

HARDWARE-SOFTWARE COMPLEX «TRAINING APPARATUS OF THE OPERATOR OF DEVICES OF NONDESTRUCTIVE TESTING»

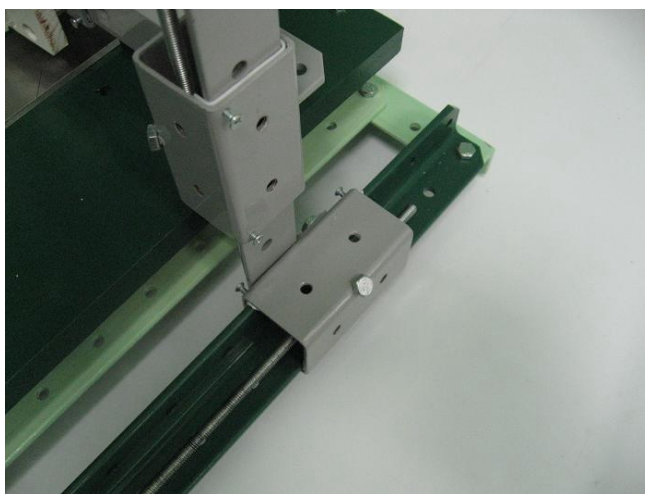
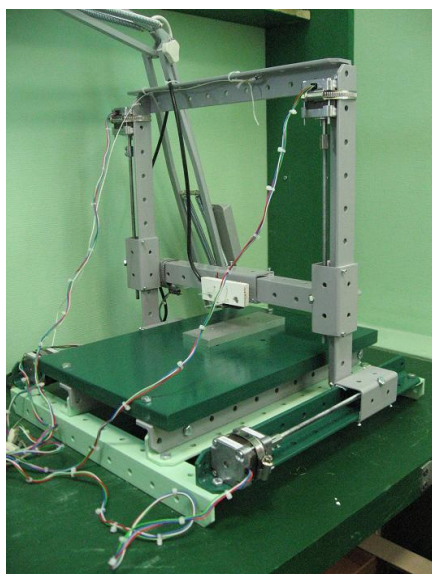
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In modern mechanical engineering sharply there is a question on quality flaw detection electromagnetic and magnetic methods of nondestructive control. One of ways of improvement of quality of diagnostics is qualitative training and improvement of professional skill of operators of devices NK. But cost of equipment of the training centre is very high: devices, gauges, samples. All it demands not only the big premises, but also service.

For simplification of process of improvement of professional skill of experts of nondestructive control HK, and also reduction of cost of training of training the hardware-software complex "Training apparatus", including has been developed:

- 3 co-ordinate machine tool with fastening for the gauge and a subject little table (drawing 1);
- The Software "Scanner" which is operating the machine tool and carrying out gathering of the information from devices NK;
- Serial device: GALS, VD-96, with a set of primary converters (drawing 2)
- The Software "the Editor", allowing to edit the kept data
- The Software "Training apparatus" which is the stand with virtual panels of devices, a complex plane and a field for placing of defects. (Drawing 5)

