Procurement Specification Cover Sheet

1. Title

TECHNICAL SPECIFICATION FOR MELTER VESSEL ASSEMBLY (SPLIT SCOPE) FOR THE DEFENSE WASTE PROCESSING FACILITY (U) - PROJECT #LW-5901

2. Specification No.	3. Revision	4. Page
M-502	7	1 of 14

5. Functional Classification	6. Requester Department	7. Requester Division
SC	DWPF Design Engr.	PD & CS

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Standard Procurement Specification Revision History Sheet

1. Specification No. M-502			2. Revision No. 7	3. Page 2 of 14
4. Date	5. Revision No.	6. Paragraph No.	7. Description of Changes	
2/24/2005	6	N/A	Incorporated M-DCF-S-02277 and revised as noted.	
		2.1.2	Added "to be installed". Revised "canister positioner" to "canister	
			positioning arm". Deleted "connect".	
		2.1.3	Revised "canister positioner support frame" to "canister	
			positioning arm support bracket".	
		2.1.6	Deleted "counter balance as required". Added "interim and final".	
		2.1.7	Added "/support frame assembly and top head".	
		2.2.2	Deleted "melter head handling fixture". Revised "head" to "core".	
		2.3.3	Added "except for DS-E-1924".	
		5.1.1, 5.2 thru 5.3.4	Deleted "and Section 5.2". Deleted Section 5.2 thru Section 5.3.4	
		6.3	Added "except as noted in specification M-501, section 6.5.2"	
		6.6	Revised to delete 3-D model and add existing routing drawings.	
		7.2.1	Added paragraph on temporary orifices.	
		9.3.4	Deleted test minimums and maximum.	
		9.3.5, & 9.3.7	Revised in accordance with M-DCF-S-02277	
		Attachment10.4	Revised Section 3.2.2, added new Sections 3.2.3 and 3.2.4.	
			renumbered and revised 3.2.3 to 3.2.5	
		Attachment10.5	Pages 4 & 5, revised "positioner" & "positioner support frame"	
			to "positioning arm" & "positioning arm support bracket"	
		Attachment10.5	Page 12, revised responsibility for supply of locating	
			templates for nozzles/lower holders from "WSRC" to "VEN".	
1/8/2008	7	2.1.6	Deleted 2nd bullet and revised 3rd bullet (p. 5).	
		2.2.2	Deleted last bullet (melter assembly lifting yoke) of 2.2.2 (p. 6)	
		9.3.5	Revised (p. 13).	
		10.1 thru 10.5	Revised. Added number of pages to each attachment. (p. 14)	

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this specification is to define the requirements and division of responsibility for assembling and testing the Melter Vessel Assembly, consisting of a Melter Vessel, Melter Frame and interconnecting piping and wiring.

2.0 SCOPE

2.1 Scope Covered By This Specification

Provide all facilities, labor, engineering, materials, special tools, fixtures, accessories (except items listed in Section 2.2) and equipment to assemble and test the Melter Vessel Assembly in accordance with this Specification, Specification M-500 and the procurement documents.

Completion of the Melter Vessel Assembly is to be performed in two phases. The first phase shall consist of work performed in the Supplier's facility. The remaining work will be performed by Washington Savannah River Company (WSRC) Construction personnel at the Savannah River Site. The division of effort is described in general in the Assembly Sequence (refer to Section 7.2) and in more detail in the Interface Documents (refer to Section 2.3).

Work includes the following (sequence not necessarily as shown):

2.1.1 Melter/Frame Assembly

- Supplier will place upper melter frame over melter/lower frame and bolt to lower frame.

2.1.2 Melter Accessories (to be installed by WSRC)

- Melter drain valve
- Riser/pour spout assembly
- Melter electrodes
- Dome heaters
- Melter top head
- Top head nozzle isolation assemblies
- Top head anchor flanges.
- Melter top head components (see 7.2.2 xii)
- Ceramic fiber blanket
- Melter pour spout guard
- Test mount canister positioning arm
- Splash guards
- Dome heater transformers and bus bars
- Thermocouples

2.1.3 Frame Accessories (by Supplier)

- Fabricate nozzle mounting plates
- Weld process nozzles and lower electrical holders (supplied by WSRC) to nozzle mounting plates

- Transfer and inscribe upper frame datum marks
- Locate nozzle positioning holes in melter frame and drill
- Align and attach mounting plates to melter frame
- Install off-gas and back-up off-gas quencher guides
- Install canister positioning arm support bracket

2.1.4 Frame Electrical Systems (by Supplier)

- Design, furnish and install electrode bus bar supports
- Furnish electrode bus bars and bus bar clamps.
- Install electrode bus bars
- Design, fabricate and install conduit, conduit supports and pull boxes
- Pull cable through conduits, make terminations and test
- Seal all conduit openings and pull boxes

2.1.5 Frame Piping Systems (by Supplier)

- Design, fabricate and install pipe supports
- Design and fabricate piping spools
- Attach pipe spools to melter frame and melter vessel

2.1.6 Assembly Testing (Supplier/WSRC)

- Determine center of gravity (Supplier)
-
- Assembly lift test using lifting yoke (WSRC)
- Conduct leak tests of all Supplier furnished installed piping/tubing spools (Supplier)
- Conduct water circulation and pressure tests (WSRC)
- Conduct electrical isolation and continuity tests (Supplier/WSRC)
- Conduct a precise interim and final dimensional check of interface points (Supplier/WSRC)

2.1.7 Preparation for Shipment to Savannah River Site (Supplier)

- Pack components for shipment
- Cover all openings
- Restrain melter/support frame assembly and top head

2.1.8 Miscellaneous Scope (Supplier)

- Design and fabricate special equipment to support the above work
- Provide shop, assembly and as-built drawings
- Perform necessary in-process inspections to verify conformance to specification

2.2 Scope Not Covered By This Specification

2.2.1 Materials supplied by the Supplier under separate Specification, which include:

- Melter vessel and melter top head
- Lower melter vessel support frame (with melter attached)
- Upper melter frame

2.2.2 Materials supplied by WSRC

- Refractory lining
- Installation of refractory in melter vessel and vessel top head at SRS
- Melter Internals and accessories, including riser core, electrodes, heaters, drain valve and top head components (see 7.2.2xii) to be installed at SRS
- Lower holders and multi-pin connectors for electrical connections
- Canister positioning arm (test fit at SRS)
- Dome heater transformers (installed at SRS)
- Anchor flanges and Isolation components (installed at SRS)
- Ceramic fiber blanket/insulation material and cement (installed at SRS)
- Thermocouples (installed at SRS)
- UNS N06690 material for top head nozzles A and T
- Electrical wire and cable

2.3 Interfaces

2.3.1 Each boundary of responsibility (i.e., point where work or scope of supply assigned to one party meets that of another) has been identified as an Interface. Each such interface is noted on the appropriate Melter Interface Drawing and accompanying index and data sheets attached to the purchase order.

2.3.2 The Melter Interface Drawings, index and data sheets shall serve to identify the limits of scope of supply for each party at each Interface. Interface drawings are not intended to address total scope (see Section 2.1 and 2.2) nor design details (covered by detail drawings).

2.3.3 Any questions regarding the interpretation of or conflicts resulting from these documents shall be immediately presented, in writing, to WSRC for resolution. Data sheets, except DS-E-1924, are for reference only as the information displayed may not be current requirement.

3.0 CODES AND STANDARDS

Items supplied shall conform to this specification, other specifically referenced Project Specifications and to the applicable portions of referenced Codes and Standards. The relevant revisions of all referenced Codes and Standards are listed in Specification M-500, "Technical Specification for Melter Vessel Assembly for the Defense Waste Processing Facility".

4.0 DESIGN

4.1 The Supplier shall design and fabricate special equipment items (see below) that are part of the final assembly. The Supplier shall prepare detailed shop drawings, assembly

(erection/installation) drawings and assembly procedures for the special equipment. These documents shall be submitted to WSRC for review and acceptance in accordance with Attachment 10.1.

These drawings and procedures shall be in sufficient detail to enable WSRC to assure conformance with the Equipment Requirement (ER) Drawings, and Piping and Instrument Diagrams (P&ID's).

Special equipment items include the following:

4.1.1 Nozzle Mounting Plates

4.1.2 Submit piping and conduit routing drawings for WSRC review and acceptance. Include pipe, tubing and fittings.

4.1.3 Submit piping and conduit support drawings for WSRC review and acceptance. Include clamps for pipe and conduit.

4.1.4 Temporary piping connections used with water circulation tests.

4.2 Any bolting or other fasteners which are not remotely operable shall be secured by pinning, tack welding or similar means. Submit fastener securing procedure for WSRC review and acceptance.

4.3 The design of pipe and conduit supports shall consider dead and live loads and seismic forces. Supports shall satisfy the Seismic Zone 2 requirements as described in the Uniform Building Code, 1985 Edition. Horizontal forces (F_p) applied at the center of gravity in the direction under consideration shall be per Sec. 2312(g) where:

$F_p = .17\ W_p$

F_p = Seismic force

W_p = Dead load or dead load plus effective live load, as applicable

Piping flexibility analysis shall be the responsibility of the Supplier. Analysis shall be based on the following design conditions and shall be submitted to WSRC for review and acceptance in accordance with Attachment 10.1.

	psig	°F
Instrument air	125	100
Cooling water	60	122
Off-gas	ATM	300

4.4 Any deviations by the supplier from specified locations, orientations or requirements for Melter Vessel Assembly components must have prior written acceptance from WSRC.

5.0 MATERIALS

5.1 General Requirements

5.1.1 Materials of construction for the Melter Vessel Assembly are as required on the Equipment Requirement drawings and reference specifications. Material substitutions shall not be made without specific written acceptance by WSRC.

5.1.2 Equipment, jigs, fixtures, etc., provided by the Supplier may be of the Supplier's standard materials unless otherwise specified on WSRC drawings. All points of pressure contact between the Melter Vessel Assembly and Supplier's jigs, fixtures, etc. shall be stainless steel. Carbon steel contamination of stainless steel and nickel alloys is not permitted.

5.2 Deleted.

5.3 Deleted.

6.0 FABRICATION

6.1 All melter vessel assembly fabrication and assembly shall be in accordance with the Specifications, Equipment Requirement drawings, and the WSRC accepted Supplier fabrication/assembly drawings and procedures.

6.2 All welding requirements shall conform to the requirements of Specification M-500, Sections 5.2 through 5.4.

6.3 Cleaning and Painting

Interior and exterior surfaces shall be thoroughly cleaned of all mill scale, cuttings, weld spatter, grease, oil, and other foreign matter. Stainless steel equipment shall not be painted except as noted in Specification M-501, Section 6.5.2. A cleaning procedure shall be submitted for review and acceptance in accordance with Attachment 10.1.

6.4 All process nozzles and electrical holders shall be located and attached to the melter frame according to the dimensional requirements as shown on the ER drawings.

6.5 The Supplier shall in no way damage, modify, weld on or otherwise alter, completely tested Melter frame lifting lugs. Any accidental damage shall be immediately reported to WSRC.

6.6 The Supplier will be provided with existing Melter piping and conduit routing drawings. The Supplier shall use these as a guide for their piping and conduit routings.

6.7 Cooling water flow rates are specified in the design documents. Test water shall be applied and the flow distribution measured and adjusted (by means of orifices) within the melter frame to meet the specified requirements (within -0%, +20%). Orificing is permitted on the upstream side of the melter only.

6.8 During all fabrication, Supplier shall maintain cleanliness standards in and around the Melter. Nozzles, etc., shall be kept covered as required to prevent ingress of any dirt, water, cuttings or similar substances to the Melter. Nozzle closures are described in specification M-SPC-S-00001, Paragraph 6.2.3.

7.0 ASSEMBLY

7.1 General

This Specification addresses all work required to complete a Melter Vessel Assembly. Responsibility for this work is divided between the Supplier and WSRC generally on the basis below. For additional detail, refer to the Interface Index, Attachment 10.5

The Supplier shall prepare a detailed assembly sequence procedure, including assembly drawings based on the general sequence as shown below in Paragraph 7.2.

Assembly sequences procedure shall be submitted to WSRC for review and acceptance in accordance with Attachment 10.1. Include close-tolerance operations, including nozzle location and attachment, datum mark establishment, dowel and stud placement.

