How can asset-intensive companies improve plant production and reduce outages, while enhancing worker and equipment safety and regulatory compliance? The Safe Plant Operation & Maintenance Industry Solution Experience, powered by Dassault Systèmes 3DEXPERIENCE® platform, helps companies securely control, configure, and manage plant information and enable advanced solutions to increase plant performance and safety. It combines detailed execution-level project management with key deliverables for validating resource-optimized schedules. Movement of entire equipment structures can be simulated in a virtual 3D space to help eliminate interferences, ensure adherence to safety protocols, and avoid unplanned outages due to unforeseen circumstances or equipment conditions.
Key Benefits:
- Improved safety and productivity thanks to consistent and traceable change management of asset information
- Higher asset reliability and lower outage durations thanks to improved maintenance and deliverables planning
- Enhanced asset maintenance planning thanks to validated 3D time-based simulation

CONTINUOUS PLANT INFORMATION INTEGRITY SHARED AMONG ALL PROJECT STAKEHOLDERS

More than 10 percent of employee time is spent searching for accurate information, with no control or guarantee of finding the right versions. Enforcing change management and providing timely notifications can use up another 10 percent. Preparing reports and documents for meetings can take yet another 10 percent. All these tasks can erode almost one-third of user productivity, shrinking return on assets every time someone looks for information!

Organizing all plant information in a Single Source of Truth, the Safe Plant Operations & Maintenance Industry Solution Experience provides consistency and traceability. Combined with effective change management, it helps ensure that information is reliable, up-to-date, and secure. Stakeholders can access an accurate, customized view of the data, based on their functional needs.

TAKING THE ESSENTIAL STEP TOWARDS CORRECT, SAFE, AND ON-TIME MAINTENANCE ACTIVITIES

Planning, document management, and execution systems are typically separate and disconnected. Detailed tasks and critical review gates are not connected with key deliverables necessary for their completion. Safety systems are not validated for planned shutdown, startup, and partial outage states, and are not easily factored into resource-optimized plans. All this disconnection increases the risk of unplanned delays and improper safety during actual maintenance.

Safe Plant Operation & Maintenance solution connects deliverables to key tasks, meetings, and milestones. It enables the move to invisible governance by automatically broadcasting project status to all stakeholders as work is completed. Regulatory certification processes are improved by controlling activities and the timely release of critical documents. Safety and quality is improved using integrated system simulation to visualize and calculate the safety states and fault trees of components.

ENHANCED LIFE EXTENSION REFURBISHMENT FOR INCREASED PLANT OPERATIONAL AVAILABILITY

As equipment ages and experienced personnel retire, knowledge about proper and safe equipment replacement procedures can be lost. In some cases, large equipment may never have been replaced before, and new procedures need to be fully understood to avoid unplanned delays or critical safety situations.

Safe Plant Operation & Maintenance solution provides advanced 3D time-based simulation technology to verify the movement of equipment and resources during maintenance. It simulates critical and complex worker tasks and choreographs multiple workers working together for efficiency and safety.