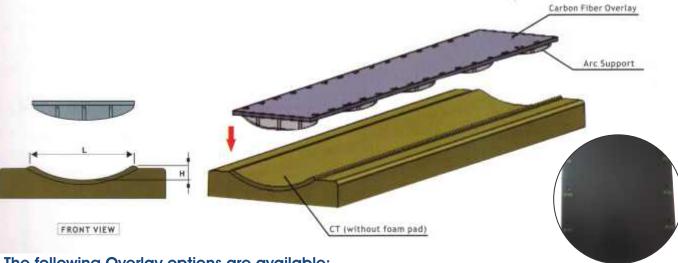
Ibeam, Novalis indexing Couch types





Elekta Linac Couch





The following Overlay options are available:

- 1. Hitachi Pronto
- 2. Philips Large Aperture
- 3. Philips Aquilion
- 4. Toshiba Ac16
- 5. Philips ECT with 16 rows small aperture
- 6. Philips Digital Diagnost DR

- 7. GE light speed VCT
- 8. GE PET/CT Discovery VCT
- 9. GE BrightSpeed with 4 rows
- 10. Siemens Somatom Sensation
- 11. Siemens Somatom Definition
- 12. Custom Design



Indexing Rods

MRI Medibord Flat Couch Top





The Klarity MRI overlay provides a clean and flat surface for accurate patient positioning and indexation to enable optimum repeatability between imaging and treatment. Image fusion with CT images can be undertaken very quickly as table curvature is eliminated.

The Overlay covers the entire cushioned patient area and is raised 10mm above the top level of the rails. Bright colored spacers locate the overlay perfectly parallel to the table. The width matches most linear accelerator systems, providing broad compatibility.

It's low weight of less than 11lbs and its high resilience make the overlay highly suitable for busy MRI rooms, where RT planning in combined with diagnostic scans and the overlay needs to be removed on a regular basis. The head end has a cutout to fit around the head coil unit. It also provides semi-circular recessed indexing points for two-pin indexing bars and other positioning accessories. The Overlay has low attenuation. It is fully MRI compatible, RF compatible, and nonconductive.

- Interlocks onto existing table
- Cushions and main coils stay in place
- Full table size with cutout for head coil
- Low height of 2cm
- High rigidity
- Available for all models of Siemens, GE, Philips MRIs and others Dimensions: 172.6cm length x 53cm width x 2cm thickness

MR couch top and holder of radiofrequency coil





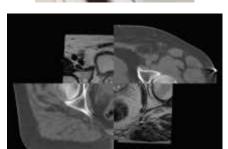








Avior+P1 (MRI Overlay) for Philips Ingenuity MRI System



Kuma MRI Overlay for GE Signa



Mirak S1 for Siemens Magnetom Skyra and Aera MRI Machines KSSMR-01

Digital Water Bath

Digitally controlled (LED) water bath can accommodate largest thermoplastic sheets up to Hip-Pelvic of any brand. Microprocessor controlled temperature setting, drainage valve, full stainless steel construction are standard features.

- Complete Stainless Steel 304 construction, tank and exteriors
- Large enough to accommodate all bigger sheets of AIO Base Plate
- Digital 'LED' readout and microprocessor based temperature controls
- Metallic drainage tap

Dimension: 35" (L) x 24" (W) x 10.5" (H) (Outer) 24" (L) x 20.5" (W) x 6.75" (D) (Inner)



Tips for making a perfect mask

Adjust temperature using microprocessor based switch, to 70°C. Set base plate on treatment table with suitable head rest. Position the patient on table. Place the precut into heated water until thermoplastic becomes completely transparent (about 3-4 minutes). Lift the precut from water and quickly and gently shake off excess water. Centre the mask on body part. Tilting slightly downward, gently and quickly mold the thermoplastic to the contours of the patient's body. As thermoplastic cools, it becomes rigid and returns to its original white colour. Do not remove the frame until it cools completely and rests on the patient for at least 5 minutes. Thermoplastic will shrink slightly during cooling process. Removing frame too soon may result in excess shrinkage and patient discomfort when refitting. If desired, treatment portals can be cut after the frame has hardened.



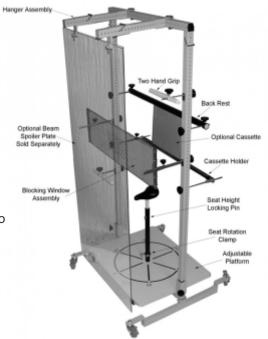
The 'Klarity' Oven Themoplastic Warming Oven

- · Safe, Dry Heat
- Simple Operation
- No Water, No Bacteria

Total Body Irradiation System (MEC)

Designed to facilitates treatment of patients in a standing but supported position. Accurate and safe mounting of shielding blocks. Patient comfort is aided by an adjustable bicycle seat. Lung blocks can be mounted directly onto adjustable perforated acrylic sheet in the front.

A scatter screen can be placed in front of patient where increased surface exposure is prescribed. An adjustable holding bar is provided for enhanced stability.



Klarity Thermoplastic Masks





Klarity Masks are a new higher standard for thermoplastic immobilization. Klarity masks are non-stick, stronger, with lower shrinkage than all other standard masks. IMRT AccuPerfTM pattern offer enhanced perforation designes for higher fixation strength, minimal bolus effect and better patient comfort. Klarity offer largest variety of masks for *S-Type*, *U-Frame*, *O-Type*, *E-Type*, *V-Type*, *P-Type*, *Stereotactic*, *BoS* and various frame types.

Klarity products undergo the most stringent testing methods to ensure the highest quality. All Items are non-toxic thermoplastic compounds manufactured to ISO 13485 specifications and comply with EC and FDA regulations. The Klarity thermoplastics have been analytically tested for Non-allergic Testing and found having 'No Antigenic Protein' by Akron Rubber Development Laboratory Inc., Ohio 44305, USA. Accreditated by the American Association of Laboratory Accreditation, District of Columbia,



O-Type Thermoplastic Masks

(Designed to fit 'Klarity' & 'Orfit' Standard & AIO Baseplates)





Klarity O-Type masks fit all standard O-Type baseplates (Orfit-Type) from Klarity, Orfit (Standard and AIO) and others. Klarity O-Type masks feature exclusive $\mathsf{EZ}\text{-}\mathsf{Grip}^\mathsf{TM}$ clamps and are available in standard white and Klarity Green TM . Both white and green masks offer strong, rigid immobilization and easy moldability.

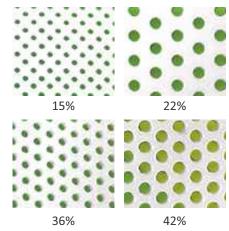


As major advance in thermoplastic design, KLARITY GREEN answers our industry's need for masks with less shrinkage, stronger confirming and with zero tackiness. No more shims and spacers, masks form securely and comfortably without creating a

"waffleface". KLARITY GREEN won't stick to skin, hair or to itself... no more throwing out a faulty mask with edges stuck together. IMRT accuracy is enhanced with better fitting masks. Try for yourself and see how KLARITY GREEN is becoming the new higher

Large Thermoplastic Sheets

ID	Thickness	Perforation	Dimensions
R-1600A	1.6mm	Non perf.	460mm×610mm, 18"×24"
R-1636A	1.6mm	36% perf.	460mm×610mm, 18"×24"
R-2022A	2.0mm	22% perf.	460mm×610mm, 18"×24"
R-2422A	2.4mm	22% perf.	460mm×610mm, 18"×24"
R-2436A	2.4mm	36% perf.	460mm×610mm, 18"×24"
R-3242A	3.2mm	42% perf.	460mm×610mm, 18"×24"



S-Type Thermoplastic Masks

(Designed to fit 'Klarity', 'Civco', 'Bionix', 'Qfix' & others S-type Baseplates)



Klarity S-type masks (push-pin) fit all standard S-Type baseplates from Klarity, CIVCO and others. Klarity S-Type masks are available in standard white and Klarity Green[™]. Both white and green masks offer strong, rigid immobilization and easy moldability.





P-Type Thermoplastic Masks

(Designed to fit 'Macromedics', 'Sinmed', 'PosiFix' & 'Klarity' Baseplates)

P-Type Masks are available in Green or White, with and without profiles.

Klarity P-Type masks fit all standard P-Type baseplates (Posifix-Type) from Klarity, Civco and others, and offer the highest quality of thermoplastic masks. Klarity P-type masks are available in standard white, and KlarityGreen™. Both white and green masks offer strong, rigid immobilization and easy moldability. KlarityGreen™ masks are non-stick and will not adhere to hair, skin, or to itself. Mask edges can be pulled apart if they connect. Klarity P-Type masks are available in the following sizes and perforation pattern. Our IMRT AccuPerf™ patterns offer enhanced perforation designs for higher fixation strength, minimal bolus effect, and better patient comfort.





R-PRT6-2422C



V-Type Thermoplastic Masks

(For all standard V-Type baseplates (Versa-Type) from 'Klarity' (Optek), 'Bionix' and others)

Klarity V-Type masks fit all standard V-Type baseplates (Versa-Type) from Klarity, Bionix and others, and are available in standard white, and KlarityGreen™. Both white and green masks offer strong, rigid immobilization and easy moldability. KlarityGreen™ masks are non-stick and will not adhere to hair, skin, or to itself. Klarity S-Type masks are available in the following sizes and perforation pattern. Our IMRT AccuPerf™ patterns offer enhanced perforation designs for higher fixation strength, minimal bolus effect, and better patient comfort.





