
Customer: ENERGY INDUSTRIES OF OHIO

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Part: SE141-114 / MODULAR COIL WINDING FORM TYPE

Drawing ID: SE141-114

Revision: 7

Customer P.O.: S005242-F/Ln:3
Serial No./Qty: A3

Reported By: MIKE GRIFFITH

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Problem: Inspection Test #: 130 rejected: OUTER AS CAST SURFACES: {g,5|A|B|C}: -.056 TO .457
Inspection Test #: 150 rejected: 4 X .03 X 45: : .010 TO .040
Inspection Test #: 190 rejected: M TO M1: {g,02|R|T|S}: -.020 TO .017
Inspection Test #: 230 rejected: N TO N1: {g,02|R|T|S}: -.024 TO .015
Inspection Test #: 240 rejected: 2 X .06/.09 X 45: : 030 TO .068
Inspection Test #: 270 rejected: .375-16 HOLES: {#,06|R|T|S}: .0052 TO .072
Inspection Test #: 280 rejected: DATUM E FLANGE: {f,01}: .011
Inspection Test #: 330 rejected: 8X Ø1-8 UNC: {#,010|A|B|C}: .001 TO .025
Inspection Test #: 350 rejected: 8X Ø1-8 UNC: {d,010|A|B|C}: .007 TO .048
Inspection Test #: 470 rejected: : d1.885 ~.003: 1.8855 ,1.8858, 1 HOLE 2.0515"
Inspection Test #: 780 rejected: INNER AS CAST SURFACES: {g,5|A|B|C}: -.444 TO .053

Also 3 additional items on NC attachment.

Proposed Disposition:

Based on previous submittal history, MTM proposes to accept deviations as is.

Number of additional pages: IDC attachment and NC attachment

Customer Disposition: Use As Is Rework Repair Scrap Replace

The rejections listed above and the attached IDC list and photos were reviewed during a telecom on 7/27 attended by D. Williamson, T. Brown, F. Malinowski, P. Heitzenroeder, and H. Neilson, M. Griffith, and N. Horton. All were accepted as is with the exception of the "as cast" surface indicated in the attached Excel file and Tom Brown's PPT slides which summarize his review of this area. He determined that the cast surface in the concave surface area exceed tolerances by approximately 3/4". EIO/MTM agreed that this surface will be ground to the specified dimension.

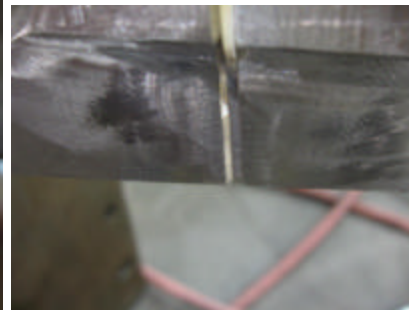
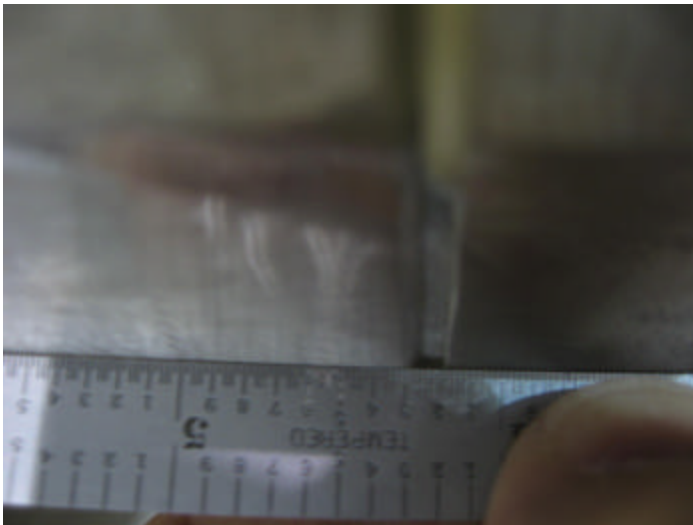
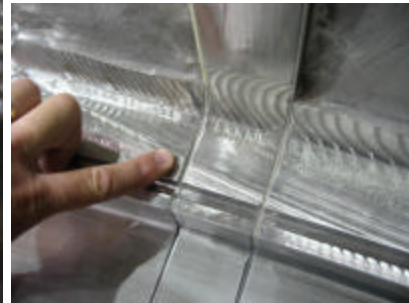
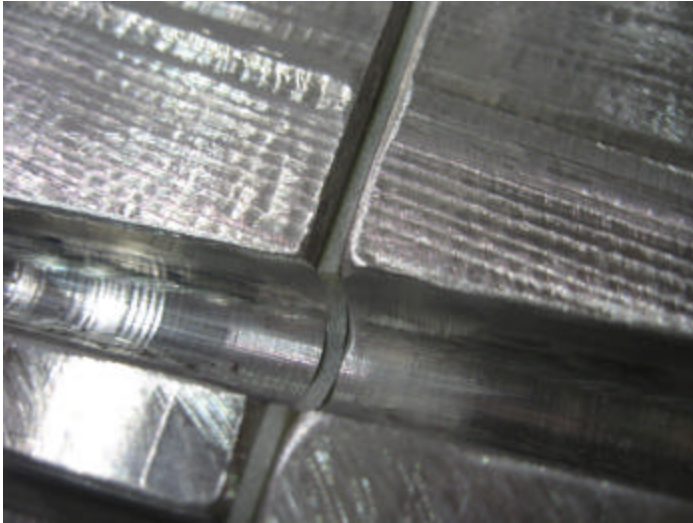
Major Tool Implemented By: _____

