

Cast Iron & Stainless Steel PT Indications - Conversion Chart

Initial PT Inspection		Indications		Type of Discontinuity
Identification	Condition	Inches	mm	
Item A	Seasoned Cast Iron	1 ≥ 1/16" , 2@1/32"	1 ≥ 1.5875mm , 2@0.79375mm	Rounded
Item D	Seasoned Cast Iron	1 @ 1/16" , 4@1/32"	1@1.5875mm , 4@0.79375mm	Rounded
Item B	Unseasoned Cast Iron	1@1/8" , 1@3/32" , 2@1/16" , 7@1/32"	1@3.175mm , 1@2.38125mm , 2@1.5875mm , 7@0.79375mm	Rounded
Item C	Unseasoned Cast Iron	1@1/8" , 3@1/16" , 11@1/32"	1@3.175mm , 3@1.5875mm , 11@0.79375mm	Rounded

Afterwash PT Inspection		Indications		Type of Discontinuity
Identification	Condition	Inches	mm	
Item A	Seasoned Cast Iron	1@1/16" , 2@1/32" , multiple ≤ 1/64"	1 ≥ 1.5875mm , 2@0.79375mm , multiple ≤ 0.396875mm	Rounded
Item D	Seasoned Cast Iron	2@1/32" , multiple ≤ 1/64"	2@0.79375mm , multiple ≤ 0.396875mm	Rounded

PT Inspection		Indications		Type of Discontinuity
Identification	Condition	Inches	mm	
SS 1.9 Qt	Brushed	1 @ 1/2" , 3@3/32" , 2@1/16" , 6@1/32"	1@12.7mm , 3@2.38125mm , 2@1.5875mm , 6@0.79375mm	Rounded
SS 3.4 Qt	Brushed	multiple ≤ 1/64"	multiple ≤ 0.396875mm	Rounded

Afterwash PT Inspection		Indications		Type of Discontinuity
Identification	Condition	Inches	mm	
SS 1.9 Qt	Brushed	1 @ 1/2" , 2@1/32" , multiple ≤ 1/64"	1@12.7mm , 2@0.79375mm , multiple ≤ 0.396875mm	Rounded
SS 3.4 Qt	Brushed	multiple ≤ 1/64"	multiple ≤ 0.396875mm	Rounded

Dye Penetrant Inspection

For Welds and Materials per ASME Section VIII, Appendix 8

Indications with major dimensions greater than 1/16" shall be considered relevant

The following relevant indications are unacceptable:

- All relevant linear indications
- Rounded indications greater than 3/16" (4.8mm)
- Four or more rounded indications in a line separated by 1/16" (1.6mm) or less edge to edge

For evaluation, the maximum dimension of rounded indications shall be considered as its size.

Indications are rejectable as defects if:

- a. Individual indications are ≥ 1/8" (3.17mm)
- b. Distribution of scattered rounded indication exceed concentration API 1104 (Standard for Welding Pipelines and related facilities)
- c. Clustered rounded indications > 1/2" (12.7mm)
- d. Combined length of clustered indications > 1/2" in any 12' (304.8mm) weld
- e. Any individual indication in a cluster > 1/16" (1.59mm)