RG460-4VHT; 2.4mm



RG461-4VHT; 3.2mm



RG460-4VT; 2.4mm



RG461-4VT; 3.2mm

E-Type Thermoplastic Masks

(Designed to fit 'Elekta' Baseplates)

Klarity Green[™] masks for Elekta's Leksell Gamma Knife[®] Icon[™] System, Fraxion[™], and Head**STEP**[™] systems

Klarity offers E-Type masks for Elekta cranial, head, and neck positioning systems for SRT and SRS, including the Leksell Gamma Knife® Icon™ System. Klarity masks for Elekta Fraxion, HeadSTEP, and Icon systems are made of Klarity LiteGreen™ thermoplastic for strong, rigid immobilization and easy moldability. The LiteGreen™ material is non-stick and will not adhere to hair, skin, or to itself. Mask edges can be pulled apart if they connect. Klarity E-Type masks are available in the following sizes and perforation pattern.





for Elekta Leksell Gamma Knife® Icon™ System

Masks for Elekta Head Step™ System

Masks for Elekta Fraxion™ System









RLG-ESH1-2412CN

RLG-ESH2-2412CN

RLG-ELH-2412CN

RLG-ELS-2412CN

BoS Masks (For Proton Therapy)

Klarity offers BoS masks for Proton Therapy. Klarity BoS masks are available in KlarityGreen™ for ultra strong support, rigid immobilization and easy moldability. A longer working time means a better fitting mask with minimal shrinkage.

KlarityGreen™ masks are non-stick and will not adhere to hair, skin, or to itself. Mask edges can be pulled apart if they connect. Klarity BoS masks are available in the following sizes.



RG-BHS-3242 (Small Head)



RG-BHM-3242 (Medium Head)

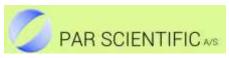


RG-BHL-3242 (Large Head & Shoulder Mask)



RG-BHS-A2436 (Pediatric Head Masks)

Custom Blocking



www.parscientific.com

The delivery of IMRT calculated dose profiles can be achieved in two ways: MLC or fixed / solid beam modifiers. The MLC is known for its authomatic set-ups. Looking at the total time for dose delivery, the fixed beam modifier technique shows lower total treatment per patient. Similar and different clinical studies has clearly demonstrated that solid beam modifiers are much superior to MLC when resolution of the calculated smooth fluence map is tested. The QA for fixed beam modifiers is less demanding than for MLC. Please

study solid beam modifier vs MLC sheet describing these vital

parameters.

CNC Block Milling System

XYZ axis automatic CNC machine for filter production. Compete software package (windows). Standard ASCII File Formats. A small compact table model.

Active cutting area: 300x200mm adjust

Styrofoam block size: maximum 500x250 mm

Maximum drilling depth: 90mm

Cabinet Size: L.: 610mm, W.: 650mm, H.: 715mm

Cabinet weight: 102 kg





ACD-4 MK 5 Block Cutting Unit

Small and extremely reliable maintenance free version. Block cutter with touch screen for adjustments. Most modern software version with all clinical software tools. Full dicomRT interface via shared directories or dicom deamon (optional). The system integrates full patient library features facilitating the process of creating filters and mounting them on tray or applicator. All though multi leaf collimators have been introduced, RT departments still opt for automatic cutters for irregular blocks.

- Cutting accuracy: better than 0,5mm
- Cutting speed: 10mm per sec.-adjust
- Active cutting area: 380x380mm adjust
- Styrofoam block size: maximum 450×440mm
- Power supply: 240 VAC
- Cabinet size: L.: 72 cm, W.: 38 cm, H.: 72 cm
- Cabinet weight: 30 kg
- Software: full windows version with dicomRT inertface

Meditronix Manual Styrofoam Cutter

'Medironix' Manual Styrofoam Cutter is the specialised equipment for the radiation therapy department to cut high consistency block foam mold in CRT. It is easily adjustable to accommodate many source-to-tray and source-to-film distances. A verification light allow the operator to check the accuracy of each cut before the blocks are cast. Hot wire with a tension-adjustable organ to ensure that cutting surface. Lowest price in the industry.



- Stand alone manually controlled high precision hot wire cutter for photons
- Adjustable source-to-tray and source-to-film distances
- Verification light to check the accuracy of each cut before the block is cast
- Stainless Steel 304 structure

Specifications:

Maximum cutting area with one block : 380x380mm
 Maximum distance of source-to-film : 1400mm
 Maximum distance of source-to-tray : 560mm
 Maximum cutting thickness : 140mm

System dimensions (LxWxH) : 700x600x2300mm





Meditronix Electron Foam Cutter

This is a low-cost, counter-top hot-wire cutter.

Features:

- Table top model
- Provides white acrylic top as cutting surface
- The unit has an easily replaceable Nic-Chrome cutting wire

Imported Blue Styrofoam for Photons & Electrons

High density 40 PSI dow® Styrofoam is designed to provide a flat surface essential to the shielding block pouring process. Expressly tailored to offer dimensional uniformality and very high density. Available in a complete range of dimensions and thickness for photons and electrons.

For photons 12"x12"x3" pack of 30 foams For electrons 12"x12"x¾" pack of 30 foams



Styrofoam Blocks (For electrons 12"x12"x34")



Styrofoam Blocks (For photons 12"x12"x3")

Alloy Melter (Radimage)

Highly durable melter with heavy gauge stainless steel 304 inner and outer walls. Full trap ceramic heaters, temperature control and internal heater fitted ball valve dispenser to avoid solidification of alloy inside tap.





Low & Medium Melt Alloy (Radimage)

Low melt (70°C) or medium melt (95°C) cadmium free alloy. Available in kilograms.

Alloy Colling Plates (Radimage)

Alloy cooling plates are available in two variants. 2x1ft. Water cooling plate and compressor based refrigerated cooling system.



Water Cooling Plate



Shielding trays (Radimage)

Available with standard or custom hole and slot pattern in polycarbonate or acrylic for any brand of linac or cobalt.











Block Compressor & Electron Molds (Radimage)

Sturdy metallic made block compressor for holding electron and photon foams, while pouring alloy. Electron molds in 5, 10, 15, 20, 25cm field sizes made of specially formulated high temperature with-standing polymer silicon rubber.





Tools & Accessories (Radimage)

Stainless steel mug for pouring alloy, drill machine with drill bits, digital thermometer, wrench, coarse file, soldering iron, hammer, screw driver, nuts and bolts etc.











Block Casting System (Radimage)



- Designed to provide clean working conditions during block casting
- 4'W x 2'6"D x 6'H; wooden structure with mica finish
- Stainless Steel 304 work surface
- Electric Vent Hood for absorbing fumes and heat
- HEPA & Charcoal filter assembly fitted
- Fluorescent light inside chamber
- Cabinet below work surface
- 10 feet exhaust pipe standard, additional length available

Work Station (Radimage)



- Designed to provide good working conditions during block making
- 4'W x 2'6"D x 6'H; wooden structure with mica finish
- Stainless Steel 304 work surface
- Heavy Duty Drill Press and Vacuum Cleaner fitted
- Fluorescent light inside chamber
- Cabinet below work surface

Tray Storage Cabinet (Radimage)



- Constructed of sturdy wood with mica finish
- Aluninium side rails to hold shielding trays
- Lockable caster wheels
- Side handles to move the cabinet
- Custom designed for required number of tray slots

Block Verification Unit (Radimage)



Offers quick and precise method for checking tray mounted shielding blocks. It features a high intensity tungsten light source with fine X, Y adjustments. Linear bearing carriage for smooth motion and precision distance indicator to tray and film.

Manual Tissue Compensator Set (Radimage)

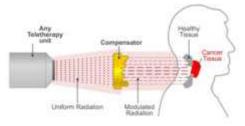
Adjustable zig made of acrylic sheets and brass rods. Acrylic sheets of 33 x 33 cm x 5 mm (custom sizes available).

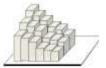
Compensator pieces - made of aluminium of 9x9 mm and various thickness: 2, 3, 5, 8, 10, 15, 20, 25, 30, 35, 40mm, storage box, adhesive, grid charts.











Secondary Standard Dosimeter



Keeping the tradition of providing excellent products for Dosimetry, QA and patient positioning for over three decades, Radimage Healthcare India Pvt. Ltd. (Meditronix Corporation) proudly announce indigenous manufacturing of complete range of Dosimetry products, including Electrometer, Ion Chambers, Well Chamber, Water Phantoms, Ion Chamber based Area Monitors, Last Man out Switch, extension cables etc. We undertake repairs for chambers and cables of any brand. The Dosimetry System is initially checked and calibrated at BARC, Mumbai.

Radimage Digital Electrometer* RH-DEM 0517

Designed for Radiotherapy measurements. Its operation is simple, using a single button to start/stop and reset the measurement. The quantity measured is charge, with a built-in precision digital timer which helps to measure the signal current also. It has a wide measurement range extending from pico coulomb to micro coulomb thus making it useful for pinpoint dosimetry chambers, Farmer chamber and Well type chamber for LDR & HDR Brachytherapy work. It has built-in High voltage supply directly applied to lonization Chamber, which can be set as \pm V and \pm V/2 for the evaluation of $k_{\text{saturation}}$. Being indigenous and use of modular design makes the servicing and maintenance fast and economical.



