

EDP technology to make life easy for you

The Windows interface

With the clear and well-arranged graphical Windows interface, in four languages, you will have no problem with the system handling. The system is operated via keyboard, an integrated touchpad, an optionally connected mouse or via a remote control having eight assignable instrument functions.

The Windows world

As the USLT 2000 is a standard PC, you can of course also install other Windows applications and use them for your individual applications parallel to the ultrasonic functionality. This means that if you're not using the USLT 2000 as an ultrasonic instrument, you can, for example, also work with word processing and spreadsheet programs.

You will learn to appreciate the advantages made available by the Windows world with its entire functionality even more. The so-called "multitasking" - that means simultaneous application of several programs and exchange of all sorts of data - offers great ease of use in this regard. In view of working with the USLT 2000, this means: you generate your test report forms in MS Excel. After this, you determine the fields into which the parameters and readings from the test results of the USLT 2000 are to be transferred. All you then have to do is select the test jobs and results which you wish to file and the forms are automatically filled out and ready to be printed.

Database

The storage of test data is indispensable not only for repetitive in-service tests. The importance of documentation also ranks enormously high today.

Instrument settings for different applications as well as countless test results, including the A-scans, must be permanently filed or statistically evaluated in many ultrasonic tests for reasons of product liability.

The method best suited to accomplish this task is a well-structured database: in the USLT 2000, all settings and findings are stored and managed in a MS ACCESS database.

Application software

The openness of the Microsoft concept offers all the possibilities of an individual postprocessing of data here as well because the most different programs have access to the filed data: analyzing programs, programs for test job management, and not forgetting - the tailored Krautkramer application software.

All USLT 2000 utilities (functions, function values and readings) are freely available to the user and can be applied for development of own test and control programs, together with the UltraWorks program.

Ultrasonic Inspection Report															
Order:	Repetitive Test	Order No.:	W 1430 B												
Installation:	Line 495	Drawing No.:	none												
Client:	0 at Pipeline	Material:	ST52												
Client Design:	95.0 mm	Object diameter:	1400.0 mm												
Location:	1/4 point	Mat. Velocity:	3250 m/s												
Date:	30.11.2001	Surface:	smooth												
Testing Co.:	Fischer	Test Span:	40-HP 50												
Instrument:	USLT 2000	Instrument Setup:	AUTO MMB 45-4												
C. at. Range:	150 mm	Calibration:	ISR 2												
Total Gain:	49 dB	Mat. Velocity:	3250 m/s												
Probe:	MWB 45-4	Frequency:	4 MHz												
Probe Serial No.:	5205	Rectification:	Full												
Reference Ref.:	H2M25	Probe angle:	45.0 °												
Regist. Curve:	2.0 mm	Diam. Reference Ref.:	mm												
Transfer Correction:	0.0 dB	Amplitude Correction:	-2.0 dB												
<table border="1"> <thead> <tr> <th>File No. (Date)</th> <th>Time</th> <th>AV</th> <th>RP</th> </tr> </thead> <tbody> <tr> <td>1 (30.11.2001)</td> <td>12:24:55</td> <td>14.1 dB</td> <td>3.3 mm</td> </tr> <tr> <td>2 (30.11.2001)</td> <td>12:57:40</td> <td>14.1 dB</td> <td>1.7 mm</td> </tr> </tbody> </table>				File No. (Date)	Time	AV	RP	1 (30.11.2001)	12:24:55	14.1 dB	3.3 mm	2 (30.11.2001)	12:57:40	14.1 dB	1.7 mm
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Excel export of inspection results

Krautkramer USLT 2000

The Ultrasonic Test System in a Notebook for Today and Tomorrow



GE imagination at work



For mobile test use, first-rate documented ultrasonic performance

The demands on ultrasonic tests are changing - and with them also the technical prerequisites for fulfilling new needs and requirements. We keep pace with the development: our USLT 2000 provides you with state-of-the-art technology that multiplies the application possibilities in everyday testing - and maintains a perfect ease of use. The advantages for the Quality Management are also obvious: the USLT 2000 solves all your problems with the management, evaluation and exchange of test-relevant data.

For everyday testing ...

Ultrasonic testing with a notebook means: high-tech ultrasonics *plus* modern data management *plus* mobility.

The USLT 2000 stands for excellent ultrasonic performance to accomplish even the most demanding test tasks. It stands for the openness toward the EDP world because the complete Windows functionality is utilized. In the end, the USLT 2000 stands for a truly mobile use: a PC weighing just about 3 kg (6.6 lbs.) becomes a universal ultrasonic instrument able to withstand - as an industrial-type notebook - even adverse ambient conditions.

