RoboSPECT

An Ultimate Solution for Cardiac Imaging with Robotic Control

PNP

An Art Piece in Technology

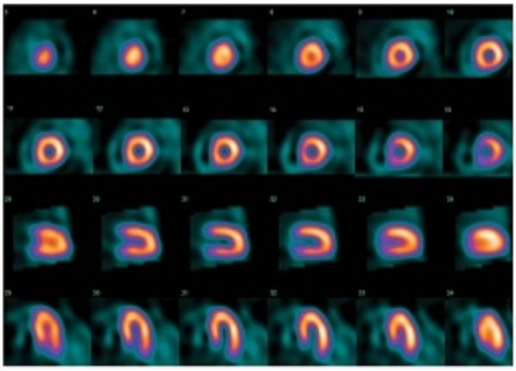
RoboSPECT

- Novel design of robotic movements
- Smallest footprint
- Open gantry design
- Comfortable seat design
- Resolution recovery method
- Variable axis of rotation positioning
- List mode Gated SPECT acquisition
- Motion artifact reduction
- Optimized Field of View for cardiac imaging
- State of the art SPECT technology
- Advanced Cedars-Sinai software for quantification
- Employing the square PMT technology
- Using dedicated positioning method
- Fixed 90˚ position
- User-friendly acquisition station
- Easy-to-use hand controller
- Appealing colors
- Native design

The ultimate cardiac imaging solution is PARTO NEGAR PERSIA medical imaging system's RoboSPECT; a compact cardiac imaging system.

"RoboSPECT" is the first and only dedicated cardiac SPECT (Single Photon Emission Computed Tomography) with robotic movements.The system provides perfect performance and best image quality in cardiac SPECT imaging for clinical purposes.

"RoboSPECT" definitely gives you the best in nuclear cardiology, today. The system has been generally recognized for forward thinking and innovative design.



Have you ever thought how nice it would be to have nuclear cardiology imaging services right in your own office? How much faster and more convenient it would be for everyone? Now, adding your own in-house nuclear cardiology services is a lot easier than you imagine.

RoboSPECT

Optimized Field of View
Minimize inappropriate activity uptake of other organs.

Light-Weight Collimators
Easily interchangeable, manually.

User-Friendly Acquisition Station
Dedicated acquisition user interface includes all cardiology-related acquisition activities.

Hand Controller
The icon-driven hand controller, incredibly easy to learn is used for gantry operations and entering body contour learning points.

Smallest Equipment Footprint
Ideal size and low weight of RoboSPECT system offers an exam room as small as 3X3 m^2 (9 square meter) and can be placed on any floor (weighs less than 750 kg). Generally, no special room modifications are required.

Fixed 90° Position

Minimal patient-to-detector distance and small dead space.

Metallic Unhindered Cardiac SPECT

Low attenuation patient couch.

Comfortable Seat Design

A revolutionary reclining seat designed to provide maximum patient comfort.

Inviting Open Gantry Design

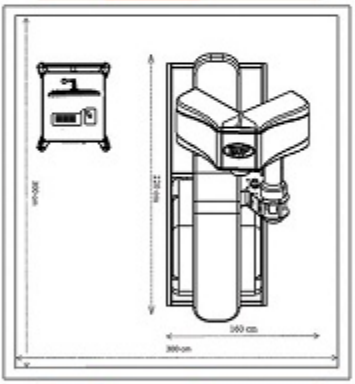
Non-intimidating and patient-friendly design, easy access for patients of any size (120 kg, 210 cm).

Robotic Movements

Synchronized lateral, arm rotate and detector swivel motors deliver circular and noncircular SPECT movements. Robotic design, using three swivel arms, easily provides precise wide range of motions and minimum center of rotation (COR) error.

RoboSPECT

Detector specifications	
Intrinsic spatial resolution	
FWHM in UFOV	≤ 3.6 mm
FWTM in UFOV	≤ 7.4 mm
Intrinsic spatial linearity	
Absolute in UFOV	≤ 0.8 mm
Differential in UFOV	≤ 0.1 mm
Intrinsic Energy Resolution	
in UFOV	≤ 9 %
Intrinsic flood field uniformity	
Integral in UFOV	≤ 2.2 %
Differential in UFOV	≤ 1.2 %
System spatial resolution w/o scatter at 10 cm (FWHM in UFOV)	
LEHR	7.8 mm
LEGP	9.7 mm
Sensitivity	
LEHR	175 cpm/μCi
LEGP	295 cmp/μCi
ECG Gating	
Mode	List mode
Max. number of frames per R-R interval	32
Gantry physical Specifications	
Head rotation range	48 degrees
Arm rotation range	70 degrees
Field of view (FOV)	37×22 cm²
Useful field of view (UFOV)	36×21 cm²
System Specifications	
Height	200 cm
Width	160 cm
Length	220 cm
Weight (with detectors and collimators)	750 Kg
Circular radius	18-30 cm
Lateral position range	20 cm
Lateral speed	0.8 cm/s
Rotation range	185 degrees
Detectors respective angle	90 degrees
Rotational accuracy	0.1 degree
Patient contouring	Yes



Patient Comfort

- Convenient patient set-up
- Increased comfort

Patient-Friendly Environment

- Offering the promise of an enjoyable experience
- Open System

Image Quality

- Less patient motion
- Metallic unhindered cardiac imaging

Modern Design

- Compact system
- Appealing color

Easy to Install

- One week installation
- 3 m x 3 m footprint
- Minimum room remodeling requirements

Easy to Learn

- Three-day onsite application training

Easy to Use

- Automated camera setup
- Simple, fast collimator change
- Simple hand controller
- Predefined acquisition protocols

Easy to Buy

- Low-risk revenue opportunity
- Complete configurations
- One-year guaranty
- Full maintenance support

ISO 13485: 2013
ISO 9001: 2013
IEC 60601-1-1: 2005
IEC 60601-1-2: 2005
IEC 60601-1-4: 2005

Complexity in Design
for
Simplicity in Application

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