



[www.siemens.com/mi](http://www.siemens.com/mi)

# Symbia Evo, Symbia Evo Excel and Symbia S SPECT systems

Environmental product declaration

---

# Ecological advantages of Symbia Evo, Symbia Evo Excel and Symbia S

Equipped with leading high-definition detector technology, Symbia Evo™<sup>1</sup>, Symbia Evo Excel™<sup>1</sup> and Symbia™ S SPECT systems offer the highest<sup>2</sup> system sensitivity and the best<sup>2</sup> NEMA-reconstructed resolution. With industry-leading<sup>2</sup> image quality, our SPECT scanners deliver accurate and reproducible clinical information to support physicians' diagnostic confidence, helping you to improve clinical outcomes and potentially reduce readmission rates.

Exclusive options, such as Automated Quality Control and Automated Collimator Changer, automate your routine tasks. Cardiac throughput can also be significantly improved with IQ•SPECT's four-minute acquisition. With a focus on increasing your productivity, our Symbia Evo and Symbia S systems also offer you the ability to save up to 50%<sup>2</sup> more time and the potential to double patient throughput.

Engineered to manage key life-cycle costs, Symbia Evo Excel is the most<sup>2</sup> cost-effective solution in its class. The system design addresses space requirements, as well as maintenance and serviceability, making it an investment that works for you.

In addition, our Symbia SPECT systems provide an array of environmental advantages, such as

- 99% of materials used can be returned to the flow of recyclable materials<sup>3</sup>
- Plastic parts are labeled for recycling
- Disassembly instructions for high-quality recycling are available
- Product take-back according to strict EU directives



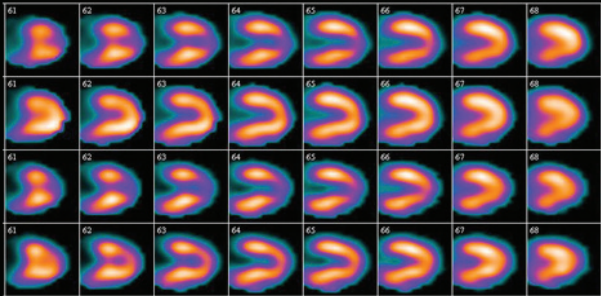
# Up to 80% lower injected dose or faster imaging with IQ•SPECT<sup>2</sup>

When you add IQ•SPECT to your Symbia Evo or Symbia S SPECT systems, you'll be able to achieve ultra-fast cardiac imaging or up to 80% lower injected dose. With IQ•SPECT's cardio-centric orbit, you can do standard dose scans in 4 minutes, half-dose scans in 8 minutes and quarter-dose scans in 16 minutes.<sup>3</sup> Even with iterative reconstruction on conventional systems, 16-minute scans are needed when a half dose is administered.<sup>3</sup>

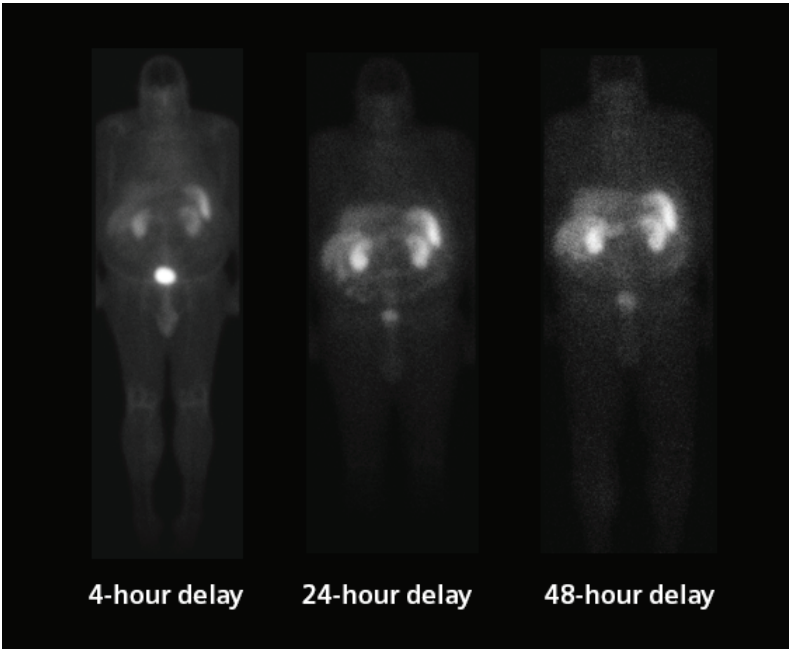
## Far-reaching benefits

Besides the efficiency gains achieved by fast scan times, reducing injected dose lowers patient and staff exposure to radiation and limits environmental impact.

