



## Special ultrasonic probes for scanner

### Application

Probes from special Ultra offer. Embedded scanner is a unique feature of CUD flaw detector. Probe for scanner it's a connection of two probes (emitter and receiver). One probe emits a surface (Ryleigh) wave, it has built-in magnetic holder which keeps it on tested surface. Other probe has two transducers. One of them is a receiver of surface wave and it gives us position of a probe. Second transducer is responsible for testing.

Probes for scanner provides automated flaw valuation according to for ex. PN-EN 1712 and 1714 standards. Results of testing are presented as a map of detected flaws - Sonograms.

All probes can be made in a standard manner or customized to the customer specific requirements.

Probes can be supplied with the water-coupling wedge or without it in casings made of: aluminum (blacken), brass, stainless steel, teflon, plastic or other requested material.

Probes can be delivered with LEMO or BNC connector. Other connectors are also available upon request.

Delivered probes has manufacturer certificate with specified acoustic probe parameters.

Probe marked as M-1R90 7x7 is an emitter probe, where: M - magnetic holder, 1 - frequency 1MHz, R - surface wave (Ryleigh), 90 - beam angle, 7x7transducer dimensions.

### Probe symbols:

Probe marked as S4T60 9x10 and U03042 has:

- S - probe for scanner,
- frequency 4 MHz,
- type of ultrasonic wave T-transverse,
- beam angle 60 degrees,
- transducer diameter 9x10 mm,
- U03042 manufacturer symbol and serial number.

### Standard probes for scanner (underlined - most commonly used):

S2T45 9x10 S3T45 9x10 S4T45 7x7 S5T45 7x7  
S2T45 15x15 S3T45 12x12 S4T45 9x10 S5T45 9x10  
S2T70 9x10 S3T70 9x10 S4T70 7x7 S5T70 7x7  
S2T70 15x15 S3T70 12x12 S4T70 9x10 S5T70 9x10

### Probe acoustical parameters:

- frequency,
- Type of ultrasonic wave,
- beam angle,
- transducer dimensions,
- offset,
- near field length,
- Relative probe sensitivity,
- effective transducer dimensions.