



PÖYRY



ATOMEX-EUROPE

Forum of Nuclear Industry Suppliers

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CIVIL ENGINEERING SERVICES

- Consulting
- Advisory
- Design
 - Preliminary design
 - Study
 - Conception Plan
 - Basic design
 - Licensing Design
 - Tender documentation
 - Domestication
 - Detailed Design
 - Construction –mounting work general organization
 - As-built drawings
- Project management
 - Designer site supervision
 - General review during project implementation

ENGINEERING DISCIPLINES

- Architecture
- Interior Design
- Civil Engineering
 - Road, railway design
 - Water utility design
- Structural Engineering
- Mechanical engineering
 - Plumbing Engineering
 - Fire Protection Engineering
 - Heating Ventilation and Air Condition Engineering
- Electrical engineering
 - Electrical installation
 - Lightning engineering

WORKING ENVIRONMENT

- **Codes and standards**

- Eurocode
- MSZ, MSZ EN
- ISO
- DIN
- ASME

- **Software**

- AutoCad
- ArchiCad
- Nastran
- AXIS VM
- Nemetschek

KEY DESIGN PRODUCTS AND ENGINEERING SERVICES

- Overall Technology
 - Main designer
 - Project management
 - Project plan
 - Quality management
 - Organization design for construction and mounting
 - Permitting phase assistance (licensing services)
- Complex civil engineering facilities
 - Industrial and energetic facilities, mainly power plants (Nuclear Power Plant also) and substations
- Site location
 - Site selection
 - Site layout
- Architecture
 - Technological buildings, mainly power station (including Nuclear Power Plant) and substation

KEY DESIGN PRODUCTS AND ENGINEERING SERVICES II.

- Load bearing structures
 - Industrial steel-and reinforced concrete structures
 - Statical computations (with FEM computation also)
 - Foundations for vibration control (foundation for turbogenerator set included)
 - Dynamic analysis (foundation supporting engines, earthquake) with FEM computation also
- Roads
 - Plant and rural roads, pavement for technological areas, earthwork
- Public utility
 - Water supply, sewage and drain system design
- Other professional areas
 - Ageing management/maintenance activity plan
 - Bill of quantities for all construction

PUBLIC HEARING

Szerencs Biomass Power Plant, Hungary



The Planed Power Plant in the Environment

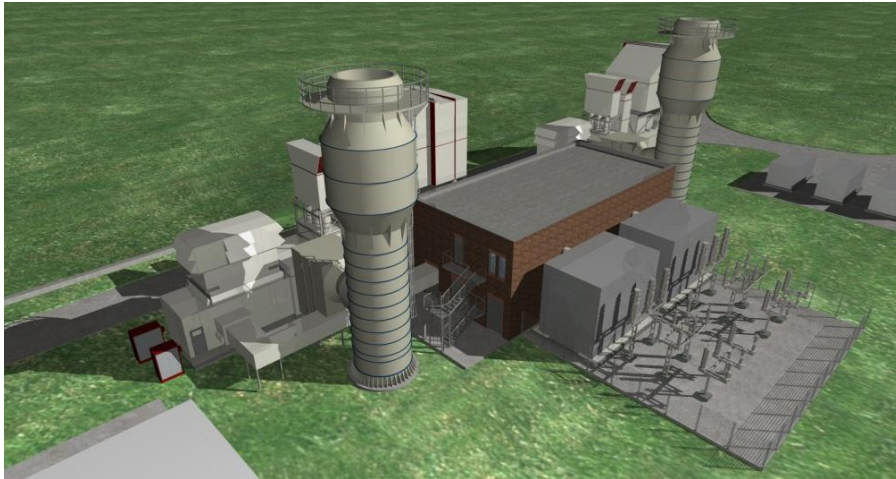


A view from the public road



Bird's-eye view

CONSTRUCTION PERMIT DESIGN



Ajka Combined Cycle Gas Turbine Power Plant,
Hungary



NICOPOL Biomass Power Plant, Bulgaria

PAKS NUCLEAR POWER PLANT, HUNGARY PLANT LIFETIME EXTENSION (PLEX)