Title: _____

Date: _____

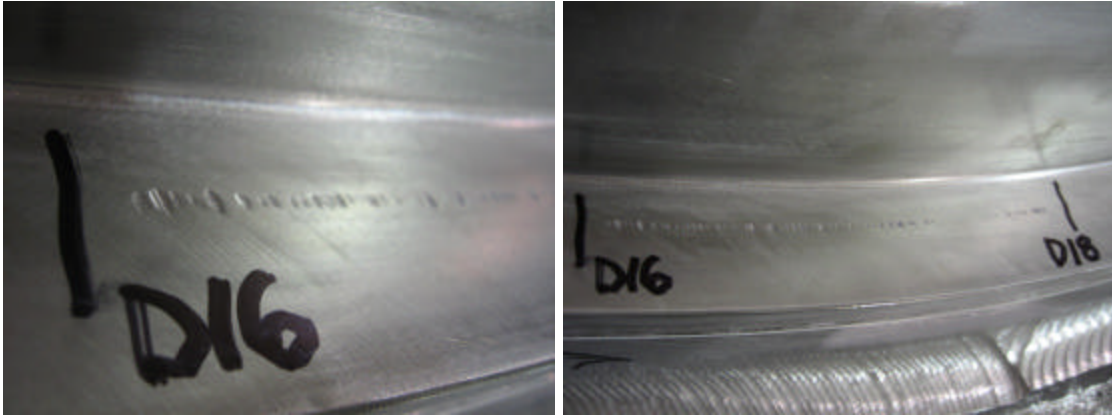
SE141-114 A3
NC20201 attachment

1. The pictures below show examples of the G11 insulating material below the surface of the finished part. The top two are on the E side of the casting below the VPI groove. The bottom two pictures were taken at the perimeter of the datum D flange. The maximum amount the G11 is below the surface is .060”.

