

Production Part Approval Process (PPAP)



Marion Body Works, Inc.

Training Guide



Production Part Approval Process (PPAP)

The purpose of PPAP is to determine if all customer engineering design record and specification requirements are properly understood by the Suppliers and that the manufacturing process has the capability to produce product consistently meeting these requirements during an actual production run at the quoted production rates.



MBW PPAP Level Definitions

Level 1 PPAP:

- **Part Submission Warrant (PSW)** - One page document that “warrants” the part meets the design requirements


Level 2 PPAP: Includes Level 1 PPAP requirements PLUS...

- Part Submission Warrant
- Dimensional Results – 1 piece
- Design Records (Bubble Print)
- PPAP Samples – First production order / upon request prior to production order
- Print Notes (Attach copy of Raw Material Certification / Performance Test Report / Surface Finish / Labeling, Paint Process, Welding)
- Supplier Change Request (OSK-F1000) – if applicable





Level 4 PPAP

- Part Submission Warrant (PSW)
- Dimensional Results – 1 piece
- Design Records (Bubble Print)
- PPAP Samples

Production Part Approval Process (PPAP)



A Tradition of Quality. Since 1905

 Fire and Emergency Products	 Commercial Products
 Defense Products	 Custom Cab Products

01-FRM 007-002 5/8/2017 RAH



Accessing MBW PPAP Workbook








<http://www.marionbody.com/supplier-quality-information>

To access the Marion Body Works PPAP workbook, click on the hyperlink above and select “Production Part Approval Process.”

All required pages of the PPAP workbook must be filled out entirely.

SUPPLIER QUALITY INFORMATION

We pride ourselves on the quality of craftsmanship we put into every product here at Marion Body Works. Below you can find links to download supplier quality information documents.

-  [Product/Process Change Request Form](#)
-  [Supplier Quality Manual](#)
-  [Cab Shipping Instructions](#)
-  [GTT Shipping Instructions](#)
-  [GTT Final Assembly Operation](#)
-  [GTT Final Assembly Inspection Checklist](#)
-  [Production Part Approval Process](#)



Submitting PPAP Documentation

PPAP documentation must be supplied to Marion via the FTP site in one file submission—PDF format—file name should be formatted as follows:

MBW PART NUMBER_SUPPLIER NAME_MMDDYYYY_PPAP_REV

**IMPORTANT:
DO NOT SUBMIT ANY PPAP DOCUMENTATION VIA EMAIL OR
WITH THE PARTS SHIPMENT**



Submitting PPAP Documentation

If you have access to the Marion FTP site, follow the below instructions for uploading PPAP documentation.

If you do not have access, please follow the instructions on slide eight of this training.

Access the Marion Body Works FTP site:

<https://swft.exavault.com/login>



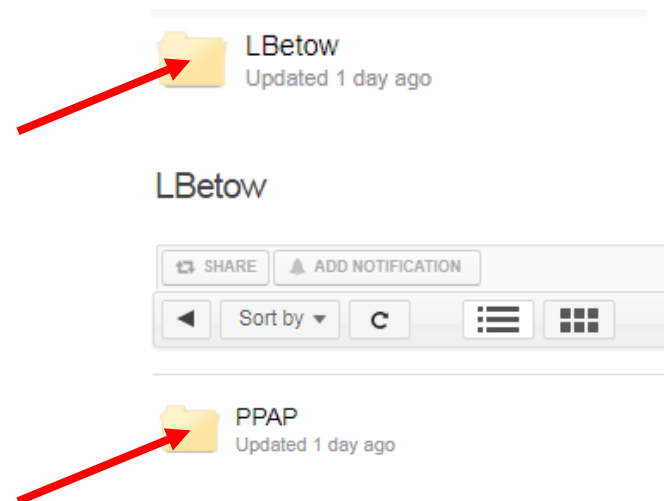
Submitting PPAP Documentation

Example:

Select your supplier folder.

Once inside the folder you will see a folder labeled PPAP.

Select the PPAP folder and upload all PPAP documentation in that folder.





Submitting PPAP Documentation

If you do not have access to the Marion Body Works FTP site, please fill out the agreement located on the Marion Body Works website:

<http://www.marionbody.com/supplier-quality-information>

And return to Lisa Betow—Materials Manager
lbetow@marionbody.com



PPAP Workbook – Level 2 Requirements

COVER

INTRO

PPAP REQUIREMENTS

DIMENSIONAL

PSW

PRINT NOTES

PRINT NOTES - PAINT

PRINT NOTES - WELDING

APPEARANCE

INTRO:

Type in Part / Supplier Information, this will be transferred throughout the workbook.