Data courtesy of Hopital de la Cite de la Sante de Laval, Quebec, Canada



Data courtesy of Indiana University Health, Bloomington, Indiana, USA



## Environmental product design



### Material supply

From natural resources to delivery of semi-finished products



### Production/delivery

From production of components to operation startup by the customer



### User/maintenance

Includes daily use by our customers as well as maintenance



### End of life

From disassembly at the customer through material and energy recycling

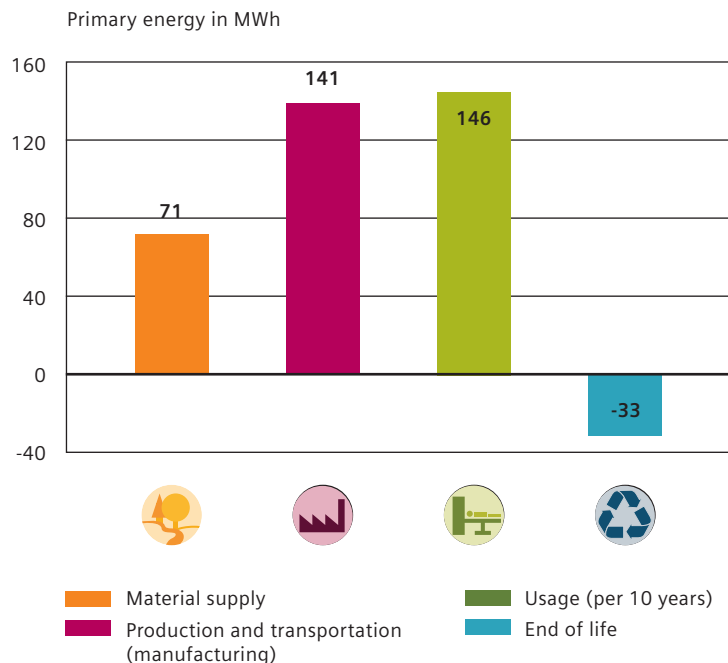
Siemens considers environmental aspects in all phases of the product life cycle, including material supply, production/delivery, use/maintenance and end of life.

This supports the effort to improve the environmental performance of our products.

## Cumulative energy demand

Energy consumption is the most important environmental characteristic of medical devices. This is why we use Cumulative Energy Demand to assess environmental performance. Cumulative Energy Demand is the total primary energy<sup>4</sup> that is necessary to produce, use and dispose of a device—including all transportation.

Our medical devices can be recycled almost completely for materials or energy. With an appropriate end-of-life treatment, it is possible to return up to 33 MWh in the form of secondary raw materials or thermal energy to the economic cycle.

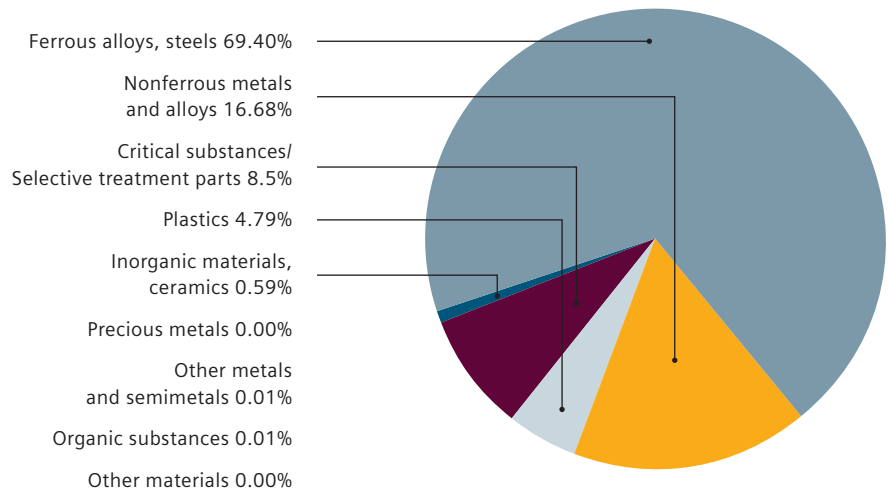


---

## Identification of product ingredients (% composition by weight)

Symbia S, Symbia Evo and Symbia Evo Excel scanners are mainly built out of metals. This ensures a high degree of recyclability.

