

# A Tradition of Innovations

The changing landscape of flat detector technology and its integration with digital radiographic and fluoroscopic imaging solutions.

From 1998 to 2002, Siemens Medical Solutions introduced their first digital flat detector radiography solutions, the well established AXIOM Aristos family equipped with Trixell Pixium 4600 radiography detector. This first digital radiography portfolio contained different system variants with integrated flat detectors to cater to various radiographic imaging requirements in areas such as general and trauma departments. The amorphous silicon flat detector greatly changed the radiographic routine and addressed the many challenges faced in conventional and computed radiography – among them dose, workflow and image quality. These issues have been scrutinized and discussed in many

journals and the advantages gained with flat detector solutions are well accepted. However, with all the advantages gained with the flat detector, one challenge was positioning flexibility for certain specific examinations as the detector could not be removed from the system. An example is a common projection, an axial projection of the hip.

To overcome this limitation, Siemens launched the AXIOM Multix M family in 2003. These imaging solutions showcased a single, mobile detector in a digital radiographic system. This mobile detector could be inserted either into the table or wall stand or placed in direct contact with patients for free exposures. This solution resolved the limitation of

detector handling flexibility while improving workflow. Also, it complemented our AXIOM Aristos range by providing a choice of solutions for various clinical and economical requirements.

## Flat detectors in the fluoroscopy suite

Following the increasing acceptance of flat detectors in radiography, Siemens Medical Solutions realized that customers would get an advantage through the integration of flat detectors into fluoroscopy solutions.

At RSNA 2005, the new conventional dig-



### MULTIX and VERTIX FD

The first flat detector digital radiography solution to be introduced by Siemens Medical Solutions.

RSNA 1998



### AXIOM Aristos Family

AXIOM Aristos FX, a member of the Aristos family, is a solution with fully automated system positioning. The ceiling suspended detector and X-ray tube facilitate flexible positioning with a single flat detector.

RSNA 2002



### AXIOM Multix M Family

This family offers the first fully integrated digital radiography solutions equipped with the mobile flat detector – delivering workflow efficiency and flexibility.

RSNA 2003

ital fluoroscopy system AXIOM Luminos TF optionally equipped with a mobile flat detector, was launched. This solution enabled users to utilize the mobile detector for radiographic projections instead of cassettes. This concept again brought many workflow improvements and enhanced utilization of the fluoroscopy system – allowing healthcare institutions to re-evaluate the investment of such high-end digital fluoroscopy systems. Following the path of further detector developments, a new full-sized 43 cm x 43 cm (17" x 17") detector with fluoroscopic and radiographic capabilities was launched at RSNA 2006, replacing the image intensifier and the Spotfilm device. The remote-controlled AXIOM

Luminos *dRF* equipped with this innovative detector revolutionized the workflow and throughput in a typical fluoroscopy room.

### What is next on the horizon?

Following recent innovations in radiography and fluoroscopy, Siemens Medical Solutions continues to push the limits with creative imaging solutions. In response to a frequently asked question, Siemens is introducing the newest digital radiography system at RSNA 2007. Ysio wi-D\*, the new digital radiography

system brings new meaning to workflow flexibility. It is equipped with the new generation radiographic detector in the wall stand and a wireless mobile detector (wi-D) in the table. This solution of one integrated detector and one mobile wireless detector makes it possible to meet the demands of high throughput and a wide range of radiographic applications. Ysio wi-D, an innovative system that simplifies challenging routines, is designed for virtually any examination without limitations. Just read on for more details on the latest in radiography and fluoroscopy at RSNA 2007.



#### AXIOM Luminos TF with mobile flat detector

Totally digital solution for both fluoroscopy and radiography. Greatly streamlining the clinical workflow for improved efficiency.

RSNA 2005



#### AXIOM Luminos *dRF*

Revolutionizing the fluoroscopy suite. 2-in-1 solution for fully digital fluoroscopy and radiography with an integrated flat detector for both dynamic and static imaging.

RSNA 2006



#### Ysio wi-D

A brand new system in digital radiography, combining integrated and wireless mobile flat detectors for maximum workflow efficiency and flexibility.

RSNA 2007

\* Future 510k