

# Nondestructive Inspection System for Detecting Internal Flaws

**Purpose:** To develop a technology based on phased array and TOFD technologies to detect defects in thick-walled structures

## Main Specifications:

- (1) Ultrasonic instrument applicable to phased array & TOFD
  - (a) The number of channels: 32/64CH  
(60CH for phased array, 4CH for TOFD & Pulse echo)
  - (b) Variable refraction angle:  $30\sim 70^\circ / 0.1^\circ$  Pitch
  - (c) TOFD: 4CH
  - (d) Pulse echo: 8CH
  - (e) Frequency band: 0.7~20Mhz
- (2) Driving unit
- (3) Signal processing unit

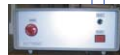
## Location and Date of Installation:

Materials Science Research Laboratory, September 2003

Signal processing & control unit



Ultrasonic instrument



Driving unit

