framatome

Mechanical calculations expertise

Framatome Excellence Center of Calculations to serve the Customers worldwide

Challenge

Demonstration of compliance to technical and regulatory requirements for components and mechanical structures in many industries

© Framatome

Solution

- Thermal, thermal hydraulics and mechanical multi-actioneffects calculations
- Manufacturing processes simulation including thermal simulation
- Fracture mechanics: analysis of crack propagation in relation with manufacturing process and component lifetime
- Fatigue analysis and component service lifetime
- Elastic and elastoplastic analysis
- ASME, RCC-M, RSE-M, ESPN codes and regulations, etc.
- Development of codes and methods is internally developed with dedicates expect resources
- Definition or adaptation of manufacturing processes with welding and non-destructive testing experts
- Solutions applicable to a wide range of industries (Oil & Gas, Energy, Aerospace, Chemical, Pharmaceutical, Transportation, Special Tooling, Ship Industry and Navy, Defense)

Tools

- Systus ANSYS simulation software
- In-company developed-Codes
- CATIA type CAD
- Infrastructure supported by one of the largest calculations network in France

References

- Capacity to fit the global market (South Africa, UK, China, US)
- Justification of nuclear primary loop components including pressurized equipment
- EDF large scale modernization program (extension of 1300MWe nuclear reactors' service lifetime)

Customer benefits

- Safety and Quality Conformity
- Trusted supplier with a proven experience in nuclear activities
- Analysis by Calculation Experts leading to decisive conclusions

Key figures

45 years of expertise in the mechanical calculations

20% of the team is made up of experts having a PhD degree

Contact: g-fra-pcm-sales@framatome.com www.framatome.com

It is prohibited to reproduce the present publication in its entirety or partially in whatever form without prior written consent. Legal action may be taken against any infringer and/or any person breaching the aforementioned prohibitions. Subject to change without notice, errors excepted. Illustrations may differ from the original. The statements and information contained in this publication are for advertising purposes only and do not constitute an offer of contract. They shall neither be construed as a guarantee of quality or durability, nor as warranties of merchantability or fit these for a particular purpose. All statements, even those pertaining to future events, are based on information available to us at the date of publication. Only the terms of individual contracts shall be authoritative for type, scope and characteristics of our products and services.