



reliable and precise
**Thickness
Measurements**

CNC
Manual
Custom
Robotic
Ultrasonic
Solutions

Mepuls



CNC MACHINE INTEGRATION

Integrated as a measurement tool, the Mepuls performs ultrasonic measurements at a very high accuracy.

Ultrasound : 10 to 20 Mhz local immersion

Couplant: Homogenous liquid (cutting fluid, water, oil)

Power: Rechargeable 3.7 volt batteries

Thickness measurement: 1 to 20 mm

Wireless communication: Zigbee 2.4 GHz

wireless ultrasonic device
for accurate thickness measurements

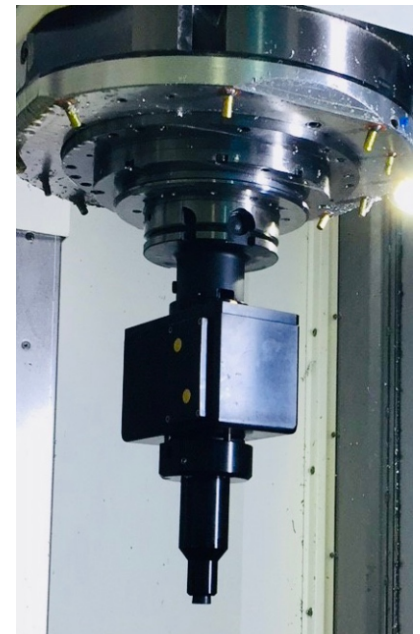
FEATURES

- Cutting fluid enters the tool from the center or from an external input
- Auto-detection of spurious indications: (chips, no parts, lack of coupling, loss of ultrasonic signal)
- Integrated calibration routines
- Statistical analysis of measures for higher accuracy



SYSTEM DELIVERY

- Measurement head
 - transducer
 - Zig Bee communication card
 - Assembly
- Communication station
 - Mini industrial unit
 - communication receiver
- Software
 - communication
 - ultrasonic



CNC SOLUTIONS

Automated
Wireless
No contact

INTEGRATED SOLUTION

Controller communication
Fit in tool changer
Uses cutting fluid

MANUAL SCANNERS

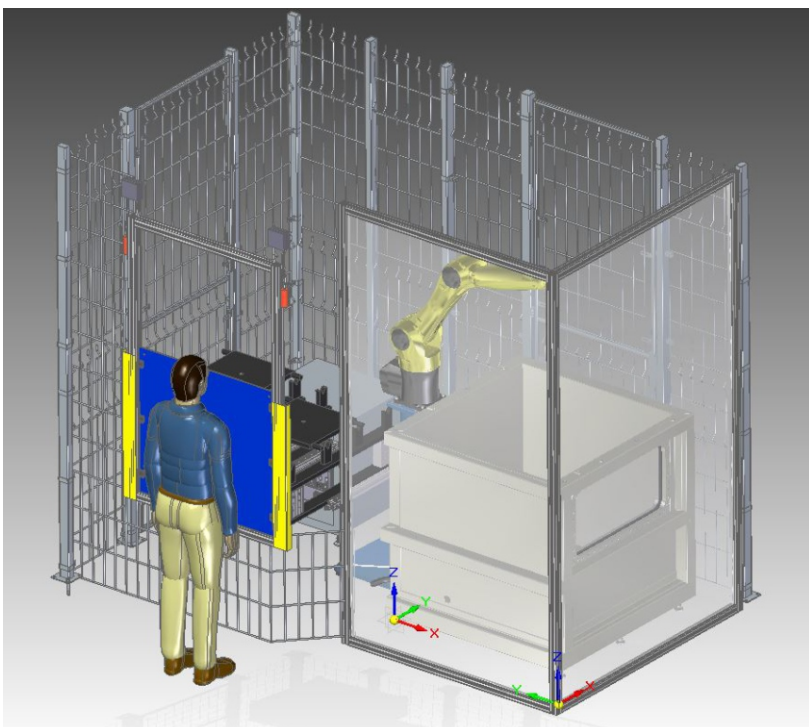
Measurements can be fitted on a custom manual scanner. This is designed on request. The unit can also supplement an X-Y or R theta scanner.



custom mechanics and automation for more efficient measurements

ROBOTIC CELLS

The robotic cell is adapted to your parts. It may include entry and exit conveyors, drawer input/output assembly, tank, robot, special gripper and calibration station.



