

*Best*<sup>®</sup>  
Theratronics



*Equinox*

EXTERNAL BEAM THERAPY SYSTEM

# Theratron® Equinox™

## A treatment device that fights cancer, not your budget

### Your Single Source Oncology Solutions Provider

At Best® Theratronics we design products and solutions that help medical professionals treat cancer. Our products are used throughout the world to deliver radiation treatments. We are best known for the Theratron® Teletherapy treatment systems using Cobalt-60. We have over 50 years of experience in designing, manufacturing, installing, and servicing Cobalt-60 based external beam systems. Over that time we have installed more than 1,500 Theratrons® and supply over 80% of the world's gamma based external beam systems. Today these machines deliver 45,000 treatments per day. The Theratron® Equinox™ is the newest member of the Theratron® line, a new design that offers more reliability and more functionality. As one of the members of the Team Best® companies, we are excited to expand our product offerings beyond external beam treatment systems. Our aim is to be the Single Source Oncology Solutions Provider™ of choice for our customers. We can now offer our customers a wide array of best in class products used in brachytherapy and external beam radiation. It is through our commitment to our customers that we succeed in our mission to provide healthcare for everyone.

#### Reliable

Theratron® Equinox™ is an evolution of the Theratron® line of treatment devices and through our years of development and servicing we have, gained the knowledge to build more robust and reliable units. The elegant yet simple design results in a more reliable system that will offer more up-time than expected with comparable devices.

#### Intuitive

The use of a new graphical user interface makes the entry of treatment parameters logical and easy. Interlock messages are clearly displayed and easily interpreted to allow for rapid correction of incorrect settings. System messages are presented in a clearly understandable form. The service screen displays the status of the machine to provide a simple method to troubleshoot the system.

#### Safe

Along with the interlock system and the IEC design standards used to develop the Theratron® Equinox™, the on board verification system prevents the delivery of radiation when the Target and Actual settings do not match. The display

is color coded in red, yellow and green to indicate the verification status. This display method provides the operator with a clear indication of which parameters are out of tolerance so that they can be corrected. In the unlikely event of a source transition problem, the jaws automatically close completely and furthermore, the motorized wedge (if installed), is moved into the beam to help block the radiation.

#### Efficient

The Theratron® Equinox™ can be configured in either an 80 cm or 100 cm configuration and if required a Beam-stopper can be added to the unit to help with room shielding. Best® Theratronics can provide the highest activity sources in the industry resulting in an output of 390 cGy per min at 80 cm, or 250 cGy per min at 100 cm. The high activity sources allow for faster treatment times, which improve throughput. In addition Theratron® Equinox™ has an auto set-up feature that with a press of one button, the machine will move the collimator, gantry and jaws to its target locations simultaneously. The auto set-up feature can significantly reduce the set-up time and allow for more treatments.



#### Affordable

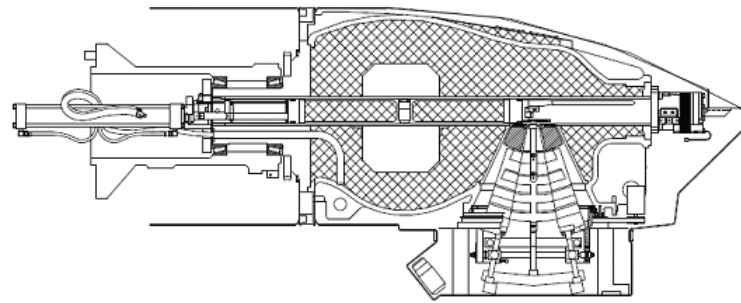
The cost of ownership of a Theratron® Equinox™ is less than other comparable devices due to the stability of the source, its minimal power requirements and its simple design. Since the source does not vary in energy, symmetry or flatness, the amount of Quality Assurance required to ensure a “good beam” is dramatically reduced. The Theratron® Equinox™ operates with normal electrical power and does not need a special cooling system, thereby reducing the operational cost of the unit. Its simple design means that owning and operating a Theratron® Equinox™ will be less expensive than a linear accelerator.