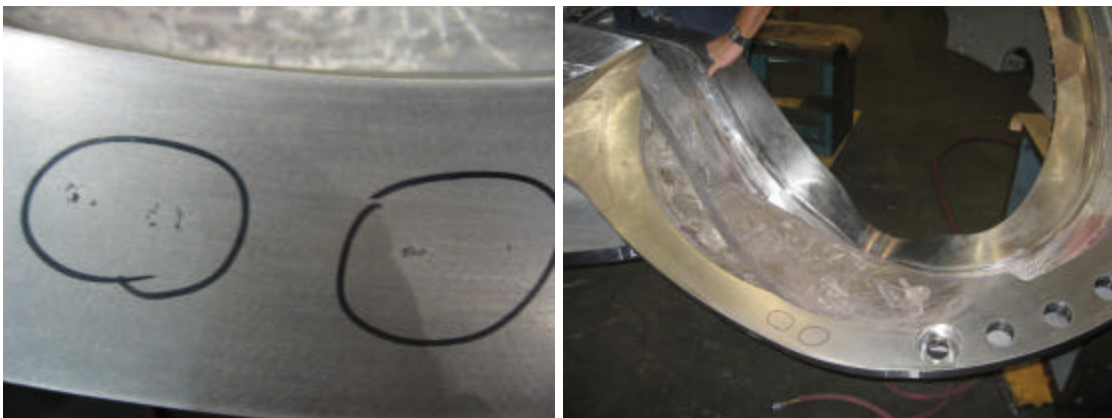


SE141-114 A3
NC20201 attachment

- The pictures below are of tooling marks on the short leg of the T section (datum D side). The numbers represent the corresponding T hole locations. The maximum depth of these marks is approximately .005”.



- There were two areas of casting porosity on the D flange that were not rejectable during the PT process but are worth noting due to their visibility.



Workorder: 65709/3-0 Sub:1 Op:130

Revision:

Part: SE141-114 - MODULAR COIL WINDING FORM TYPE-A - PRODUCTION MODULAR COIL WINDING FORM TYPE-A

Drawing ID: SE141-101 Rev: 3			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY			
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT	
2* (10)	D3	Ø.001 - Ø.002 CHECK CLEARANCE OF ITEM 5 TO ITEM 6.		MFG			LESS THAN .002	825-B.JA 07-21-06			A *
* (15)		THE GAP BETWEEN THE POLOIDAL BREAK BUSHINGS AND FLANGE SHALL BE LESS THAN .002"		MFG			LESS THAN .002	825-B.JA 07-21-06			A *
* (20)		ENSURE THAT THE CUMULATIVE GAPS AT ANY SINGLE CROSS SECTION OF THE POLOIDAL FLANGE ELEMENTS IS LESS THAN .005".		MFG			LESS THAN .002	825-B.JA 07-21-06			A *
* (30)		THE MAX. GAP AT THE POLOIDAL BREAK PERIMETER IS .015" AND CANNOT EXCEED 1/8" FROM THE EDGE.		MFG			LESS THAN .002	825-B.JA 07-21-06			A *
1* (40)	F2	TORQUE ASSEMBLY TO 1500 +/- 30 FT-LBS PER DRAWING NOTE 15.	TORQUE MULTIPLIE	MFG		J-1240	1500	825-B.JA 07-21-06			A *

Workorder: 65709/3-0 Sub:1 Op:132

Revision: 07/27/06 8:45

Part: SE141-114 - MODULAR COIL WINDING FORM TYPE-A - PRODUCTION MODULAR COIL WINDING FORM TYPE-A

Drawing ID: SE141-114 Rev: 7			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY			
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT	
1* (10)	F3	NOTE 14 - BACK SPOTFACE ALL THRU HOLES TO MINIMUM CLEAN UP.		QA		VISUAL	ACCEPT	339-E.RO 07-27-06			A *
1*	E8		CMM	QA		00064	.0045	339-E.RO			A *

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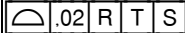
INSPECTION DATA CHECKLIST