7.2 General Assembly Sequence

7.2.1 Phase I - Work at Supplier's Shop

i) establish frame datum axes

ii) locate and install melter frame nozzles and lower electrical holders

iii) fabricate and install electrode bus bars in frame (Attachment 10.4)

iv) install upper frame on lower frame

v) spool pipe and conduit

vi) install all conduit and pull all wire except as follows:

- pigtails for connections to the dome heater transformers will be assembled but not installed
- conduit for these transformers will be installed but not welded at the lower holder
- heat shrink tubing will be installed at least as far as the last cable breakout and further if flexibility permits
- installation of connectors and make-up of final terminations will be by WSRC for:

  Riser/Pour Spout heaters and T/Cs

  Electrode T/Cs

  Drain Valve heaters, T/Cs and limit switches

  Dome Heater Transformers power and T/Cs

  Dome Heater T/Cs

  Refractory T/Cs

All wire ends are to be labeled with originating pin number and with termination identification.

vii) install all piping and pipe supports except:

Lines with spool pieces to be assembled and installed by WSRC at SRS:

MSW32-P240-2 OGP48-P232-2

MSW31-P240-2	MRW32-P240-1/2
MRW80-P240-2	MRW31-P240-1/2
MRW79-P240-2	MRW30-P240-1/2
MRW78-P240-3	MRW29-P240-1/2
MSW60-P240-3/4	MSW61-P240-3/4
MRW127-P240-3/4	MRW128-P240-3/4
MRW34-P240-1/2	PLA250-P69-3
MRW33-P240-1/2	PLA245-P69-3
MSW45-P240-1/2	ARG15-P69-1/2
MSW43-P240-1/2	¾ Jumper P240 G12 to MRW78
¾ Jumper P240 G11 to MRW76	

Complete lines to be installed by WSRC at SRS:

½ Jumper P240 Q1 to AA1

½ Jumper P240 Q2 to AA2

½ Jumper P240 Q3 to AA3

½ Jumper P240 Q4 to AA4

Lines to be installed by the Supplier which will have Cajon or similar fitting connections to be made-up by WSRC at SRS:

PLA235-P69-1/2	ISA772-P138-1/2
PLA236-P69-1/2	ISA774-P138-1/2
PLA288-P69-1/2	ISA785-P138-1/2
PLA289-P69-1/2	ISA786 P138-1/2
	ISA736-P138-1/2

The Supplier shall supply and install temporary orifices on the following lines as directed by WSRC:

MSW31-P240-2	MSW44-P240-1/2
MSW32-P240-2	MSW47-P240-1/2
MSW33-P240-1 ½	MSW48-P240-1/2
MSW34-P240-1 ½	MSW60-P240-3/4
	MSW61-P240-3/4

The Supplier shall supply all piping material unless otherwise noted in the Interface Index. This includes all pipe, piping supports, isolation components, etc.

Spool pieces will be provided in pieces (preassembled to the greatest extent possible) with excess length to permit accurate fit-up by WSRC. All components for each spool

piece will be packed so as to maximize the ease of identification and assembly and will be cross-referenced to the appropriate drawing number (Supplier number and WSRC Vendor Print number). Break points in Supplier's piping shall be positioned to make field completion of piping as accessible as possible and maximize ease of fit-up.

viii) fabricate and install canister positioning arm support bracket

ix) fabricate and install quencher orientation guides

x) fabricate pour spout guard

xi) dimensionally inspect frame mounted components

7.2.2 Phase II - Work at Savannah River Site by WSRC

i) install melter electrodes

ii) install refractory and ceramic fiber blanket/insulation

iii) install dome heaters and seal per Attachment 10.3

iv) install drain valve

v) install riser/pour spout assembly

vi) place top head on melter

vii) align and attach Isolation and Guide assemblies on melter head

viii) install thermocouples (Attachment 10.3)

ix) connect wiring and test

x) complete piping (as listed above), test and balance

xi) insulate steam and off-gas lines

xii) mount top head components (level dip tube, thermowells [3], feed tubes [2], CCTVs [2]

xiii) install melter pour spout guard

xiv) fabricate and install splash guards

xv) perform balance and lift testing

xvi) perform dimensional checkout

8.0 INSPECTION

8.1 The Supplier shall perform all necessary inspections to ensure that the complete melter assembly meets all requirements of the ER Drawings and purchase order documents including:

8.1.1 Dimensional check of the placement of the melter vessel within the frame. WSRC shall verify

control lines prior to placement of the melter vessel.

8.1.2 Dimensional check of the location and orientation of all frame mounted features.

8.2 Detailed inspection procedures shall be prepared to describe inspection equipment, methods and data to be recorded and submitted.

8.3 Nondestructive Examination

8.3.1 General Requirements.

Nondestructive examination shall be performed as required by Specification M-500, paragraph 6.1 and by other detailed Specifications, as applicable, attached to the purchase order.

8.3.2 Extent of NDE (Structural/Assembly Welds).

8.3.2.1 Nondestructive examination of the vessel shall be in accordance with Specification M-501, Section7.3.2.

8.3.2.2 Nondestructive examination of the support frame shall be in accordance with Specification S-501, Sections 7.1.1 and 7.2.

8.3.3 Extent of NDE (Piping welds).

8.3.3.1 Extent of pipe weld examination shall be per Attachment 9.3 of Specification P-501.

8.4 Upon completion of the Melter Vessel Assembly, dimensional inspections shall be performed in accordance with Specification M-500, Section 6.2.1. The measurements to be recorded are detailed in the Melter Vessel Assembly Dimensional Record Drawings attached to the purchase order. (Reference Specification G-6).

9.0 TESTING

9.1 Specified testing necessary to demonstrate proper function of the Melter Vessel Assembly and its components shall be performed. Testing responsibility will be in accordance with work scope definition as listed in Section 7.0 and in the Interface Index, Attachment 10.5.

9.2 Detailed mechanical test procedures and electrical test procedures shall be prepared to describe test methods, equipment and data to be recorded. Mechanical test procedures and electrical test procedures shall be submitted to WSRC for review and acceptance. Test reports shall be submitted to WSRC.

9.3 Tests conducted shall include:

9.3.1 Flow Test of the Cooling Water System:

Flow testing will be performed by WSRC at SRS. WSRC personnel shall supply test water as necessary to the Melter Vessel Assembly at a pressure not to exceed 25 psig. Prior to making final connections to the assembly and/or assembly components (see also 9.3.7), connecting piping, tubing, hoses, etc. shall be thoroughly flushed. Verify that water enters and exits the distribution system at the correct points. Where necessary, WSRC shall measure and verify balanced flow distribution of cooling water within the melter frame. The system shall be drained and thoroughly dried after testing.

9.3.2 Operation of the Melter Drain Valve:

The drain valve will be functionally tested by WSRC at SRS by applying instrument quality compressed air to the valve bellows at specified pressures and cycle all functions and components not less than 5 times. Confirm operation of all limit switches.

Set pressures are noted on the drawings attached to the purchase order. (Reference Specification M-500, Section 3.1).

9.3.3 Testing of Electrical Wiring and Connections:

All wiring shall be tested per Specification E-501 "Technical Specification for Melter Assembly Cable and Connectors."

9.3.3.1 In addition, all wires shall be checked for continuity, short circuits and proper routing.

9.3.3.2 Dome heaters and riser/pour spout heaters shall be test heated by WSRC at SRS at less than 100% of operating capacity to ensure proper function. Temperatures shall be monitored by means of the installed thermocouples or by thermocouples or thermometers.

9.3.4 Pressure testing of Piping Spools:

All piping shall be pressure tested as appropriate for the piping class as specified in P&IDs and Specification P-501. Piping connected to the Melter shall be hydrostatic tested or pneumatic tested at a pressure compatible with the Melter design. The pressure test shall be maintained for a sufficient time, not less than 10 minutes, to determine if there are any leaks. Supplier shall submit pressure test procedures and pressure test reports in accordance with Specification P-501.

9.3.5 Balance and Lift Test By WSRC Using Site Lifting Yoke:

A lift test with the melter assembly shall be performed by WSRC at SRS. In order to demonstrate remotability, the lifting yoke shall be engaged and disengaged, at least one time each, without hands-on assistance.

9.3.5.1 Balance lift test, by WSRC, as noted below:

Two (2) vertical scales shall be placed on the frame west side nozzle mounting plate and two (2) on the east side lower holder mounting plate. The scales on the north end shall be placed as far north as possible but in the same east-west plane, +/- ½". The scales on the south end shall be placed 14 feet, +/- ½", from the north end scales and in the same east-west plane, +/- ½". The scales shall be zeroed while the vessel/frame assembly rests on the Melter Support Beam. The vessel/frame assembly shall be raised and optical readings taken on the four (4) scales. Maximum acceptable deviation shall be 0.100".

Engineering shall be notified of maximum deviation and location of counterweights, if required, to be added. Concurrence (DE/DA) of counterweight location is required prior to permanently welding the counterweights to the frame. If counterweights are added, the balance shall be repeated. Total weight and location of the counterweights, if required, shall be recorded in the Assembly Manual. The combined weight of the Yoke, Melter Vessel Assembly and counterweights shall not exceed 80% of the rated crane capacity of 117 tons.

The following components/items shall be installed on the Melter during the balance test:

- Outer Thermowell
- Vapor Space Thermowell
- Level Dip Tube
- Primary Off Gas Film Cooler
- Back Up Off Gas Film Cooler
- ½" plywood covers on all open Top Head nozzles
- Dust covers, with bails, on all electrical lower holders
- 16 Ga. Aluminum covers on all process nozzles
- Acme nuts on all uninstalled Top Head component locations
- PVC protective sleeves on all dowels and studs (optional – no significant weight impact)

The following components shall not be installed on the Melter during the balance test:

- Feed Tubes (2)
- Boroscopes (2)
- Canister Positioning Arm
- Seal Pot
- Melter Frame CCTV Camera

9.3.6 A flow test of the Melter TV Camera Air system shall be performed by WSRC at SRS. Instrument quality air at 25 psig will be supplied to the camera assembly connections and minimum flows of 30 lbs/hr to the camera and 30 lbs/hr to the borescope confirmed.

9.3.7 A flow test of the Feed Tube Cooling Water System shall be performed by WSRC at SRS by circulating water through the feed tubes at 6-7 gpm and recording the actual pressure drop. Differential pressure shall not exceed 60 psig.

10.0 ATTACHMENTS

10.1 Engineering Document Requirements, OSR Form 45-6 (2-pages)

10.2 Quality Verification Document Requirements, OSR Form 45-5 (2 pages)

10.3 Supplemental Installation Information (2 pages)

10.4 Melter Electrode Bus Bar Fabrication (3 pages)

10.5 Interface Index (23 pages)

OSR 45-6B# (Rev 8-27-91)

Engineering Document Requirements

Attachment No. 10.1
Revision No. 7
Spec/Req'n No. M-502

1. Document Category Number	2. Specification Paragraph Reference	3. Document Description	4. Permission to Proceed Required		5. Submittal Schedule	6. Quantity Required		7. Kind of Copies	8. Remarks
			Yes	No		Init	Final		
1.3	4.1	Special Equipment Detail/Ass'y. Drawings	X		90 days ARO	3		Print	ARO=After receipt of purchase order
25.0	4.1	Special Equipment Assembly Procedures	X		"	3		"	
1.3	4.1.2	Piping and Conduit Routing Drawings	X		"	3		"	
1.3	4.1.3	Piping and Conduit Support Drawings	X		"	3		"	
25.0	4.2	Fastener Securing Procedure	X		"	3		"	
8.0	4.3	Piping Flexibility Analysis	X		"	3		"	
15.0	6.3	Cleaning Procedure	X		"	3		"	
25.0	7.1	Melter Vessel Assembly Sequence Procedure	X		"	3		"	
26.0	9.2	Mechanical Test Procedures	X		"	3		"	
26.0	9.2	Electrical Test Procedures	X		"	3		"	

Engineering Document Requirements Form Instructions

Purpose The Engineering Document Requirements (EDR) form is prepared by the originator, establishes a basis for actions required of a Supplier and provides the schedule for the submittal of engineering documents by the Supplier.

Legend

Entry No. **Information Required**

1 Document category number — see below.
2 Applicable specification number and appropriate paragraph.
3 Description corresponding to document category number.
4 Permission to proceed with fabrication or other specific processes is marked yes, if required.
5 List a milestone after award i.e., prior to fabrication, prior to test, prior to shipment, or with shipment that the listed document is to be submitted by S
6 Number of copies required for submittal.
7 Reproducible, Mylar, Vellum, etc.
8 Enter remarks when appropriate.