Specifications

<i>El</i> ectrometer	RH-DEM0517
Ch <i>ar</i> ge Ra <i>nges</i>	Three ranges, pC, nC & mC Selectable from the front panel
Display	4½ digit LCD
(i)pC range	0-19999pC
Resolution	I _P C
(ii) nC range	0-199.99nC
Resolution	0.01nC
(i <i>ii</i>) mC ra <i>n</i> ge	0-19.999 mC
Resolution	0.001 mC
Linearity	0.01% in all ranges
Timer Range	0-999.9 s
Resolution	0.1s
Display	4digit LED
Current measurement	Measurement of rate of charge
Operation	Start/ Stop/Reset with single switch for charge and timer
Leakage current	Adjustable to less than 5 fA @ 20°C from Front Panel
Chamber Bias voltage	Nominal $\pm 300 \text{V}, \pm 150 \text{V}$ selectable from the front panel
Mains power	220V
Dimensions	25cm(W)X27cm(L)X12cm(h)
Weight	2kg

^{*}Can be supplied with ADCL USA calibration (optional) or BARC Calibration, date to be appointed by the user.



Radimage 0.6cc Farmer Type Ion Chamber* RH-FC 0117

Indigenously designed and developed to suit the Radiotherapy dosimetry applications. The measuring volume is vented to ambient and requires, Air density correction for accurate measurements. Wide energy range extending from 200kev to 35Mev. Standard outer dimensions, compatible with Farmer Chambers of other manufacturers. Integral 10 metre long triaxial cable, or can be customised as per the requirements.

Specifications

opeomodiio ii		
Chamber type	RH-FC 011 7	
Cavity Volume	0.6cm³ nominal	
Wall Material	PMMA/Graphite*	
Wall thickness	0.4mm	
Electrode	Aluminium	
Cavity length	24mm	
Outer diameter	7mm	
Build-up Cap	Delrin	
Polarizing Voltage	Maximum 500V	
Chamber Leakage	± 2fA	
Energy Range	I40keV-50MeV	
Connector	Triaxial TNC or BNC	



Radimage Brachytherapy Well Chamber* (RH-WC 12017)

Indigenous Well type chamber provides a very convenient means for the measurement of Reference Air Kerma Rate of Brachytherapy sources used for cancer treatment. It is High sensitivity chamber as a result of higher absolute efficiency (close to unity) makes it a precise, linear, stable and reliable equipment. It is very rugged and has a long life. It is ideal for LDR and HDR.

Specifications

Chamber type	RH-WC 12 017
Active Volume	300 cm ³
Range	ImCi to 24 Ci Ir-192 HDR
Height	158 mm
Diam eter	I02mm
Source Holder	HDR Ir-192 *
Polarizing Voltage	Maximum ±500V
Chamber Leakage	±2fA
Triaxial Cable	I0m
Connector	Triaxial threaded TNC or BNC

^{*}Can be supplied with ADCL USA calibration (optional) or BARC Calibration, date to be appointed by the user.

Radimage Water Phantoms

- Available in wide variety and application needs
- Fixed depth chamber holder; 30cm³ or any size
- Variable depth-2D; with crank assembly, any size
- D10xD20 water filled phantom
- Dual chamber water phantom
- Motorised 2D phantom and more.....







30cm3 Phantom



D10×D20 Phantom

^{*}Specify the required wall material



Radimage Gamma Area Monitor (Ion Chamber Based) RH-AM 0417

Gamma Area Monitor is an Air Equivalent ionisation chamber based Radiation monitor, which is suitable for continuous gamma rays and also for Pulsed X-ray radiation beams of Linear Accelerators. Ionisation chamber is a very rugged, high precision, linear, stable and reliable radiation detector. Air Equivalent design makes it energy independent over a very wide energy range. It is free from dead time losses which makes it extremely durable and has long life detector. Simple associated electronics further enhances its reliability. It is designed and assembled fully indigenously, hence servicing and maintenance is quick and economical.

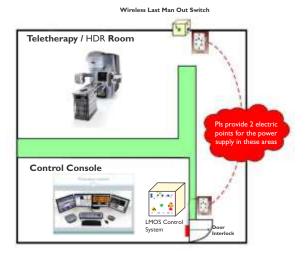


Specifications

Detector	Hermetically sealed A ir Equivalent lonisation chamber
Range	0-200mR/h (Higher ranges are available on demand) Flickering display in case of over range. No Fall back on over load.
Display	3½ digit LED
Time constant	5 seconds
Resolution	0.1mR/h
Linearity	±1% over the full range
Energy Response	±2% 200keV –35MeV
Operation	Auto Reset
Alarm	Buzzer with adjustable radiation level from 0-200mR/h.
Outputs	Two independent NO/NC Relay contacts for door inter lock etc
Mains power	220V
Dimen sions	Height: 250mm, Width: 160mm, Depth: 90 mm
In st allatio n	Wall Mounting
Weight	Approx. I.0kg

Radimage Last Man Out Switch RH-LM0817

Advised by AERB "Last Man Out Switch" (LMOS) is designed for radiation safety. Soon after patient setup, the technician needs to press the LMOS after ensuring that nobody is present in the treatment room. This activates an



audio-visual alarm for 30 seconds and during this period the operator needs to close the door and switch "ON" the beam. Works on latest micro controller based technology.



*Can be supplied with ADCL USA calibration (optional) or BARC Calibration, date to be appointed by the user.

TLD Reader



www.rexon.com

- Processes all TLD dosimeters powder, chips, ribbons, pellets, disk, rods, and micro cubes, custom shapes.
- Direct contact planchet heating for best heat transfer and accuracy. 9ms response time. Ir thermometry. Best in the
- Low cost bar coded Ni-steel planchets. Not platinum, unless specified.
- Bar coded planchet 600°C for custodial track of dosimeters. Only one in TLD dosimetry systems.
- Planchets easily interchangeable by user simply pick one up and insert any other type in the drawer. NO VACUUMING!!!!
- Weight input from electronic balance for powder sample correlation - standard PC programmable powder vibrator 0 to 25 sec.
 - Bar code scanner & auto N2 shut off included as standard equipment. No hot gas heating, Save on N2 cost.
- Display digitilized glow curve and temperature profiles- 10 nodes available for programming time temperature heating profiles
- Unlimited configuration and calibration for any unit of measurement
- Simple and accurate analysis. Verification for a built-in quality control check.
- Reference light source for real time PMT drift correction
- Dosimeter correction factor storage and automatic call up
- Internal micro processor (C/C++) RS 232 and USB Connection PC: operator in windows XP®, NT and windows 7 OS
- Automated drawer, PC controlled. Avoid costly Carpal tunnel workmen's claims by operators
- Laptop or desktop control. Advanced GUI.



UL-320 Automated Drawer Reader



Programmable Annealing Oven



Full Automated Reader



Chip Planchet with Barcode



Chip Planchet

with Barcode



Extremity Dosimeter



TLD Powder



Powder Dispenser



Disk Placket with Barcode



Vacuum Twizer



Discs / Pellets



Chips, Rods, Ribbons

Radiation Monitoring



Ludlum Ion Chamber Survey Meter (Model 9DP)

The Ludlum Model 9DP, Pressurized ion chamber meter, provides highly sensitive measurements of exposure and exposure rate. It can simultaneously display the exposure rate and integrated value or the highest rate seen by the instrument. The integrated value can be reset (if desired) using one of the four convenient front-panel mounted buttons.

Features

- 0 to 50 mSv/h (0 to 5 R/hr) Range with μR/hr Sensitivity
- Sunlight Readable Color Display
- Auto Zeroing & Ranging
- Rechargeable Batteries
- Alarming Capability
- Rate, Integrate & Peak Hold Readouts
- Data Logging
- USB Connectivity
- Free Firmware Updates through Internet



RADIATION DETECTED	gamma & Xays above 25 keV; beta above 1 MeV
OPERATING RANGES	With R/hr units 0-500 μR/hr, θ5 mR/hr, 0-50 mR/hr, 0-500 mR /hr, θ5 R/hr
	With Sv/h units 0–5 μ Sv/h, 0-50 μ Sv/h, 0-500 μ Sv/h, 0-50 mSv/h, 0-50 mSv/h
CHAMBER V OLUME	230 cm³ (14 in³) volume pressurized to 8 atmospheres (117 psi)
ACCURACY	+/-10%
RESPONSE TIME	5 seconds in lowest range, 2 seconds in all other ranges, when measuring from 10% to 90% of
	final value
MEASUREMENT READOU	simultaneous display ofate, integrated reading, and highest rate (peak hold)
LCD DI S PL AY	8.9 cm (3.5 in.) diagonal, 240 x 320 (H x W) pixels, TFT active matrix, 262,000 colors, 220 cd/m ²
ALA RM S	two levels of radiation alarms available, each are user programmable
AUTOMATIC FUETIONS	auto ranging, auto zeroing, auto LCD backlighting
AUDIO OUTPUTS	built-in unimorph speaker, > 60 dB at 0.6 meters (2 ft.)





The Model 23-1 Electronic Personal Dosimeter (Ludlum) is a solid and lightweight (55.9 g/2 oz) pen-type personal dosimeter. It can be used for measuring gamma or X-ray radiation in medical and laboratory environments or other areas where personal radiation monitoring is desired or required.

- 600 record data logging option available
- low weight and slim design
- audio alarm
- silicon semiconductor detector
- gamma and X-ray (35 keV to 3 MeV)

Personal Radiation Monitor (Model 25)

The Model 25 is a conveniently small-sized device designed to warn users any time they are in a potentially harmful radiation environment. The unit will automatically alarm with a loud audible signal and blinking display when either the dose rate (0.01 mR/hr to 999 R/hr) or accumulated dose (0 to 1999 R) set points are exceeded.