(20)		FLANGE PROFILE +/- .25 IN THIS AREA						07-27-06		
1* (30)	D8		CMM	QA	00064	.004		339-E.RO 07-27-06		A *
1* (40)	D8	54.20 ± .03	CMM	QA	00064	54.200		339-E.RO 07-27-06		A *
1* (50)	C8	54.20 ± .03	CMM	QA	00064	54.199		339-E.RO 07-27-06		A *
1* (60)	B8		CMM	QA	00064	.002		339-E.RO 07-27-06		A *
1* (70)	D5		CMM	QA	00064	.004		339-E.RO 07-27-06		A *
1* (80)	D5	48.50 ± .03	CMM	QA	00064	48.480		339-E.RO 07-27-06		A *
1* (90)	C5	48.50 ± .03	CMM	QA	00064	48.508		339-E.RO 07-27-06		A *
1* (100)	B5		CMM	QA	00064	.009		339-E.RO 07-27-06		A *
1* (110)	D4	VERIFY PART MARKING: MAJOR TOOL SE141-114 A(casting number) (weight) LBS.	CMM	QA	00064	ACCEPT		339-E.RO 07-27-06		A *
1* (120)	D4	RECORD WEIGHT	CMM	QA	00064	5440		339-E.RO 07-27-06		A *
1* (130)	D3	 OUTER AS CAST SURFACES	CMM	QA	00064	-.056 TO .457 [N/C: 20201-Doc:NC20201]		339-E.RO 07-27-06		R *
2* (140)	F8	2 X .40	CMM	QA	00064	0.39 TO 0.41		339-E.RO 07-27-06		A *
2* (150)	F8	4 X .03 X 45	CALIPER	QA	J-707	.010 TO .040 [N/C:2 0201-Doc:NC20201]		533-B.CL 07-26-06		R *
2* (160)	G6	2 X R.187 +.025 / -.005	PIN GAGE	QA	J-651-2	.184 TO .207		533-B.CL 07-26-06		A *
2* (170)	G5	 P TO M	CMM	QA	00064	.0149 TO .076		339-E.RO 07-27-06		A *

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INSPECTION DATA CHECKLIST

2* (190)	F5	 M TO M1	CMM	QA		00064	-.020 TO .017 [N/C: 20201-Doc:NC20201]	339-E.RO 07-27-06			R *
2* (200)	E5	 M1 TO N1	CMM	QA		00064	-.011 TO .022	339-E.RO 07-27-06			A *
2* (210)	G3	 Q TO N	CMM	QA		00064	-.007 TO .094	339-E.RO 07-27-06			A *
2* (220)	F3	DATUM E SIDE VERIFY SHELL INTERSECT CLEARANCE USING GAGE MTMFX-3473		QA		MTMFX-3473	ACCEPT	533-B.CL 07-26-06			A *
2* (230)	F3	 N TO N1	CMM	QA		00064	-.024 TO .015 [N/C: 20201-Doc:NC20201]	339-E.RO 07-27-06			R *
2* (240)	B4	2 X .06/.09 X 45	CALIPER	QA		J-707	030 TO .068 [N/C:20 201-Doc:NC20201]	533-B.CL 07-26-06			R *
2* (250)	B5	Ø .375-16 UNC ▽ .750 +.1 -0 96 X	THREAD PLUG GAGE	QA	100%	A-444	ACCEPT [N/C:20201-D oc:NC20201]	242-M.G 07-27-06			A *
2* (260)	B5		DEPTH MICROMETE PIN GAGE	QA		J-1024 J-652-3	.620 TO .621 DIA. DEPTH .183 TO .191 [N/C:20201-Doc:NC20 201]	242-M.G 07-27-06			A *
2* (270)	B5	 .375-16 HOLES	CMM	QA		00064	.0052 TO .072 [N/C: 20201-Doc:NC20201]	339-E.RO 07-27-06			R *
3* (280)	H3	 DATUM E FLANGE	CMM	QA		00064	.011 [N/C:20201-Doc :NC20201]	339-E.RO 07-27-06			R *
3* (285)	H4	$\sqrt{125}$ DATUM E FLANGE	PROFILOMETER	QA		J-1109	20 TO 100	533-B.CL 07-26-06			A *
3* (290)	F2	 DATUM D FLANGE	CMM	QA		00064	.007	339-E.RO 07-27-06			A *
3* (295)	F3	$\sqrt{125}$ DATUM D FLANGE	PROFILOMETER	QA		J-1109	40 TO 125 [N/C:2020 1-Doc:NC20201]	242-M.G 07-27-06			A *
3* (300)	E4	Ø2.50 THRU	CALIPER	QA		J-707	2.497	533-B.CL 07-26-06			A *
3* (310)	F4	 Ø2.50	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *

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INSPECTION DATA CHECKLIST

3* (320)	C7	8X Ø1-8UNC ∇ 2	THREAD PLUG GAGE	QA		A-71	ACCEPT	533-B.CL 07-26-06			A *
3* (330)	C7	$\Phi .010$ A B C 8X Ø1-8 UNC	CMM	QA		00064	.001 TO .025 [N/C:2 0201-Doc:NC20201]	339-E.RO 07-27-06			R *
3* (340)	D5	8X Ø1-8UNC THRU	THREAD PLUG GAGE	QA		A-71	ACCEPT	533-B.CL 07-26-06			A *
3* (350)	D5	$\Phi .010$ A B C 8X Ø1-8 UNC	CMM	QA		00064	.007 TO .048 [N/C:2 0201-Doc:NC20201]	339-E.RO 07-27-06			R *
3* (360)	D3	Ø2.50 THRU	CALIPER	QA		J-707	2.499	533-B.CL 07-26-06			A *
3* (370)	D3	$\Phi .060$ A B C Ø2.5	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
3* (380)	D1	40.90	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
4* (390)	H6	$\square \text{Ø}2.000-2.001 \nabla 0.990-1.000$	DIAL BORE GAGE DEPTH MICROMETE	QA		J-1400 J-1024	2.000 DEPTH .998	339-E.RO 07-27-06			A *
4* (400)	F4	Ø1.375-6UNC THRU	THREAD PLUG GAGE	QA		A-375	ACCEPT	533-B.CL 07-26-06			A *
4* (410)	F4	$\Phi \text{Ø}0.06$ M A D Ø1.375-6	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
4* (420)	D4 &	Ø1.885 ± .003 THRU	DIAL BORE GAGE	QA		J-1400	1.883 TO 1.886	533-B.CL 07-26-06			A *
4* (430)	D4 &	$\Phi \text{Ø}0.06$ M A D Ø1.885	CMM	QA		00064	.0036 TO .044	339-E.RO 07-27-06			A *
4* (440)	B6	3X Ø1.5	CALIPER	QA		J-1103	1.503 TO 1.505	533-B.CL 07-26-06			A *
4* (450)	B6	$\Phi .06$ M A D 3X Ø1.5	CMM	QA		00064	.004 TO .018	339-E.RO 07-27-06			A *
4* (460)	A4	6X .25-20 UNC ∇ .5 .5 X 82° CHAMFER	THREAD PLUG GAGE	QA		A-726	ACCEPT	533-B.CL 07-26-06			A *
5* (470)	D8/D6	Ø1.885 ± .003	CMM	QA		00064	1.8855 ,1.8858, 1 H OLE 2.0515" [N/C:20 124-Doc:NC20124]	242-M.G 07-27-06			R *

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INSPECTION DATA CHECKLIST

5* (480)	D8/D6	Φ \emptyset .06 N A E \emptyset 1.885	CMM	QA		00064	.013 TO .053	339-E.RO 07-27-06			A *
5* (490)	F8	\emptyset 1.375-6UNC THRU	THREAD PLUG GAGE	QA		A-375	ACCEPT	495-D.CO 07-26-06			A *
5* (500)	F8	Φ \emptyset .06 N A E \emptyset 1.375-6 UNC	CMM	QA		00064	.048	339-E.RO 07-27-06			A *
5* (510)	F6	8X 1/4 -20 UNC-2B	THREAD PLUG GAGE	QA		A-375	ACCEPT 23 PLACES	495-D.CO 07-26-06			A *
5* (520)	D6	3X \emptyset 1.5 ∇ 2.33	CALIPER DEPTH MICROMETE	QA		J-1103 J-1024	1.503 TO 1.505 D EPTH 2.337	533-B.CL 07-26-06			A *
5* (530)	D6	Φ \emptyset .06 N A E 3X \emptyset 1.5	CMM	QA		00064	.002 TO .032	339-E.RO 07-27-06			A *
5* (540)	B3	6X .25 - 20 UNC ∇ .6 \emptyset .5 X 82° CHAMFER	THREAD PLUG GAGE	QA		A-726	ACCEPT	533-B.CL 07-26-06			A *
6* (550)	H7	6.00	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (560)	H7	1.00	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (570)	G8	6.70	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (600)	F8	6.70	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (610)	E7	5.75	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (620)	E7	1.00	CMM	QA		00064	SEE IGES	339-E.RO 07-27-06			A *
6* (630)	E6	4X \emptyset 1.00	PIN GAGE	QA		J-921	.993 TO 1.00	533-B.CL 07-26-06			A *
6* (640)	G5	2X .88 - 1.13	CALIPER	QA		J-707	1.120 TO 1.130	533-B.CL 07-26-06			A *
6* (650)	F5	.06-.09 X 45° TYP	CALIPER	QA		J-707	.080	533-B.CL 07-26-06			A *
7* (650)	G2		CMM	QA		00064	SEE IGES	339-E.RO			A