Document Category Number and Descriptions

1.0 Drawings
- 1.1 Outline Dimensions, Services, Foundations and Mounting Details — Drawings providing external envelope, including lugs, centerline(s), location an for electrical cable, conduit, fluid, and other service connections, isometrics and details related to foundations and mountings.
- 1.2 Assembly Drawings — Detailed drawings indicating sufficient information to facilitate assembly of the component parts of an equipment item.
- 1.3 Shop Detail Drawings — Drawings which provide sufficient detail to facilitate fabrication, manufacture, or installation. This includes pipe spool draw internal piping and wiring details, cross-section details and structural and architectural details.
- 1.4 Wiring Diagrams — Drawings which show schematic diagram equipment, internal wiring diagrams, and interconnection wiring diagram for electrical
- 1.5 Control Logic Diagrams — Drawings which show paths which input signals must follow to accomplish the required responses.
- 1.6 Piping and Instrumentation Diagrams — Drawings which show piping system scheme and control elements.

2.0 Parts Lists and Costs — Sectional view with identified parts and recommended spare parts for one year's operation and specified with unit cost.

3.0 Complete WSRC Data Sheets — Information provided by Supplier on data sheets furnished by WSRC.

4.0 Instructions
- 4.1 Erection/Installation — Detailed written procedures, instructions, and drawings required to erect or install material or equipment.
- 4.2 Operations — Detailed written instructions describing how an item or system should be operated.
- 4.3 Maintenance — Detailed written instructions required to disassemble, reassemble and maintain items or systems in an operating condition.
- 4.4 Site Storage and Handling — Detailed written instructions, requirements and time period for lubrication, rotation, heating, lifting or other handling requirements to prevent damage or deterioration during storage and handling at jobsite. This includes shipping instruction for return.

5.0 Schedules: Engineering and Fabrication/Erection — Bar charts or critical path method diagram which detail the chronological sequence of activities, i.e., Engineering submittals, fabrication and shipment.

6.0 Quality Assurance Manual/Procedures — The document(s) which describe(s) the planned and systematic measures that are used to assure that structure systems, and components will meet the requirements of the procurement documents.

7.0 Seismic Data Reports — The analytical or test report which provides information and demonstrates suitability of material, component or system in relation conditions imposed by the stated seismic criteria.

8.0 Analysis and Design Reports — The analytical data (stress, electrical loading, fluid dynamics, design verification reports, etc.) which demonstrate that an i satisfies specified requirements.

9.0 Acoustic Data Reports — The noise, sound and other acoustic vibration data required by the procurement documents.

10.0 Samples
- 10.1 Typical Quality Verification Documents — A representative data package which will be submitted for the items furnished as required in the procurer documents.
- 10.2 Typical Material Used — a representative example of the material to be used.

11.0 Material Descriptions — The technical data describing a material which a Supplier proposes to use. This usually applies to architectural items, e.g., metal decking, doors, paints, coatings.

12.0 Welding Procedures and Qualifications — The welding procedure, specification and supporting qualification records required for welding, hard facing, ove brazing and soldering.

13.0 Material Control Procedures — The procedures for controlling issuance, handling, storage and traceability of materials such as weld rod.

14.0 Repair Procedures — The procedures for controlling material removal and replacement by welding, brazing, etc., subsequent thermal treatments, and fina acceptance inspection.

15.0 Cleaning and Coating Procedures — The procedures for removal of dirt, grease or other surface contamination, and preparation and application of protect coatings.

16.0 Heat Treatment Procedures — The procedures for controlling temperature and time at temperature as a function of thickness, furnace atmosphere, coolin and methods, etc.

19.0 UT — Ultrasonic Examination Procedures — Procedures for detecting discontinuities and inclusions in materials by the use of high frequency acoustic en

20.0 RT — Radiographic Examination Procedures — Procedures for detecting discontinuities and inclusions in materials by x-ray or gamma ray exposure of photographic film.

21.0 MT — Magnetic Particle Examination Procedures — Procedures for detecting surface or near surface discontinuities in magnetic materials by the distortio applied magnetic field.

22.0 PT — Liquid Penetrant Examination Procedures — Procedures for detecting discontinuities in materials by the application of a penetrating liquid in conjun with suitable developing materials.

23.0 Eddy Current Examination Procedures — Procedures for detecting discontinuities in materials by distortion of an applied electromagnetic field.

24.0 Pressure Test — Hydro, Air, Leak, Bubble or Vacuum Test Procedures — Procedures for performing hydrostatic or pneumatic structural integrity and leak tests.

25.0 Inspection Procedures — Organized process followed for the purpose of determining that specified requirements (dimensions, properties, performance re etc.) are met.

26.0 Performance Test Procedures — Test performed to demonstrate that functional design and operational parameters are met.
- 26.1 Mechanical Tests — e.g., pump performance, data, valve stroking, load, temperature rise, calibration, environmental, etc.
- 26.2 Electrical Tests — e.g., impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.

27.0 Prototype Test Reports — Reports of a test which is performed on a standard or typical examination of equipment or item, and which is not required for ea produced in order to substantiate the acceptability of equal items. This may include tests which result in damage to the item(s) tested.

28.0 Personnel Qualification Procedures — Procedures for qualifying welders, inspectors and other special process personnel.

29.0 Supplier Shipping Preparation Procedures — Procedures used by a Supplier to prepare finished materials or equipment for shipment from its facility to the jobsite.

Attachment No. 10.2
Revision No. 7
Spec/Req'n No. M-502
Page 1 of 2

Quality Verification Document Requirements

1. Document Category Number	2. Specification Paragraph Reference	3. Document Description	4. SSR Release	5. WSRC Receipt Inspection Check-In	6. Remarks	7. DOC Supplier Page Count
26.0	9.2	Mechanical Test Reports				
26.0	9.2	Electrical Test Reports				

8. Supplier's Order No.	9. Supplier's Part	10. Supplier's Part Name	11. Quantity

12. PO No.	13. WSRC Line/Equip Tag or Code No.	14. WSRC Part Name

15. Supplier's Conformance Statement

We certify that the work and required documents meet the requirements of the procuring documents.

Authorized Supplier Signature _____ Title _____ Date _____

16. Source Surveillance Representative at Suppliers Facility

Work was released based on satisfactory completion of quality surveillance and review of documentation.

☐ With Authorized Deviations Noted in Column 6
☐ No Deviations

Signature of SSR _____ Date _____

17. Receiving Inspection at SRS

This form and the quality verification documents referenced hereon have been received and their relationship to the hardware items verified.

Signature of WSRC Inspector _____ Date _____

Quality Verification Document Requirements Form Instructions

Purpose The Quality Verification document Requirements (QVDR) is initiated by SRS and completed by the Supplier when providing quality verification documents. The QVDR is a multipurpose form to

Transmit quality verification documents from the Supplier,
Provide evidence of SSR release of documentation and/or work, and
Provide evidence of an SRS inspection check of documentation received at SRS.

WSRC Entries

Entry No.	Information Required
1	Enter Document Category Number — see below.
2	Enter Specification Number and Paragraph Reference.
3	Enter Description corresponding to the Document Category Number.
4	SSR to initial upon item release.
6	Enter "Remarks: as appropriate.
16	SSR and dates release.

Field Entries

Entry No.	Information Required
5	SRS inspector at the jobsite to complete check-in.
17	The SRS Inspector will review the quality verification documentation package. If found satisfactory, he signs and dates the check-in statement.

Supplier Entries

Entry No.	Information Required
7	Enter number of pages of quality verification document being submitted.
8	Enter information required.
9	Enter information required.
10	Enter information required.
11	Enter the quantity of units covered by the documents submitted. For each item on Entry No. 12 being released, provide a separate copy of this completed form and the supporting quality verification documents.
12	Enter information required.
13	Enter information required.
14	Enter information required.
15	Supplier — Signature of an employee authorized to sign such documents.

Document Category Numbers and Descriptions

12.0 Welding Verification Reports — Reports of welding performed to include weld identification, and certification that qualified welding procedures and welders were used.

13.0 Material Verification Reports — Reports relative to material which confirm, substantiate or assure that an activity or condition has been implemented in conformance with code and material specifications imposed by the procurement documents.

14.0 Major Repair Verification Reports — Reports may include weld repair locations (maps), material test reports for filler metal, pre- and post-weld heat treatment records, NDE records, etc. The resolution of whether a repair is major or not is an SRS responsibility.

15.0 Cleaning and Coating Verification Reports — Reports include a certification of visual examination for surface preparation, surface profile, materials, etc.; and also humidity data, temperature data and coating thickness data as required by the procurement documents.

16.0 Heat Treat Reports — Reports normally include furnace charts and similar records which identify and certify the item(s) treated, the procedure used, furnace atmosphere, time at temperature, cooling rate, etc.

17.0 Material Property Reports

- 17.1 MTR (Material Test Reports) — These reports include all chemical, physical, mechanical, and electrical property test data required by the material specification and applicable codes. These are applicable to cement, concrete, metals, cable jacket materials, rebar, rebar splices, etc.
- 17.2 Impact Test Data — Reports of Charpy or drop weight tests including specimen configuration, test temperature and fracture data.
- 17.3 Ferrite Data — Reports of the ferrite percentage for stainless steel materials used, including castings and welding filler metals as deposited.
- 17.4 Material Certificate of Conformance — Documents which certify conformance to the requirements of the applicable material specification.
- 17.5 Electrical Property Reports — Reports of electrical characteristics, e.g., dielectric, impedance, resistance, flame tests, corona, etc.

18.0 Code Compliance — Verifying documents (such as data Forms U-1, M-2, State, etc.), which are prepared by the manufacturer or installer and certified by the Authorized Code Inspector.

19.0 UT — Ultrasonic Examination and Verification Reports — Examination results of certain characteristics of discontinuities and inclusions in material by the use of high frequency acoustic energy.

20.0 RT — Radiographic Examination and Verification Reports — Examination results of certain characteristics of discontinuities and inclusions in materials by x-ray or gamma-ray exposure of photographic film, including film itself.

21.0 MT — Magnetic Particle Examination and Verification Reports — Examination results of surface (or near surface) discontinuities in magnetic materials by distortion of an applied magnetic field.

22.0 PT — Liquid Penetrant Examination and Verification Reports — Examination results of surface discontinuities in materials by application of a penetrating liquid in conjunction with suitable developing techniques.

23.0 Eddy Current Examination and Verification Reports — Examination results of discontinuities in material by distortion of an applied electromagnetic field.

24.0 Pressure Test — Hydro, Air, Leak, Bubble or Vacuum Test and Verification Reports — Results of hydrostatic or pneumatic structural integrity and leakage tests.

25.0 Inspection and Verification Reports — Documented findings resulting from an inspection.

26.0 Performance Test and Verification Reports — Reports of Test Results

- 26.1 Mechanical Test, e.g., pump, performance data, valve stroking, load, temperature rise, calibration, environment, etc.
- 26.2 Electrical Tests, e.g., load, impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.

27.0 Prototype Test Report — Report of the test which is performed on a standard or typical example of equipment, material or item, and which is not required for each item produced in order to substantiate the acceptability of equal items. This normally includes tests which may, or could be expected to, result in damage to the item(s) tested.

28.0 Certificate of Conformance—A document signed or otherwise authenticated by an authorized individual certifying the degree to which items or services meet specified requirements.

SUPPLEMENTAL INSTALLATION INFORMATION

ITEM I - Deleted

ITEM II – CERAMIC FIBER INSTALLATION

- Dome Heater Seals

There is 3/8 inch annular gap between the dome heater OD and the refractory clearance holes. This must be sealed to prevent vapors in the melter from contacting the dome heater end stems.

The seal material will be ceramic fiber purchased in the form of braided rope. This must be cut in lengths that will fit around the 3-1/4" diameter heater ends like a packing ring. Rings of this material must be packed to a depth of approximately 10 inches at all 16 heater penetration points. A suitable tool must be used to force the rings into the 3/8" crevice to achieve a tight joint. Enough material should be installed to bring the packing flush with the surface of the side wall refractory.

ITEM III - MELTER THERMOCOUPLE INSTALLATION GUIDELINES

Following are general guidelines for melter thermocouple installation. Some melter components will have thermocouples installed by the component fabricator and are not removable from the component.

