Specification of SAM-TITAN

1. Ultrasonic Pulser/Receiver

- Frequency Range   1 - 500MHz
- Low noise, high performance pulser/receiver derives the ultrasonic signal of ultra wide-bandwidth characteristics from the transducer.

2. A/D Converter

- Real time 1GHz Sampling Rate

3. Industrial Computer for Ultrasonic System

- OS : Windows 10
- Monitor : 24" (with MONITOR ARM)

4. Mechanical Scanner

- Scan Axis (Linear servo motor)
  Max. Speed   1,000mm/s
  Repeatability   +/-2 micron
  Encoder Resolution   0.5micron

- Index Axis
  Micro-stepping motor with lead screw
  Step Resolution   5micron

- Vertical Axis
  Micro-stepping motor with lead screw
  Max. Stroke   80mm
  Vertical Resolution   2.5micron

-C- Scanning Area : 750mm x 750mm
-T- Scanning Area : 750mm x 250mm ~300mm
- Material of Mechanical Equipment : Al
- Material of Frame : Steel
- Total size except monitor : 1,400 X 1,400 X 1,565mm
- Bath Loading/Unloading System

5. Immersion Tank
- Water circulation pump with filter (Option)
- Dimension : 950mm x 1,050mm x 150mm
- Material : SUS

6. General
- Weight   : Approx. 700kg
- Power   : AC220V / 20A

7. ScanUp and ScanUpViewer Software
- Windows 10 base software for system control and image analysis
- Automatic and manual setup
- Automatic focusing, Auto-sizing & Auto-gate
- Pulse echo and thru transmission modes of operations
- A, B, C-Scan, FFT-Scan TOF-3D and Virtual 3D display
- Multi-Layer Scan (Upto 20 layers), Tray Scan, Strip Scan and Specific Area Scan
- C-Scan image for amplitude, time of flight and phase inversion
- FFT for transducer evaluation, Bulk-scan
- Size measurement of defects and delamination
- Automatic report generation

8. Transducers

9. Lay-out

1. Dimension : 1,400x1,380x1,500(1,710)
2. Weight : Approx. 700kg
3. Power : 220ACV, 1 Phase, 15A
4. Pnuematics : 5~6kgf
5. Water In / Out