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# ACUSON S Family Ultrasound Systems, HELX with Touch Control

Environmental Product Declaration

# Progress that is Impressive – Ecological Advantages of the ACUSON S Family of Ultrasound Systems, HELX with Touch Control

- Managed Node Package upgrade allows software updates to be delivered remotely, reducing travel for customer service visits
- 52 lbs lighter than prior generation products
- The complete ACUSON S Family of ultrasound systems and their components are taken back and refurbished
- All substances contained in the product and its packaging are documented
- Disassembly instructions for high-quality recycling are available

## ACUSON S Family Ultrasound Systems, HELX with Touch Control: Reduce environmental impact by reducing on-site travel

Managed-Node Package (MNP) enables Siemens Remote Service (SRS) System Management. SRS System Management allows the customer to receive system software updates remotely, which eliminates time and travel costs associated with on-site software updates. Eliminating average on-site travel of 2.5 hours reduces fossil fuel consumption and greenhouse gas emissions.





## Ultrasound – Designed by You.

If you could design your own ultrasound system, what would you do? We have conducted usability sessions and spoken with healthcare professionals from around the world to find out what they wanted in an ultrasound system.

Their most common request: An intuitive and smart ultrasound system that enables healthcare providers to effectively manage today's demanding caseloads and diversity of clinical choices.

The ACUSON S Family, HELX with Touch Control was designed with a dedicated focus on General Imaging. It offers new levels of workflow efficiency, imaging performance and sustainability.

### **Workflow**

- Increase process efficiency and patient throughput with intuitive workflow innovations

### **Imaging Performance**

- Strengthen clinical capabilities with enhanced imaging technologies that advance diagnostic clarity

### **Sustainability**

- Investment protection with an upgradeable ultrasound architecture that addresses evolving needs

## Reduced Environmental Footprint

Less mass and reduced shipping weight means lower fossil fuel consumption and greenhouse gas emissions during shipping (for production and to customers) and less natural resources consumed in manufacturing. With this and the reduced need for service visit travel, the ACUSON S Family, HELX with Touch Control proves it is possible to have powerful performance without a large environmental impact.

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## Environmental Management System

Siemens Healthineers gives high priority to achieving excellence in Environmental Protection, Health Management and Safety (EHS).

Across the globe, Siemens Healthineers has implemented a consistent EHS management system. It lays the foundation for the continuous improvement of our performance in these areas, and regular auditing assures our conformance.

Healthineers is certified in accordance with ISO 14001 and OHSAS 18001.

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## 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



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

Our product design procedure fulfills the requirements of IEC60601-1-9:2007 "Environmental product design for medical electrical equipment".

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

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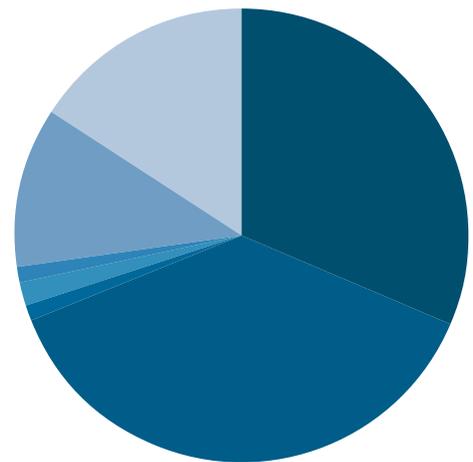
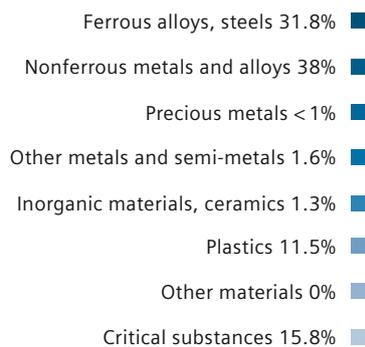
## Identification of Product Materials

The ACUSON S Family, HELX with Touch Control is mainly constructed out of metals and plastics. This ensures a high degree of recyclability.

The weight of each system is based on the system unpacked and ready for connecting transducers and using in a patient examination. The weight includes documentation devices, such as printers, installed on the system.