1. Thermocouples are made from precious metal and should be handled with care.

2. Do not cut or remove the plastic insulating sleeve surrounding the thermocouple sheath. If the plastic is cut or damaged, so as to provide an electrical path, it must be repaired by heat shrinking a new piece of the same material in place of the damaged section.

3. Confirm the proper thermocouple tag number vs. the location as shown on the equipment arrangement drawings.

4. Measure and mark the thermocouple with the immersion length specified on the equipment arrangement drawings. (Witness point.)

5. Install Conax MHM seal fittings or vessel packing glands, as appropriate.

6. Install the thermocouple to the proper depth and tighten the gland nut. (Witness point for Nos. 2, 3 & 6.)

7. Route the flexible thermocouple leads to the appropriate splice points and make splices.

8. Install extension wire in the conduits between the thermocouple splice points and the melter frame. Maintain maximum separation from power wires and conduits and the single-phase electrode bus bar. Close parallel runs of extension wire with power wire and bus bar must be avoided. Power or bus bar and extension wire crossings are permitted at right angles. Absolutely no power wiring is permitted in thermocouple extension wire conduits.

9. Connect extension wire to proper electrical lower hold pins.

10. Install radiation resistant shrink fit plastic tubing over the extension wire between the end of the conduit and the thermocouple splice points. The plastic should extend into the conduit and over the splice point.

11. Confirm the electrical continuity from the proper lower holder pin to the proper thermocouple at its splice point. (Witness point.)

12. Connect the extension wire to the thermocouple leads at the splice point observing proper polarity. (Witness point.)

13. Shrink the plastic tubing in place.

MELTER ELECTRODE BUS BAR FABRICATION

1.0 SCOPE

This appendix covers the requirements for furnishing the Melter Bus Bars for the Melter Vessel Assembly.

2.0 MATERIALS

Materials used in fabrication shall be in accordance with the ER drawings and applicable ASTM Standards.

3.0 FABRICATION

Fabrication of equipment shall be In accordance with the ER drawings and WSRC approved Supplier procedures and drawings.

3.1 All welding of copper to copper, and copper to silicon bronze shall be in accordance with the following:

3.1.1 General Welding Requirements

a. Welding, welding procedure specifications, and welder qualifications shall be in accordance with ASME IX-Welding and Brazing Qualifications.

b. Grease, oil, marking crayons, paint, cleaning solvents, dirt, and all extraneous matter must be removed from the entire bar prior to welding. Metal oxides and mill scale must be removed for a minimum of 1 inch from the weld area.

c. All welding shall be performed by using either Gas Tungsten Arc Welding (GTAW) or Gas Metal Arc Welding (GMAW).

d. The Supplier shall submit a copy of each Welding Procedure Specification (with Procedure Qualification Records) to be used on this work for Bechtel review.

e. Welder performance qualification records for each individual welder shall be available for in-shop review by the WSRC Supplier Surveillance Representative.

3.1.2 Filler Metals

When welding copper to copper or copper to silicon bronze, ERCu filler metals shall be used. Alternative filler metals shall not be used without WSRC permission.

3.1.3 Preheat

a. A minimum temperature of 1000°F preheat is required prior to start of welding.

3.1.4 Workmanship

All welds shall be continuous, uniform in width and size throughout the full length. Welds shall be free of weld splatter, course ripples, grooves, overlap or undercut.

3.2 NDE

3 2.1 Radiographic examination shall be performed on 100% of the full penetration bus bar welds. Radiographic examination shall be performed in accordance with Article 2 of ASME V. Sections of welds that are shown by radiography to have any of the following type of imperfections shall be unacceptable:

1) Any type of crack

2) A single rounded indication greater than 3/16 inch

3) Any group of indications in a cross sectional plane in which the total area of voids exceeds 5% of the total cross sectional area of the bus bar

3.2.2 Where radiographic examination cannot be performed due to weld location, liquid penetrant examination shall be performed on 1/4t, 1/2t, 3/4t and final weld pass. Liquid penetrant examination shall be performed in accordance with ASME, Section V, Article 6. Acceptance criteria shall be in accordance with ASME, Section VIII, Division 1, Appendix 8.

3.2.3 Prior to any fabrication (bending, welding, etc.) of the bus bars, Supplier shall perform 100% ultrasonic examination of the raw bus bar material. UT examination shall be in accordance with ASME, Section V, Article 5. Acceptance criteria shall be in accordance with ASME, Section VIII, Division 1, Appendix 12.

3.2.4 After machining of the clamp end and prior to silver plating of either end, Supplier shall perform a liquid penetrant examination of the silver plating areas. PT examination and acceptance criteria shall be in accordance with Section 3.2.2.

3.2.5 NDE procedures shall be submitted for WSRC review and acceptance in accordance with Specification M-500, Attachment 11.1. NDE test results shall be submitted in accordance with Specification M-500, Attachment 11.2.

3.3 Silver plating shall be in accordance with specification ASTM B700 and as shown on the ER drawings.

4.0 ASSEMBLY

4.1 Assembly of the bus bar assemblies shall be in accordance with Supplier procedures and in accordance with the ER Drawings.

5.0 DIELECTRIC TEST

The completed bus bar assembly shall be checked for electrical isolation according to the following procedures:

1. Isolate the clamp-end and temporarily attach the dowel-end support base to a grounded support stand.
2. Connect an adjustable voltage insulation tester between bus bar and grounded support stand.
3. Gradually raise test voltage from zero to 2200 volts and hold for 60 seconds, then reduce voltage back to zero.

4. During test, check for flashovers or sparkovers and record voltage (testers usually have buzzers or other indication of breakdown).

5. After test, examine bus bar assembly for evidence of flashover (check for change in insulation resistance).

INTERFACE INDEX
MELTER VESSEL ASSEMBLY
SPLIT-SCOPE INTERFACE INDEX
FOR THE DEFENSE WASTE PROCESSING FACILITY

THIS MELTER INTERFACE INDEX IS USED TO IDENTIFY THE LIMITS OF SCOPE OF RESPONSIBILITY (SUPPLY, DESIGN, ASSEMBLY, ETC.) FOR EACH PARTY (WSRC OR SUPPLIER) AT EACH INTERFACE. THE INDEX IS TO BE USED IN CONJUNCTION WITH INTERFACE DATA SHEETS AND INTERFACE DRAWINGS. EACH INDIVIDUAL INTERFACE AND ITEM OF RESPONSIBILITY IS TABULATED HEREIN AND RESPONSIBLE PARTY IDENTIFIED.

QUESTIONS REGARDING INTERFACE RESPONSIBILITIES, INCLUDING ANY APPARENT OMISSIONS, SHALL BE BROUGHT TO WSRC'S ATTENTION.

THIS INDEX HAS BEEN ARRANGED IN ALPHABETICAL ORDER BY MAJOR ACTIVITY (REFER TO THE ATTACHED TABLE OF CONTENTS).

DEFINITIONS:

MAJOR ACTIVITY: GENERAL ASSEMBLY AREA OR TASK

DATA SHEET: INTERFACE DATA SHEET DEPICTING THE MAJOR ACTIVITY

COMPONENT ACTIVITY: LOCAL OR INDIVIDUAL ASSEMBLY ACTIVITY

KEY:

DSN	=	Design	ASSEM	=	Assembly
SPLY	=	Supply	INSTAL	=	Installation
REMOVE	=	Removal	PREP	=	Preparation, General
INSERT	=	Insertion	SOLDER	=	Solder
LOCATE	=	Locate	WELD	=	Weld
TEST	=	Test	MACHINE	=	Machine

TYPE: REFERS TO TYPE OR COMPONENT ACTIVITIY; i.e. MECHANICAL, ELECTRICAL OR PIPING

RESP: RESPONSIBLE PARTY FOR COMPONENT ACTIVITY

KEY:

WSRC = WASHINGTON Savanah River Company VEN = Supplier
SRC = Savannah River Construction
SRS = Savannah River Site

CONN: RELATED MELTER CONNECTION IDENTIFICATION
REF. DRAWING: REFERENCED DETAIL OR ASSEMBLY DRAWING(S)
REV: INDICATES A LINE ITEM REVISED IN THE SPECIFIED ISSUE

TABLE OF CONTENTS

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
BUS BAR ASSEMBLY	DS-M-502-12	DSN OF BUS BARS	ELEC	WSRC	L1	W840613		
			ELEC	WSRC	L2	W840612		
			ELEC	WSRC	L3	W840613		
			ELEC	WSRC	L4	W840612		
		DSN OF END POINT COMPONENTS	ELEC	WSRC	L1	W840614	FRAME & ELECTRODE END	
			ELEC	WSRC	L2	W840614	FRAME & ELECTRODE END	
			ELEC	WSRC	L3	W840614	FRAME & ELECTRODE END	
			ELEC	WSRC	L4	W840614	FRAME & ELECTRODE END	
		ASSEM OF BUS BAR CLAMPS TO ELECTRODES	ELEC	WSRC	L1		REF. DS-M-502-5	
			ELEC	WSRC	L2		REF. DS-M-502-5	
			ELEC	WSRC	L3		REF. DS-M-502-5	
			ELEC	WSRC	L4		REF. DS-M-502-5	
		DSN/SPLY OF INSULATED SUPPORTS	MECH	VEN	L1			
			MECH	VEN	L2			
			MECH	VEN	L3			
			MECH	VEN	L4			
		INSTAL OF BUS BARS IN FRAME	ELEC	VEN	L1			
			ELEC	VEN	L2			
			ELEC	VEN	L3			
			ELEC	VEN	L4			
		INSTAL OF INSULATED SUPPORTS	MECH	VEN	L1			
			MECH	VEN	L2			
			MECH	VEN	L3			
			MECH	VEN	L4			
		SPLY OF BUS BARS	ELEC	VEN	L1	W840613		
			ELEC	VEN	L2	W840612		
			ELEC	VEN	L3	W840613		
			ELEC	VEN	L4	W840612		
		SPLY OF END POINT COMPONENTS	ELEC	VEN	L1	W840614	FRAME & ELECTRODE END	
			ELEC	VEN	L2	W840614	FRAME & ELECTRODE END	
			ELEC	VEN	L3	W840614	FRAME & ELECTRODE END	
			ELEC	VEN	L4	W840614	FRAME & ELECTRODE END	
CANISTER POSITIONING ARM	DS-M-502-24	DSN OF CANISTER POSITIONING ARM SUPPORT BRACKET	MECH	WSRC		W840610		
		DSN/SPLY OF CANISTER POSITIONING ARM	MECH	WSRC		W753272	EXISTING	
		TEST OF MOUNTING/REMOVE OF CANISTER POSITIONING ARM	MECH	WSRC				
		LOCATE/INSTAL OF CANISTER POSITIONING ARM SUPPORT BRACKET	MECH	VEN			ON MELTER FRAME	
		SPLY OF POSITIONING ARM SUPPORT BRACKET	MECH	VEN		W840610		

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
CANISTER POSITIONING ARM	DS-M-502-24	SPLY/ASSEM OF CONDUIT	ELEC	VEN				
		SPLY OF WIRING	ELEC	WSRC				
		ASSEM OF WIRING	ELEC	VEN			WITH N MELTER FRAME	
		WELD OF POSITIONING ARM SUPPORT BRACKET	MECH	VEN				
DOME HEATER	DS-M-502-8	SPLY OF THERMOUPLES	ELEC	WSRC	XF01		TO SFIS	
			ELEC	WSRC	XF02		TO SFIS	
			ELEC	WSRC	XF03		TO SFIS	
			ELEC	WSRC	XF04		TO SFIS	
			ELEC	WSRC	XF05		TO SFIS	
			ELEC	WSRC	XF06		TO SFIS	
			ELEC	WSRC	XF07		TO SFIS	
			ELEC	WSRC	XF08		TO SFIS	
			ELEC	WSRC	XF09		TO SFIS	
			ELEC	WSRC	XF10		TO SFIS	
			ELEC	WSRC	XF11		TO SFIS	
			ELEC	WSRC	XF12		TO SFIS	
			ELEC	WSRC	XF13		TO SFIS	
			ELEC	WSRC	XF14		TO SFIS	
			ELEC	WSRC	XF15		TO SFIS	
			ELEC	WSRC	XF16		TO SFIS	
		DSN/SPLY OF HEATER	ELEC	WSRC	M1		TO SFIS	
			ELEC	WSRC	M11		TO SFIS	
			ELEC	WSRC	M13		TO SFIS	
			ELEC	WSRC	M15		TO SFIS	
			ELEC	WSRC	M3		TO SFIS	
			ELEC	WSRC	M5		TO SFIS	
			ELEC	WSRC	M7		TO SFIS	
			ELEC	WSRC	M9		TO SFIS	
		DSN/SPLY OF HEATER COMP.	ELEC	WSRC	M1		TO SFIS	
			ELEC	WSRC	M11		TO SFIS	
			ELEC	WSRC	M13		TO SFIS	
			ELEC	WSRC	M15		TO SFIS	
			ELEC	WSRC	M3		TO SFIS	
			ELEC	WSRC	M5		TO SFIS	
			ELEC	WSRC	M7		TO SFIS	
			ELEC	WSRC	M9		TO SFIS	
		ASSEM OF HEATERS/ISOLATION	ELEC	WSRC	M1			
			ELEC	WSRC	M11			
			ELEC	WSRC	M13			
			ELEC	WSRC	M15			
			ELEC	WSRC	M3			