PPAP REQUIREMENTS:

This outlines the PPAP submission requirements. (Informational only)

PSW:

This documents the warrant that the Part Meets the design Intent. This will be used to communicate back to the supplier the acceptance or rejection of the PPAP.

DIMENSIONAL:

This is used in conjunction with a “bubble print” to document the actual dimensions of the PPAP part.

PRINT NOTES:

This is used to document all the remaining notes on print (Attach copy of Raw Material Certification / Performance Test Report / Surface Finish / Labeling, Paint Process, Welding)

Required where applicable:

PRINT NOTES – Performance Tests:

This is optional depending if there are Print Notes specifying performance requirements.

PRINT NOTES – Defense PAINT:

This is optional depending if there are Print Notes specifying paint requirements for Defense Product.

PRINT NOTES – Plating:

This is optional depending if there are Print Notes specifying coating requirements.

PRINT NOTES – APPEARANCE:

This is optional depending if there are Print Notes specifying paint requirements for non-Defense Product.

PRINT NOTES – WELDING:

This is optional depending if there are Print Notes / Welding requirements specified.



PPAP Workbook – Intro Tab

COVER	INTRO	PPAP REQUIREMENTS	DIMENSIONAL	PSW	PRINT NOTES	PRINT NOTES - PAINT	PRINT NOTES - WELDING	APPEARANCE
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Fill in all of the blue information.
This will automatically populate
all like fields throughout the
workbook.

Part Information



Supplier Information



 <i>A Tradition of Quality. Since 1905</i>		PPAP INTRODUCTION	
<p>PPAP packages are expected to be received by Marion BodyWorks by the date assigned by Marion BodyWorks Designee. If for any reason you cannot meet this date, contact Marion BodyWorks Designee for resolution.</p> <p>It is the policy of Marion BodyWorks to approve initial samples of supplier provided parts before receiving production orders of those parts MBW has developed the PPAP PROCESS to facilitate this requirement.</p> <p>The Default PPAP is Level 2, unless otherwise required by the Marion Body Works Quality Manager.</p> <p>PPAP requirements apply to the following parts:</p> <ol style="list-style-type: none">1) Initial submission2) Engineering Change(s)3) Tooling: Transfer, Replacement, Refurbishment, or additional4) Correction of Discrepancy5) Production Break to Marion Body Works Corporation > 1 year6) Change to Optional Construction or Material7) Sub-Supplier or Material Source Change8) Change in Part Processing9) Parts produced at Additional Location10) Other - please specify			
<p>Please reference the Marion Body Works Supplier Quality Manual for more detail on PPAP requirements.</p>			
<p>The information in blue is interlinked to the other spreadsheets. FILL IN THE BLUE SECTIONS FOR AUTOMATIC INPUT INTO FORMS</p>			
Part Name	Part Number	Engineering Revision Level	Engineering Revision Level Date
PART NAME	PART NUMBER	ERL	ERL DATE
Supplier Name	Supplier Number	Street Address	City
State	Country	Zip	Phone Number
Fax Number			
Supplier Name	SUPPLIER NAME	SUPPLIER NUMBER	ADDRESS
City	CITY	STATE	COUNTRY
Zip	ZIP	555-555-5555	555-555-5554
Phone Number			
Fax Number			
Email Address			Emailme@somewhere.com



PPAP Submission Requirements

COVER	INTRO	PPAP REQUIREMENTS	DIMENSIONAL	PSW	PRINT NOTES	PRINT NOTES - PAINT	PRINT NOTES - WELDING	APPEARANCE
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Level 2 PPAP is the default submission level and should be used unless otherwise specified by MBW.

The list of what is required is based on the submission level requested.

Any deviation from MBW requirements (specifications, material, print notes, etc.) must be approved by the use of the deviation form prior to PPAP submission.

