Standard Operating Procedure	SOP No.
Weld Program	5.024

DCR No.: 10010 Revision No.: 5 Effective: 03-06-12 Supersedes: 7-7-99 Revision Date: 03-06-12

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1 Purpose

1.1 To establish a standard procedure for documenting weld schedule development and/or program parameters for orbital/automatic GTAW machines.

2 Scope

2.1 This procedure applies to welding pharmaceutical stainless steel piping, and tool hookup assemblies.

3 Responsibility

- 3.1 The Therma general foreman (GF) shall manage the welders and verify compliance with this procedure.
- 3.2 The welders certified as per SOP 7.009 (GTAW Welder Qualification) shall be responsible for performing the following procedures.

4 Procedures

- 4.1 Where applicable, review the customer's weld specifications for weld acceptance criteria and make welds as required.
- 4.2 Always turn power supply off before making any cable connection changes to the power supply.
- 4.3 Ensure that the power supplied to the welding machine is from a dedicated circuit. Do not connect to electrical circuits shared with other users.
- 4.4 Verify that the proper input voltage and amperage are supplied.
- 4.5 Calibrate the weld head
 - 4.5.1 at the beginning of each shift
 - 4.5.2 when changing the weld head

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4.5.3 if changing power source

Note: Adjust the following parameters in the orbital/automatic GTAW machine as per approved weld program schedule values.

- 4.6 When selecting or developing a new weld program schedule a welder shall generate test coupon(s) to check compliance with weld acceptance criteria.
 - 4.6.1 Pulse
 - 4.6.2 Rotation
 - 4.6.3 Synchro
 - 4.6.4 Amperage
 - 4.6.5 Time duration
 - 4.6.6 Arc gap
- 4.7 Perform a test run when selecting a new weld program schedule.
- 4.8 Record the weld configuration program (for each pipe size) as a reference guide for future welds, use Form FN 5.024.1 (Weld Program Log for 207) or Form FN 5.024.2 (Weld Program Log for 107).
- 4.9 Provide coupons as required by SOP 7.024 (Coupons).
- 5 Review and Approval
 - 5.1 The Therma Quality Control Examiner (QCE) shall examine the coupons as per SOP 7.009 (GTAW Welder Qualification).
 - 5.2 The Therma QCE shall then notify the welder of results and record on Form FN 5.024.1 (Weld Program Log for 207) or FN 5.024.2 (Weld Program Log for 107).

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Document Approval

Field / Operations Manager

Date

Engineering Manager

Date

Quality Assurance Manager

Date