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
DOME HEATER	DS-M-502-6	ASSEM OF HEATERS/ISOLATION	ELEC	WSRC	M5			
			ELEC	WSRC	M7			
			ELEC	WSRC	M9			
		INSTAL COVER COOLING WATER PIPING	PIPE	WSRC			COMPLETE PIPING FROM BRK PNT	
		INSTAL OF HEATER COVERS	MECH	WSRC	M10		EAST COVER	
			MECH	WSRC	M12		EAST COVER	
			MECH	WSRC	M14		WEST COVER	
			MECH	WSRC	M16		WEST COVER	
			MECH	WSRC	M2		EAST COVER	
			MECH	WSRC	M4		EAST COVER	
			MECH	WSRC	M6		WEST COVER	
			MECH	WSRC	M8		WEST COVER	
		INSTAL OF HEATERS	MECH	WSRC	M1			
			MECH	WSRC	M11			
			MECH	WSRC	M13			
			MECH	WSRC	M15			
			MECH	WSRC	M3			
			MECH	WSRC	M5			
			MECH	WSRC	M7			
			MECH	WSRC	M9			
		INSTAL OF THERMOCOUPLES	ELEC	WSRC	XF01	W836886		
			ELEC	WSRC	XF02	W836886		
			ELEC	WSRC	XF03	W836886		
			ELEC	WSRC	XF04	W836886		
			ELEC	WSRC	XF05	W836886		
			ELEC	WSRC	XF06	W836886		
			ELEC	WSRC	XF07	W836886		
			ELEC	WSRC	XF08	W836886		
			ELEC	WSRC	XF09	W836886		
			ELEC	WSRC	XF10	W836886		
			ELEC	WSRC	XF11	W836886		
			ELEC	WSRC	XF12	W836886		
			ELEC	WSRC	XF13	W836886		
			ELEC	WSRC	XF14	W836886		
			ELEC	WSRC	XF15	W836886		
			ELEC	WSRC	XF16	W836886		
		TEST OF HEATERS	ELEC	WSRC	M1		BUMP TEST M-502, 9.3.3.2	
			ELEC	WSRC	M11		BUMP TEST M-502 ,9.3.3.2	
			ELEC	WSRC	M13		BUMP TEST M-502, 9.3.3.2	
			ELEC	WSRC	M15		BUMP TEST M-502, 9.3.3.2	
			ELEC	WSRC	M3		BUMP TEST M-502, 9.3.3.2	
			ELEC	WSRC	M5		BUMP TEST M-502, 9.3.3.2	
			ELEC	WSRC	M7		BUMP TEST M-502, 9.3.3.2	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
DOME HEATER	DS-M-502-6	TEST OF HEATERS	ELEC	WSRC	M9		BUMP TEST M-502, 9.3.3.2	
		SPLY/INSTAL COVER COOLING WATER PIPING	PIPE	VEN			INSTALL TO BREAK POINT	
DOME HEATER BUS BAR	DS-M-502-7	DSN/SPLY OF BUS BAR	ELEC	WSRC	EE21			
			ELEC	WSRC	EE22			
			ELEC	WSRC	EE23			
			ELEC	WSRC	EE24			
			ELEC	WSRC	EE25			
			ELEC	WSRC	EE26			
			ELEC	WSRC	EE27			
			ELEC	WSRC	EE28			
		SPLY OF TRANSFORMERS	ELEC	WSRC	EE5			
			ELEC	WSRC	EE6			
			ELEC	WSRC	EE7			
			ELEC	WSRC	EE8			
		INSTAL OF BUS BAR	ELEC	WSRC	EE21	W840493		
			ELEC	WSRC	EE22	W840493		
			ELEC	WSRC	EE23	W840493		
			ELEC	WSRC	EE24	W840493		
			ELEC	WSRC	EE25	W840493		
			ELEC	WSRC	EE26	W840493		
			ELEC	WSRC	EE27	W840493		
			ELEC	WSRC	EE28	W840493		
		INSTAL OF BUS BAR COOLING WATER PIPING	PIPE	WSRC			SEE DS-M-502-8	
		INSTAL OF BUS BAR COOLING WATER PIPING	PIPE	VEN			SEE DS-M-502-8	
		SPLY OF BOLTING	MECH	VEN				
		SPLY OF BUS BAR COOLING PIPING	PIPE	VEN			SEE DS-M-502-8	
DOME HTR TRANSFORMER	DS-M-502-8	DSN OF TRANSFORMERS	ELEC	WSRC		W840493	4 REQUIRED (TYPICAL)	
		SPLY OF BUS BARS	ELEC	WSRC				
		SPLY OF TRANSFORMERS	ELEC	WSRC		W840493		
		INSTAL OF BUS BARS	ELEC	WSRC			SEE DS-M-502-7	
		INSTAL OF CABLING	ELEC	WSRC			TRANSFORMER 'A'	
			ELEC	WSRC			TRANSFORMER 'B'	
			ELEC	WSRC			TRANSFORMER 'C'	
			ELEC	WSRC			TRANSFORMER 'D'	
		INSTAL OF CONNECTORS	ELEC	WSRC			TRANSFORMER 'A'	
			ELEC	WSRC			TRANSFORMER 'B'	
			ELEC	WSRC			TRANSFORMER 'C'	
			ELEC	WSRC			TRANSFORMER 'D'	
		INSTAL OF COOLING WATER FITTINGS	PIPE	WSRC			TRANSFORMER 'A'	
			PIPE	WSRC			TRANSFORMER 'B'	
			PIPE	WSRC			TRANSFORMER 'C'	
			PIPE	WSRC			TRANSFORMER 'D'	
		INSTAL OF COOLING WATER ISOL. COMP.	PIPE	WSRC			TRANSFORMER 'A'	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
DOME HTR TRANSFORMER	DS-M-502-8	INSTAL OF COOLING WATER ISOL. COMP.	PIPE	WSRC			TRANSFORMER 'B'	
			PIPE	WSRC			TRANSFORMER 'C'	
			PIPE	WSRC			TRANSFORMER 'D'	
		INSTAL OF COOLING WATER PIPING	PIPE	WSRC	XK1		TRANSFORMER 'A'	
			PIPE	WSRC	XK2		TRANSFORMER 'B'	
			PIPE	WSRC	XK3		TRANSFORMER 'C'	
			PIPE	WSRC	XK4		TRANSFORMER 'D'	
			PIPE	WSRC	XL1		TRANSFORMER 'A'	
			PIPE	WSRC	XL2		TRANSFORMER 'B'	
			PIPE	WSRC	XL3		TRANSFORMER 'C'	
			PIPE	WSRC	XL4		TRANSFORMER 'D'	
		INSTAL OF TRANSFORMERS ON FRAME	MECH	WSRC			TRANSFORMER 'A'	
			MECH	WSRC			TRANSFORMER 'B'	
			MECH	WSRC			TRANSFORMER 'C'	
			MECH	WSRC			TRANSFORMER 'D'	
		WELD OF TRANSFORMER TO FRAME	MECH	WSRC			TRANSFORMER 'A' TACK WELD	
			MECH	WSRC			TRANSFORMER 'D' TACK WELD	
			MECH	WSRC			TRANSFORMER 'B' TACK WELD	
			MECH	WSRC			TRANSFORMER 'C' TACK WELD	
		INSTAL OF THERMOCOUPLE WIRING	ELEC	VEN				
		SPLY OF CABLE	ELEC	WSRC				
		SPLY OF COOLING WATER FITTINGS	PIPE	VEN			TRANSFORMER 'A'	
			PIPE	VEN			TRANSFORMER 'B'	
			PIPE	VEN			TRANSFORMER 'C'	
			PIPE	VEN			TRANSFORMER 'D'	
		SPLY OF COOLING WATER ISOL. COMP.	PIPE	VEN			TRANSFORMER 'A'	
			PIPE	VEN			TRANSFORMER 'B'	
			PIPE	VEN			TRANSFORMER 'C'	
			PIPE	VEN			TRANSFORMER 'D'	
		SPLY OF COOLING WATER PIPING	PIPE	VEN	XK1		TRANSFORMER 'A'	
			PIPE	VEN	XK2		TRANSFORMER 'B'	
			PIPE	VEN	XK3		TRANSFORMER 'C'	
			PIPE	VEN	XK4		TRANSFORMER 'D'	
			PIPE	VEN	XL1		TRANSFORMER 'A'	
			PIPE	VEN	XL2		TRANSFORMER 'B'	
			PIPE	VEN	XL3		TRANSFORMER 'C'	
			PIPE	VEN	XL4		TRANSFORMER 'D'	
		SPLY OF ELECTRICAL CONNECTORS	ELEC	VEN				
		SPLY OF MOUNTING HARDWARE	ELEC	VEN			FOR BUS BARS	
		SPLY OF THERMOCOUPLE WIRING	ELEC	WSRC				
DRAIN VALVE	DS-M-502-11	SPLY OF THERMOCOUPLES	ELEC	WSRC	N		SEE DS-M-502-14	
		DSN/SPLY OF DRAIN VALVE	MECH	WSRC	N		ASSEMBLED - SHIP TO SRS	
		DSN/SPLY OF INSTALLATION FRAME	MECH	WSRC	N		WITH DRAIN VALVE	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
DRAIN VALVE	DS-M-502-11	DSN/SPLY OF SUPPORT STRUCTURE	MECH	WSRC	N		WITH DRAIN VALVE	
		INSTAL OF THERMOCOUPLES	ELEC	WSRC	HH04	W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH05	W836886	SEE DS-M-502-14	
		INSTAL OF CONNECTING PIPING	PIPE	WSRC	NN			
			PIPE	WSRC	XA03			
			PIPE	WSRC	XA04			
			PIPE	WSRC	XA05			
			PIPE	WSRC	XA08			
			PIPE	WSRC	XA10			
		INSTAL OF DRAIN VALVE	MECH	WSRC	N	W801373		
		INSTAL OF FITTINGS	PIPE	WSRC	N			
		INSTAL OF SUPPORT STRUCTURE	MECH	WSRC	N	W801374		
		INSTAL OF THERMOCOUPLES	ELEC	WSRC	HH06	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH07	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH08	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH09	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH10	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH11	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH12	W769406, W836886	SEE DS-M-502-14	
			ELEC	WSRC	HH13	W769406, W836886	SEE DS-M-502-14	
		INSTAL OF WIRING TERMINATIONS	ELEC	WSRC	N		ALL REMAINING CONNECTIONS	
		REMOVE INSTALLATION FRAME	MECH	WSRC	N			
		TEST "BUMP" OF DRAIN VALVE HEATERS	ELEC	WSRC	N		SPEC, M-502, PARA. 9.3.3.2	
		TEST OF DRAIN VALVE	MECH	WSRC	N		SPEC. M-502, PARA, 9.3.2	
			ELEC	WSRC	N		SPEC, M-502, ATT.10.3	
		INSTAL OF WIRING	ELEC	VEN	N		EXCLUDING TERMINATIONS	
		SPLY OF CABLE	ELEC	WSRC	N			
		SPLY OF CONNECTING PIPING	PIPE	VEN	NN			
			PIPE	VEN	XA03			
			PIPE	VEN	XA04			
			PIPE	VEN	XA05			
			PIPE	VEN	XA08			
			PIPE	VEN	XA10			
		SPLY OF FITTINGS	PIPE	VEN	N		INCL. ISOLATION COMPONENTS	
		SPLY OF WIRING	ELEC	WSRC	N			
		SPLY/INSTAL COOLING WATER PIPING	PIPE	VEN	F5		SEE DS-M-502-16	
			PIPE	VEN	G5		SEE DS-M-502-16	
		SPLY/INSTAL OF CONNECTING CONDUIT	PIPE	VEN	N			
ELECT, LWR. HOLDER	DS-M-502-27	DSN/SPLY OF ELECT, LOWER HOLDER	ELEC	WSRC		W753098		
		DSN/SPLY OF PRE-DRILLED CONN. BLOCK ASSY	ELEC	WSRC			WITH LOWER ELEC. HOLDER	
		SPLY OF CONNECTOR PINS	ELEC	WSRC			WITH LOWER ELEC. HOLDER	
		ASSEM OF PINS	ELEC	VEN				
		INSTAL OF CONN, BLOCK IN ELECT. HOLDER	ELEC	VEN		W770399		