MARION		MARION BODY WORKS PPAP Part Submission Requirements			
A Tradition of Quality. Since 1905					
Part Number:	PART NUMBER	Part Description:	PART NAME		
Revision Level:	ERL	Revision Date:			
Supplier Name:	SUPPLIER NAME	Purchase Order No.:			
Supplier Number:	SUPPLIER NUMBER	Reason for Request:			
Date Issued:		Submission Due Date:			
UNLESS OTHERWISE SPECIFIED IN WRITING BY MARION BODY WORKS:					
Default PPAP Submission Level 2 - Unless Otherwise Specified by Marion Body Works (Segment Specific Requirements may vary) S = Supplier Must Send Items to MBW for Approval * = Supplier to Send items to MBW Upon Request NR= Documents are not required for development or submission					
					Submission Level
PPAP Submission Requirements and Detail Description					
1.) Part Submission Warrant (PSW)	S	S	S	S	S
2.) Dimensional Results	*	S	S	S	S
3.) Design Records (Bubble Print)	*	S	S	S	S
4.) PPAP Samples - first production order / upon request prior to production order	*	S	S	S	S
5.) Print Notes: (Attach copy of Raw Material Certification / Performance Test Report / Surface Finish / Labeling, Paint Process, Welding)	*	S	S	S	*
6.) Supplier Change Request Form- if applicable	*	S	S	S	NR
7.) Design Failure Modes effects Analysis (DFMEA) - if supplier is design responsible	*	*	S	S	NR
8.) Process Flow Diagram (PFD)	*	*	S	S	NR
9.) Process Failure Modes Effects Analysis (PFMEA)	*	*	S	S	NR
10.) Initial Process Capability - for major / critical characteristics	*	*	S	S	NR
11.) Measurement System Analysis (MSA) - for major / critical characteristics	*	*	S	S	NR
12.) Process Control Plan	*	*	S	S	NR
13.) Appearance Approval Report (AAR) - if applicable	*	*	S	S	NR
14.) Checking Aids (Fixture, gage, tem plate, etc) - if applicable	*	*	S	S	NR
15.) Records of Compliance with Customer Specific Requirements - if applicable	*	*	S	S	NR
16.) Master Sample Photo Documentation of PPAP parts	*	*	S	S	NR
17.) Tooling Photo Documentation - if applicable	*	*	S	S	NR
Additional Submission Instructions below:					



PSW – Part Submission Warrant



- 1.) Name of part on drawing
- 2.) MBW part number on PO/drawing
- 3.) MBW part number on drawing
- 4.) Supplier part number if applicable (n/a if not)
- 5.) Engineering change level (ex. Rev B, this will be on the drawing / PO)
- 6.) Engineering date (ex. 4/7/11, this will be on the drawing / PO)
- 7.) Is this is Safety / Government regulation (ex. Drawing will indicate if it is FMVSS, or other industry standard safety regulation.)
- 8.) PO number from MBW driving demand for this part / PPAP.
- 9.) This section requires all applicable Supplier location information.
- 10.) Marion Body Works
- 11.) Buyer Name
- 12.) Check the reason for the PPAP submission
- 13.) Check the Level of PPAP that was requested by MBW and check what documents in the PPAP have been submitted that are applicable for this component.
- 14.) If Supplier has MBW owned tooling document here.
- 15.) Supplier Point of Contact Information
- 16.) MBW quality department will complete this section and send back to the Supplier Point of Contact.