CUSTOM SOLUTIONS

Our solutions are customized to your applications. There is no one fit all solutions, Our solutions are agile and meant to be adapted to fit your environment.



INTEGRATED SOLUTIONS

We can interface to your network. Interoperability is offered to connect and communicate inspection status and results.



ULTRASONIC

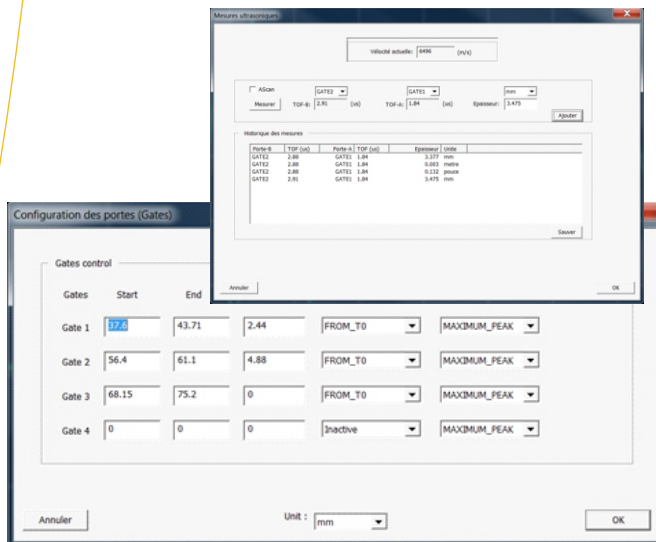
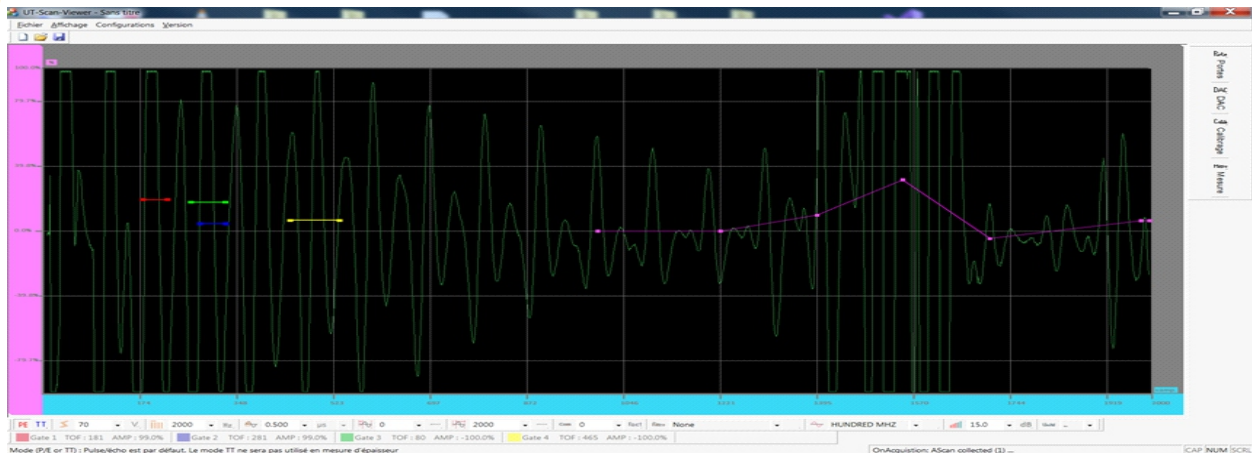
All systems use the same ultrasonic hardware and software. The operator interface is customized as required. .

SPECIFICATIONS

- Power; 5 Volt DC
- Voltage: Adjustable 30 to 230 volts
- Input Bandwidth: 05 to 25 MHZ at 3dB
- Pulse Width: 5 to 1.272 us
- Analog Gain : 0 to 92 dB
- TCG: 0 to 92 dB, +/- 1 to 10ns
- Digitizer : 100 MHz, 12 bits
- PRF: 1Hz to 20 KHz
- Interface: Ethernet 1 Ghz or USB 2.0
- Size: 120 mm x 73 mm x 75 mm (w/o enclosure)
- Optional 8 channel multiplexer



hardware and software designed for thickness measurement



Software

- Two interfaces: set-up and acquisition
- Views: A scan, Amp, TOF
- Output: Thickness based on max ampl, first peak, last peak
- Hardware Gates: 4 (calculated directly on the card)

thickness measurement