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(660)		19.00						07-27-06		*
7*	F2		CMM	QA		00064	SEE IGES	339-E.RO		A
(670)		2.00						07-27-06		*
7*	F2		CMM	QA		00064	SEE IGES	339-E.RO		A
(680)		6.75						07-27-06		*
7*	F2		CMM	QA		00064	SEE IGES	339-E.RO		A
(690)		3.75						07-27-06		*
7*	F1	4X Ø.75-10 UNC ▽ 1.50	THREAD PLUG GAGE	QA		A-681	THREAD AND DEPTH A	495-D.CO		A
(700)							CEPT	07-26-06		*
7*	D1		CALIPER	QA		J-707	1.56 / 1.56	339-E.RO		A
(710)		2X 1.56 OPEN THRU						07-27-06		*
7*	C1	.375-16 UNC-2B TAP ▽ .75 .03 X 45° CHAMFER 6X	THREAD PLUG GAGE	QA		A-444	ACCEPT	339-E.RO		A
(720)								07-27-06		*
7*	C4	VERIFY THAT HOLE LOCATIONS ARE SCRIBED ON THE PART.		QA		VISUAL	ACCEPT	533-B.CL		A
(730)								07-26-06		*
7*	B3	8.50 DISTANCE BETWEEN SCRIBE MARKINGS.	CALIPER	QA		J-1389	8.51	495-D.CO		A
(740)								07-26-06		*
9*	H1	2X Ø.50	PIN GAGE	QA		J-651-2	.500	533-B.CL		A
(750)								07-26-06		*
9*	B7	TC2 HOLE TO BE .625" IN DIAMETER APPROX. 2.52" DEEP AND .25" IN DIAMETER AT LEAST 1" DEEP.	DEPTH MICROMETE	QA		J-1024	.628 DIA. DEPTH 2. 639 AND 3.640	533-B.CL		A
(760)			CALIPER			J-707		07-26-06		*
*		TC1 LOCATION AND CONFIGURATION MODIFIED. HOLE TO HAVE .625 CLEARANCE AND AT LEAST 1" OF DEPTH AT THE .25" DIA	DEPTH MICROMETE	QA		J-1024	.625 DIA. DEPTH 1.060	533-B.CL		A
(770)			CALIPER			J-707		07-26-06		*
10*	F5	 .5 A B C	CMM	QA		00064	-.444 TO .053 [N/C:	339-E.RO		R

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(780)		INNER AS CAST SURFACES				20201-Doc:NC20201]	07-27-06			*
10* (790)	D5	WING SURFACES	CMM	QA		00064	-.122 TO -.209	339-E.RO 07-27-06		A *
Drawing ID: NCSX-CSPEC-141-03 Rev: 11			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY		
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT
4* (800)	3.1.1.A	¹²⁵ THE TWO "L" MACHINED SURFACES OF TEE MUST HAVE A RMS OF 125.	PROFILOMETER	QA		J-1109	8 TO 30	533-B.CL 07-26-06		A *

Workorder: 65709/3-0 Sub:1 Op:136

Revision:

