

Industrial facility structures are exposed to harsh physical conditions and chemical attack. Structural pathology analyzes current conditions and determines the best practice for repairs.

- Detailed analysis based on realistic 3D Structural Numerical Models to simulate structural behavior under various loading conditions.
- Consideration of all load combinations acting on the structure and foundations during operation.
- Consideration of the real boundary conditions (supports, load and displacement locations, etc.)
- Evaluation of possible soil-foundation-structure interaction effects.
- Consideration of conditions during the repair process.

The diagnosis of a structure's failure identifies the causes and most effective retrofit techniques:

- Structural behavior and construction techniques for the best repair method.
- Non-linear theories and computational models for structures and construction materials (i.e., concrete, steel, soils, rock, etc.)
- Experimental tests to evaluate the structural failure.

