

Computer Tomography System from GE, today Waygate Technologies – a Baker Hughes business

## **vtomex L 240**

Step-in cabin

### **CT:**

- 240 kV / 320 W open microfocus X-ray-tube
  - Focal spot 3 - 200  $\mu\text{m}$
  - Minimal voxel size: 2  $\mu\text{m}$
- High-Contrast Detector Tungsten with
  - ca. 2000\*2000 Pixel, pixel size 200 $\mu\text{m}$ , Detector size 400 mm x 400 mm
  - Bit depth: 14 bit (16.384 grey values)
  - Frame rate up to 8 fps
  - Movable distance along y-axis ca. 600 mm
- 8-axis sample-manipulator
  - Setup on granite block for maximal long-term-stability and precision
  - Anti-Vibration-System
  - Axis travel lengths:
    - X:  $\pm 250$  mm
    - Y: 600 mm
    - Z: 1200 mm
  - Controls via Joystick & Software
  - Max. sample diameter : 600 mm
  - Max. sample height: 800 mm
  - Max. sample weight: 50 kg
  - 2. Rotation and tilting table for 2D-inspection. Tilting  $\pm 30^\circ$
- Step-in cabin compliant to R $\ddot{O}$ V, leak radiation < 1 $\mu\text{Sv/h}$
- Integrated controls with PC (Windows 7)
- Printed instructions and electrical plans available

### Technical data

- Dimensions (w x h x l): ca. 4550 mm x 2400 mm x 3110 mm (w/o console)
- weight:
  - Cabin: ca. 9 t
  - Manipulator: ca. 8 t
  - Complete system: ca. 18 t
- Electrical contacts: 3 \* 400 VAC/N/PE, 3 \* 40 A
- Compressed Air: 6 bar
- Environmental requirements: 10° - 30°C, rel. humidity 25% - 85% rF, not condensing

First Installation: 13.10.2008

Detector and PC renewed: 17.3.2016

## **Accessories:**

### **Software for 3D computed tomography datos|x acquisition V2.2.1-RTM**

Proprietary CT acquisition software with following modules:

- quality | assurance: auto positioning (CNC) und control for 2D inspection
- AGC|modul – automatic rotation axis calibration
- surface|extraction – STL export of iso-surface
- CT image quality analyzer according ASTM E 1695
- datos|x Modulpaket advanced
- Scan|optimizer
- Multi|scan – scan stacks for tall samples
- Sector|scan – partial rotation scan of less than 360°
- Fast|scan – continuous rotation scan.

### **Rekonstruktion and visualization -Workstation HS384 GB - WSU-Dual/384**

- HP Z820 Workstation mit 2 Intel® Xeon® CPUs (E5-2660, 2,2 GHz, je 8 cores)
- 192 GB RAM
- 800 GB SSD, 1,5 TB HDD
- 4 AMD Fire Pro W8100 GPUs
- 2 \* 24" HD Monitor
- Microsoft Windows® 7 Ultimate (64bit)

### **Datos | x 2 Rekonstruktion-Software V2.6.0-RTM**

- BHC+|Modul – beam hardening correction
- RAR|module - Ring Artifact Reduction
- Auto|roi – automatic ROI determination
- MV|reco – automatic partial reconstruction of huge volumes
- DICONDE|export
- ext|launch – trigger external software upon reconstruction events