For the Quality Management ...

Ultrasonic testing using a mobile notebook also means: undreamt-of possibilities for data processing.

Documentation of ultrasonic tests and test results, Export to Microsoft Excel, forwarding of data to company databases and networking of test systems - the USLT 2000 paves the way in today's and tomorrow's world of data.

... Krautkramer technology

This advancement was made possible by the cheque card-sized PCMCIA card especially developed by Krautkramer and taking care of the complete digitization of the test system.



Test technology for special demands

The pick of ultrasonics

Extreme miniaturization of the electronics and maximization of performance - that's USLT 2000.

The system is not only characterized by a high measuring accuracy and a large frequency range but also by extensive matching features enabling you to tailor the USLT 2000 to your individual application needs.

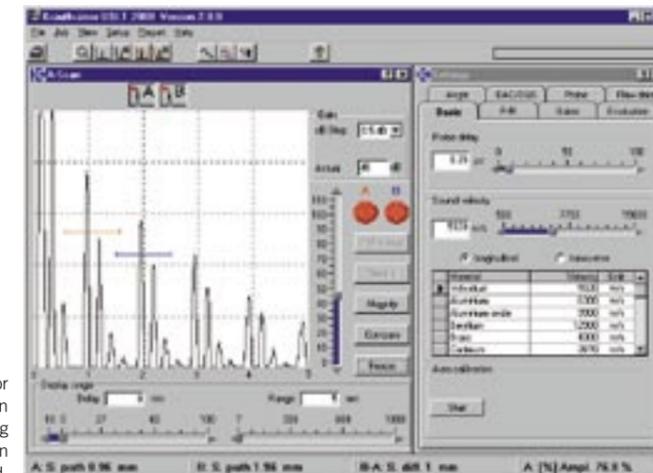
This includes for example the choice of the echo display mode that helps you with the evaluation: you can superimpose a stored display of test findings on the currently active A-scan in order to compare the test results. You can alternatively record the echo dynamics and simultaneously display the real-time signals. Even the possibility of an adjustable signal averaging is available to you in this connection.

The USLT 2000 offers universal evaluation options for detected indications to meet both national and international test specifications: DGS curves, user-friendly recording of a DAC and TCG for both methods.

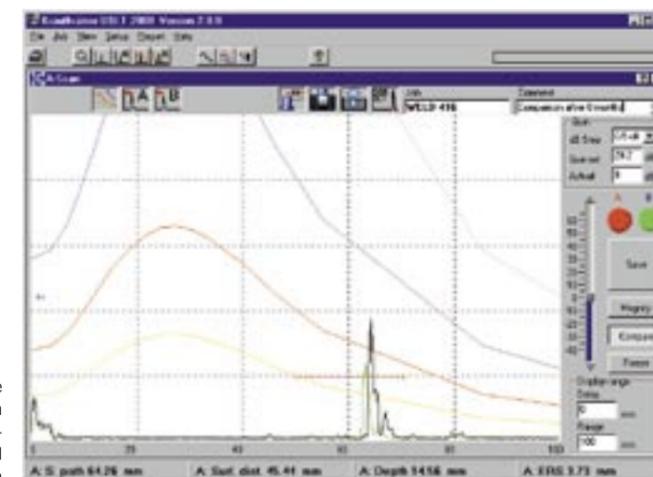
A highlight: the A-scan

With the USLT 2000, the days when you missed the analog screens of the usual test instruments in some test jobs are gone because the SVGA screen achieves a maximum A-scan resolution of 635 x 400 pixels thus enabling an almost analog display. Added to this are the large color display and the fast echo display.

The Windows operator interface with A-scan and setup menu. Dialog language and units can be easily changed.



The operator interface with A-scan in zoom mode, echo comparison, multiple DAC and display evaluation



This makes the USLT 2000 even suitable for applications in which an excellent resolution is important: for example, bonding tests and flaw detection on thin work-pieces, or in particular the inspection of spot-welded joints, for instance within the automotive industry.

An operator-interface, especially tailored to this application, automatically carries out spot weld evaluation and stores all the results in the database.

The probe solution

The pulser and receiver electronics is accommodated in a small aluminium box. Just select the probe required for your test task and connect it.

The intelligent Krautkramer dialog probes provide a special ease of use because they are automatically recognized by the system. All important probe data are automatically transferred to the USLT 2000.