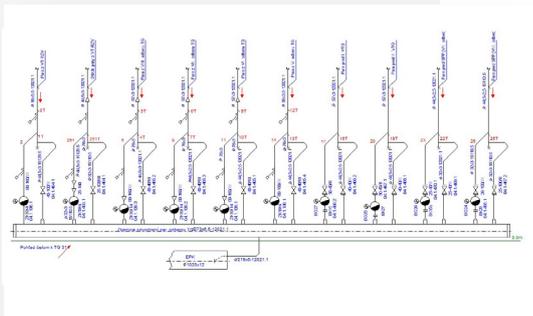
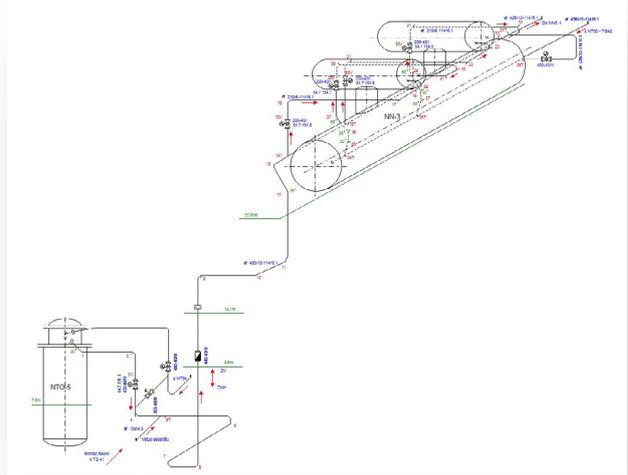


Electric module

This module is intended for assessment of cables used in operation as well as assessment of cable testing samples. The records include measurements and tests that were carried out including the measured values, namely through the method of accelerated ageing and through the ECAD method. The whole module is made up of three basic logical parts: Common functions and code lists (cable types, cable parameters, ...), Cables in operation (records of all cables that are used in operation – including records of performed measurements on the cables) and Testing samples (it is possible to measure the values of the parameters that are inserted in the parameters code list for each single cable from any testing sample). The module also includes a function for keeping records of performed visual inspections of the cables.

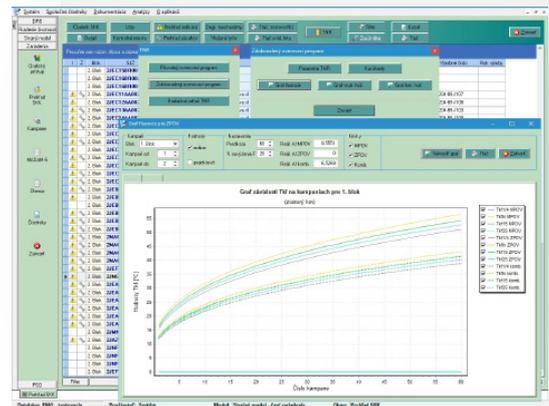


Construction module

The Construction module deals with the issue of lifetime of selected construction structures as well as structures of nuclear power plants that are loaded by weather conditions, exposed to the acting of various degradation effects, stressed by high temperatures or overpressure, and deteriorated by radiation field. Some data are aggregated in the database, e.g. data about types and relevance of breakdowns, deteriorating mechanisms, maintenance interventions, inspections, tests, incl. laboratory tests.

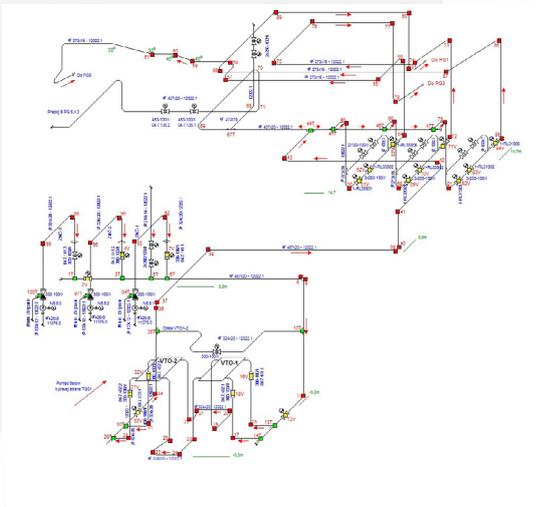
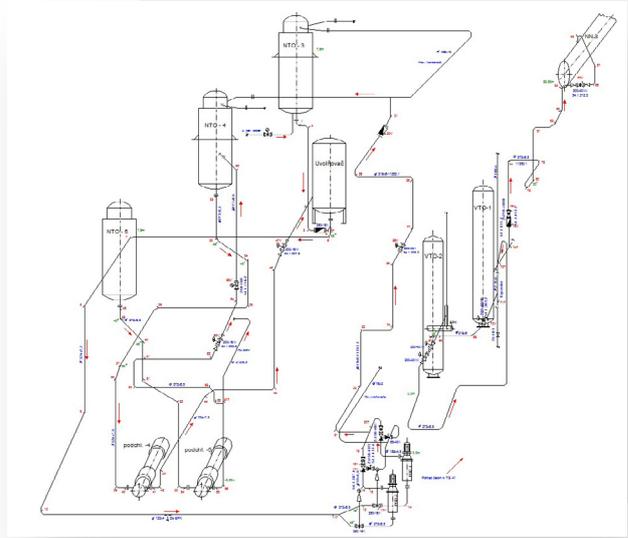
Qualification and Seismic Qualification modules

The qualification process verifies that the device is capable of fulfilling safety function requirements during the whole time of environment conditions acting. The qualified lifetime means a period of normal operation during which the ageing process does not cause such deterioration of the device that might lead to malfunctioning during the successive postulated event. The Qualification module allows monitoring of the above mentioned requirements, i.e. it provides an overview of the devices together with their qualified lifetimes, requalification intervals, replacement of devices with terminated qualified lifetime, and mapping of changes relating to environment quality. The Seismicity module monitors a special part of environmental impacts on the mechanical, electric, and civil equipment. It sums up the influences of seismicity for three basic modules of the database and that is why it is connected with them. It includes an extensive database of relevant data needed for assessing seismic situations.



Common code lists and system functions module

This module includes common functions for all remaining modules of DRS application; i.e functions for system setting like: user and access rights, overview of users working with the system incl. possibility of sending messages between users, termination of the programme to another user, and change of a password. Moreover, this module includes code lists intended to manage data common for all modules.



Hardware and software requirements

The programme is prepared for an operating system in MS Windows XP, 7, 8 and 10 environment; it was developed in environment BORLAND Delphi 7. Data are saved in an Oracle or MSSQL database.