



Figure 4: TSC Bend Test: Pass and Fail Samples

6.6 TSC Finish

6.6.1 The deposited TSC shall be uniform without blisters, cracks, loose particles, or exposed steel as examined with 10x magnification.

6.7 TSC Porosity

6.8.1 If required by the purchaser, the maximum allowable porosity and the metallographic measurement method to be used for the evaluation shall be specified. Note: Porosity measurements are not used for in-pro-

cess quality control in metallizing for corrosion protection of steel. However, porosity measurements may be used to qualify thermal spray application processes and spray parameters.

6.8 TSC QC Measurement Procedures and Instruments

6.8.1 The suitability of the TSC thickness, portable tensile bond, bend test, and cut-test measurement procedures and instruments shall be validated during the Contract Pre-Award Validation according to Section 14.

Section 7: TSC Application Procedure

7.1 General

7.1.1 Appendix D details the key production and quality control checkpoints for applying TSCs.

7.2 Thermal Spray Equipment Setup

7.2.1 Thermal spray equipment shall be set up, calibrated, and operated (1) according to the manufacturer's instructions and technical manuals or the TSC applicator's refinement thereto, and (2) as validated by the JRS (See Paragraph 13.2).

7.2.2 Spray parameters and thickness of each crossing pass shall be set for spraying the specified thermal spray material and, at a minimum, be validated with the bend test.

7.2.3 The thermal spray equipment spray-parameter set-up shall be validated with a bend test at the beginning of each shift or crew change.

7.2.4 A copy of the spray parameters used shall be attached to the JCR.