INSPECT, like COMPRESS, can handle complete pressure vessel models. INSPECT combines vessel damage information with its location on the 3D model. This adds context and value to your inspection data. Weld joint efficiency versus damage location, static liquid head, overhead weights, wind and seismic are automatically taken into account. This detailed analysis provides cost savings that are not possible with any other Fitness-For-Service software.

Pressure Vessel Re-Rating

INSPECT, like COMPRESS, can handle complete pressure vessel models. INSPECT combines vessel damage information with its location on the 3D model. This adds context and value to your inspection data. Weld joint efficiency versus damage location, static liquid head, overhead weights, wind and seismic are automatically taken into account. This detailed analysis provides cost savings that are not possible with any other Fitness-For-Service software.

INSPECT - API 579-1 Fitness-For-Service Software

INSPECT®

API 579-1 Fitness-For-Service Simplified

INSPECT performs the calculations and assessments needed by engineers engaged in process plant inspection and maintenance activities. It creates detailed Fitness-For-Service (FFS) reports for pressure vessels, heat exchangers, piping and above ground storage tanks.

- Reduce risk
- Extend vessel remaining life
- API 579-1 and ASME® FFS-1
- Mechanical Integrity

INSPECT Reduces Costs

Designed to help you make “run, repair or replace” decisions for your ASME pressure vessels, heat exchangers and piping
Clients Who Trust INSPECT

Shutdown inspections often find previously undetected damage and production needs to know if the equipment can be put back into service as soon as possible. INSPECT helps avoid mistakes in these circumstances by providing engineers with a number of unique features. INSPECT’s 3D graphics provide visual confirmation that the equipment and the damage have been input correctly. INSPECT’s detailed reports allow engineers to verify the supporting calculations for themselves. The easy to use and yet rigorous fitness-for-service analysis performed by INSPECT reduces the risk of making the wrong decision while keeping things on schedule.

API 579-1 Part 3
Brittle Fracture Assessments

API 579-1 Part 3 requires a brittle fracture assessment (material toughness check) before proceeding with the majority of flaw assessments. This is provided in INSPECT by specifying that a Part 3 brittle fracture assessment be done on the flaw being investigated. Part 3 brittle fracture assessments are derived from ASME VIII, paragraph UCS-66 and no software handles this better than Codeware’s.

Easy to Read Fitness-For-Service Reports

INSPECT creates detailed Fitness-For-Service (FFS) reports for pressure vessels, heat exchangers, piping, and above ground storage tanks. Reduce regulatory compliance risk by creating ASME design reports for your undocumented pressure vessels. INSPECT also produces detailed API 579-1 remaining life reports and extensive audit trail reports that document all calculations performed. All API 510 and API 570 Code results are supported by full ASME VIII, ASME B31.3, ASME B31.4 and TEMA calculations and reports.

INSPECT Reduces Risk
### Featured Capabilities

- All features from COMPRESS, Heat Exchanger and Division II
- API 579-1/ASME FFS-1 calculations with detailed reports
- Part 3 – Brittle Fracture and MSOT assessments and curves
- Part 4 – General Metal Loss
- Part 5 – Local Metal Loss (includes groove-like flaws)
- Part 6 – Pitting Corrosion
- Supplemental loads for Part 5 and 6
- Combined Local Metal Loss and Pitting
- Part 9 – Crack-like Flaws
- Part 10 – Creep assessments
- Part 11 – Assessment of Fire Damage
- Part 12 – Dents, Gouges and Dent-Gouge Combinations
- API 579-1 remaining life calculations
- 3D visual confirmation that equipment and flaws are input correctly
- Integrated 3D Inspection Data Management System (IDMS)
- Automatic and manual inspection point (CML) placement
- User defined CML data fields, as many as required
- API 510, API 570 and API 653 calculations and reports
- Determines inspection schedules (time based)
- Quickly perform pressure vessel re-rating simulations
- Multiple ASME VIII Code Editions in one program (1995 – present)
- Process piping inspection checklists with user-defined commentary
- Brittle fracture checks as recommended by NCPWB
- Mechanical Integrity RAGAGEP comply with OSHA 1910
- Documents undocumented pressure vessels
- API 653 tank bottom patch plates (repair plates)
- Exports piping showing flaw locations and types to SOLIDWORKS®
**Integration**

- Codeware XML data export supports 3rd party developers
- Submit National Board® forms electronically
- 3D CAD Integration with Inventor® and SOLIDWORKS®
- Drafter 3D automatic 2D drawings creation from INSPECT solid models
- Export neutral solid model file formats IGES, ACIS and STEP
- HTRI Xchanger Suite Xist® native file bi-directional interface
- Integrates with Codeware’s Section IX weld program, Shopfloor

**Technical (IT)**

- Networking and remote access enabled
- Application server support
- Remote (silent) installation availability
- Multi-user license access

**Support**

- Online training
- Technical support (online, email and phone)
- Support Center access
- Software updates
- Calculation verification and QA manuals

Perform level 1, 2 and 3 pitting assessments and generate detailed API 579 reports with a click of a button.

Perform general and local metal loss assessments and quickly generate detailed reports.