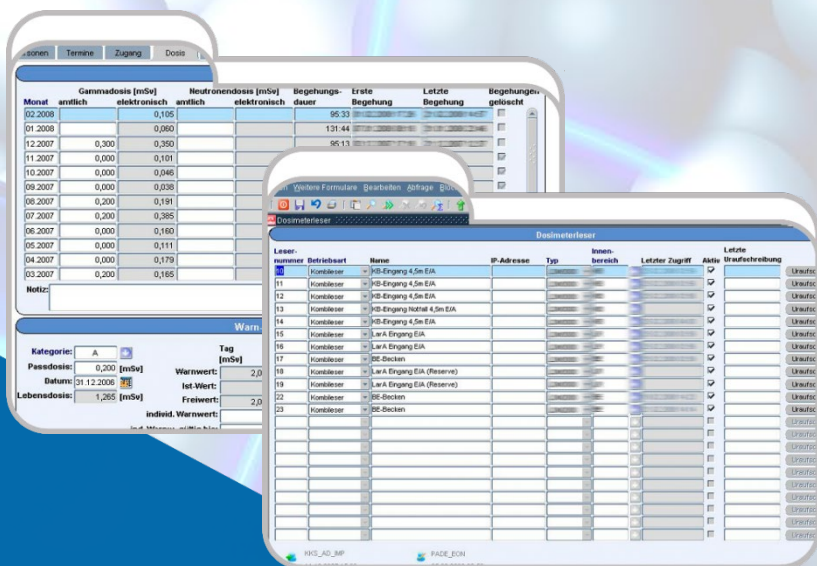


Personal- and job-related exposure dosage database system - PADE

PADE is a database system used for access control and monitoring of personal and job-related exposure dosage values in nuclear power plants. PADE is equipped with an online interface to exposure dosage detection systems installed in the nuclear facility and is thus capable of performing collection and evaluation functions with respect to personal and job-/workplace-related exposure values.



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PADE monitors compliance with exposure dosage limits prescribed by the Radiation Protection Ordinance during all visits to controlled areas. The system monitors daily, quarterly and lifetime dosage levels as well as dose rates. Both operational and official exposure dosages are monitored.

The training and examination records of plant and outside personnel are checked prior to each admission into a controlled area. Equipped with an integrated door guard module, the system is able to open the door to the controlled area upon completion of the required access eligibility checks. The system also includes integrated key and locker management features. „Who is where?“ analyses are provided to the central radiation protection office.

PADE also includes check-in/check-out modules for the central radiation protection office. These functions can be performed in detail for individuals and in a blanket process for visitor groups. PADE can read the personal data required for check-in via an online interface with the central access control system. Evaluation lists and documents (e.g. exposure dosage certifications) can be prepared with the aid of a flexible report tool. PADE is designed to handle increased access loads during the review phase without difficulty.



System requirements:

PADE has been developed as application for an ORACLE database under Windows XP. There, ORACLE-DEVELOPER Tools were used. The door control modul was developed in C++.



Schedule monitoring

In PADE, any type of instruction and examination dates, such as medical, radiation or respiratory protection examinations instructions, can be defined. The consequences of missed deadlines for access to the controlled area can be defined depending on the radiation protection category. PADE can generate reminder messages to the dosimeter readers if deadlines are exceeded or deny access to the controlled area. The monitoring of radiation absorption measurements is also integrated into the schedule monitoring.

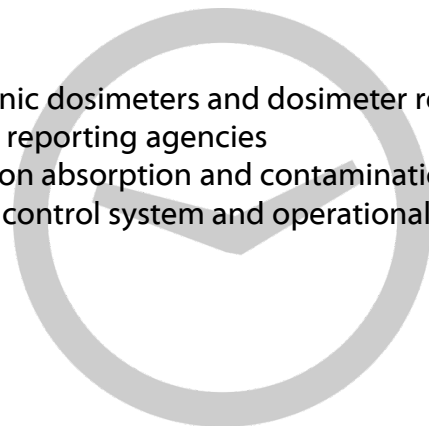
Evaluations

PADE is equipped with a powerful reporting system. This system can be used for evaluations of daily work as well as ready-made compilations for monthly, annual and outage inspection reports. The outputs are generated as PDF files and in MS Excel format.

Interfaces

PADE offers interfaces to many systems from different manufacturers in the field of dosimetry and radiation protection.

- Electronic dosimeters and dosimeter readers
- Official reporting agencies
- Radiation absorption and contamination monitors
- Access control system and operational management system



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