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| Standard Operating Procedure Grinding/Polishing/Blending for Stainless Steel Surfaces | SOP No. 5.050 |
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- 1 Purpose
 - 1.1 To establish a standard procedure for grinding, polishing or blending of welds on stainless steel surfaces.
- 2 Scope
 - 2.1 This procedure applies to welds on stainless steel surfaces.
 - 2.2 Grinding tools (pads) shall not have been used on carbon steel surfaces.
- 3 Responsibility
 - 3.1 The sheet metal foreman shall be responsible for performing the following tasks.
 - 3.2 The project manager shall manage the sheet metal foreman and verify the compliance with this procedure and project specifications.
- 4 Procedures
 - 4.1 Verify project specification prior to initiating this procedure.
 - 4.2 When grinding, polishing or blending is required, a rough grinding shall be performed on the outside surface of welds with 80 grit of aluminum oxide sanding discs.

Note: Silicon carbide shall be used only on surfaces, which are not electropolished.
 - 4.3 After rough grinding, the welds shall be blended with a 120 grit of aluminum oxide sanding belt using a pneumatic or electric surface finishing tool. Pneumatic tool will be powered by clean dry oil-free air.
 - 4.4 After a sufficient grain is achieved, a final blend shall be performed on the welds with a convolute wheel of medium density and a silicon carbide grain.

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4.4.1 In spaces difficult to access where a finishing tool can not be used, blending will be done by hand and finished with a medium density red scotch brite pad.

4.5 After grinding, polishing or blending is completed, the weld area will be wiped and cleaned with 100% isopropyl alcohol (IPA) first.

4.6 After the first time of cleaning, clean the weld area with a mixture of 50% IPA and 50% deionized (DI) or reverse osmosis (RO) water.

4.7 After the cleaning is done, the sheet metal foreman shall wrap the finished product with stretch plastic.

5 Review and Approval

5.1 The sheet metal foreman shall notify the project manager once this polishing procedure has been completed and the work product is ready for any required inspection.

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Document Approval


 Sheet Metal Manager

2-25-05
 Date


 Process Skid Project Manager

2-23-05
 Date


 Quality Assurance Manager

2-25-05
 Date

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