



VisiConsult  
X-ray Systems & Solutions

# FineTune Detector Holder

## THE 7-AXIS HIGH PRECISION DETECTOR HOLDER

High-end Computed Tomography (CT) applications and flexible inspections have special requirements towards the detector holder. Therefore, VisiConsult developed the FineTune holder as a tool to achieve that last notch of quality and simplicity. Incorporating 7 axes the detector can be adjusted with a translational accuracy of 20µm and rotational accuracy of less than 0.01°. All axes are completely decoupled and the centre of rotation is exactly in the centre of the detector's active area. Through a locking keyway a set of favourite positions can be setup in seconds. The FineTune is available as a fast upgrade to all VisiConsult C-Arm systems.

An automated shift reduces those artefacts in 3D Computed Tomography inspections that are caused by dead pixels. To achieve this the detector can be shifted pneumatically. Through the offset of a few detector pixels in-between subsequent images the defect pixels can be easily eliminated during reconstruction. Especially R&D labs use different detectors for their inspections. Through the Quick-change connector the time to switch to a new detector is reduced from hours to seconds.

- Two translation axes with **20µm** accuracy over  $\pm 30\text{mm}$  without play
- Three rotational axes with  $<0.01^\circ$  accuracy with a maximum of  $\pm 1.5^\circ/3^\circ$
- Rotational centre exactly in the centre of the active area (FDP/DDA)
- Decoupled translation and rotational axes for precise fine-tuning
- Quick-change connector for detectors to save time
- Modular setup to upgrade existing C-Arm systems like the XRH222
- Locking keyway to restore prior settings in seconds
- Dead-Pixel and artefact compensation through pneumatic detector movement

