

9 * RT Principle:

Radiographic absorption & Penetration.

10 * Code for Procedure:

11 ASME Section V; Article-2

12 * Acceptance Criteria:

ASME Section VIII Division-1

1 UW-51 (For Full Radiograph)

2 UW-52 (For Spot Radiograph)

* RT Film discontinuity (Weld)

3 • Slag (SMAW; SAW; FCAW)

4 • Porosity

• Lack of Fusion

5 • Incomplete Penetration.

• Under cut

6 • Tungsten Inclusion (GTAW)

* What is Penetrameter?

7 How to interpret it in RT film?

Penetrameter is a device whose image on RT Film is used to determine radiographic quality level.

• Hole type • Wire type.

* Radiographic techniques:

- SWSI
- SWSI - Panamie
- DWST
- DWDT
- Multiple film technique
- Parallel/Tube shift technique.

* What is Artifacts?

An Artifacts is any film imperfection which results from lack of care/cleanliness

- Dust
- Pressure marks
- Crimp marks
- Static marks

* Density requirement:

	Single film view	Composite
X-Ray	1.8 minimum	1.3 min.
	4.0 maximum	4.0 max.
Y-Ray	2.0 minimum	1.3 min.
	4.0 maximum	4.0 max.

Note: Density variation ± 0.05

Please refer ASME Sec. V Article 2 - T-282.1

* Where to measure density?

weld area of interest

- Lightest
- Darkest

Variation -15% or $+30\%$

Designated Hole / Essential wire.

→ Please refer ASME Sec. V Article-2
T-282.2

* How to do RTFI?

- Job no / Part no; Joint no.; welder no;
- Location marker / spot; Repair status
- IQI Placement - Visible wire / Hole - Density
- Artifacts
- Discontinuity
- Evaluation.