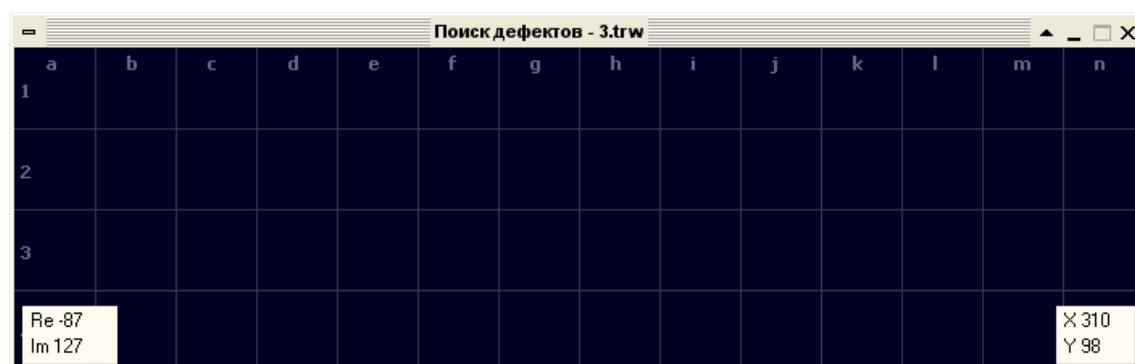
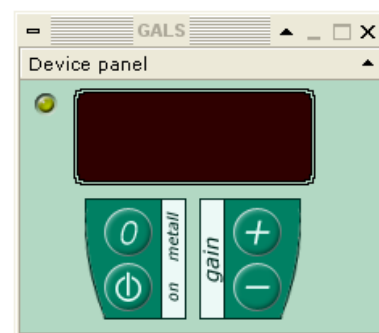
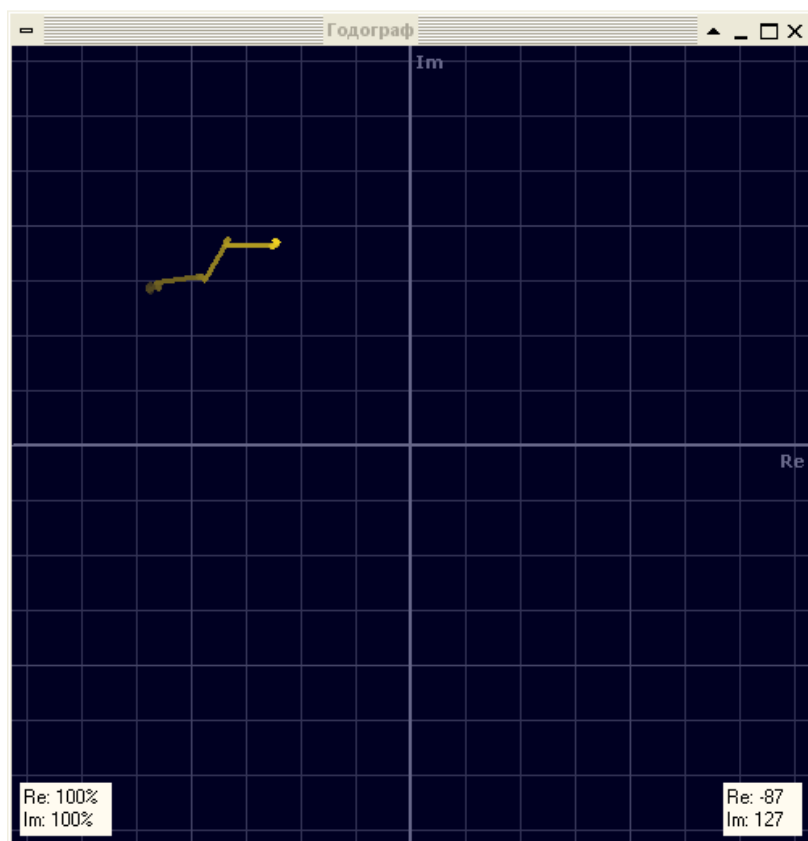
The modular software product provides possibility of its expansion, addition of new panels of devices, samples of defects.



drawing 1



drawing 2



drawing 3

Results of scanning of samples of defects are shown In following drawings

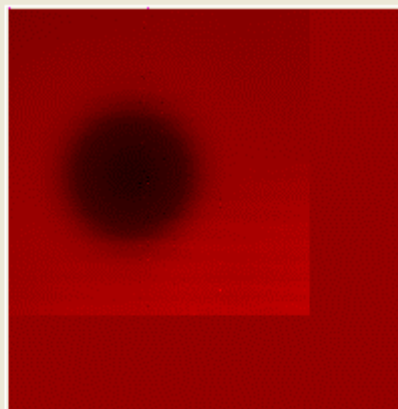
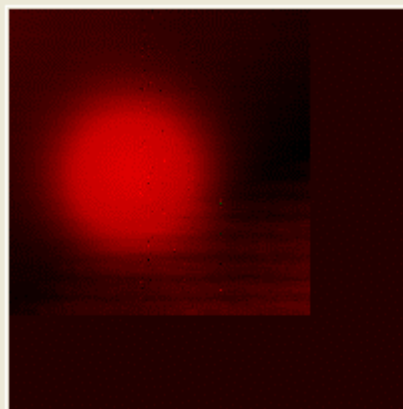
Flat-bottomed aperture in an aluminium plate (photo):



Visual representation at scanning:



The device – VD-96
The gauge – UVTP-7x20
Frequency – 8 kHz
Strengthening – 30 dB



The device – VD-96
The gauge – VTP-103
Frequency – 8 kHz
Strengthening – 30 dB

Flat-bottomed aperture in an aluminium plate (photo):



Visual representation at scanning:

The device – GALS-96

The gauge – VTP-103

Frequency – 648 kHz