Ludlum Digital Area (Zone) Monitor (Model 375)

The Model 375 is a versatile, compact, and very affordable digital electronic controller designed for monitoring radiation in areas. Its simple design accommodates many different detectors suiting a wide variety of applications, and is equipped with a local readout and alarms. These versatile units may also be connected to an optional auxiliary indicator/annunciators for alerting personnel at remote locations.

- programmable units of measure and alarms
- battery backup
- four-digit LED display with two cm digits
- displays μR/hr, mR/hr, R/hr, μSv/h, mSv/h, Sv/h, μrem/hr, mrem/hr, rem/hr, cpm, cps, and others





Ludlum Neutron Survey Meter (Model 30-7)

The Model 30-7 is a handheld, lightweight neutron dose detector. The operator is able to adjust the viewing angle of the meter to maximize a comfortable viewing angle.

- Neutron Dose Rate & Under 4.5 kg (10 lb)
- Adjustable Viewing Angle for Display Unit
- Moderated Neutron Detector
- Range: 0–100 mSv/h (0–10,000 mrem/hr)
- Display Unit Detaches for Greater Versatility
- Low-Weight Unit Provides Same Readings as Standard REM-ball from Bare AmBe and Lower Energies
- Includes Adjustable Shoulder Strap

Ludlum Survey Meter (Model 9-3)

The Ludlum 9-3 ion chamber is a rugged air ionization chamber for performing beta-gamma dose rate measurements over a five-decade span ranging from background to 50,000 mR/hr (500 mSv/h). The chamber wall, including the instrument case, is 1000 mg/cm^2 . A 1000 mg/cm^2 retractable beta shield allows beta measurement with a 7 mg/cm² window. The six-position switch selects Off, x10K, x1K, x100, x10 and x1.







Arrowtech Analogue Pocket Dosimeter & Charger

The Direct-Reading Dosimeter is a pocket-size, carbon-fiber electroscope with an ion chamber for detecting and indication of integrated exposure to Gamma and X-Ray radiation. It has a thin wall which permits the penetration and detection of radiation. This model comes with a hardened sapphire window that won't scratch even in the toughest of conditions.

Radiation Detected: Gamma and X-Ray from 16 keV to 6 MeV

Range: 0-200mR

Detector: Fiber-Electrometer mounted in an Electrically Conductive Plastic Ion

Chambei

Detector Housing: Very low permeability plastics - Hermetically-Sealed

Accuracy: +/- 10% of true exposure

Model 909B Dosimeter Charger: The Model 909B Charger LED Reading Light reduces re-zeroing time and effort by eliminating the need to remove the dosimeter from the Charger for reading. Simply view the scale while the dosimeter is resting lightly on the charger contact after re-zeroing.

Radiation Monitoring

Ludlum Model 3000 Digital Survey Meter

- Large Backlit LCD for Ease of Reading
- Auto Ranging
- Compatible Detectors : GM, Proportional, Scintillation

The Ludlum Model 3000 is a versatile, lightweight, ergonomically-designed instrument used with an external detector for alpha, beta, or gamma radiation survey. Three modes of operation - RATE, MAX, and COUNT - are available for the user. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, mR/hr, or μ Sv/h units. The user can switch between two sets of chosen units by simply pressing the Units button.











Ludlum Model 79/2 Stretch Scope Survey Meter

- Lightweight Approximately 1/3 the Weight of Comparable Instruments
- 1.1 m (45 in.) to 4.5 m (177 in.) Telescoping Carbon Fiber Pole
- Energy Compensated GM Detector
- Range: 0.001 mSv/h to 0.04 Sv/h (0.1 mR/hr to 4 R/hr)
- 1 μSv/h (0.1 mR/hr) Display Resolution

Ludlum Model 52-1, 52-5 & 52-6 Series Portable Portal Monitors

- Portable
- 61 cm (24 in.) or 81.3 cm (32 in.) Wide Opening
- Plastic Scintillator Detectors
- Built-in Person Counter
- Background Updating and Subtraction
- Sets Up In Minutes
- Easy to Operate

The non-volatile parameters are preset at the factory to detect a 1.0 μ Ci 137Cs source in a 10 μ R/hr background field. The electronics are microprocessor-based for ease of setup and reliability. Status LEDs indicate count-cycle status. Audible signals accompany the LEDs for additional indication. Detector counts, background, and all parameters may be viewed on the Liquid Crystal Display (LCD). All setup is accomplished by way of pushbuttons located below the LCD.







Radiation Monitoring

451P Pressurized µR Ion Chamber Radiation Survey Meter

The auto-ranging 451P ion chamber radiation survey meter features a pressurized ionization chamber, providing enhanced sensitivity (μ R resolution) and improved energy response to measure radiation rate and dose from x-ray and gamma sources.

Key Features

- High sensitivity μR measurements of rate and dose simultaneously, with the capability to record peak rate
- Ergonomic, anti-fatigue handle with replaceable grip, wrist strap and tripod mount
- Programmable flashing LCD display and audible alarm
- Easily-accessible battery door (operated by two 9-volt alkaline batteries) on the outside of the bottom case
- RS-232 communications interface with optional Windowsbased Excel add-in for data logging
- Available with dose equivalent energy response (SI units)

Product Specifications

Radiation detected	Beta above 1 MeV,Gamma and x,-rays above 25 keV
Operating ranges	0 to 500 μ R/h or 0 to 5 μ Sv/h 0 to 5 mR/h or 0 to 50 μ Sv/h 0 to 50 mR/h or 0 to 500 mSv/h 0 to 500 mR/h or 0 to 5 mSv/h 0 to 5 R/h or 0 to 50 mSv/h
Accuracy	Within 10% of reading between 10% and 100% of full-scale indication on any range, exclusive of energy response.



451B Ionization Chamber Survey Meter with Beta Slide

The auto-ranging 451B ion chamber survey meter measures radiation rate and accumulated dose from beta, gamma and x-ray radiation sources.

Product Specifications

Radiation detected	Alpha above 7.5 MeV, Beta above 100 keV, and Gamma above 7 keV
Operating ranges	0 to 50 R/h

Digital Pocket Dosimeter (Bleeper)

The Bleeper is a simple, convenient instrument for alerting personnel to the presence of x-ray or gamma radiation. The instrument operates continuously and provides a clear, audible indication of dose rates.

While it produces a "bleep every 15 minutes for normal background radiation, the frequency of the "bleeps increases with the dose rate until a continuous tone is achieved in high radiation fields.

Sensitivity to background radiation:	Approx. 1 bleep per 15 minutes. 1 mR/hr: Approx. 1 bleep per 20 seconds. 100 mR/hr and up: Continuous signal (to at least 600 R/hr)
Energy range:	45 keV/h to 6 MeV





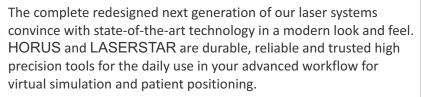
A2J HORUS Mobile Laser System



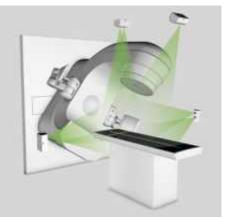


www.a2jlaser.com

Horus and Laserstar The Perfect Combination for Patient Marking and Positioning in Radiotherapy



A2J HORUS Moving Laser System - The moveable laser lines are supporting your radiotherapy treatment planning for a precise and highly accurate marking on the patient skin.



Technical DATA Horus				
HORUS Laser color (wavelength)	red (638 nm), green (520 nm)			
Line width (up to 4 m distance)	< 1 mm			
Line length (a t 3 m d is ta nce)	> 3 m			
Laser cl a ss	2			
Posit ioning accur a cy	± 0.1 mm			
Projection accuracy (up to 4 m distance)	± 0.5 mm			
Travel range	700 mm			
Pow er sup ply	100 – 240 V AC			
Dimensions (H x W x D)ser rail	1355 x 155 x 145 mm			
Weight Laser rail	20 kg			



Control Tablet PC

Horus 1

- 1 mobile sagittal laser
- 2 fixed cross beam lasers for horizontal and transversal lines
- 1 additional fixed transverse laser in the ceiling device to prevent shadow effects

Horus 3

- 1 mobile sagittal laser
- 2 mobile Horizontal laser
- 3 fixed transverse laser

Horus 5

- 1 mobile sagittal laser
- 2 mobile Horizontal laser
- 2 mobile transverse laser



AJ Hospital, Mangalore (India)



Horus Range Set-up

A2J LASERSTAR Fixed Laser System





www.a2jlaser.com

With its red or green laser lines and crosses LASERSTAR ensures exact and reproducible positioning to the LINAC isocenter. For patient alignment in all three body planes the system consists of at least three LASERSTAR devices. LASERSTAR can be mounted at the ceiling and wall by using the appropriate brackets. If a wall mount is not possible the laser can be mounted to a floor stand.

TECHNICAL DATA LASERSTAR				
Laser color (wavelength)	Red (638 nm), green (529 nm)			
Linw width (up to 4 m distance)	< 1nm			
Line length (at 3 m distance)	>3 m			
Laser class	2			
Operating temperature	15 – 30°C			
Power supply	100 – 204 V AC			
Dimensions (L x W x D)	180 x 112 x 81 mm			
Weight	1.4 kg			







Iso Align Alignment Device (Imported)

- Radiation and light-field congruence
- Collimator isocentricity
- Collimator field size accuracy
- Gantry isocentricity
- Table isocentricity
- ODI Accuracy and laser alignments

This precision quality control tools is deal for daily, weekly and monthly quality control assessments of all mechanical geometrical parameters of linear accelerators or therapy units.

