CASE STUDY: PT REKADAYA ELEKTRIKA, INDONESIA

FACTS AT A GLANCE

Company: PT Rekadaya Elektrika

Website: www.rekadaya.co.id

Description: Rekadaya was founded by two companies: PT PLN (Persero) and PT Rekayasa Industri. It was established to increase and improve competitiveness of electric power projects in Indonesia. Rekadaya specializes in power plants and related network infrastructure, with its EPC solutions designed to give its customers a competitive advantage. From small power plants to enterprise-wide integrated systems, Rekadaya's solutions have proven themselves across a wide range of power plants, and in some of the most demanding power environments.

Industry: Power

Country: Indonesia

PRODUCTS USED

- SmartPlant® 3D
- SmartPlant Review
- SmartPlant Reference Data
- Standard Database for SmartPlant Reference Data
- CAESAR II®

KEY BENEFITS

- Capture of accurate engineering knowledge for enhanced competitiveness
- Design automation for increased modeling productivity and design quality
- Concurrent engineering across multiple disciplines for enhanced collaboration

SMARTPLANT® 3D HELPS REKADAYA TO ENHANCE DESIGN OF POWER PLANTS FOR INCREASED PERFORMANCE

Next-generation Intergraph® 3D design solution enables Indonesian engineering company to achieve improved safety, quality, and productivity

IDENTIFYING GOALS

Indonesia represents a huge market for the development and construction of power plants and related network infrastructure to meet the rising demand for electricity in line with the increasing momentum of the country's economic growth. PT Rekadaya Elektrika (Rekadaya) was established to respond to market demand on the development of electric power projects. The Indonesian company offers engineering, procurement, and construction (EPC) solutions for a wide range of power plants.

As the power sector in Indonesia continues to grow, Rekadaya wanted to update its technology systems to keep up with an increasing number of projects and maintain its competitive advantage. The Indonesian EPC determined that it needed to leverage the latest and most advanced technology to enhance power plant design and deliver maximum engineering value.

OVERCOMING CHALLENGES

- Improve engineering design productivity and accelerate project schedules
- Enhance quality and accuracy of engineering design
- Automate generation of project deliverables

REALIZING RESULTS

After a comprehensive evaluation of all the available solutions in the market, Rekadaya selected Intergraph® SmartPlant® 3D as the best option for its requirements.

"We needed an engineering design solution that could improve our productivity and accelerate project schedules for enhanced competitiveness," said Isfa Musafik, lead drafter at Rekadaya. "SmartPlant 3D is proven technology, and has been adopted by several of our clients. The Intergraph solution features unique rule-based architecture and automation capabilities, which will help to optimize our engineering design processes."

SmartPlant 3D is the world's first and only next-generation 3D plant design solution, employing a breakthrough engineering approach that is focused on rules, relationships, and automation. It provides all the capabilities needed to design a plant, and then keep it as-built throughout its life cycle. This innovative Intergraph solution

captures new and existing engineering knowledge so that it can be saved and reused in the future, which is key to Rekadaya's success in today's competitive global economy. SmartPlant 3D is the most advanced and productive 3D plant design solution that effectively enables optimized design for increased safety, quality, and productivity, while shortening project schedules. Companies using SmartPlant 3D typically report a 30 percent improvement in overall engineering design productivity.

Intergraph and PT Everest Technology, our local distributor in Indonesia, supported the implementation of SmartPlant 3D for engineering design at Rekadaya. The Indonesian EPC was impressed by SmartPlant 3D's user-friendly and powerful interface across all engineering disciplines, supporting concurrent engineering by multiple users across multiple disciplines for enhanced collaboration. SmartPlant 3D's rule-based technology facilitates design automation and interdisciplinary clash checking for faster and better design. The Intergraph solution also includes all international standards and codes, which is particularly important for the power industry. In addition, Rekadaya could use SmartPlant Review for internal assessment of 3D models, as well as review them with clients.

Another critical factor for Rekadaya's selection of SmartPlant 3D was its ability to interface with other applications within an integrated engineering environment. Rekadaya is already interfacing SmartPlant 3D with CAESAR II® for pipe stress analysis, and the solution can allow for future expansion as it also integrates with other SmartPlant Enterprise solutions across all engineering disciplines, including materials management, engineering and schematics, and others.

MOVING FORWARD

Rekadaya intends to expand its use of SmartPlant 3D and implement it for additional projects. The Indonesian EPC also plans to establish an integrated engineering environment by adopting other SmartPlant Enterprise solutions, such as SmartPlant Foundation, SmartPlant Instrumentation, SmartPlant Materials, SmartPlant Electrical, and SmartPlant P&ID.

"We have had a positive experience with the use of Intergraph technology and we are confident it will deliver great value to our company," said Musafik. "The adoption of the integrated suite of SmartPlant Enterprise engineering solutions will enable us to fully maximize the benefit of SmartPlant 3D for our power plant projects."

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer, and smarter. The company's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, operation, and data management of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions, including ERDAS technologies, to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is a wholly owned subsidiary of Intergraph Corporation for the SG&I U.S. federal business.

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