



## Advanced Visualization Software System for Nuclear Power Plant Inspection

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Visualization techniques have been widely used in industrial environment for enhancing process control. Traditional techniques of visualization are based on control panels with switches and lights, and 2D graphic representations of processes. However, modern visualization systems enable significant new opportunities in creating 3D virtual environments. These opportunities arise from the availability of high end graphics capabilities in low cost personal computers.

In this paper we describe implementation of process visualization software, developed by INETEC. This software is used to visualize testing equipment, components being tested and the overall power plant inspection process. It improves security of the process due to its real-time visualization and collision detection capabilities, and therefore greatly enhances the inspection process.

**Keywords:** nuclear power plant, steam-generator, reactor pressure vessel, inspection, 3D graphics, industrial process visualization, collision detection