

# Proceso normativo para la gestión del ciclo de vida de equipos estáticos



**ASME PTB-2:** Guía para la Gestión del ciclo de vida e Integridad de Equipos a Presión

**NACE PCIM:** Sistema de Gestión de Integridad de Corrosión en Tuberías.

**ASME B31.85:** Sistema de Gestión de Integridad de Tubería a Gas

**API 1160:** Gestión de Integridad de Tuberías de Líquidos

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## Técnicas de Inspección ASNT

- Magnetic Particle Testing (MT)
- Liquid Penetrant Testing (PT)
- Radiographic Testing (RT)
- Electromagnetic Testing (ET)
- Visual Testing (VT)
- Acoustic Emission Testing (AE)
- Laser Testing Methods (LM)
- Leak Testing (LT)
- Magnetic Flux Leakage (MFL)
- Neutron Radiographic Testing (NR)
- Thermal/Infrared Testing (IR)

## Leyenda:

**ASME:** American Society of Mechanical Engineers

**NACE :** National Association of Corrosion Engineers

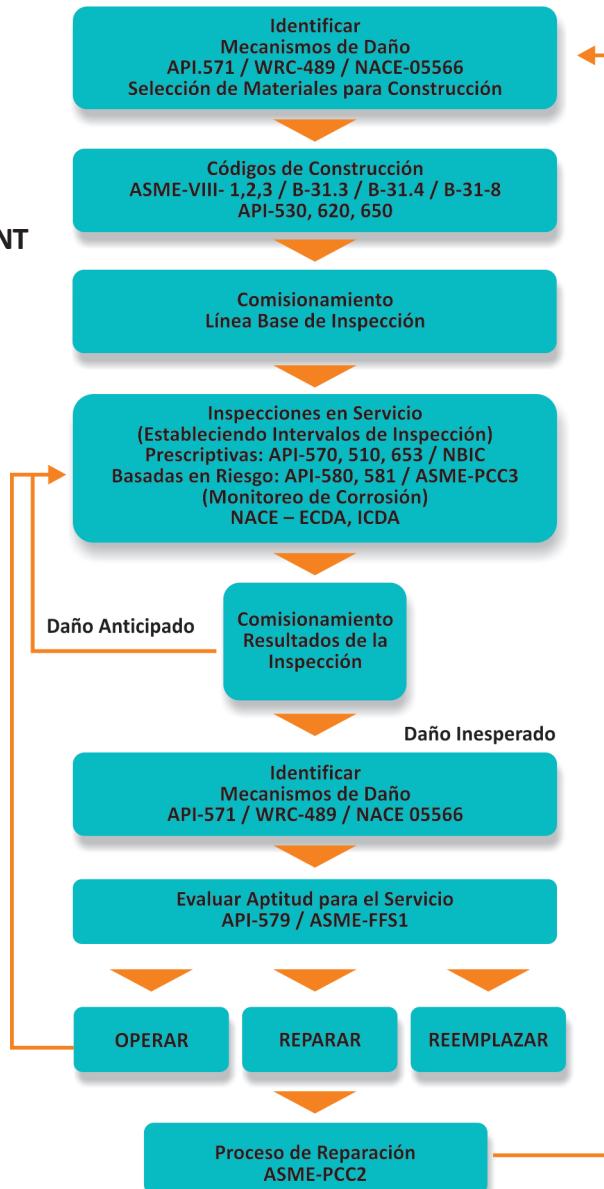
**ASNT:** American Society for Non Destructive Testing

**API:** American Petroleum Institute

**NBIC:** National Board Inspection Code

**WRC:** The Welding Research Council

**PCC:** Post Construction Committee



## 1-Identificación de Mecanismos de Daño

WRC Bulletin 488 Damage Mechanisms Affecting Fixed Equipment in The Pulp And Paper Industry

WRC Bulletin 489 & API 571 Damage Mechanisms Affecting Fixed Equipment in The Refining Industry

WRC Bulletin 490 Damage Mechanisms Affecting Fixed Equipment in Fossil Electric Power Industry

ASME PCC-3 Inspection Planning Using Risk-Based Methods (Appendices B & C)

## 2-Estandares de Diseño y Construcción

API Std 530/ISO 13704 Calculation of Heater-Tube Thickness in Petroleum Refineries

API Std 620 Design and Construction of Large, Welded, Low-Pressure Storage Tanks

API Std 650 Welded Tanks for Oil Storage

ASME B&PV Code, Section VIII – Division 1 Rules for Construction of Pressure Vessels

ASME B&PV Code, Section VIII - Division 2 Rules for Construction of Pressure Vessels – Alternative Rules

ASME B&PV Code Section VIII – Division 3 Rules for Construction of Pressure Vessels – Alternative Rules for Construction of High Pressure Vessels (VIII-3)

ASME B31.3 Process Piping

### 3- Códigos de Inspección en Servicio

API 510 Pressure Vessel Inspection Code: Maintenance Inspection, Rerating, Repair and Alteration

API 570 Piping Inspection Code: Inspection, Repair Alteration and Rerating of In-Service Piping Systems

API 653 Tank Inspection, Repair, Alteration, and Reconstruction

NACE Internal Corrosion Direct Assessment (ICDA)

NACE External Corrosion Direct Assessment (ECDA)

NB-23 National Board Inspection Code

API RP 580 Risk-Based Inspection

API RP 581 Risk-Based Inspection Technology

ASME PCC-3 Inspection Planning Using Risk-Based Methods

### 4- Códigos para Evaluación de Aptitud para el Servicio.

API Std 579-1/ASME FFS-1 2007 Fitness-For-Service

### 5- Código de Reparación

ASME PCC-2 Standard for the Repair of Pressure Equipment and Piping

### Códigos Complementarios

API RP 572 Inspection of Pressure Vessels (Towers, Drums, Reactors, Heat Exchangers, and Condensers)

ASME PCC-1 Guidelines for Pressure Boundary Bolted Flange Joint Assembly

API RP 575 Inspection of Atmospheric & Low Pressure Storage Tanks

API RP 574 Inspection Practices for Piping System Components

API 691 Risk-Based Inspection of Rotating Equipment

API RP 576 Inspection of Pressure-Relieving Devices

API RP 573 Inspection of Fired Boilers and Heaters

API RP 520/521 Pressure Relief Systems (PRS)

API RP 585 Pressure Equipment Investigation

API 941 High Temperature Hydrogen Attack

API RP 584 Integrity Operating Windows

API RP 583 Corrosion Under Insulation

API 577 Welding & Metallurgy

API 936 Refractory



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