Part: SE141-114 - MODULAR COIL WINDING FORM TYPE-A - PRODUCTION MODULAR COIL WINDING FORM TYPE-A

Drawing ID: SE141-114 Rev: 7			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY		
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT
* (10)		<u>D A T U M - E - S I D E</u> MAG PERMEABILITY TO BE NO GREATER THAN 1.02μ. CHECK 3 PLACES ADJACENT TO EVERY 5TH HOLE IN T SECTION.	MASTER GAGE	QA		J-1165	< 1.02	495-D.CO 07-26-06		A *
* (20)		<u>D A T U M - D - S I D E</u> MAG PERMEABILITY TO BE NO GREATER THAN 1.02μ. CHECK 3 PLACES ADJACENT TO EVERY 5TH HOLE IN T SECTION.	MASTER GAGE	QA		J-1165	<1.02	495-D.CO 07-26-06		A *

Workorder: 65709/3-0 Sub:1 Op:140

Revision:

Part: SE141-114 - MODULAR COIL WINDING FORM TYPE-A - PRODUCTION MODULAR COIL WINDING FORM TYPE-A

Drawing ID: SE141-101 Rev: 3			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY		
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT
* (10)		<u>T E S T 1</u> RESISTANCE TO BE >500 kohms CHECK RESISTANCE BETWEEN THE MID-PLANE POLOIDAL BREAK SHIM AND THE WINDING FORM.	MULTIMETER	QA		J-1358	2.2 G KOHMS	503-B.HO 07-25-06		A *

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INSPECTION DATA CHECKLIST

*		T E S T 2 RESISTANCE TO BE >500 kohms CHECK RESISTANCE BETWEEN THE JUMPERED BOLTS AND JUMPERED MID-PLANE CASTING AND WINDING FORM.	MULTIMETER	QA		J-1358	655 M KOHMS	503-B.HO			A
(20)								07-25-06			*

Workorder: 65709/3-0 Sub:13 Op:30

Revision:

Part: SE141-141 - BEARING PLATE DETAIL TYPE "A" SHORT -

Drawing ID: SE141-141 Rev: 1			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY			
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT	
1*	G2	RECORD MAGNETIC PERMEABILITY. RESULTS TO BE NO GREATER THAN 1.02μ.	MASTER GAGE	QA		J-1165	ACCEPT	533-B.CL			A
(10)								06-21-06			*

Workorder: 65709/3-0 Sub:14 Op:30

Revision:

Part: SE141-142 - BEARING PLATE DETAIL TYPE "A" LONG -

Drawing ID: SE141-142 Rev: 1			INSPECTION INSTRUCTIONS			RESULTS		INSPECTED BY			
SHEET	ZONE	CHARACTERISTIC	GAGE/EQUIP	BY	SAMPLE	SER#	DATA/REMARKS	INSP	VERFD	AUDIT	
1*	G2	RECORD MAGNETIC PERMEABILITY. RESULTS TO BE NO GREATER THAN 1.02μ.	MASTER GAGE	QA		J-1165	LESS THAN 1.02	503-B.HO			A
(10)								07-19-06			*