MARION
A Tradition of Quality Since 1948

Part Submission Warrant

Part Name 1 PART NAME MBW Part Number 2 PART NUMBER
Shown on Drawing Number 3 Supplier Part Number 4
Engineering Revision Level 5 Dated 6
Safety and/or Government Regulation 7 Yes No
PURCHASE ORDER NO. 8
ORGANIZATION MANUFACTURING INFORMATION CUSTOMER SUBMITTAL INFORMATION
SUPPLIER NAME 9 SUPPLIER NUMBER 10
Organization Name & Address Customer Name & Address
ADDRESS 11 Buyer Name 11
CITY STATE ZIP U.S.A.
City Region Postal Code Country
REASON FOR SUBMISSION (Check at least one)
 Initial submission
 Engineering Change (E)
 Tooling Transfer, Replacement, Refurbishment 12
 Correction of Discrepancy
 Production Break from MBW > 1 year
 Change to Optional Construction or Material
 Sub-Supplier or Material Source Change
 Change in Part Processing
 Parts produced at Additional Location
 Other - please specify
REQUESTED SUBMISSION LEVEL (Check one)
 Level 1 - Warrant only submitted to customer
 Level 2 - Warrant with product samples, ISIR, 13 Surface Finish/Paint Test Results
(Check items that have been submitted within this PPAP submission)
 1. Part Submission Warrant (PSW)
 2. Dimensional results (ESIR)
 3. Design Record / Drawing 5a. Print Notes: Material Tests 5d. Print Notes: Part Identification
 4. PPAP Samples 5b. Print Notes: Surface Finish Tests 5e. Print Notes: Paint, Plating, Coating Tests
 5. Print Notes (check all that apply) 5c. Print Notes: Functional Tests 5f. Welding
 6. Engineering Change Records / Deviations
 Level 3 - All Level 2 Requirements in addition DMVEA, PFD, PFMEA, Control Plan, Initial Process Capability, and MSA
(Check items that have been submitted within this PPAP Submission - See PPAP Requirements Tab for Definition)
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
 Level 4
(Check items that have been submitted within this PPAP Submission)
 1. Part Submission Warrant (PSW)
 2. Dimensional results (ESIR)
 3. Design Record / Drawing
 4. PPAP Samples
5. Confirmation of conformance to all Print Notes: Yes No n/a 14
Is each Customer Tool properly tagged and numbered? Yes No n/a
Declaration:
I have noted on this part submission warrant any deviation from the associated design record and/or any areas of non-compliance to the Marion Body Works requirements. If Yes, Explain 15
Organization Authorized Signature _____ Date _____
Print Name _____ Phone No. 555-555-5555 Fax No. _____
Title _____ E-mail _____
FOR CUSTOMER USE ONLY
PPAP Warrant Disposition: Approved Rejected Other 16
Customer Signature _____ Date _____
Print Name _____ Customer Tracking Number (optional) _____

****DO NOT LEAVE ANY SECTIONS BLANK. N/A IS OK WHERE NECESSARY****



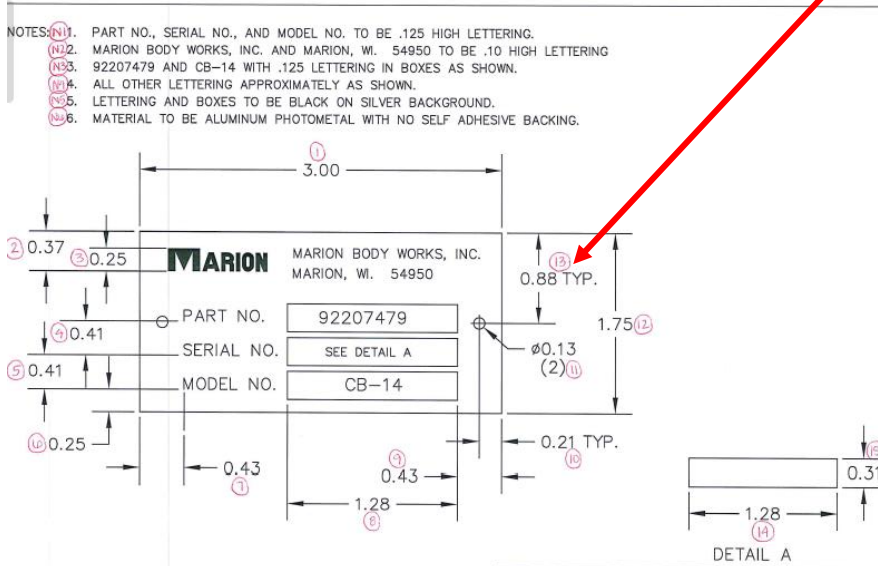
PPAP - Dimensional Results/Bubble Print

- COVER
- INTRO
- PPAP REQUIREMENTS
- DIMENSIONAL**
- PSW
- PRINT NOTES
- PRINT NOTES - PAINT
- PRINT NOTES - WELDING
- APPEARANCE



If populated correctly, the measurement results will show “red” when out of tolerance.

Anywhere on the print where “TYP” or an amount of dimensions are called out, be sure to have the corresponding amount of measurements recorded on the dimensional results.