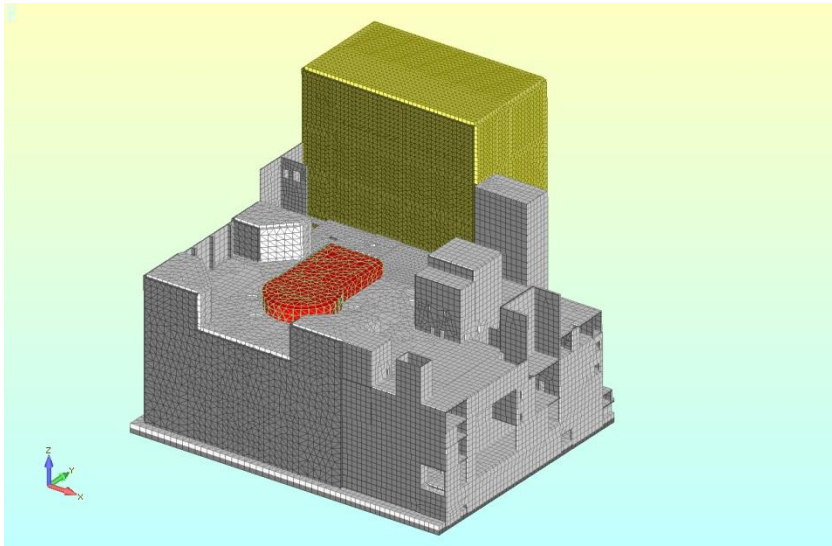
Ageing management system of building structures



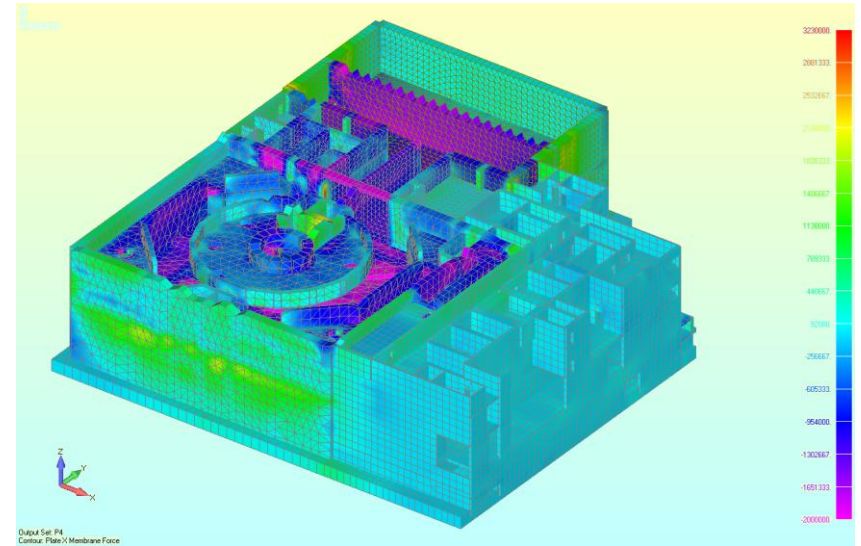
The ageing management programs and the connected professional documents

PAKS NUCLEAR POWER PLANT, HUNGARY, PLEX

Statical computation of the main building VVR 440/213 Unit



Finite Element Model of Reactor Building



Membrane forces

TURBOSET FOUNDATION

Vásárosnamény Gasturbine Power Plant, Hungary



Pile – droving machine



The Manufacturer-Power Engines
St. Petersburg



Heads of piles

PAKS, HUNGARY SITE OF THE NEW NUCLEAR POWER PLANT



PAKS, HUNGARY

LOCATION OF A POTENTIAL NUCLEAR POWER PLANT





**Thank you for your
attention!**

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