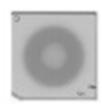
This screen is inscribed with lines precisely defining 5 x 5, 10×10 , 15×15 , and 20×20 cm fields. The screen can rotate about its axis in increments of 45° . Tungsten /lead balls are embedded in the screen, when exposed they project a sharp image on the film. A 10×12 inch ready pack film can be inserted in between the two plates. Acrylic base plate has an attached bubble-level and levelling legs. Digital angle indicator also available for precise alignment.











Digital Angle Indicator

Carestream EDR2 Films

Gafchromic EBT Films

Gafchromic RTQA Films

Gafchromic Cyberknife Films

Gold Fiducial Markers

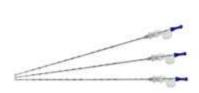
IZI Medical Products

IZI Medical Products provides standard and elongated gold markers to better verify localization. IZI provides various gold fiducial markers to meet your specific needs to enhance accuracy and efficiency during radiation therapy.

Gold Fiducial Markers are implantable markers used in IMRT, CRT, and IGRT treatment to provide real-time accurate localization of the treatment volumes. The needles are used for the interstitial placement of gold seed markers. Once implanted, the gold markers serve as localization devices for the purpose of radiation therapy.

www.izimed.com





These markers are a necessity during cases where the treatment volume moves with respect to external skin markings. IZI Gold Fiducial Markers are used in soft tissue cases like the prostate, liver and lung.

Instructions for Use:

- Remove the "sterile" Fiduciary Marker needle from the sterile pouch,
- Remove the protective sheath from the needle.
- Insert the sterile needle into the desired depth and location / DO NOT remove or advance the stylet during insertion.
- Once the needle has been placed remove the stylet lock from the stylet.
- While holding the stylet steady withdraw the needle cannula to eject the marker.
- Discard of the needle in appropriate sharps disposal containers or by standard hospital sharps disposal procedures.

Specification

PRE-WAXED NEEDLES WITH GOLD FIDUCIARY MARKERS
Sterile, biocompatible needles each containing a 99.9% gold marker
Gold Markers: **Diameters** 0.8mm, 1.0mm & 1.2mm

Lengths 3.0mm, 5.0mm, 7.0mm and 10mm (pack of three markers)



FlexiMarc[™] Gold Fiducial Markers (Non-Migrating)

- Uses node technology for better visibility
- Specifically shaped to prevent migration
- Available in 2 or 3 node configurations
- One marker provides 2 distinct reference points
- Visible in TRUS, BAT, Portal, MRI, CT and x-Ray
- Multiple diameters and needle guides to meet your needs
- 0.9 mm diameter with 18 GA needle 2 or 3 node
- 1.2 mm diameter with 17 GA needle 2 or 3 node
- Available in 1cm & 2cm lengths



Patient Markers (Imported)









Blue Cross Skin Markers

Blue Line Marker

Multimodality Markers

Portal Mark - Set-up Point









Ball Marker (1,1.5,2,2.5,3,4,5mm)

Tab Marker (1.5,2,2.5mm)

Suremark Arrow

Sure Mark Relief Tabs (1.5,2,2.5mm)









Power MARK Cross Label

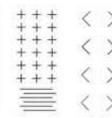
Wire Marker (0.3,0.4,0.8,1.5mm)

Vision Mark (for CT) 2mm

LiquiMark MRI Marker 8mm













Portal Mark - Iso Centre

Variety

Isocentres Corners

Tattoo Ink Bottle

Invisible Fluorescent Ink Pen

Pen Point Marker, Co-57, 200 μCi

Patient Shielding



Tungsten Eye Shield (Imported)

Provides adequate protection of the ocular structure for electrons or superficial shielding. Each eye shield is coated with a 2mm minimum thickness of dental acrylic on the bean entrance of the shield to reduce electron backscatter to eyelid. 2mm tungsten shield should be used for 6 MeV and the 3mm tungsten shield should be used for 9 MeV. These are not recommended for use above 9 MeV. Available in three sizes; small, medium, large. Sold as single unit or as a set.



Testicle Shield (Radimage)

Made of lead with painted surface and are designed to reduce scatter radiation to the testicles. Each unit is cast to provide a lead wall thickness of ½" and features an open sector to allow comfortable attachment to the patient. All surfaces are coated with polyurethane paint to reduce lead exposure.

The shield's top and bottom sections are secured with either the two rubber straps, provided, or with nylon tape. When using the testicle shield stand, no straps are needed. A special dome and groove between the two halves of the shield, stop leakage and prevent them from sliding apart.

Available in three sizes; small, medium, large. Sold as single unit or as a set.



Silicon Testicle Shield for CT Imaging



Klarity Thermoplastic Pellets



Designed to move all or part of testicle and scrotum out of the direct beam while irradiating a portion of scrotum. Made of rugged clear acrylic. This 'T' type shaped device features a grooved adjustment blade that easily adjusts to any vertical or angled position, then locks in place with a turn of the knob.

Testicle Separator (Radimage) Testicle Shield Stand (Radimage)

This adjustable stand offers increased patients comfort while raising or lowering the shield. A hand knob allows for easily vertical adjustment from 1" to 10". Can be used for anterior and posterior treatments.





Lead Mobile Barriers (Radimage)

Radiation safety mobile lead shield with caster wheels. Single shield of lead supported with strong iron frame. Custom sizes available for fixed height or adjustable.



16cm dia and 37 cm height. Custom sizes available.



Gel Bolus - Tissue Equivalent Build-up Material (Imported)

Superflab is exceptionally elastic, conforming to patient contours, while maintaining uniform thickness

- For enhanced dose build-up to skin
- Maintains uniformity of thickness
- Reusable, can be washed with soap and water
- Approved for human contact
- Sizes available in square of 30x30cm; 0.3, 0.5, 1, 1.5, 2, 3 & 4 cm thickness





RT Custom Bolus (Imported)

Ideal for hard-to-bolus areas such as: chest wall, nose, parotid, groin, ears, and any irregularly surfaced anatomical feature. The attenuation characteristics of this product are comparable to other polymer-based products; however, its physical properties are superior. The RT Custom Bolus softens in hot water and becomes mouldable just like thermoplastic.

- Available in sheet or pellet form.
- Won't dry out or change shape.
- Density: 1.1 g/cm³
- Sizes available: 7x22, 20x23, 30x30, 43x43, 30x45cms; thickness: 3.2, 4.8mm

Conforms well to patient's contour

Will not dry out



Brass Mesh Bolus (Imported)

This bolus can be used for post-mastectomy chest walls using 4Mv and 6Mv photons. When placing Brass Mesh over breast and a gap is between breast, use a piece of back to back tape on the patient between the breasts to secure the brass mesh down.

Size: 18" x 18" (45x45 cm). Thickness: 1.5 mm



The Brass Compensator Wedges (Imported)

The Brass Compensator Wedges are custom made for Varian, Siemens, AECL, Elekta, Toshiba, ATC, Mitsubishi, and ADAC accelerators.

LeadBrass Wedges: 15°, 20°, 30°, 40°, 45°, 50°, 60° **Density:** 8.515 g/cm³



MR Slessinger Board For HDR Brachytherapy (Imported)

The Slessinger Board is a padded sliding board that is CT and MR compatible. It is designed to facilitate HDR brachytherapy, specifically for pelvic treatments. The patient can be transferred onto the board from the operating room couch and remain on the board in recovery, during imaging for planning and until the HDR treatment is given.

Base Dimensions: 21" W x 72" L x 0.75" T (53.3 x 183 x 1.9 cm)

Base Material: Corrugated polypropylene

Pad Dimensions: 20.5" W x 69" L x 1.5" T (52.3 x 175 x 3.8 cm)

Pad Material: Vinyl coated closed cell foam



Shown with Additional Accessories Not Included with Base Item



Super Stuff Bolus Material (Imported)

It has a density of 1.02g/cm3. There are 50 - 1 ounce packages of powder which are packaged in a plastic bag with a black water fill line indicated on the bag. After mixing, Super Stuff takes on the consistency of Jello[®]. Seal with plastic wrap and shape to fit the patient.



Straight & Curved Body Caliper (Radimage)

For central axis and off axis measurements. The reversing calliper orientation assists in determining separation such as laterals, oblique and off table measurements. Wide base ensures perpendicularity to tabletop. Straight scale with 55, 45 & 24 cm lengths.



Rectal Markers (Imported)

Comprises of tungsten balls precisely placed inside reusable sleeve and adjustable Anas Marker. This allows to accurately determine the rectal distance from the radiation source.



CT Rectal Marker with Teflon Balls



Shadowform Vaginal Markers, 18cm



Vaginal Dilator (Radimage)

Acylic vaginal dilators are available in 2,

2½ and 3 cm diameter, Length 25 cm

Shadowform Rectal Markers, 38cm

Shadowform Rectal Markers, 10cm

Shadowform Markers (Imported)

- Disposable
- Available in two lengths and are marked at 1 cm intervals
- No cross contamination
- Latex-free
- Used for Simulation and CT Planning







Countour Wire (Imported)

Lead Contour Wire, 3mm (0.125) Diameter. Weight: 1 lb (0.5 kg)



Used to correct minor mistakes or modifications while making thermoplastic mold. Can also be used to melt alloy with flow control option.



Barometer & Thermometer (Imported)

Both digital and analogue models are available. All Models are supported with calibration certificate.



