The **3400 Blood Irradiator**

**The Premier X-Ray Blood Irradiator in the World**

**Providing Superior Uniformity and Industry Leading Reliability**

- **Highest Product Throughput and Flexibility**
  Processes a variety of blood configurations of up to 6L capacity in 5 minutes - whole blood bags, platelet bags and loaded syringes in the same cycle

- **Excellent Dose Uniformity**
  A combination of the patented Quastar® x-ray emitter and rotating carousel achieve ~1.5 DUR

- **Direct Replacement for Gamma Irradiator**
  U.S. Government recognized safe, direct alternative for radioactive isotope (gamma) source irradiators

*US-FDA CLEARED, CE MARKED, AND CB SCHEME CERTIFIED

*Optional Rad Scan Bar Code Reading System shown above
We pioneered the first FDA-cleared blood x-ray irradiation medical device used to prevent the highly fatal transfusion-associated graft-versus-host disease (TA-GVHD) in blood transfusion recipients.

Blood transfusion is a lifesaving procedure for people who are bleeding and people who cannot make a sufficient amount of blood on their own.

A rare but almost always fatal complication from blood transfusion is called transfusion-associated graft-versus-host disease (TA-GVHD), where immune cells from the donor blood attack the recipient’s organs and cause a deadly infection that is nearly impossible to fight off.

Started over 20 years ago, we pioneered the first-ever FDA-approved blood x-ray irradiation medical device used to prevent TA-GVHD, and today with over 250 worldwide installations, we have maintained our status as the industry leader and gold-standard in blood irradiation technology and instrumentation ever since.

Our patented x-ray irradiation technology effectively and routinely inactivates the immune cells in donor blood, which diminishes the risk of developing TA-GVHD for the transfusion recipient.
Optional Items Available

**Carbon Fiber Canisters**
Each unit comes with (6) carbon fiber canisters which are used to hold the blood products when processed. (additional fiber canisters are available for purchase)

Having an additional set of canisters allows for pre-loading products for increased turn-around and efficiency.

Canister dimensions:
(4 x 5") 10.2 x 12.7 cm / 1 L

PN #1402055

**Syringe Holders**
Allows for syringes to be run simultaneously with whole blood and platelets in the same cycle.

Accepts up to (3) 30 mL or 60 mL drawn syringes per holder (up to 18 total per cycle)

PN # 3400-09401

**Rad Scan Bar Code Reading System**
An error free Bar Code Scanning system that stores product data to replace a manual log. Data is stored in a .csv file on a thumb drive.

Available as option.

PN # 1409383

**Dose Mapping Phantom**
Available for customers outside the US only

A Dose Mapping Phantom is a cyndrical device placed into one of the canister holders to simulate a canister full of blood.

Thermoluminescent dosimeters (TLDs) are placed in the phantom to measure the dose.

A Phantom is required to perform commisioning and routine dosimetry.

PN # PHANTOM
SPECFICATIONS

PHYSICAL DIMENSIONS

EQUIPMENT DIMENSIONS
34.0 x 36.0" | 86.36 x 91.44 cm

CRATED DIMENSIONS
38 x 40 x 75" | 96.52 x 101.60 x 190.50 cm

EQUIPMENT WEIGHT
1900 lbs. | 862 kg

IRRADIATION GUIDELINES

USA (FDA)
15 Gy min/25 Gy central/50 Gy max

EUROPE (EDQM) & UK (BCSH)
25 Gy min/50 Gy max dose rate: 5.5 - 6.5 Gy/min

PROCESSING

DOSE UNIFORMITY RATIO (DUR)
~1.5

DOSE MAPPING
The RS 3400 is dose mapped prior to shipment and at the time of installation.

WARRANTY

12 MONTH FULL WARRANTY
Includes Installation, Training, Initial Dose Map, Radiation Survey, 2nd Dose Map and all parts, labor & travel

EXTENDED WARRANTY PROGRAM
Available for purchase anytime within 12 months from date of installation

SAFETY & QUALITY

All Rad Source irradiators receive a quality inspection, dose map, and radiation survey prior to shipment and again at installation.

All Rad Source irradiators are manufactured as cabinet x-ray devices and conform to the radiation safety guidelines in 21 CFR 1020.40

ELECTRICAL REQUIREMENTS

POWER
208/240VAC, Single phase, 50/60Hz, 30 Amp, true earth ground

INSTRUMENT WIRING
10 AWG L1, L2/N

Blood Bags
Up to (6) 600 mL bags
Platelet Bags
Up to (6) 500 mL bags
Syringes
Up to (18) 60 mL Syringes

OUR MISSION IS TO BECOME THE WORLD LEADER IN CREATING X-RAY TECHNOLOGIES AND SOLUTIONS THAT ENABLE OUR CUSTOMERS TO IMPROVE THE WORLD THROUGH LIFE SCIENCE.

For over 24 years we have been a trusted and reliable partner to approximately 900 hospitals, pharmaceutical, academic and research institutions worldwide. Quastar, our patented technology, produces high output x-ray irradiation safely, efficiently and reliably for a wide variety of applications in life sciences.

To learn more about our positive impact on our world, contact us today.

www.radsource.com/blood-irradiator-rs3400 678-765-7900