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
ELECT,LWR.HOLDER	DS-M-502-27	SOLDER OF WIRES TO PINS	ELEC	VEN		SEE DATA SHEET	PROCEDURE PER DWG. W770398	
		SPLY OF CABLE	ELEC	WSRC				
		SPLY OF WIRE	ELEC	WSRC				
		SPLY/INSTAL OF CONDUIT	ELEC	VEN		W840481 W840601		
CERAMIC FIBER BLANKET	DS-M-502-18	SPLY OF CERAMIC FIBER MATERIAL & CEMENT	MECH	WSRC			TO SRS	
		SPLY OF INSTALLATION PROCEDURES	MECH	WSRC			SPEC. M-502, ATT. 10.3	
		INSTAL OF CERAMIC FIBER	MECH	WSRC				
FLANGE ISOLATION	DS-M-502-13	DSN OF MELTER NOZZLE	MECH	WSRC	B1	D822984, D822985	ON MELTER	
			MECH	WSRC	B2	D822984, D822985	ON MELTER	
			MECH	WSRC	C2	D822984, D822985	ON MELTER	
			MECH	WSRC	C3	D822984, D822985	ON MELTER	
			MECH	WSRC	C4	D822984, D822985	ON MELTER	
			MECH	WSRC	D	D822984, D822985	ON MELTER	
			MECH	WSRC	D1	D822984, D822985	ON MELTER	
			MECH	WSRC	E	D822984, D822985	ON MELTER	
		DSN/SPLY OF ANCHOR FLANGE ASSEMBLY	MECH	WSRC	B1		TO SRS	
			MECH	WSRC	B2		TO SRS	
			MECH	WSRC	C2		TO SRS	
			MECH	WSRC	C3		TO SRS	
			MECH	WSRC	C4		TO SRS	
			MECH	WSRC	D		TO SRS	
			MECH	WSRC	D1		TO SRS	
			MECH	WSRC	E		TO SRS	
		DSN/SPLY OF INSULATION MAT'L ((THERMAL)	MECH	WSRC	D		ONE ASBESTOS GASKET ONLY	
			MECH	WSRC	D1		ONE ASBESTOS GASKET ONLY	
		DSN/SPLY OF ISOLATION MAT'L	MECH	WSRC	B1		TO SRS	
			MECH	WSRC	B2		TO SRS	
			MECH	WSRC	C2		TO SRS	
			MECH	WSRC	C3		TO SRS	
			MECH	WSRC	C4		TO SRS	
			MECH	WSRC	E		TO SRS	
		ASSEM OF ALL COMPONENTS	MECH	WSRC	B1	SEE DATA SHEET		
			MECH	WSRC	B2	SEE DATA SHEET		
			MECH	WSRC	C2	SEE DATA SHEET		
			MECH	WSRC	C3	SEE DATA SHEET		
			MECH	WSRC	C4	SEE DATA SHEET		
			MECH	WSRC	D	SEE DATA SHEET		
			MECH	WSRC	D1	SEE DATA SHEET		
			MECH	WSRC	E	SEE DATA SHEET		
		SPLY OF MELTER NOZZLE	MECH	VEN	B1	D822984, D822985	ON MELTER	
			MECH	VEN	B2	D822984, D822985	ON MELTER	
			MECH	VEN	C2	D822984, D822985	ON MELTER	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
FLANGE ISOLATION	DS-M-502-13	SPLY OF MELTER NOZZLE	MECH	VEN	C3	D822984, D822985	ON MELTER	
			MECH	VEN	C4	D822984, D822985	ON MELTER	
			MECH	VEN	D	D822984, D822985	ON MELTER	
			MECH	VEN	D1	D822984, D822985	ON MELTER	
			MECH	VEN	E	D822984, D822985	ON MELTER	
LEVEL DIP TUBE	DS-M-502-1	DSN/SPLY OF ANCHOR FLG ASSY.	MECH	WSRC	C2	W801353	TO SRS	
		DSN/SPLY OF DIP TUBE	MECH	WSRC	C2	W801363	TO SRS	
		DSN/SPLY OF ISOLATION COMPONENTS	MECH	WSRC	C2		TO SRS	
		INSERT/REMOVE OF DIP TUBE	MECH	WSRC	C2			
		INSTAL ISOLATION ASSY.	MECH	WSRC	C2			
		INSTAL NOZZLE ANCHOR FLANGE ASSY.	MECH	WSRC	C2		DS-M-502-13	
MELTER FEED TUBE	DS-M-502-4	DSN/SPLY OF ANCHOR FLG.	MECH	WSRC	B1	W801356	TO SRS	
			MECH	WSRC	B2	W801356	TO SRS	
		DSN/SPLY OF FEED TUBE	MECH	WSRC	B1		TO SRS	
			MECH	WSRC	B2		TO SRS	
		DSN/SPLY OF ISOLATION MATERIALS	MECH	WSRC	B1	W801354	TO SRS	
			MECH	WSRC	B2	W801354	TO SRS	
		ASSEM/INSTAL ANCHOR FLANGE	MECH	WSRC	B1			
			MECH	WSRC	B2			
		ASSEM/INSTAL OF ISOLATION ASSY.	MECH	WSRC	B1			
			MECH	WSRC	B2			
		INSERT/REMOVE FEED TUBE	MECH	WSRC	B1			
			MECH	WSRC	B2			
		TEST OF COOLING WATER	MECH	WSRC	B1		SPEC. M-502, PARA. 9.3.1	
			MECH	WSRC	B2		SPEC. M-502, PARA. 9.3.1	
		TEST OF FEED TUBE	MECH	WSRC	B1		MECHANICAL OPERATION	
			MECH	WSRC	B2		MECHANICAL OPERATION	
MELTER FRAME ASSY.	DS-M-502-9	DSN OF MELTER VESSEL	MECH	WSRC				
		DSN OF UPPER AND LOWER FRAME	MECH	WSRC		W840459		
		ASSEM OF UPPER FRAME TO LOWER FRAME	MECH	VEN				
		ASSEM OF VESSEL TO LOWER FRAME	MECH	VEN				
		SPLY OF BOLTING MATERIALS	MECH	VEN				
		SPLY OF MELTER VESSEL	MECH	VEN				
		SPLY OF UPPER & LOWER FRAME	MECH	VEN				
MELTER FRAME DATUM	DS-M-502-22	SPLY OF BUTTON SPEC.	MECH	WSRC		W840617		
		LOCATE/INSTAL OF BUTTONS	MECH	VEN		W840603		
		LOCATE/INSTAL OF INSCRIPTION OF DATUM	MECH	VEN			DATUM MARKS ON UPPER FRAME	
			MECH	VEN			DATUM MARKS ON BUTTONS	
		SPLY OF BUTTONS	MECH	VEN		W840617		
		SPLY OF FRAME MOUNTED PLATES	MECH	VEN				
		SPLY OF REFERENCE DATUM MARKS	MECH	VEN		W840462	ON LOWER FRAME	
			MECH	VEN		D822975	ON MELTER VESSEL	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
MELTER FRAME TV	DS-M-502-26	DSN/SPLY OF CCTV CAMERA	MECH	WSRC			TO SRS	
		DSN OF DOWELS	MECH	WSRC		W840604		
		DSN OF STUDS	MECH	WSRC		W840605		
		SPLY OF LOCATION REQUIREMENTS	MECH	WSRC		W840603		
		INSTAL/REMOVE OF SUPPORT FRAME	MECH	WSRC				
		LOCATE/INSTAL OF STUDS AND DOWELS	MECH	VEN				
		SPLY OF STUDS AND DOWELS	MECH	VEN				
MELTER HEAD INSTALL.	DS-M-502-20	DSN OF BOLTING	MECH	WSRC			TO SRS	
		DSN OF GASKET	MECH	WSRC		PV813205	TO SRS	
		DSN OF MELTER AND MELTER HEAD	MECH	WSRC		D826349		
		DSN/SPLY OF HEAD HANDLING FIXTURE	MECH	WSRC				
		ASSEM OF VESSEL HEAD	MECH	WSRC				
		SPLY OF BOLTING	MECH	VEN			TO SRS	
		SPLY OF GASKET	MECH	VEN		PV813205	TO SRS	
		SPLY OF MELTER AND MELTER HEAD	MECH	VEN		D826349		
MELTER TV CAMERA	DS-M-502-3	DSN/SPLY OF ASSEM./TESTED CAMERA UNIT	MECH	WSRC	D		TO SRS	
			MECH	WSRC	D1		TO SRS	
		DSN/SPLY OF CAMERA CARRIER & BORESCOPE	MECH	WSRC	D	W801371	TO SRS	
			MECH	WSRC	D1	W801371	TO SRS	
		DSN/SPLY OF TV CAMERA/LENS/MIRROR	ELEC	WSRC	D		TO SRS	
			ELEC	WSRC	D1		TO SRS	
		INSERT/REMOVE MELTER TO ASSY.	MECH	WSRC	D			
			MECH	WSRC	D1			
		INSTAL OF AIR/STEAM PIPING/TUBING	PIPE	WSRC	XA13		FROM BREAKPOINT	
			PIPE	WSRC	XA14		FROM BREAKPOINT	
			PIPE	WSRC	XA15		FROM BREAKPOINT	
			PIPE	WSRC	XA16		FROM BREAKPOINT	
		TEST COOLING/ CLEANING AIR FUNCTION	MECH	WSRC	D			
			MECH	WSRC	D1			
		SPLY/INSTAL OF AIR/STEAM PIPING/TUBING	PIPE	VEN	XA13		TO BREAKPOINT	
			PIPE	VEN	XA14		TO BREAKPOINT	
			PIPE	VEN	XA15		TO BREAKPOINT	
			PIPE	VEN	XA16		TO BREAKPOINT	
NOZZLES/LWR. HOLDERS	DS-M-502-25	DSN/SPLY OF ELECT, LOWER HOLDERS	MECH	WSRC		W753098		
		DSN OF MOUNTING PLATES	MECH	WSRC		W840602		
		DSN OF MOUNTING STUDS & NUTS	MECH	WSRC		W840601		
		DSN OF PROCESS NOZZLES	MECH	WSRC		W840607		
		SPLY OF DIMENSIONAL REQUIREMENTS	MECH	WSRC		W840603		
		SPLY OF LOCATING TEMPLATES	MECH	VEN		W840616, W840618		
		LOCATE/INSTAL ELECTR. LOWER HOLDERS	MECH	VEN			20 PLCS.- ON FRAME APRON	
		LOCATE/INSTAL PROCESS NOZZLES	MECH	VEN			22 PLCS.- ON FRAME	
		SPLY OF PROCESS NOZZLES	MECH	VEN		W840602		
		SPLY/ASSEM OF MOUNTING PLATES	MECH	VEN		W840617		