DIMENSIONAL RESULTS													
ORGANIZATION:		MARION BODY WORKS				PART NUMBER:		86200451					
SUPPLIER NUMBER:		86200451				PART NAME:		PLATE DATA CB 14 NAVISTAR					
NAME OF INSPECTION FACILITY:				MBW				ENGINEERING REVISION LEVEL				A	
DATE:		8/15/2017											
Supplier required to provide marked up drawing to identify items inspected													
ITEM	DIMENSION / SPECIFICATION	TOLERANCE		SPECIFICATION / LIMITS		GAGE TYPE*	QTY TESTED	ORGANIZATION MEASUREMENT RESULTS (DATA)			OK	NOT OK	
		-	+	MIN	MAX			Piece 1	Piece 2	Piece 3			
ex.	4	1	1	3	5								
1	3	0.06	0.06	2.94	3.06	TAPE MEASURE	1	3.00		2.00		X	
2	0.37	0.06	0.06	0.31	0.43	CALIPER	1	0.37				X	
3	0.25	0.06	0.06	0.19	0.31	CALIPER	1	0.25				X	
4	0.41	0.06	0.06	0.35	0.47	CALIPER	1	0.41				X	
5	0.41	0.06	0.06	0.35	0.47	CALIPER	1	0.41				X	
6	0.25	0.06	0.06	0.19	0.31	CALIPER	1	0.25				X	
7	0.43	0.06	0.06	0.37	0.49	CALIPER	1	0.43				X	
8	1.28	0.06	0.06	1.22	1.34	CALIPER	1	1.28				X	
9	0.43	0.06	0.06	0.37	0.49	CALIPER	1	0.43				X	
10	0.21	0.06	0.06	0.15	0.27	CALIPER	1	0.21				X	
	0.21	0.06	0.06	0.15	0.27	CALIPER	1	0.21				X	
11	0.13	0.06	0.06	0.07	0.19	CALIPER	1	0.13				X	
	0.13	0.06	0.06	0.07	0.19	CALIPER	1	0.13				X	
12	1.75	0.06	0.06	1.69	1.81	CALIPER	1	1.75				X	
13	0.88	0.06	0.06	0.82	0.94	CALIPER	1	0.88				X	
	0.88	0.06	0.06	0.82	0.94	CALIPER	1	0.88				X	
14	1.28	0.06	0.06	1.22	1.34	CALIPER	1	1.28				X	
15	0.31	0.06	0.06	0.25	0.37	CALIPER	1	0.31				X	
				0	0								
				0	0								

Make sure the design record (bubble print) matches the numbering on the dimensional results.

*Traceable to NIST
Blanket statements of conformance are unacceptable for any test results.

PRINT NAME	SIGNATURE	TITLE	DATE
RACHEL HEINEMAN	<i>Rachel Heineman</i>	QUALITY TECHNICIAN	8/9/2017



PPAP – Print Notes SAMPLE

- COVER
- INTRO
- PPAP REQUIREMENTS
- DIMENSIONAL
- PSW
- PRINT NOTES
- PRINT NOTES - PAINT
- PRINT NOTES - WELDING
- APPEARANCE



1. Design Record Requirement
2. ASTM Chemical Requirement
3. ASTM Mechanical Requirement
4. PPAP document to outline requirement and actual's per the print and Industry standard (ASTM)

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATIONS:
A. ASME Y14.100-2000
B. ASME Y14.5M-1994
2. MATERIAL: STEEL, ASTM A36/A36M, (UNS K02600),
PLATE, HOT ROLLED, .250 INCH THK.
3. MATERIAL: STEEL, ASTM A36/A36M, (UNS K02600),
PLATE, HOT ROLLED, .500 INCH THK.
4. IEEE/ASTM SI 10 SHALL BE USED
IN CONVERTING AND ROUNDING OFF.
1 INCH = 25.4 mm APPLIES.

1

TABLE 2 Chemical Requirements

Note 1—When a dash is in this table, there is no requirement. The test analysis for manganese shall be decreased and reported as described in the test analysis section of Specification A 36/A 36M.

Product	Shape	Plate ^a							
		To 1/8 [2.5] [64]	Over 1/8 to 1/4 [6.35 to 12.7] [158.75 to 317.5]	Over 1/4 to 3/8 [12.7 to 19.0] [317.5 to 476.25]	Over 3/8 to 1 [19.0 to 25.4] [476.25 to 2540]	Over 1 to 4 [25.4 to 101.6] [2540 to 10160]	Over 4 [101.6] [10160]	To 1/8 [2.5] [64]	Over 1/8 to 1/4 [6.35 to 12.7] [158.75 to 317.5]
Carbon, max, %	0.28	0.28	0.28	0.27	0.26	0.28	0.27	0.28	0.28
Manganese, %	—	—	0.30-0.60	0.30-1.00	0.30-1.00	—	0.60-0.90	0.60-0.90	0.60-0.90
Phosphorus, max, %	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Sulfur, max, %	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Nitrogen, %	0.008 max	0.008 max	0.008 max	0.008 max	0.008 max	0.008 max	0.008 max	0.008 max	0.008 max
Copper, max, % when copper steel is specified	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

^a Manganese content of 0.28-0.30% is required for plates over 420 lb-ft (204 kg-ft).