Total weight:

**Approximately 137 kg (303 lbs)**

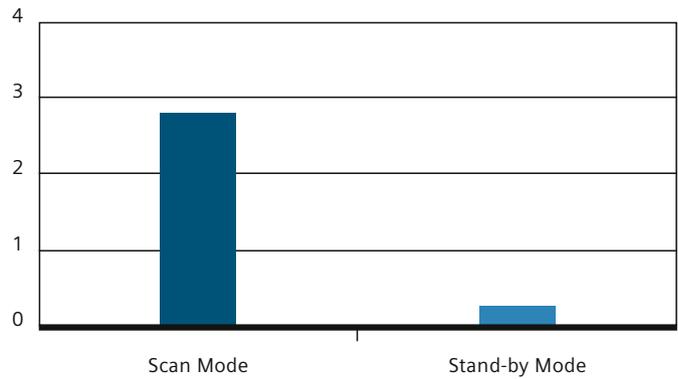


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## Energy Analysis

Energy consumption is an important environmental aspect of medical devices. For the ACUSON S Family, HELX with Touch Control, equipped with the energy efficient Stand-by mode, the user makes the difference. When not in use, the user can reduce energy usage nearly 95% by switching from Scan to Stand-by mode.

Electricity Consumption per day (kWh)



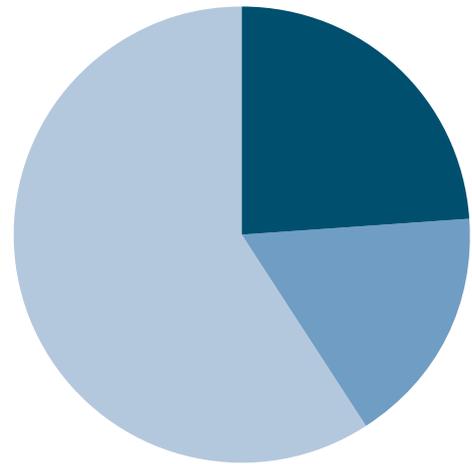
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## Packaging

The ACUSON S Family, HELX with Touch Control packaging materials consist entirely of wood, paper, cardboard and plastic, nearly all of which can be recycled.

Total weight:  
**Approximately 47 kilograms (104 lbs)**

Paper/cardboard 24%  
Plastic 17%  
Wood 59%

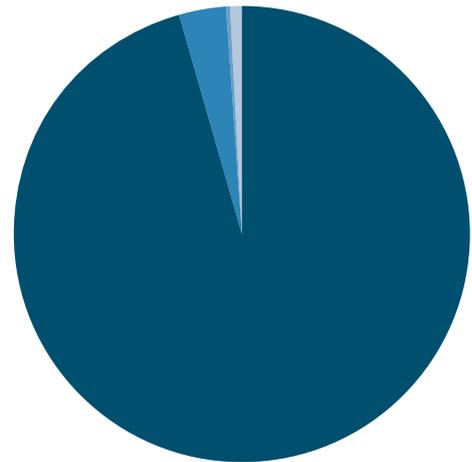


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## Product Take-Back

Most of the materials used to produce ACUSON S Family, HELX with Touch Control systems are recyclable. 96% (by weight) can be recycled for material content and 3.3% for energy.

Recyclable 97%  
Energy recovery 3.3%  
Landfill 0.17%  
Unknown 0.83%



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## Operating data

Heat emissions of each device	
Stand-by mode <sup>1</sup>	0.03 kW
Scan mode <sup>2</sup>	0.57 kW
<b>Allowed room temperature<sup>3</sup></b>	10°C – 40°C
<b>Allowed relative humidity<sup>3</sup></b>	10 – 80%
Noise level	
Basic load <sup>1</sup>	48 dB(A)
Full load <sup>2</sup>	50 dB(A) <sup>6</sup>
Energy consumption	
Stand-by mode <sup>1</sup>	0.03 kW
Scan mode <sup>2</sup>	0.57 kW
<b>Power-on time<sup>4</sup></b>	60 sec
<b>Power-off time<sup>5</sup></b>	60 sec

<sup>1</sup> Device is in operation but no examination takes place

<sup>2</sup> Average value for energy consumption at examination of patients

<sup>3</sup> Within examination room

<sup>4</sup> From off-mode to operating state

<sup>5</sup> From operating state to off-mode

<sup>6</sup> Measuring according to NEMA

## Technical specifications

Interface for heat recovery	No
Type of cooling	Air-cooling
Complete switch-off is possible	Yes
Devices are adjustable for the user in terms of height	Yes

## Radiation

Not applicable

## Replacement Parts and Consumables

Item	Life cycle
Lithium batteries	Every 1.5 years



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## Disposal/Substance Information

End of life concept	Yes
Recycling information	Yes
List of hazardous substances	Yes

## Cleaning

### Compatible cleaning processes

Total – each device	Yes
Restrictions for particular device components	Yes

### List of compatible substance classes

Total – each device	Specified low level disinfectants (see Instructions for use)	No
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Restrictions for particular device components see Instructions for use

<b>Suitability of each device for sterile areas</b>	No
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## Further Ecologically Relevant Information

### Elements of instruction are

Recommendations for saving energy	Yes
Recommendations for efficient cleaning	Yes
Recommendations for appropriate use of consumables	Yes



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