Field Girth Weld FBE Coating Application Procedure
Revised: 16 September 2013

1. Blast clean the weld surface using sand or grit of appropriate size to produce an angular profile of 2 mils (50µm) to 4.5 mils (112µm). The blasting procedure must insure at least 0.5” feathering to the parent coating on each side of the weld. The profile should be verified by one of the industry recognized test methods.

2. The cleaned surface shall be of minimum SA 2½ cleanliness.

3. The blasted surface shall be further cleaned with a stream of pressurized dry air and a bristle brush to remove all loose coatings and dust from the cut back area where coating is to be applied.

4. Heat the area (preferably using an induction coil heating system) to raise the surface temperature above 475º F using a heat-up rate not to blister the parent coating*. Verify the surface temperature using proper method. Care should be taken not to contaminate the surface while taking temperature measurements.

5. Spray apply the Fusion Bonded Epoxy coating immediately so that when the Power is applied, the surface is above 450º F or as per the TDS of the product applied. The spray application shall be continued to build the coating film thickness to above 20 mils (500µm) in a minimum of 3 passes.

**NOTE:**
In most cases, the residual heat on the substrate is sufficient to cure the FBE. However, for thin wall pipe and fittings additional heat may be applied as post cure two (2) minutes at or above 425º F is sufficient to cure the coating.

* If blistering occurs, reduce generator amperage output by extending the heat-up time.
** For a detailed procedure, refer to NACE RP0402-2002.

QUALITY CONTROL TESTS

1. Take a sample to test for cure using TM analysis. If this is not practical, other cure tests are to be employed to ensure cure of the FBE coating.

2. After allowing sufficient time for the substrate to cool, adhesion test shall be conducted to ensure proper adhesion of the coating.

Other tests must include, Dry Film Thickness, Holidays and Visual Defects. Appropriate test must be used.

AXALTA COATING SYSTEMS
NOTE:
Recommended that an application procedure should be developed based on the customer’s specification with these guidelines. A trial should be conducted using this procedure to verify the quality of the applied coating. This procedure should be used during the entire project. Any further deviations shall be reviewed and approved by the Project Engineer.