

## Philips Medical Systems

a report by  
Philips

Philips offers a robust portfolio of medical systems and the goal of each product is clear; faster and more accurate diagnosis and treatment. The product line includes best-in-class technologies for X-ray, ultrasound, magnetic resonance, computed tomography (CT), nuclear medicine, positron emission tomography (PET), radiation oncology systems, patient monitoring, information management and resuscitation products. The company also offer a wide range of services; including, but not limited to, training and education, business consultancy, financial services and e-care business services.

### Healthcare Informatics

Philips' healthcare informatics portfolio includes a wide range of products and professional services. Each one offering customer tailored image and information management solutions for the cardiology and radiology environment. Worldwide installations in both these areas have given the company invaluable experience in the market.

The technological innovations Philips deliver are a direct result of the work done with all their customers. This insight has helped to develop IT products and services that help healthcare professionals improve their productivity, efficiency and ultimately the quality of care.

### Customer Support, Healthcare Consulting and Financial/Leasing Services

Philips understand that for every institution, one of the customer's most pressing concerns is how to maximise the value of the medical technology they already have.

The comprehensive professional services will help to improve patient outcomes and reduce the overall costs of healthcare delivery with integrated solutions that effect change. With Philips' comprehensive customer care services, the goal is to help increase the speed of patient throughput, increase uptime, improve productivity and lower the cost of ownership. The

company's customer care services maintain this collaborative relationship with a post-installation service package designed specifically for each department. Customer care services provide the power of choice in a complex healthcare environment. With Philips' expertise, in both clinical applications and information technology, the company are ready to collaborate with customers on an integrated, multi-modality, healthcare IT environment, which transforms data into knowledge.

### X-Ray – General

The company's general X-ray division develops, manufactures and sells X-ray systems for radiography and fluoroscopy, as well as mobile C-arms for surgery.

The radiography portfolio includes conventional and mobile radiography solutions. In the field of digital radiography Philips provides computed radiography and direct digital radiography (DR) systems. The company's latest image processing technology, Unified Image Quality Enhancement (UNIQUE), provides outstanding image quality for both flat detector technology and Philips computed radiography (PCR).

Philips R/F X-ray systems assist in faster, more confident diagnoses for a wide application range: The DuoDiagnost systems, as well as the Eleva family of products, all reflect the company's commitment to delivering the highest image quality at the lowest possible dose, while enhancing quality of care and increasing productivity.

The Philips BV family addresses all mobile fluoroscopy imaging applications as required, for example, in the operating room (OR). All BV family systems offer integrated Digital Images and Communications in Medicine (DICOM) functionality and Vequion compliant workstations.

### X-Ray – Cardio/Vascular

Innovative technology is one of the reasons why Philips have been called a world leader in cardiac and

vascular imaging for diagnostics and intervention. The reason lies in the accomplishments made through collaborative work with customers committed to changing cardiovascular (CV) care for the better. The results include innovations like the Integris Allura – the world's first interventional X-ray system for three dimensional (3-D) reconstructions.

### CV Care

Philips Cardiovascular Care Segment is dedicated to providing full-line support across the CV care continuum. The depth and breadth of the CV portfolio includes:

- X-Ray angiography;
- CV CT;
- CV magnetic Resonance (MR);
- nuclear Cardiology;
- echocardiography (ECG);
- diagnostic ECG;
- cardiac care unit (CCU) monitoring;
- healthcare informatics defibrillation; and
- service and Support.

The company are also committed to advancing molecular imaging research (MIR) for the future of CV care. Philips are collaborating with leading researchers and drug designers worldwide in the development of new contrast agents and other pharmaceuticals for the future of CV molecular imaging.

Philips understand the challenges their clients face on a daily basis, and through their 'Collaboration Methodology' they work with the client to understand their needs and provide the specific solutions that are required. The company's goal, for both administrators and clinicians alike, remains the same: To continue to help deliver world-class CV care routinely to all patients within the constraints of hospital economics.

### Ultrasound

Philips offers a broad range of Ultrasound products, which consist of high-definition (HDI) and compact systems, as well as general and cardiology focused systems. Current successes in this area include:

- The company have grown to an installed base of over 14,000 digital broadband HDI systems.
- The second-generation SonoCT real-time compound imaging ultrasound technology allows for advanced signal processing, such as Tissue Harmonic Imaging (THI), 3-D and panoramic imaging.

- Philips' CV ultrasound systems include the SONOS 4500, SONOS 5500, and 'ImagePoint Hx' systems.
- The 'EnConcert' system has been touted as the world's leading integrated, digital solution for acquisition, review, measurement, reporting and archiving of ECG images and data

### Magnetic Resonance Imaging

Because of their client's input, Philips are striving to change how the world looks at MR in radiology, cardiology and interventional applications. The customers have shown the company how MR products improve speed, create higher-quality images and expand the breadth of applications, while reducing the cost of ownership.