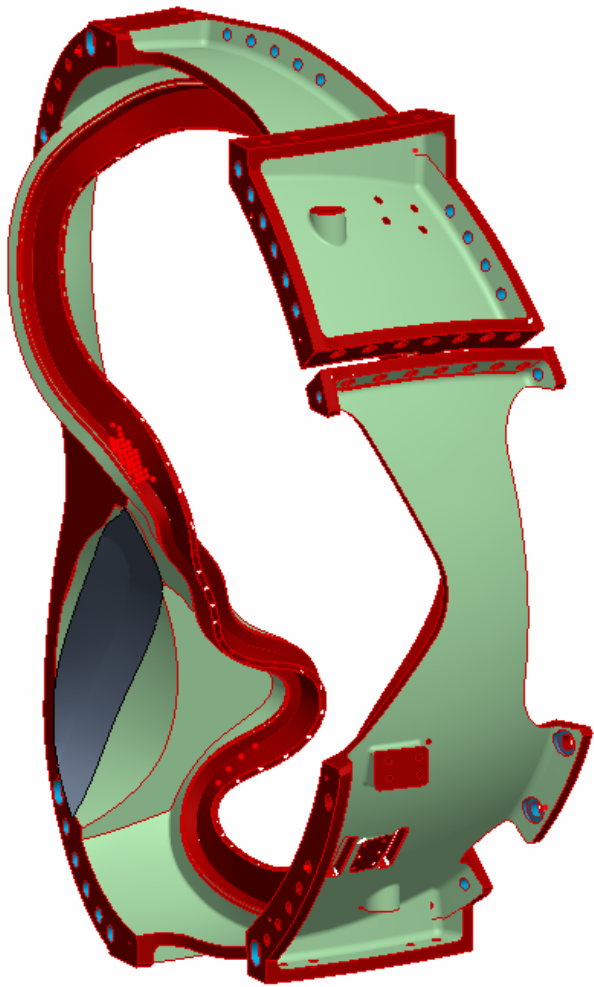
* To Far Right Indicates Data Package Requirement

NOTE: the recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal statutes including federal law, title 18, chapter 47.

MC A3 Wing Inspection

Mtm_mc_a3_check.asm

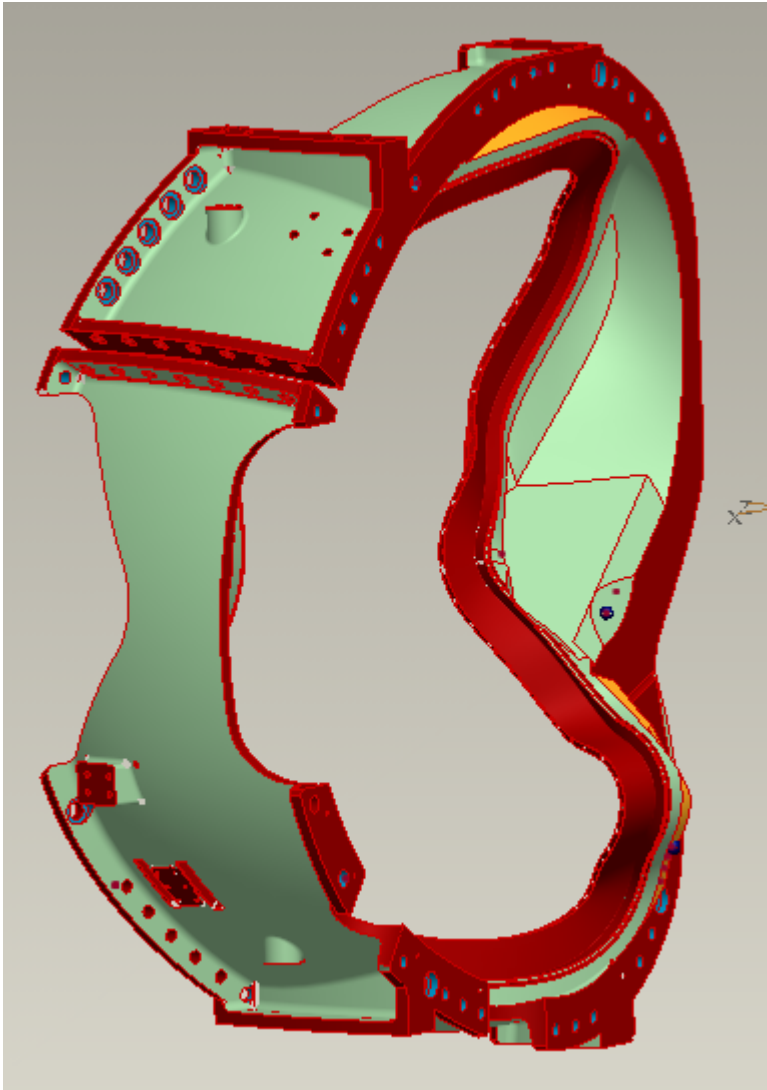
T. Brown
7/27/06



A to A Side



A to B Side



A to B Side