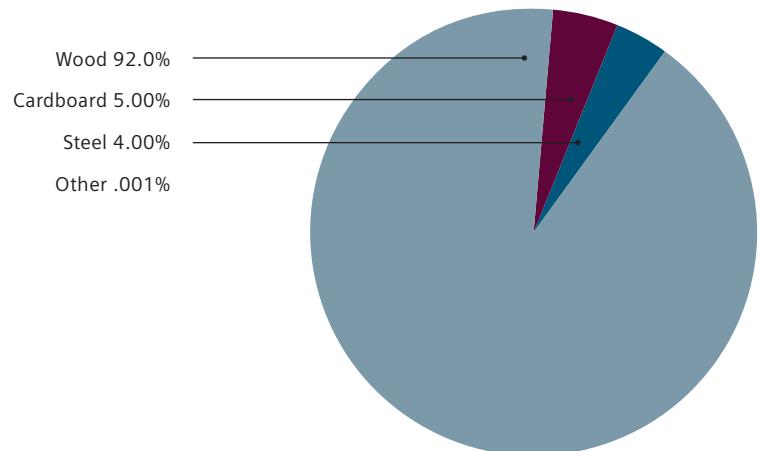
Total weight: approx.  
3,735 kg/8,234 lb



---

## Packaging

The Symbia S, Symbia Evo and Symbia Evo Excel system packaging primarily consists of wood, steel and cardboard, all of which are recyclable.



---

## Product take-back

Most of the materials used to produce Symbia S, Symbia Evo and Symbia Evo Excel scanners are recyclable for material content or for energy.

Our product take-back program helps us further address the environmental aspects of our products—even at the end of life. As part of this program, we refurbish

systems and reuse components and replacement parts whenever possible through our refurbished systems business. We reuse components and subsystems for non-medical products. We also recycle for material or energy value. Disassembly instructions for disposal and recycling are available for our products.

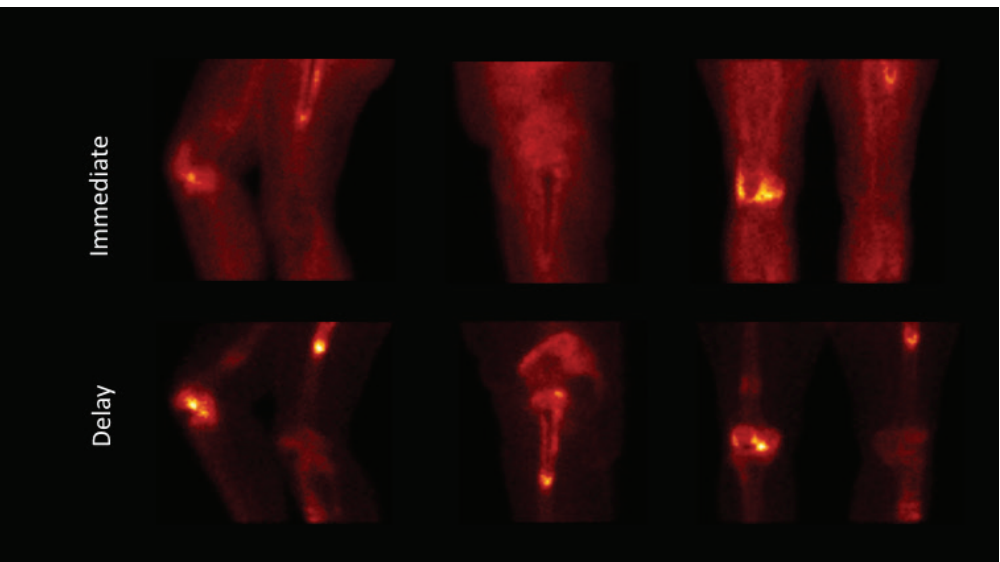
## Operating data

<b>Allowed room temperature</b>	64.4°-86° F (18°-30° C)
<b>Allowed relative humidity</b>	20-80% with dewpoint
<b>Noise level</b>	
Basic load	68 dB
Full load	75 dB
<b>Energy consumption</b>	1.1 kW
During ramp up	0.6 kW
Basic load	0.6 kW
Full load	3 kW
<b>Power-on time</b>	60 minutes
<b>Power-off time</b>	<5 minutes