Analogue Barometer



Digital Thermometer



Digital Barometer cum Thermometer

RITG142

YES WE DO

FOR USERS REQUIRING BOTH MACHINE & PATIENT QA, TRY RIT Complete

The single-vendor solution that performs or trends EVERY TEST recommended in TG-142

RIT EPID PHANTOM TESTS

(24 X 24cm)

- · Constancy in 5 areas
- · Resolution (MTF)
- · Geometric Distortion
- Uniformity
- Contast

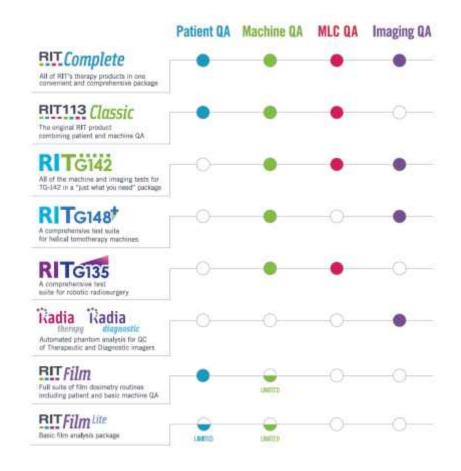
Noise





- · IGRT Daily QA
- · CBCT imaging for OBI and XVI
- Planar kV Imaging
- · Planar MV (EPID) Imaging
- Enhanced Sterotactic (Winston-Lutz) with Virtual Star Shot*
- MLC accuracy
- · Radiation vs. Light Field
 - Regular
 - Asymmetrical
- · Beam profiles / Flatness / Symmetry
- · Starshots and more

* US Patent 9192784, JP Patent 6009705, CA Patent 2918045, and other international patents pending.

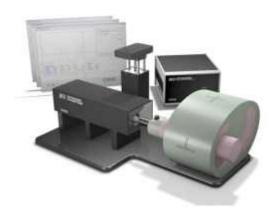




CIRS Dynamic Thorax Phantom



www.cirsinc.com



The CIRS Dynamic Thorax Phantom is a precision instrument for investigating and minimizing the impact of tumor motion inside the lung. It provides known, accurate and repeatable three-dimensional target motion inside a tissue equivalent phantom. It is designed for comprehensive analysis of image acquisition, planning and dose delivery in image-guided radiation therapy. The phantom body represents an average human thorax in shape, proportion and composition. A lung equivalent rod containing a spherical target and or various detectors is inserted into the lung equivalent lobe of the phantom. The body is connected to a motion actuator box that induces three-dimensional target motion through linear translation and rotation of the lung equivalent rod. Motion of the rod itself is radiographically invisible due to its matching density with the surrounding material. The target and its

motion, given its density difference, can be resolved.

- Complex 3D tumor motion within the lung
- Sub-millimeter accuracy and reproducibility
- Tissue equivalent from 50 keV to 15 MeV
- Compatible with TLD, MOSFET Dose Gel, Micro-chamber, PET/CT targets and film







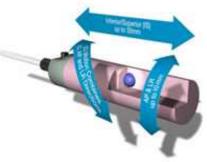


Dynamic Platform



Dynamic Cardiac Phantom





IMRT Thorax Phantom



www.cirsinc.com









IMRT Homogeneous Phantom

IMRT Head & Torso Phantom

IMRT Head & Neck Phantom



Cube 20 Phantom

The CIRS Model 009 Cube 20 Phantom was designed for routine QA in RT and IMRT applications where ease of use and quick set-up are important.

The Cube 20 Phantom is manufactured from Plastic Water® DT which faithfully mimics the Linear attenuations of water within 1% from 50KeV to 15 MeV. This enables complete QA from CT image acquisitions to therapy dose verifications.

MRGRT Motion Management QA Phantom

Features:

- Non-ferromagnetic materials => MR safe
- Shielded for RF interferences
- Allows for positioning within magnet bore due to piezoelectric motors
- Quick setup & quick indexing to couch
- Organic shaped Organs at Risk and moving target
- Can be imaged in MRI, CT, PET and hybrid systems Ion chamber dosimetry in Liver, Kidney, Spine and moving target
- 3D tissue equivalent Spine for bone landmark



Unlike other water equivalent plastics on the market, Plastic Water® is flexible and resists breakage under impact. Plastic Water is the only calibration material available in 1 mm thicknesses. Original Plastic Water® is the only material which agrees with true water within 0.5% above 7 MeV. Custom cavities are available to accommodate any ion chamber on the market (simply provide detailed drawings when ordering).*





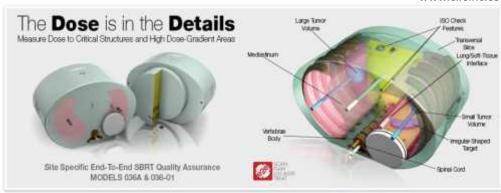


SBRT Phantom



www.cirsinc.com

The high dose per fraction associated with SBRT necessitates a high degree of accuracy in target localization and dose delivery. Small errors can result in significant under treatment of portions of the tumor volume and over dosages of nearby normal tissues. The E2E® SBRT Phantom provides a means to check the entire treatment chain during commissioning and





routine QA.

The Model 036A-CVXX-xx* is an anthropomorphic thorax body containing articulated spine, ribs and lungs.

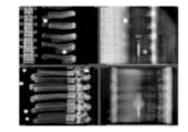
- All materials are suitable for use in kV and MV energies.
- Thorax with articulated spine, ribs and lungs
- · Optional Abdomen with Gafchromic Film insert
- High Resolution Anthropomorphic Characterstics



Multi-Energy CT QA Phantom







E2E® SBRT Phantom with Removable Spine



Steev Stereotactic (SRS)
Verification Phantom



Electron Density Phantom



Mini Phantom



Shane Phantom
Patient for VMAT & IMRT



SRS Multi-Lesion QA Phantom



Proton Therapy Dosimetry Head - Tissue Equivalent



3D Sectional Torso Phantom



Large Field MRI Distortion Phantom

ATOM Dosimetry Verification Phantom (Whole Body Phantoms)

Tissud Simulation & Phantom Tochnology

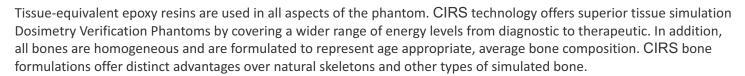
www.cirsinc.com

CIRS ATOM® phantoms are a full line of anthropomorphic, cross sectional dosimetry phantoms designed to investigate organ dose, whole body effective dose as well as verification of delivery of therapeutic radiation doses.

ATOM is the only line of dosimetry phantoms to range in sizes from newborn to adult. Six models are available: newborn, 1-year, 5-year and 10-year old pediatric phantoms as well as adult male and female phantoms.

Each phantom is sectional in design with traditional 25 mm thick sections. The sectional surfaces are extremely flat and smooth and do not require any special coatings or treatment. This results in minimal interfaces

between the slabs when viewed in a scout or projection X-ray. The ATOM line also differs from other dosimetry phantoms by providing optimized TLD locations specific to 21 inner organs.



- Phantom models cover a wide range of patient ages
- Organ specific dosimetry with minimal detectors
- Superior tissue simulation and lifelike imaging properties
- Homogeneous bone
- Accommodates wide variety of detectors

MRI Distortion Phantom for SRS

CIRS Model 603A was designed for assessment of MR image distortion in Stereotactic Radiosurgery Planning. It is also a useful tool for verifying image fusion and deformable image registration algorithms used in various treatment planning systems. The tissue equivalent, anthropomorphic design provides the closest conditions to a clinical imaging scenario. The phantom can be imaged using X-ray, Computed Tomography and Magnetic Resonance. It images well with all MRI sequences tested to date, including T1 weighted, T2 weighted, 3D Time of Flight, MPRAGE and CISS.





Brachytherapy QA Phantom

A robust quality assurance prostate brachytherapy QA program is essential to ensure accurate image-guidance and dosimetry calculations. The CIRS Model 045A, used in conjunction with the CIRS Model 053G Ultrasound Prostate Phantom, offers a complete solution for implementing a QA program specific to transrectal ultrasound used for guidance of prostate brachytherapy as recommended by AAPM Task Group 128.

Diagnostic Radiology QA



www.quart.de/en

QUART didoEASY Series

The QUART didoEASY meters can be used for simple but very precise dose measurements. Since the meters do not require any pre-setting procedure, measurement results are acquired quickly

- 1. Position the detector and switch on the didoEASY meter...
- 2. Set the x-ray equipment to the desired parameters...
- 3. Expose...

Units

>>> and quickly read all relevant data from the meter's display

The detector of the QUART didoEASY meter series automatically measures the integrated dose-length product (DLP) at dental panoramic equipment." A feature that provides extra value to our users.



Technical Specifications

Appl. Temp. $15 - 35^{\circ}$ C (recomm.) Storage Temp. $0-50^{\circ}$ C (recomm.)