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
PIPING AND CONDUIT	DS-M-502-16	SPLY/ASSEM OF MOUNTING STUDS & NUTS	MECH	VEN		W840617		
		ASSEM OF PIPING ISOLATORS	PIPE	WSRC			SEE M-502, PARA, 7.2.1	
		FLOW TESTING	PIPE	WSRC				
		MACHINE ORIFICES	PIPE	WSRC		W840606		
		WELD OF CONDUIT PULL BOXES	MECH	WSRC			AFTER COMPLETION OF TESTING	
		WELD OF PIPING	PIPE	WSRC			SEE M-502, PARA, 7.2.1	
		ASSEM OF PIPING ISOLATORS	PIPE	VEN		W840606	SEE M-502, PARA 7.2.1	
			PIPE	VEN			SEE M-502, PARA, 7.2.1	
		SPLY OF BLANK ORIFICES	PIPE	VEN		W840606		
		SPLY OF PIPING	PIPE	VEN	ALL			
		SPLY OF PIPING ISOLATORS	PIPE	VEN	ALL	W840606		
		SPLY OF PULL BOXES	MECH	VEN				
		SPLY/WELD OF CONDUIT	PIPE	VEN				
POUR SPOUT GUARD	DS-M-502-17	DSN OF RISER GUARD	MECH	WSRC		W840609		
		DSN OF RISER GUARD MOUNTING TABS	MECH	WSRC			ON RISER	
		INSTAL OF GUARD	MECH	WSRC		W840609		
		SPLY OF GUARD AND MOUNTING HARDWARE	MECH	VEN		W840609	TO SHS	
		SPLY OF RISER GUARD MOUNTING TABS	MECH	VEN			ON RISER	
QUENCHER GUIDE	DS-M-502-19	DSN OF LWR ORIENT'N GUIDE	MECH	WSRC		W840611		
		DSN/SPLY OF BUOG QUENCHER	MECH	WSRC			WITH UPPER GUIDE	
		DSN/SPLY OF OFF GAS QUENCHER	MECH	WSRC			WITH UPPER GUIDE	
		DSN/SPLY OF QUENCHER STAND	MECH	WSRC				
		DSN/SPLY OF VARIABLE SUPPORTS	MECH	WSRC				
		SPLY/INSTAL OF LWR ORIENT'N GUIDE	MECH	VEN		W840611		
RISER AND POUR SPOUT	DS-M-502-21	DSN OF POUR SPOUT	MECH	WSRC				
		DSN OF RISER END	MECH	WSRC		D826860		
		DSN/SPLY OF ADAPTER	MECH	WSRC				
		DSN/SPLY OF ELECTRODES	ELEC	WSRC				
		DSN/SPLY OF HEATERS	MECH	WSRC				
		DSN/ SPLY OF RISER END COVER	MECH	WSRC				
		ASSEM OF SUPPLY-SIDE PIPING	PIPE	WSRC			MAKE CLOSURE CONNECTIONS	
		ASSEM/INSTAL OF ADAPTER	MECH	WSRC				
		ASSEM/INSTAL ELECTRODES	ELEC	WSRC				
		ASSEM/INSTAL HEATERS	ELEC	WSRC				
		ASSEM/INSTAL OF POUR SPOUT	MECH	WSRC				
		ASSEM/INSTAL OF RISER END	MECH	WSRC		W801372		
		ASSEM/INSTAL OF RISER END COVER	MECH	WSRC				
		INSTAL OF ARGON PIPING	PIPE	WSRC	XA01			
		INSTAL OF RETURN-SIDE PIPING	PIPE	WSRC	G11			
			PIPE	WSRC	G12			
		PREP OF RISER END	MECH	WSRC				
		SPLY OF ARGON PIPING	PIPE	VEN	XA01			
		SPLY OF POUR SPOUT	MECH	VEN				

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
RISER AND POUR SPOUT	DS-M-502-21	SPLY OF RETURN-SIDE PIPING	PIPE	VEN	G11			
		SPLY OF RETURN-SIDE PIPING	PIPE	VEN	G12			
		SPLY OF RISER END	MECH	VEN		D826860		
		SPLY OF SUPPLY-SIDE FITTINGS	PIPE	VEN				
		SPLY OF SUPPLY-SIDE PIPING	PIPE	VEN			INSTALLED IN POUR SPOUT	
SEAL POT MOUNTING	DS-M-502-23	DSN OF DOWELS	MECH	WSRC		W840604		
		SPLY OF LOCATION REQUIREMENTS	MECH	WSRC		W840603	TO MATCH SEAL POT	
		DSN OF BEARING PLATES	MECH	WSRC				
		DSN OF GUIDE ASSEMBLY	MECH	WSRC		W840461		
		LOCATE/INSTAL OF BEARING PLATES	MECH	VEN				
		LOCATE/INSTAL OF DOWELS	MECH	VEN				
		LOCATE/INSTAL OF GUIDE ASSEMBLY	MECH	VEN				
		SPLY OF BEARING PLATES	MECH	VEN				
		SPLY OF DOWELS	MECH	VEN		W840604		
		SPLY OF GUIDE ASSEMBLY	MECH	VEN		W840461		
SIDE ELECTRODE	DS-M-502-5	SPLY OF THERMOCOUPLE	ELEC	WSRC	L1		TO SRS	
			ELEC	WSRC	L2		TO SRS	
			ELEC	WSRC	L3		TO SRS	
			ELEC	WSRC	L4		TO SRS	
		DSN OF BUS BARS/CLAMPS	MECH	WSRC	L1	W840612, W840613		
			MECH	WSRC	L2	W840612, W840613		
			MECH	WSRC	L3	W840612, W840613		
			MECH	WSRC	L4	W840612, W840613		
		DSN/SPLY OF ELECTRODE COMP.	MECH	WSRC	L1	W801357, W801358	W728051 TO SRS	
			MECH	WSRC	L2	W801357, W801358	W728051 TO SRS	
			MECH	WSRC	L3	W801357, W801358	W728051 TO SRS	
			MECH	WSRC	L4	W801357, W801358	W728051 TO SRS	
		ASSEM OF ELECTRODE	ELEC	WSRC	L1			
			ELEC	WSRC	L2			
			ELEC	WSRC	L3			
			ELEC	WSRC	L4			
		INSTAL OF COOLING WATER PIPING	PIPE	WSRC	AA1		INCLUDING ISOLATION	
			PIPE	WSRC	AA2		INCLUDING ISOLATION	
			PIPE	WSRC	AA3		INCLUDING ISOLATION	
			PIPE	WSRC	AA4		INCLUDING ISOLATION	
			PIPE	WSRC	BB1		INCLUDING ISOLATION	
			PIPE	WSRC	BB2		INCLUDING ISOLATION	
			PIPE	WSRC	BB3		INCLUDING ISOLATION	
			PIPE	WSRC	BB4		INCLUDING ISOLATION	
			PIPE	WSRC	P1			
			PIPE	WSRC	P2			
			PIPE	WSRC	P3			
			PIPE	WSRC	P4			

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
SIDE ELECTRODE	DS-M-502-5	INSTALL OF COOLING WATER PIPING	PIPE	WSRC	Q1			
			PIPE	WSRC	Q2			
			PIPE	WSRC	Q3			
			PIPE	WSRC	Q4			
		INSTAL OF THERMOCOUPLE	ELEC	WSRC	L1	W836886		
			ELEC	WSRC	L2	W836886		
			ELEC	WSRC	L3	W836886		
			ELEC	WSRC	L4	W836886		
		SPLY OF BUS BARS/CLAMPS	MECH	VEN		W840612, W840613	SEE DS-M-502-12	
		SPLY OF COOLING WATER PIPING	PIPE	VEN	AA1		INCLUDING ISOLATION	
			PIPE	VEN	AA2		INCLUDING ISOLATION	
			PIPE	VEN	AA3		INCLUDING ISOLATION	
			PIPE	VEN	AA4		INCLUDING ISOLATION	
			PIPE	VEN	BB1		INCLUDING ISOLATION	
			PIPE	VEN	BB2		INCLUDING ISOLATION	
			PIPE	VEN	BB3		INCLUDING ISOLATION	
			PIPE	VEN	BB4		INCLUDING ISOLATION	
			PIPE	VEN	P1			
			PIPE	VEN	P2			
			PIPE	VEN	P3			
			PIPE	VEN	P4			
			PIPE	VEN	Q1			
			PIPE	VEN	Q2			
			PIPE	VEN	Q3			
			PIPE	VEN	Q4			
T/Cs (MELTER BODY)	DS-M-502-14	SPLY OF THERMOCOUPLE	ELEC	WSRC	C6		TO SRS	
			ELEC	WSRC	C7		TO SRS	
			ELEC	WSRC	CC1		TO SRS	
			ELEC	WSRC	CC2		TO SRS	
			ELEC	WSRC	CC3		TO SRS	
			ELEC	WSRC	CC4		TO SRS	
			ELEC	WSRC	HH04		TO DRAIN VALVE MANUFACTURER	
			ELEC	WSRC	HH05		TO DRAIN VALVE MANUFACTURER	
			ELEC	WSRC	HH06		TO SRS	
			ELEC	WSRC	HH07		TO SRS	
			ELEC	WSRC	HH08		TO SRS	
			ELEC	WSRC	HH09		TO SRS	
			ELEC	WSRC	HH10		TO SRS	
			ELEC	WSRC	HH11		TO SRS	
			ELEC	WSRC	HH12		TO SRS	
			ELEC	WSRC	HH13		TO SRS	
			ELEC	WSRC	HH14		TO RPS HEATER MFR.	
			ELEC	WSRC	HH15		TO RPS HEATER MFR.	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	SPLY OF THERMOCOUPLE	ELEC	WSRC	HH16		TO RVPS HEATER MFR.	
			ELEC	WSRC	HH17		TO RVPS HEATER MFR.	
			ELEC	WSRC	HH18		TO RVPS HEATER MFR.	
			ELEC	WSRC	HH19		TO RVPS HEATER MFR.	
			ELEC	WSRC	XF01		TO SFIS	
			ELEC	WSRC	XF02		TO SFIS	
			ELEC	WSRC	XF03		TO SFIS	
			ELEC	WSRC	XF04		TO SFIS	
			ELEC	WSRC	XF05		TO SFIS	
			ELEC	WSRC	XF06		TO SFIS	
			ELEC	WSRC	XF07		TO SFIS	
			ELEC	WSRC	XF08		TO SFIS	
			ELEC	WSRC	XF09		TO SFIS	
			ELEC	WSRC	XF10		TO SFIS	
			ELEC	WSRC	XF11		TO SFIS	
			ELEC	WSRC	XF12		TO SFIS	
			ELEC	WSRC	XF13		TO SFIS	
			ELEC	WSRC	XF14		TO SFIS	
			ELEC	WSRC	XF15		TO SFIS	
			ELEC	WSRC	XF16		TO SFIS	
		INSTAL OF THERMOCOUPLE	MECH	WSRC	HH04	W836886		
			MECH	WSRC	HH05	W836886		
			MECH	WSRC	HH14	W836886		
			MECH	WSRC	HH15	W836886		
			MECH	WSRC	HH16	W836886		
			MECH	WSRC	HH17	W836886		
			MECH	WSRC	HH18	W836886		
			MECH	WSRC	HH19	W836886		
		ASSEM OF THERMOCOUPLE	MECH	WSRC	C6		MAKE CONNS. TO WIRING	
			MECH	WSRC	C7		MAKE CONNS. TO WIRING	
			MECH	WSRC	CC1		MAKE CONNS. TO WIRING	
			MECH	WSRC	CC2		MAKE CONNS. TO WIRING	
			MECH	WSRC	CC3		MAKE CONNS. TO WIRING	
			MECH	WSRC	CC4		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH04		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH05		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH06		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH07		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH08		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH09		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH10		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH11		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH12		MAKE CONNS. TO WIRING	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	ASSEM OF THERMOCOUPLE	MECH	WSRC	HH13		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH14		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH15		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH16		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH17		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH18		MAKE CONNS. TO WIRING	
			MECH	WSRC	HH19		MAKE CONNS. TO WIRING	
			MECH	WSRC	XF01		MAKE CONN. TO WIRING	
			MECH	WSRC	XF02		MAKE CONN. TO WIRING	
			MECH	WSRC	XF03		MAKE CONN. TO WIRING	
			MECH	WSRC	XF04		MAKE CONN. TO WIRING	
			MECH	WSRC	XF05		MAKE CONN. TO WIRING	
			MECH	WSRC	XF06		MAKE CONN. TO WIRING	
			MECH	WSRC	XF07		MAKE CONN. TO WIRING	
			MECH	WSRC	XF08		MAKE CONN. TO WIRING	
			MECH	WSRC	XF09		MAKE CONN. TO WIRING	
			MECH	WSRC	XF10		MAKE CONN. TO WIRING	
			MECH	WSRC	XF11		MAKE CONN. TO WIRING	
			MECH	WSRC	XF12		MAKE CONN. TO WIRING	
			MECH	WSRC	XF13		MAKE CONN. TO WIRING	
			MECH	WSRC	XF14		MAKE CONN. TO WIRING	
			MECH	WSRC	XF15		MAKE CONN. TO WIRING	
			MECH	WSRC	XF16		MAKE CONN. TO WIRING	
		INSTAL OF HEAT SHRINK TUBING	ELEC	WSRC	XF01		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF02		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF03		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF04		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF05		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF06		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF07		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF08		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF09		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF10		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF11		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF12		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF13		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF14		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF15		SPLICE POINT TO CONDUIT	
			ELEC	WSRC	XF16		SPLICE POINT TO CONDUIT	
		INSTAL OF THERMOCOUPLE	MECH	WSRC	C6	W836886		
			MECH	WSRC	C7	W836886		
			MECH	WSRC	CC1	W836886		
			MECH	WSRC	CC2	W836886		

