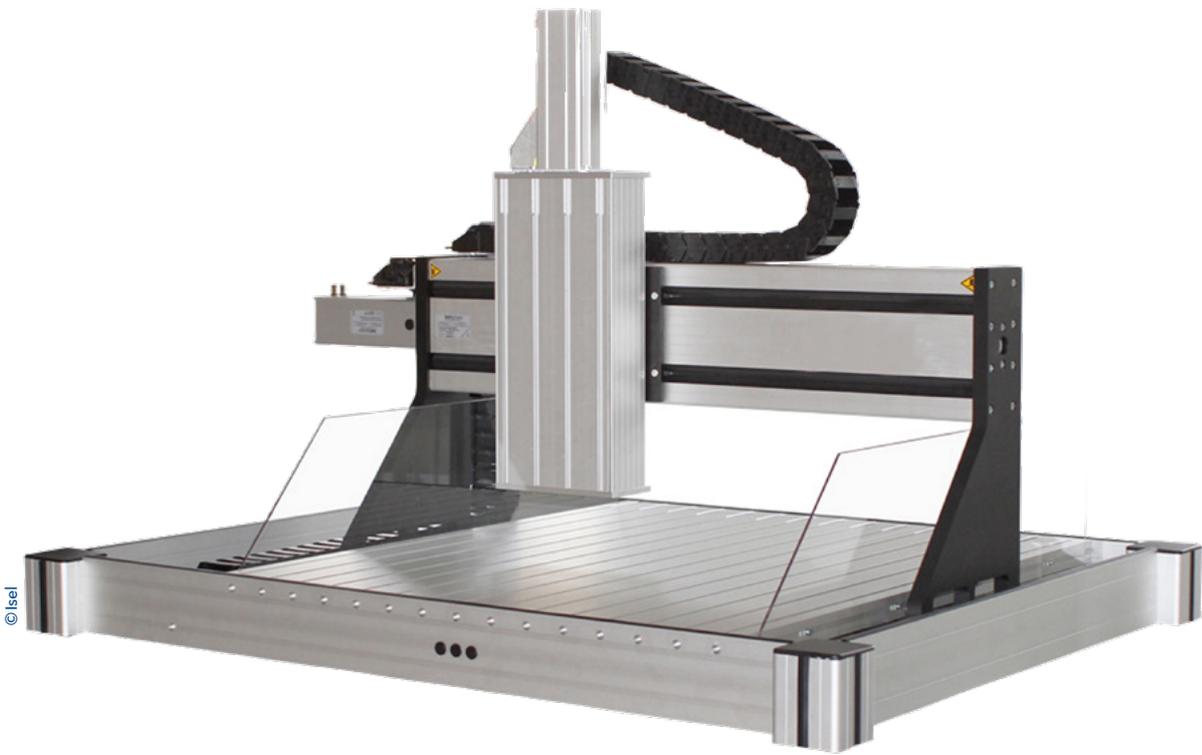


Laser Ultrasound NDT Scanner

3-axis flat-bed scanner unit



moving sounds without moving parts



One- or eight-channel NDT scanning system for laser-based air-coupled ultrasound detection including flat-bed scanner, measurement electronics, analysis software and computer hardware

General specifications

3-axis flat-bed scanner unit; scanning area: 530 x 1000 mm or 500 x 530 mm (X and Y axis)

Z-axis: traveling distance: 460 mm

Motors and drive controllers

Maximum travel speed 75 mm/s

Step size increment adjustable between 0.01 mm...5 mm,
step size independently adjustable for x and y increment

Underframe and cabling

Supply 110-120V; AC 50Hz-60 Hz

Measurement electronics/data acquisition

4x 2-channels or 1 channel measurement unit for signal digitization; 25 MHz sampling rate 14 bit

1x interface board for path control

1x TTL output for excitation laser or thermoacoustic emitter

+/-7.5V (50 Ohm) input, with adjustable 0...50 dB analog signal amplifier

Analog input filter: all-pass, high pass, low pass

Switchable inline digital filter during acquisition

Displayed frequency bandwidth 5 MHz, selectable range

Encoded pulse sequence excitation with freely programmable code sequences

Analysis software

Configuration and software control of the scanner and data acquisition hardware

Parallel display or switchable display for A-scans of all 8 channels (only for 8 channel model)

Joint (fused) display of 1 to 8 channels into one single C or D scan image (only for 8 channel model)

Data aggregation and display as A, B, C, D scans, correlation and spectral analysis

Configuration of flexible time and spectral windows for analysis and display

Trigger on preset threshold value

User interface with functionality for exploration of recorded datasets, data export (CSV),

image export (jpg, vector graphics, CSV)

Software menu in English language

Computer hardware

Measurement computer with monitor including monitor, keyboard, mouse,

software pre-installed on Windows 10 platform