Philips' state-of-the-art line of Achieva scanners includes the Achieva 1.5T and the Achieva 3.0T, the world's most compact ultra-high field MR system. The Panorama 0.6T and Panorama 0.23T represent the company's commitment to the open MR market. Featuring a true C-arm design, the open scanners offer outstanding convenience to both staff and patients.

In addition, all of the MR products are delivered with Philips' unique Sensitivity Encoding (SENSE) technology, an advancement that has proven itself in a clinical setting to provide revolutionary enhancements in magnetic resonance imaging (MRI) speed.

### Computed Tomography

Philips Medical Systems has always been an explorer and has always supported the pioneering spirit in clients. There is perhaps no better example of this than Philips CT. Customers are able to choose from a range of systems that provide a breadth of capabilities from routine clinical exams to advanced applications in cardiology, oncology and PET/CT imaging. Their appeal is powered not only by intelligent technologies, but also by intuitive human interface advancements.

Philips offers an entirely new line of multislice CT systems under the name of Brilliance™ CT. Brilliance systems are specifically designed to help sites leverage the full value enabled by multislice imaging through smarter technologies and advances in user-friendliness. Users can expect superior results across a range of routine and advanced applications including neuro, body, pulmonary, CV paediatric, interventional and trauma studies.

The Brilliance family of products is intended to meet the needs of a wide variety of customers; systems are available in a breakthrough 64-slice configuration, as well as 6-slice, 10-slice, 16-slice and 40-slice, and 16 power configurations. In addition to the Brilliance CT portfolio, Philips offers a Mx8000™ Dual multislice CT scanner, AcQsim™ CT scanner for oncology studies and GEMINI™ CT/PET multislice systems.

### Nuclear Medicine

Philips' market-leading nuclear medicine imaging product portfolio offers a complete line of gamma cameras for general nuclear medicine applications, as well as a cardiology market leader in office-based applications. CardioMD is a compact, dedicated gamma camera for nuclear cardiology and is specifically designed to meet the requirements of outpatient facilities.

Philips also recognises the potential for improving patient care and reducing costs through the use of hybrid imaging systems. The hybrid imaging line continues to expand and now includes, Precedence SPECT/CT, the latest breakthrough in functional and molecular imaging, and GEMINI™ PET/CT, the world's first and only open PET/CT.

### Positron Emission Tomography

Philips are looking to set new standards in imaging with their PET and PET/CT product offerings by focusing on performance, productivity and reliability. Driving all of these accomplishments is the revolutionary Pixelar™ detector design, combined with true 3-D acquisition and reconstruction – targeted at setting a new benchmark for PET image quality.

These products can help provide diagnostic confidence. They can help customers make more informed decisions and encourage shared confidence by eliminating departmental technical boundaries. An example of this is Philips' Syntegra workflow solution. It provides automated 3-D image registration algorithms that are fast and reproducible and available in full fidelity for multi-modality display and review.

Philips are continually focusing on developing products with the customers and patients in mind. An example of this is the unique and open design of the PET/CT products. They can reduce anxiety during the imaging examination by allowing

patients to see beyond the scanner. Philips' Expanse™ technology provides easy patient access through separation of the PET and CT gantries.

Knowing that the customer wants to make secure investments, the PET/CT systems are 'designed for life'. The company's commitment is to develop products that provide competitive advantages for the present, while providing the ability to grow as new applications emerge.

### Radiation Therapy Planning

The Pinnacle radiation oncology system computers help oncologists plan, deliver and evaluate precise radiation treatments for cancer patients. The systems combine third-party workstations and printers using Philips' proprietary application software. They offer 3-D volumetric image processing and dose computation capabilities, which enable physicians to plan the precise application of high-energy radiation to a patient's specific targeted area for the treatment of cancer.

### Cardiac and Monitoring Systems

The Cardiac and Monitoring Systems division offers an extensive and recognised portfolio of patient monitoring and cardiology products; including automated external defibrillators and related professional services, supplies and support.

These solutions are designed to provide better and faster patient care. They are here to support the needs of healthcare providers in demanding environments. In addition, they are here to address an international trend of treating chronic medical conditions outside the hospital. Key products include:

- patient monitoring systems;
- point-of-care diagnostics;
- clinical information management systems;
- diagnostic cardiology device technologies;
- manual automated external defibrillators;
- electrocardiographs;
- electronic stethoscopes;
- data management systems;
- 600 medical-supply products; and
- financial, integration and professional consulting services.

Philips' focus is on everyone – from the healthcare consumer to the healthcare providers, from the home to the hospital. ■