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	INSTAL OF THERMOCOUPLE	MECH	WSRC	CC3	W836886		
			MECH	WSRC	CC4	W836886		
			MECH	WSRC	HH06	W836886		
			MECH	WSRC	HH07	W836886		
			MECH	WSRC	HH08	W836886		
			MECH	WSRC	HH09	W836886		
			MECH	WSRC	HH10	W836886		
			MECH	WSRC	HH11	W836886		
			MECH	WSRC	HH12	W836886		
			MECH	WSRC	HH13	W836886		
			MECH	WSRC	XF01	W836886		
			MECH	WSRC	XF02	W836886		
			MECH	WSRC	XF03	W836886		
			MECH	WSRC	XF04	W836886		
			MECH	WSRC	XF05	W836886		
			MECH	WSRC	XF06	W836886		
			MECH	WSRC	XF07	W836886		
			MECH	WSRC	XF08	W836886		
			MECH	WSRC	XF09	W836886		
			MECH	WSRC	XF10	W836886		
			MECH	WSRC	XF11	W836886		
			MECH	WSRC	XF12	W836886		
			MECH	WSRC	XF13	W836886		
			MECH	WSRC	XF14	W836886		
			MECH	WSRC	XF15	W836886		
			MECH	WSRC	XF16	W836886		
		INSTAL OF WIRING	ELEC	WSRC	XF01		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF02		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF03		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF04		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF05		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF06		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF07		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF08		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF09		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF10		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF11		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF12		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF13		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF14		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF15		ROUTE TO SPLICE POINT	
			ELEC	WSRC	XF16		ROUTE TO SPLICE POINT	
			ELEC	VEN	C6			

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	INSTAL OF WIRING	ELEC	VEN	C7			
			ELEC	VEN	CC1			
			ELEC	VEN	CC2			
			ELEC	VEN	CC3			
			ELEC	VEN	CC4			
			ELEC	VEN	HH04			
			ELEC	VEN	HH05			
			ELEC	VEN	HH06			
			ELEC	VEN	HH07			
			ELEC	VEN	HH08			
			ELEC	VEN	HH09			
			ELEC	VEN	HH10			
			ELEC	VEN	HH11			
			ELEC	VEN	HH12			
			ELEC	VEN	HH13			
			ELEC	VEN	HH14			
			ELEC	VEN	HH15			
			ELEC	VEN	HH16			
			ELEC	VEN	HH17			
			ELEC	VEN	HH18			
			ELEC	VEN	HH19			
			ELEC	VEN	XF01			
			ELEC	VEN	XF02			
			ELEC	VEN	XF03			
			ELEC	VEN	XF04			
			ELEC	VEN	XF05			
			ELEC	VEN	XF06			
			ELEC	VEN	XF07			
			ELEC	VEN	XF08			
			ELEC	VEN	XF09			
			ELEC	VEN	XF10			
			ELEC	VEN	XF11			
			ELEC	VEN	XF12			
			ELEC	VEN	XF13			
			ELEC	VEN	XF14			
			ELEC	VEN	XF15			
			ELEC	VEN	XF16			
		SPLY OF HEAT SHRINK TUBING	ELEC	VEN	XF01		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF02		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF03		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF04		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF05		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF06		SPLICE POINT TO CONDUIT	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	SPLY OF HEAT SHRINK TUBING	ELEC	VEN	XF07		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF08		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF09		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF10		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF11		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF12		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF13		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF14		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF15		SPLICE POINT TO CONDUIT	
			ELEC	VEN	XF16		SPLICE POINT TO CONDUIT	
		SPLY OF THERMOCOUPLE WIRE	ELEC	WSRC	C6			
			ELEC	WSRC	C7			
			ELEC	WSRC	CC1			
			ELEC	WSRC	CC2			
			ELEC	WSRC	CC3			
			ELEC	WSRC	CC4			
			ELEC	WSRC	HH04			
			ELEC	WSRC	HH05			
			ELEC	WSRC	HH06			
			ELEC	WSRC	HH07			
			ELEC	WSRC	HH08			
			ELEC	WSRC	HH09			
			ELEC	WSRC	HH10			
			ELEC	WSRC	HH11			
			ELEC	WSRC	HH12			
			ELEC	WSRC	HH13			
			ELEC	WSRC	HH14			
			ELEC	WSRC	HH15			
			ELEC	WSRC	HH16			
			ELEC	WSRC	HH17			
			ELEC	WSRC	HH18			
			ELEC	WSRC	HH19			
			ELEC	WSRC	XF01			
			ELEC	WSRC	XF02			
			ELEC	WSRC	XF03			
			ELEC	WSRC	XF04			
			ELEC	WSRC	XF05			
			ELEC	WSRC	XF06			
			ELEC	WSRC	XF07			
			ELEC	WSRC	XF08			
			ELEC	WSRC	XF09			
			ELEC	WSRC	XF10			
			ELEC	WSRC	XF11			

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER BODY)	DS-M-502-14	SPLY OF THERMOCOUPLE WIRE	ELEC	WSRC	XF12			
			ELEC	WSRC	XF13			
			ELEC	WSRC	XF14			
			ELEC	WSRC	XF15			
			ELEC	WSRC	XF16			
		SPLY / INSTAL CONDUIT	ELEC	VEN	C6			
			ELEC	VEN	C7			
			ELEC	VEN	CC1			
			ELEC	VEN	CC2			
			ELEC	VEN	CC3			
			ELEC	VEN	CC4			
			ELEC	VEN	HH04			
			ELEC	VEN	HH05			
			ELEC	VEN	HH06			
			ELEC	VEN	HH07			
			ELEC	VEN	HH08			
			ELEC	VEN	HH09			
			ELEC	VEN	HH10			
			ELEC	VEN	HH11			
			ELEC	VEN	HH12			
			ELEC	VEN	HH13			
			ELEC	VEN	HH14			
			ELEC	VEN	HH15			
			ELEC	VEN	HH16			
			ELEC	VEN	HH17			
			ELEC	VEN	HH18			
			ELEC	VEN	HH19			
			ELEC	VEN	XF01		UP TO PULL BOX	
			ELEC	VEN	XF02		UP TO PULL BOX	
			ELEC	VEN	XF03		UP TO PULL BOX	
			ELEC	VEN	XF04		UP TO PULL BOX	
			ELEC	VEN	XF05		UP TO PULL BOX	
			ELEC	VEN	XF06		UP TO PULL BOX	
			ELEC	VEN	XF07		UP TO PULL BOX	
			ELEC	VEN	XF08		UP TO PULL BOX	
			ELEC	VEN	XF09		UP TO PULL BOX	
			ELEC	VEN	XF10		UP TO PULL BOX	
			ELEC	VEN	XF11		UP TO PULL BOX	
			ELEC	VEN	XF12		UP TO PULL BOX	
			ELEC	VEN	XF13		UP TO PULL BOX	
			ELEC	VEN	XF14		UP TO PULL BOX	
			ELEC	VEN	XF15		UP TO PULL BOX	
			ELEC	VEN	XF16		UP TO PULL BOX	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
T/Cs (MELTER HEAD)	DS-M-502-15	SPLY OF PIN BLOCKS/PINS	ELEC	WSRC	C3		SEE DS-M-502-2	
			ELEC	WSRC	C4		SEE DS-M-502-2	
			ELEC	WSRC	E		SEE DS-M-502-2	
		SPLY OF THERMOCOUPLES	MECH	WSRC	C3		THREE THERMOCOUPLES TO SRS	
			MECH	WSRC	C4		SIX THERMOCOUPLES TO SRS	
			MECH	WSRC	E		SIX THERMOCOUPLES TO SRS	
		SPLY OF CONAX FITTINGS	MECH	WSRC	C3			
			MECH	WSRC	C4			
			MECH	WSRC	E			
		SPLY OF THERMOWELLS/LEVEL DIP TUBE	MECH	WSRC	C3		SEE DS-M-502-2	
			MECH	WSRC	C4		SEE DS-M-502-2	
			MECH	WSRC	E		SEE DS-M-502-2	
		ASSEM OF THERMOCOUPLES	ELEC	WSRC	C3			
			ELEC	WSRC	C4			
			ELEC	WSRC	E			
		INSTAL OF CONAX FITTINGS	MECH	WSRC	C3			
			MECH	WSRC	C4			
			MECH	WSRC	E			
		INSTAL OF PIN BLOCKS	MECH	WSRC	C3			
			MECH	WSRC	C4			
			MECH	WSRC	E			
		INSTAL OF THERMOCOUPLE	MECH	WSRC	C3	W836886	THREE THERMOCOUPLES	
			MECH	WSRC	C4	W836886	SIX THERMOCOUPLES	
			MECH	WSRC	E	W836886	SIX THERMOCOUPLES	
TERMINAL CONNECTION	DS-M-502-10	DSN/SPLY OF ELECTRODE STEM	ELEC	WSRC			MOUNTED TO MELTER COMPONENT	
		ASSSEM OF LUGS & CABLE TO MELTER & FRAME	ELEC	WSRC			SEE DATA SHEET	
		INSTAL OF HEAT SHRINK TUBING	ELEC	WSRC			SEE DATA SHEET	
		ASSEM OF LUGS & CABLE TO MELTER & FRAME	ELEC	VEN			SEE DATA SHEET	
		INSTAL OF HEAT SHRINK TUBING	ELEC	VEN			SEE DATA SHEET	
		SPLY OF CABLES	ELEC	WSRC				
		SPLY OF HEAT SHRINK TUBING	ELEC	VEN	ALL		SEE DATA SHEET	
		SPLY OF LUGS	ELEC	VEN	ALL			
THERMOWELLS	DS-M-502-2	SPLY OF PIN CONNECTOR BLOCKS	ELEC	WSRC	C3		TO SRS	
			ELEC	WSRC	C4		TO SRS	
			ELEC	WSRC	E		TO SRS	
		SPLY OF PINS	ELEC	WSRC	C3		TO SRS	
			ELEC	WSRC	C4		TO SRS	
			ELEC	WSRC	E		TO SRS	
		SPLY OF THERMOCOUPLES	ELEC	WSRC	C3		SEE DS-M-502-15	
			ELEC	WSRC	C4		SEE DS-M-502-15	
			ELEC	WSRC	E		SEE DS-M-502-15	
		DSN/SPLY OF ANCHOR FLANGE ASSY.	MECH	WSRC	C3	W801355	TO SRS	
			MECH	WSRC	C4	W801355	TO SRS	

MAJOR ACTIVITY	DATA SHEET	COMPONENT ACTIVITY	TYPE	RESP.	CONN.	REF. DWG	REMARKS	REV
THERMOWELLS	DS-M-502-2	DSN/SPLY OF ANCHOR FLANGE ASSY.	MECH	WSRC	E	W801355	TO SRS	
		DSN/SPLY OF ISOLATION COMPONENTS	MECH	WSRC	C3		TO SRS	
			MECH	WSRC	C4		TO SRS	
			MECH	WSRC	E		TO SRS	
		DSN/SPLY OF THERMOWELLS	ELEC	WSRC	C3	W801364	TO SRS	
			ELEC	WSRC	C4	W801364	TO SRS	
			ELEC	WSRC	E	W801364	TO SRS	
		ASSEM OF THERMOCOUPLES TO PINS	ELEC	WSRC	C3			
			ELEC	WSRC	C4			
			ELEC	WSRC	E			
		INSTAL CONNECTOR BLOCK	ELEC	WSRC	C3			
			ELEC	WSRC	C4			
			ELEC	WSRC	E			
		INSTAL OF THERMOWELL	MECH	WSRC	C3		(INSERT & REMOVE)	
			MECH	WSRC	C4			
			MECH	WSRC	E			
		INSTAL/ASSEM ANCHOR FLG.	MECH	WSRC	C3			
			MECH	WSRC	C4			
			MECH	WSRC	E			
		INSTAL/ASSEM ISOLATION ASSY.	MECH	WSRC	C3			
			MECH	WSRC	C4			
			MECH	WSRC	E			