

5.1.7. COMPETENCY CONFIRMATION OF CONFORMITY EVALUATING BODIES IN THE FIELD OF NONDESTRUCTIVE TESTING AT HAZARDOUS PRODUCTION FACILITIES

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Proper evaluation of remaining lifetime, analysis of risks related with equipment operation at hazardous production facilities become the State problem that cannot be resolved without application of non-destructive testing methods. Importance of non-destructive testing during manufacturing and repair of equipment grows as well. It is connected with application of high-resistance steels, which are more sensitive to the presence of defects of various types, and application of new structure calculation methods allowing reserve of structure strength to be reduced significantly.

Relevancy of application of non-destructive testing in order to ensure operational safety of equipment used at hazardous production facilities is confirmed by Resolution of the Government of the Russian Federation "On measures on provision of industrial safety of hazardous production facilities at the territory of the Russian Federation", no.241 of 28.03.01. Federal authority of executive power in the field of industrial safety (these functions were assigned to the Gosgortekhnadzor of Russia) has set to scientific community the task to develop concepts and requirements to the non-destructive testing system directed toward provision of industrial safety of hazardous production facilities. In the result of joint activity of leading specialists of the most reputable organizations in the field of non-destructive testing, "Managerial concept for the System of non-destructive testing and the main directions of its development" providing certification of personnel, laboratories, methodological documents and non-destructive testing means was elaborated and approved by the Gosgortekhnadzor of Russia.

Purpose of the System of non-destructive testing is to increase the level of operational safety of technical devices, buildings and constructions applied and operated at hazardous production facilities. It should be achieved for the account of improvement of trustworthiness, reproducibility, comparability of the non-destructive testing results and adoption of timely and adequate decisions on provision of industrial safety. The System of non-destructive testing resolves the following problems of improvement of organizational-methodological and scientific-technical support of activities in the field of non-destructive testing: improvement of personnel qualification, competency of laboratories, technical level of methodological documents and non-destructive testing means.

In accordance with program approved by the Rostekhnadzor head, the Unified conformity evaluation system for object under control of the Rostekhnadzor (ES OS) is created. Within the frames of this system, various bodies of conformity evaluation, including ones within the System of non-destructive testing, can confirm their competence by means of voluntary certification. Currently, 40 independent bodies on certification of non-destructive testing laboratories, 6 independent bodies on certification of methodological documents and non-destructive testing means and 30 independent bodies on certification of non-destructive testing personnel are registered in ES OS as a conformity evaluating bodies in the field of non-destructive testing. Both legal and private persons are certified: approximately 3.5 thousands laboratories and 41.5 thousands of specialists in non-destructive testing.

In order to harmonize certification criteria and procedures within the ES OS with European and international requirements and to provide conditions for recognition of laboratory activity results by countries entered into the multilateral agreement with the European co-operation for Accreditation, accreditation of non-destructive testing laboratories for compliance with requirements of SDA-15-2008 "Requirements to testing laboratories" and GOST R ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories" was started within the frames of ES OS. Presently, more than 100 non-destructive testing laboratories are accredited.