

Terminologies of Inspection and NDE

(other than hardness tests & PMI)

- **VT:** Visual Test
 - **PT:** (Liquid) Penetrant Test
 - **MT:** Magnetic Particle Test --- • **WFMT** – Wet Fluorescent MT • **DINSEARCH™** (Magnetic Bias) • **MFL**= Magnetic Flux Leakage, • **MFA**= Magnetic Flux Leakage Array,
 - **RT:** Radiography Test (by X-ray or γ-ray) --- • Real Time Radiographic Testing Scanners
 - Neutron Radiographic Testing
 - **UT:** Ultrasonic Test --- • **UTA** – Ultrasonic Angle Beam • **UTS** – Ultrasonic Straight Beam
 - **AUT** – Automated UT • **GWUT** - Guided Wave UT
 - **TOFD** - Time of Flight Diffraction • **PAUT** - Phased Array UT
 - **UTT** – Ultrasonic Thickness Measurement • **IRIS**-Internal Rotary Inspection System
 - **AET:** Acoustic Emission Test
 - **EC:** Eddy Current --- • **ECT** - Eddy Current Test • **ECA** - Eddy Current Array
 - **RFECT** - Remote Field Eddy Current Testing • **RFA** - Remote Field Array
 - **PEC** - Pulsed ECT • **FSECT** - Full Saturation Eddy Current Testing
 - **PSEC** - Partial Saturation Eddy Current
 - **IFT:** Infrared Thermography Test
- [Inspection Locations at Field]**
- **TML:** Thickness Measurement Location
 - **CML:** Corrosion Monitoring Location

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*Supplements for Practice
The inspection requirements in facility codes/standards (e.g., ASME Sec. VIII, ASME B31.1/31.3/31.4/31.8/31.12, API 650/610/660/5L, AWS D1.1, etc.) are not included in this table.

Item	ASME	API	NBIC	AWS	ASTM
General	PCC-3 Inspect. PCC-2 Repair		NBIC NB23 -Part 2		
Rolled Plate (Base Metal)					A578/A435 (UT)
Pressure Vessels	Sec. V (NDE)	RP510 RP572*			
Piping		RP570 RP574*			
H-EXs Tube Bundles		RP586-Sec.1			
Storage Tanks		RP653 RP575*			
Boilers/Heaters		RP573			
Coiled Tubes		RP5C8			
New Line Pipes		RP5L8			
Valves		STD598			
PRD (pressure relief devices)		RP576	NBIC NB23 -Part 4		
OCTG		Spec 5CT			
Refractory		STD975 (Refractory) STD976 (Fiber Linings)			
Surveillance Inspection at Suppliers		RP5SI			
HTHA (high temperature hydrogen attack)		RP586-Sec.2 RP934-H			
Welds		RP577	NBICNB23 -Part 3	B1.10 B1.11	
Installation			NBIC NB23 -Part 1		
Notes	Note 1				
Notes					

1. See Several Code Cases (NDE and The Alternative Application)

**Industrial
Codes/Standards
Applied for
Inspection/NDE in
Energy Industries**

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