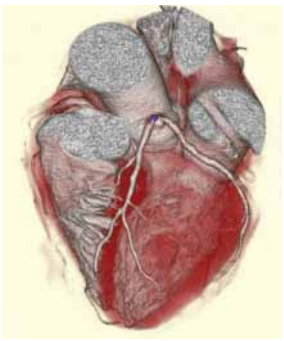
Medical Systems

In the medical systems field, Toshiba aims to create rich medical, health and welfare value bearing in mind the preciousness of human life in order to realize healthier lives for people. We offer a 64-slice CT scanner with improved temporal resolution, an interventional angiography system using a 5-axis rotational mechanism in which the examination range for the heart and blood vessels has been markedly expanded, and so on.

Aquilion™ 64-Slice System Whole-Body X-Ray CT Scanner

Aquilion™ 64-slice system whole-body X-ray CT scanner

Toshiba Medical Systems Corporation has developed a new system in the top-of-the-line Aquilion™ series of whole-body X-ray CT (Computed Tomography) scanners. This is a 64-slice system that enables 0.35-s rotation suitable for cardiac examinations.



Clinical 3D image of heart (Courtesy of Iwate Medical University)

The main features of this system are described below:

- Temporal resolution and sharpness of cardiac images have been improved with the combined use of 0.35-s rotation and 64-slice scanning. As a result, diagnostic capability in the cardiac region such as measurement of the coronary stenosis ratio has also been improved.
- Automatic adjustment of scan conditions according to the patient's heartbeat or modulation of X-ray intensity during rotation based on the patient's body size allows reduced exposure dose per examination.
- The image reconstruction engine and data transfer have been upgraded, focusing on the examination workflow for scanning, reconstruction, transfer, and observation of CT images, resulting in reduced examination time.

Infinix™ CF-i/SP, CF-i/BP Interventional Angiography System

Infinix™ CF-i/SP interventional angiography system

Toshiba Medical Systems Corporation has developed the interventional angiography systems Infinix™ CF-i/SP and CF-i/BP. The adoption of a 5-axis rotational mechanism markedly expands the examination range for the heart and blood vessels, automatically creates a continuous "heads-up" image display, and provides a wide working area for medical staff.

Left coronary angiogram

These factors are very important in catheter-based cardiovascular diagnosis and treatment. The design of the system allows it to be used in all areas of cardiovascular disease from adult coronary therapy and peripheral vascular disease, to the treatment of pediatric patients.

The main features of the system are as follows:

- Compact FPD
  A compact X-ray flat panel detector (FPD) enables C-arm positioning with steep angulation and allows regions, especially coronary arteries to be clearly and quickly visualized.
- Expanded capabilities
  By adjusting the 5-axis rotational mechanism in various ways, it is possible to perform angiography on any part of the body, from head to toe and from fingertip to fingertip.
- Wide working area
  The new floor base rotation axis allows physicians, nurses, and anesthesiologists to access the patient from the left or right side at the head end. This is especially important with small infants being examined for congenital heart disease. The overall design gives easy access to these small patients and greatly contributes to a successful outcome.