#### Advanced

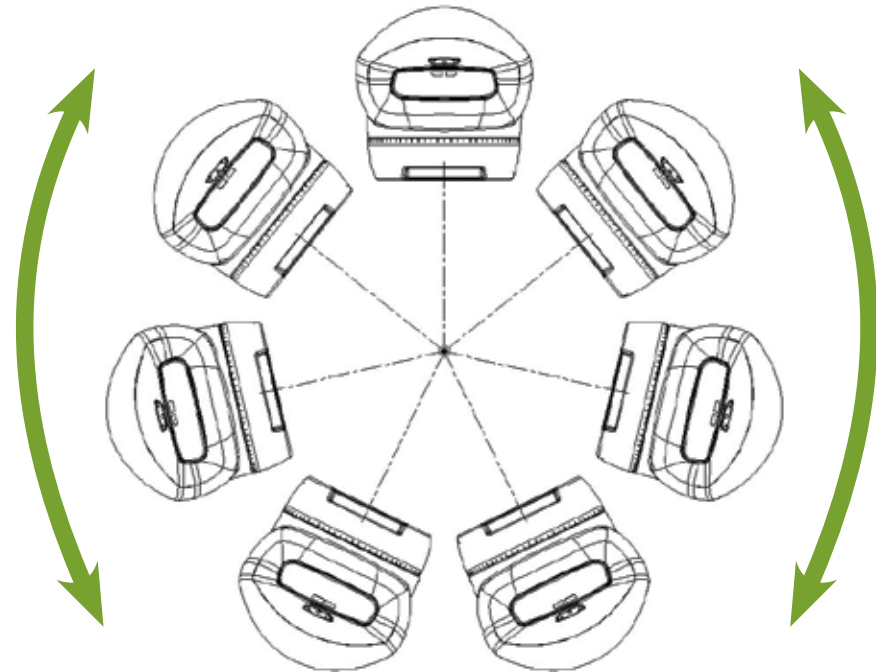
Theratron® Equinox™ has asymmetrical collimators that allow the jaws to move independently, providing more freedom in treatment planning. Arc therapy is now a simple matter of entering the arc angle and time, since the control system automatically determines the gantry speed to complete the arc. The new Motorized Wedge lets you treat with the wedge angle you need (between 1 and 60 degrees). As with all modern treatment machines, Theratron® Equinox™ can interface to all of the major record and verify systems to allow for rapid treatment parameter loading, treatment set up verification, and the recording of the delivery.



# Advanced Gamma Therapy



The design of the Theratron® Equinox™ head meets the international standards for source shielding, radiation transmission and radiation leakage. The dual computer control system monitors the source position and automatically retracts the source if a problem with source travel or position is detected. Operators and patients can feel confident that the Theratron® Equinox™ has been designed with their safety in mind.

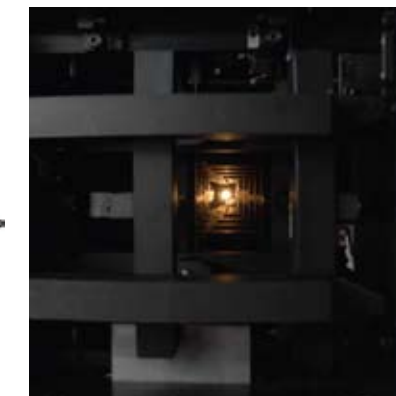
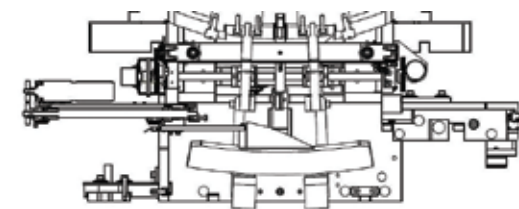


The Theratron® Equinox™ control system automatically calculates the arc speed based on the arc angle and treatment time. This makes the delivery of any arc treatment a simple matter of entering the time and angle. In addition, this feature makes it possible to perform serial tomotherapy using the nomosSTAT™ from Best® NOMOS®.



Collimator Parameters	
Set Values	Actuals
X:	22.3 cm
Y:	15.6 cm
X1: -13.0	-11.5 cm
X2: 7.0	10.8 cm
Y1: -7.0	-3.1 cm
Y2: 13.0	12.5 cm
Angle: 35.0	40.0 °

Collimator Parameters	
Set Values	Actuals
X:	20.0 cm
Y:	20.0 cm
X1: -13.0	-13.0 cm
X2: 7.0	7.0 cm
Y1: -7.0	-7.0 cm
Y2: 13.0	13.0 cm
Angle: 35.0	35.0 °



## Features

- 100 cm or 80 cm configuration
- IEC compliant
- High activity sources 1.5 or 2 cm diameter
- 390 cGy/min at 80 cm
- 250 cGy/min at 100 cm
- Asymmetric Collimators
- Auto Set-Up
- Field size from 1 x 1 to 35 x 35 cm at 80 cm
- Field size from 1 x 1 to 43 x 43 cm at 100 cm
- Physical Wedges (15, 30, 45 and 60 degrees)
- Motorized Wedge (1 to 60 degrees)
- Wedge and Block Code Interlock
- Fixed Beam and Arc Treatment
- Beam Stopper Option
- Collision Detection Ring
- Graphical Data Entry Interface
- Service Diagnostics
- Onboard Treatment Verification
- Ergonomic Hand Control
- In-Room Monitors
- Record and Verify Interface \*
- Avanza Table Control
- Dual Computer Control System

\* Requires a third party record and verify system

# Healthcare For Everyone

Team Best® Is Your Single Source Oncology Solutions Provider.

“Our Team Best® companies are committed to making quality healthcare affordable and accessible globally.”

Krishnan Suthanthiran  
President, Best Medical International

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healthcare for everyone