Environmental Humidity 20-75% non-condensing

/Air Pressure 20g/m³

Weight Base Unit: 180g including battery

Detector: Negligible

Size Base Unit $17 \times 7 \times 4.5$ cm (L×W×H)

Detector $6.0 \times 1.8 \times 0.5$ cm (L×W×H) Gy or R (to be specified on order)

Date and time on display

Dose 0.2 μ Gy - 999 mGy (Uncertainty: \pm 5%) DLP* 0.2 μ Gy*cm - 999 μ Gycm (Uncertainty: \pm 5%)

Exposure Time 0.5 ms - 300 s

Dose Rate $0.25 \mu Gy/s - 999 mGy/s$ (Uncertainty: $\pm 5\%$)

Pulses 1-9999

Pulse Rate 0.1 Pulses/s - 250 Pulses/s

APPLICATION AREAS OF RADIOLOGY	di do EASY Art. No . 11101	di do EASY A r t. N o. 11104	di do EASY Art. No . 11102	di doEASY A r t. N o. 11105	
Mammography			/	/	
Den tal /CBCT/ 3D	/	/	/	/	
Radiography/(pulsed) fluroscopy	/	/	/		
Digitalsubtraction angiography	/	/	/		
PA RAMETE RS					
	S tandar d F eatures				
Dose	/		/		
kV max	/		/		
PPV	/				
Do se rate max	/		/		
Do se rate avg.	/	/			
Irradiation time	/	/	/		
Exposure time	/	/	/		
Pul se s	/	/	/	/	
	Enhan cedFeatures				
Waveform Output (Optional)	/	/	/		
Dose width product (DWP)	/	/	/	/	
Dose width product (DWPR)	/	/	/	/	
Dose area product (DAP, for needle beams)	/	/	/		
Do se ar ea product (D APR)	/	/	/	/	

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Quart dido CT

Advanced Technology and Improved Methodology

The QUART didoCT meter is designed for easy and precise dose-width product measurements.

The meter does not require any pre-setting procedure for direct reading of DWP, rate and time parameters. Its detector part is based on solid-state technology. Unlike conventional ion chambers, the QUART didoCT is not affected by variations in environmental temperature or air pressure and does not require correction.

The didoCT is equipped with a backlit display to assure swift readings even in darkened environments. To provide the ability to track generator characteristics, the dose or DWP rate is refreshed continuously on the meter display while the measurement is running.

The meter is powered by a rechargeable battery. One charge is sufficient to last approximately 80 hours of continuous use. Recharging the meter until full takes only between 3–4 hours. A warning will appear on the display when the battery charge is running low.

Technical Specifications

DWP : Range 1.5 mGy*cm - 999 mGy*cm

Uncertainty +/- 5 %

DWP : Rate Range 2.0 mGy/s*cm – 999 mGy/s*cm

Modes (3) One-second-mean rate refreshed four times per second

(real-time);

Total average; Maximum

Uncertainty..... +/- 5 %

Exposure Time: Range 0.5 ms - 300 s

Mode Duration of full exposure

Uncertainty ± 0.5 ms

Weight: Base Unit 180g

Detector Unit 120g including cable

Size : Base Unit 17 x 7 x 4.5 cm (L x W x H)

Detector Unit 16 x 1.3 cm (length x diameter)

Active length up to 100 mm (marked)

Operating Temp: 15-35°C



QUART dido**CT** Probe



CTDI Phantom

QUART COUNTY ASSUMBLES TO NAMED USED TO THE PROPERTY OF THE P

www.quart.de/en

Precision Meters for Dose, Dose Rate and Time

Quart didoEASY R: precision dose/rate/time meter for radiotherapy/fluoroscopy/dental. Application range: 40-160 KV

Quart didoEASY M: precision dose/rate/time meter for mammography applications. Applicable for all mammo radiation qualities. Full automatic compensation of all beam qualities. Application range 22-40 KV

Dose: 0.2µgy to 999 gy

Dose Rate: 0.25 μgy/s to 999 mGy/s Exposure Rime: 0.5 ms to 300 s



Kvp and mAs Meters

- Non-invasive measurement of tube current and exposure time
- Small hand held size
- Battery operated
- Indicates x-ray wave form
- Large display readable from outside x-ray room

Range Model K2 : 45 to 125KV
 Model K2L : 40 to 115 KV



X-RAY Field Measurement - Quart Nonius

The nonius can be applied in all fields of radiotherapy : dental CR/DR, mammography, CT etc.

Quick operation

- Align the light field with nonius center liner or position the nonius directly on the edge of the image receiver
- Expose
- Read the results from the display of the connected computer. Save or printout protocol.

Accuracy: ± 0.01mm

Exposure threshold: dose ≥ 200µGy/dose rate ≥ 20µGy/sec



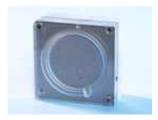
Kvp and mAs Meters

- Non-invasive measurement of tube current and exposure time
- Small hand held size
- Battery operated
- Indicates x-ray wave form
- Large display readable from outside x-ray room

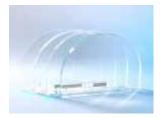
Range Model K2 : 45 to 125KV
 Model K2L : 40 to 115 KV



ConeBeam Test Phantom



Dental Phantom



Mammo Phantom



Densitometer/Sensitometer





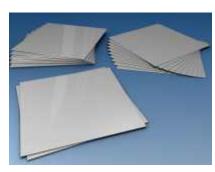
www.pro-project.pl



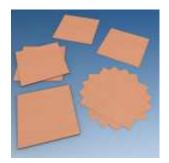
Pro-Pinhole



Pro-Star



Pro-HVL



Pro-HVL Cu



Resolution Patterns



Pro-CT mk II



Pro-CT AAPM



Pro-CT Align



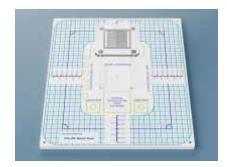
Pro-CT MINI



Pro-MRI



Pro-RF 11 Steps



Pro-RF Basic Tool

The Phantom Laboratory

www.phantomlab.com



Catphan 500 - for Spiral & Axial CT



Catphan 600 - also for Multi Slice CT



Catphan 605 - inexpensive phantom for Multi Slice



Catphan 700 - also for Performance Test including Wave Test Insert



RSVP Head Phantom



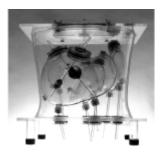
RSVP Pelvic Phantom



ECTPHAN™ 330 - for **SPECT** Imaging



LIQUI-PHIL PHANTOMS



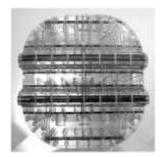
LIQUI-PHIL PHANTOMS



Sectional Phantoms



TOMOPHAN® PHANTOM - for digital breast tomosynthesis (**DBT**) imaging



MAGPHAN® RT - MR QA system for **MR** guided surgery and radiotherapy



www.cirsinc.com



Ultrasound Phantom



MRI-LINAC Dynamic Phantom



CBCT Electron Density Phantom



Ultrasound Prostate Training Phantom



Fetal Ultrasound Phantom



IMRT Pelvic 3D Phantom



Blood Mimicking Fluid



Mammography Phantom



3D Abdominal Phantom (CT, MR and ultrasound)



CBCT Electron Density & Image Quality Phantom



Daily ISO Phantom



Digital Breast Tomosynthesis QC Phantom



www.cirsinc.com

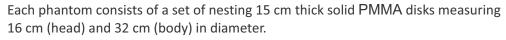


ATOM MAX Dental & Diagnostic Head Phantom

The CIRS ATOM Max Dental and Diagnostic Head Phantom is a standard of reference for diagnostic radiology of the head. The phantom is designed to assist technical and clinical staff in the selection, monitoring, training and verification of scanning parameters common to most radiological procedures requiring fine anatomical details.

CT Dose Phantom

For all computed tomography systems, the Food and Drug Administration recommends measuring the CT Dose Index (CTDI). Each section of the CIRS CT Dose Phantoms can provide separate dose information. The user can also measure maximum, minimum and mid-range values of the nominal tomographic section thickness when performing dose profile measurements.





AAPM CT Performance Phantom

The CIRS Model 610 AAPM CT Performance Phantom offers the user a single test object that measures ten distinct CT performance parameters. The phantom design is based on the guidelines presented in Report #1 of the American Association of Physicists in Medicine Task Force on CT Scanner Phantoms. The goals of report #1 were to "(1) define 'performance' of a CT scanner and (2) describe methods of performance testing through utilization of particular phantoms."

A Measurement Capabilities:

- Noise
- Size Independence
- Sensitivity / Detectability
- Radiation Dose
- Mechanical Alignment
- Spatial Uniformity
- Beam Hardening
- HU Linearity
- Slice Thickness
- Spatial Resolution and line spread function





Tissue Equivalent CT Dose Phantom



Dexa Phantom



Radiography / Fluoroscopy Phantom





The brand name SERVOX is worldwide known as a synonym for high quality speech aids and other innovative products for laryngetomised and tracheomised patients.

Servox is a market leader and has supplied over 250 machines across India.



Speech Aid Device SERVOX® Digital XL

- XL autonomy (extended battery performance; up to 50% more talk time than previous model)
- XL flexibility (possibility to use standard AAA Batteries)
- Variability of the sound nuances Two screw caps of Servox® Digital XL offer additional customization
 of the sound nuances with the hard and soft screw cap you will find the right tone
- Combined setting of the buttons to provide volume and Speech melody to suit individual needs through adjustment with special software
- Variety in application (Mouth tube adapters) gives an opportunity to use the Servox® Digital XL speech aid immediately after a surgery or during a radiation therapy
- Smart Charging Management The new high-end charger of SERVOX Digital XL is easy to handle and has an integrated USB-Out port to charge external devices simultaneously with batteries
- Individuality with sound frequency and quality The SERVOX®
 Digital XL speech aid offers the possibility to adjust and save a variety of individual settings. A more advanced fine-tuning of the sound parameters can be done with the help of our software, designed specifically for this purpose

Package includes:

- Servox Digital Speech Aid Device along with carrying cord
- Charger (with worldwide adapter)
- 8AAArechargeable batteries
- Carrying case (Hip Bag Holster)
- Instruction Manual
- Mouth Tube with adapter



Associated Products

SERVICO"



Shower Protector



Protection Bibs



Re-chargeable Cells

Medical Imaging Tables

Surgical C-Arm Table - 846

Free-float tabletop design with quick and comfortable patient positioning at an affordable price.