## Technical specifications

Interface for heat recovery	✓
Type of heat recovery (cooling)	Air
Complete switch-off is possible	✓
Device is adjustable for the user in terms of height	Yes, the height of the computer systems can be set by the end user. PPM can be tilted.
Uniform symbols for device family	✓

Data courtesy of Indiana Univ. Health, Bloomington, Indiana, USA





## Replacement parts and consumables

Replacement and consumable parts	<p>Flood Source - 1 year</p> <p>AutoQC source - 1 year</p> <p>Sources are the only replacement parts you can replace on your own.</p> <p>All other serviceable parts are replaced through Siemens Service.</p>
Recycling information	✓
List of hazardous substances	✓

## Further ecologically relevant information

Recommendations for saving energy	No
Recommendations for efficient cleaning	✓
Recommendations for appropriate use of consumables	✓

## Cleaning

### Incompatible cleaning processes and substances

For product	<p>Do not spray or pour liquids directly onto the system. Spray permissible cleaning solution or disinfectant (e.g. bleach) onto a cloth and wipe the system before completely drying with a soft cloth.</p> <p>Avoid scrubbing, rubbing, or applying excessive pressure to detector and touchpad surfaces.</p> <p>Do not clean any area inside the system. Service should be contacted for assistance with these areas.</p> <p>Do not use organic solvents such as aldehyde, acetone, naptha, benzine, and alcohol.</p> <p>Do not use agents that release ammonia when they are dissolved or decomposed.</p> <p>Do not use agents containing silicone.</p> <p>Do not use disinfectants based on substituted phenols or disinfectants that release chlorine.</p> <p>Do not use ethyl or isopropyl alcohol to clean the system's foam pads or restraint straps.</p> <p>Do not use alcohol-based cleaners on acrylic surfaces like acrylic phantoms and the sheet source holder.</p>
For particular components of the product	

Suitability of the device for sterile areas	No
Size of the surface area to be cleaned	Approx 3.5 m <sup>2</sup>



Trademarks and service marks used in this material are property of Siemens Healthcare GmbH. All other company, brand, product and service names may be trademarks, registered trademarks or service marks of their respective holders.

All comparative claims derived from competitive data at the time of printing. Data on file. Siemens reserves the right to modify the design and specifications contained herein without prior notice. As is generally true for technical specifications, the data contained herein varies within defined tolerances. Some configurations are optional. Product performance depends on the choice of system configuration.

Please contact your local Siemens sales representative for the most current information or contact one of the addresses listed below.

“Siemens Healthineers” is considered a brand name. Its use is not intended to represent the legal entity to which this product is registered. Please contact your local Siemens organization for further details.

Note: Original images always lose a certain amount of detail when reproduced.

All photographs © 2017 Siemens Healthcare GmbH. All rights reserved.

<sup>1</sup> Symbia Evo and Evo Excel are not commercially available in all countries. Due to regulatory reasons, its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

<sup>2</sup> Based on competitive literature available at the time of publication. Data on file.

<sup>3</sup> All claims based on internal measurements at time of publication. Data on file.

<sup>4</sup> Primary energy is the energy contained in natural resources prior to undergoing any man made conversions (e.g. oil, solar). Based on 10 years usage.

MI-3179.TM.JV.PDF ONLY | © Siemens Healthcare GmbH, 03.2017

#### **Siemens Healthcare Headquarters**

Siemens Healthcare GmbH  
Henkestr. 127  
91052 Erlangen  
Germany  
Telephone: +49 9131 84-0  
[siemens.com/healthcare](http://siemens.com/healthcare)

#### **Global Business Line**

Siemens Medical Solutions USA, Inc.  
Molecular Imaging  
2501 North Barrington Road  
Hoffman Estates, IL 60192  
USA  
Phone: +1 847 304-7700  
[siemens.com/mi](http://siemens.com/mi)

#### **Legal Manufacturer**

Siemens Medical Solutions USA, Inc.  
Molecular Imaging  
2501 N. Barrington Road  
Hoffman Estates, IL 60192  
USA  
Telephone: +1 847 304 7700  
[siemens.com/mi](http://siemens.com/mi)