- Low attenuation carbon fiber tabletop, with choice of standard contoured or rectangular design
- Contoured tabletop features a face cutout for comfortable prone positioning
- High-speed actuator for quick vertical movement
- Convenient positioning with portable hand-held controller





Surgical C-Arm Table



Urology C-Arm Table

Urology C-Arm Table - 800

The choice is yours...configure to meet your needs

- Large radiolucent area, 54" x 17.5"
- Industry exclusive Fowler positioning, 0° to 80°
- Five-axis motorized tabletop positioning
- Convenient positioning, hand-held and foot-operated controllers

Brachytherapy C-Arm Table - 810

For image-guided seed implantation

- Large radiolucent area, 54" x 17.5"
- Industry exclusive Fowler positioning, 0° to 80°
- Five-axis motorized tabletop positioning
- Convenient positioning; hand-held and foot-operated controllers
- Smooth starts and stops programmed into all motorized movements



Brachytherapy C-Arm Table



Fixed Height Surgical C-Arm Table

Fixed Height Surgical C-Arm Table

Quality built, affordably priced

- Extra-large low-attenuation carbon fiber tabletop
- Unrestricted end-to-end C-Arm positioning
- Four twin-wheel locking casters
- Dimensions: 82" l x 29.5" w x 35" h

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Andhara Pradesh

Govt. Medical College, Kumool
Viswa Bharti Cancer Hospital, Kumool
Govt. General Hospital, Kakinada
Christian Cancer Centre, Kakinada
King George Hospital, Vishakapatnam
Lions Cancer Centre, Vishakapatnam
Govt. General Hospital, Guntur
Mahatma Gandhi Memorial Trust, Bhimavaram
GSL Trust, Rajamundry
Guntur Cancer Care Centre, Guntur

Cancer Treatment Services, Guntur Good Samarthan Cancer Hospital, Eluru

NRI Medical College, Guntur

Assam

Assam Medical College, Dibrugarh B.Barooah Cancer Hospital, Guwahati North East Cancer Hospital, Guwahati GMCH, Guwahati Cachar Cancer Hospital, Silcher Cancer Hospital, Agartala

Bihar

Mahavir Cancer Sansthan, Patna Indira Gandhi Inst. of Medical Science, Patna

Chattisgarh

BSR Cancer Hospital, Bhilai JLN Hospital, Bhilai Vedanta, Raipur

Delhi

All India Institute of Medical Science Loknayak Jaiprakash Narayan Hospital Institute of Nuclear Medicine and Allied Science ILBS Hospital Army (R & R) Hospital

Delhi State Cancer Institute Batra Hospital

Metro Hospital
Max Hospital

Dharamshila Cancer Hospital and Research Centre

Rajiv Gandhi Cancer Institute Indraprastha Apollo Hospital BLK Hospital

MAX Hospital Artemis Hospital Medanta Hospital Park Hospital Manipal Hospitals

Gujarat

GCRI, Ahmedabad CIMS, Ahmedabad Guru Govind Singh Hospital, Jamnagar Lions Cancer Centre, Surat Regional Cancer Centre, Sidhpur Shaleen Hospital, Ahmedabad

Goa

Manipal Hospital, Goa

Haryana

PGIMER, Chandigarh
Govt. Medical College, Chandigarh
PGIMER, Rothak
Mirpur Institute of Medical Science, Rewari
OP Jindal Cancer Hospital, Hisar
Artemis Health Institute, Gurgaon
Medanta Medicity Hospital, Gurgaon
Fortis Hospital, Gurgaon
Atulya Healthcare, Ambala
MMU Mullana University, Ambala
Shreeji Diagnostic, Manesar

Himachal Pradesh

Regional Cancer Centre, Shimla

Jharkhan

Meherbai Tata Memorial Hospital, Jamshedpur Bokaro General Hospital, Bokaro

Jammu & Kashmir

Sher-E-Kashmir Institute of Medical Sciences, Srinagar Shri Mata Vaishno Devi Narayana Superspeciality Hospital, Katra GMCH. Jammu

Korals

Amala Cancer Hospital, Trichur
Amrita Institute of Medical Science, Kochi
Malabar Cancer Centre, Thalassery
Caritas Cancer Institute, Kottayam
MSGR. Joseph Kandathil Memorial Cancer Centre, Cherthala
Academy of Medical Science, Pariyaram
Kims Pennacle Cancer Centre, Trivendrum
Regional Cancer Centre, Trivendrum
Baby Memorial Hospital, Kozhikode

Karnataka

Karnataka Institute of Medical Science, Hubli
Kasturba Hospital, Manipal
Kidwai Memorial Institute of Oncology, Bangalore
National Institute of Mental Health & Neuro Science, Bangalore
M.S. Ramaiah Institute of Cancer Treatment, Bangalore
Manipal Hospital, Bangalore
Narayana Hrudayalaya Hospital, Bangalore
Aster Hospital, Bangalore
Kasturba Medical College Hospital, Mangalore
KLES Hospital, Belgaun
Father Muller Medical College, Mangalore
AJ Hospital, Mangalore

Justice K.S. Hedge Charitable Hospital, Mangalore

Meghalaya

Civil Hospital, Shillong

BGS Global Hospital, Bangalore

Radiant Global Hospital, Mysore

Maharashtra

Command Hospital, Pune
Govt. Medical College, Nagpur
RST Cancer Hospital, Nagpur
Shree Siddheshwar Cancer Hospital, Solapur
Inlaks & Budhrani Hospital, Pune
Ruby Hall Clinic, Pune
Nargis Dutt Cancer Hospital, Barsi
Pravararural Hospital, Loni
Udhav Memorial Cancer Hospital, Nashik

Shridkar Cancer Trust, Dombivali Kamalnayan Bajaj Hospital, Aurangabad Tata Memorial Hospital, Mumbai BYL Nair Hospital, Mumbai Ambani Hospital, Mumbai Shreeji Diagnostics, Mumbai Jaslok Hospital, Mumbai

Madhva Pradesh

Nanavati Hospital, Mumbai

Cancer Hospital, Gwalior Indian Institute of Head & Neck Oncology, Indore Shalby Hospital, Indore JLN Cancer Hospital, Bhopal Bansal Hospital, Bhopal

Mizoram

Mizoram State Cancer Institute, Aizwal

Oriss

MKCG, Berhampur Hemlata Hospital, Bhubaneswar

Punial

Christian Medical College, Ludhiana SGRD Cancer Hospital, Amritsar Govt. Medical College, Patiala Gracian Hospital, Mohali Indus Hospital. Mohali

Pondicherry

JIPMER

Puducherry Cancer Trust Hospital & Research Centre

Development dictates that from to time the data shown, is subject to change without notice, please obtain a quotation.

Rajastha

RNT Medical Collge, Udaipur Acharya Tulsi Regional Cancer Centre, Bikaner SMS Medical College, Jaipur Manipal Hospital, Jaipur Mahavir, Jaipur JLN Medical College, Ajmer S N Medical College, Jodhpur Defence Lab, Drdo, Jodhpur Tarini Cancer Hospital, Alwar

Tamilnadu Christian Medical College, Vellore

Cancer Institute, Chennai Kamakshi Memorial Hospital, Chennai GKNM Hospital, Coimbatore Sri Ramakrishna Hospital, Coimbatore Kovai Medical Centre, Ciombatore International Cancer Centre, Neyyoo Anna Memorial Cancer Hospital, Kanchipuram Apollo Speciality Hospital, Chennai Global Hospital, Chenna V S Hospital, Chennai Miot Hospital, Chennai Sankara Hospital, Chennai Billroth Hospital, Chennai Saveetha Medical College, Chennai **GVN Hospital, Trichy** Meenakshi Mission Hospital, Madhurai Apollo Hospital, Madhurai Guru Hospital, Madurai Vadamalayan Hospital, Madurai Salem Cancer Institute, Salem

Telangana

Kims Bibi Cancer Hospital, Hyderabad MNJ Hospital, Hyderabad Nizam Institute of Medical Science, Hyderabad Indo American Cancer Hospital, Hyderabad Kamineni Hospital, Hyderabad Yashoda Hospital, Hyderabad Apollo, Hyderabad St. Anns Hospital, Warangal Sushuruta Hospital, Karimnagar Chalmeda Hospital, Karimnagar

Uttar Pradesh

J K Cancer Hospital, Kanpur Govt. Medical College, Agra KGMIL Lucknow SGPGI, Lucknow Lucknow Cancer Institute, Lucknow RML, Lucknow IMS, BHU, Varanasi AMU, Aligarh LLR Medical College, Meerut Kamalnehru Memorial Hospital, Allahabad H P Poddar Hospital, Gorakhpur Dr Chaturvedi Hospital, Gorakhpur Indian Railways Cancer Hospital, Varanasi Keshlata Hospital, Bareilly SRM Medical College, Bareilly Dr Sheela Sharma Hospital, Mathura Royal Cancer Institute, Kanpur IBA, Noida Jaypee Hospital, Noida

Uttarancha

Himalayan Institute Hospital Trust, Dehradun Swami Rama Cancer Institute, Haldwani

West Bengal

Chittranjan National Cancer Centre, Kolkata Govt. Medical College, Kolkata Apollo Gleneagles Hospital, Kolkata Tata Medical Centre, Kolkata EKO Imaging Centre, Kolkata Barasat Cancer Hospital, Barasat North Bengal Oncology Centre, Siliguri Design to Print +91 9250671670, 9868147923



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