^b For each reduction of 0.01 percentage point below the specified carbon maximum, or increase of 0.50 percentage point manganese above the specified maximum will be permitted, up to the maximum of 1.20%.

2

TABLE 3 Tensile Requirements^a

Plate, Shape,^b and Size:

Tensile strength, ksi [MPa]	50-80 [340-550]
Yield point, min, ksi [MPa]	36 [250] ^c
Plate and Bar ^d , %:	
Elongation in 8 in. [200 mm], min, %	20
Elongation in 2 in. [50 mm], min, %	20
Elongation in 8 in. [200 mm], min, %	20
Elongation in 2 in. [50 mm], min, %	21 ^e

^a See the Orientation subsection in the Tension Tests section of Specification A 36/A 36M.

^b For wide flange shapes over 420 lb-ft (204 kg-ft), the 80 ksi (550 MPa) minimum tensile strength does not apply and a minimum elongation of 2 in. [50 mm] of 19% applies.

^c Yield point 30 ksi (200 MPa) for plates over 8 in. [200 mm] in thickness.

^d Elongation not required to be determined for floor plate.

^e For plates wider than 24 in. (600 mm), the elongation requirement is reduced two percentage points. See the Elongation Requirement Adjustments subsection.

3

ITEM	SPECIFICATION	SPECIFICATION / LIMITS		GAGE TYPE	QTY. TESTED	ORGANIZATION	MEASUREMENT RESULTS (DATA)			OK	NOT OK
		MIN	MAX				Piece 1	Piece 2	Piece 3		
1	A36/A36M PLATE 0.5"					1	0.1800	N/A	N/A		X
	C - MAX weighed %	N/A	0.25	LAB	1	0.1800	N/A	N/A	N/A		X
	Mn - NOS	N/A	N/A	LAB	1	0.3400	N/A	N/A	N/A		X
	P - MAX weighed %	N/A	0.04	LAB	1	0.0080	N/A	N/A	N/A		X
	S - MAX weighed %	N/A	0.05	LAB	1	0.0120	N/A	N/A	N/A		X
	SI - MAX weighed %	N/A	0.4	LAB	1	0.0200	N/A	N/A	N/A		X
	CU - MAX weighed %	N/A	0.2	LAB	1	0.1400	N/A	N/A	N/A		X
	Elongation (in %)	37	0	LAB	1	37%	N/A	N/A	N/A		X
	Tensile (ksi)	55	80	LAB	1	89300	N/A	N/A	N/A		X
	Yield (ksi)	35	N/A	LAB	1	49000	N/A	N/A	N/A		X

4



PPAP – Print Notes SAMPLE CERT PROVIDED

BETASTEEL
 6300 S. Roseway Road
 Postage, Indiana 46368

*****MATERIAL CERTIFICATION*****

MILL ORDER: 039517 PART NUMBER: 10032009 PAGE NUMBER: 1 of 1
 P.O. NUMBER: 0107378 #3 P.O. DATE: PRINTED: 11/05/09

S McWane Steel, Inc. S McWane Steel on IPPC
 O T Dodge Center Facility H T 4630 N. National Drive
 L O 700 Second Avenue South, P.O. Box 246 I O
 D DODGE CENTER, MN 55027 P PORTAGE, IN 46368

Material Description: HOT ROLLED BAND PRIME COIL, MILL EDGE A1018 BSLAS F OR 58 HIGH STRENGTH LOW ALLOY STEEL

Qty: 1000 X 40 000 X COIL MEN

Chemical Element	Symbol	Min	Max	Symbol	Min	Max	Symbol	Min	Max
C	0.05	0.30	P	0.008	S	0.003	SI	0.00	
Mn	0.16	0.30	CR	0.05	AL	0.010	MO	0.01	
CU	0.001	0.01	N	0.008	B	0.001	CA	0.001	
SI	0.02	0.03	SA	0.025					

Made and Milled in the USA

TENSILE	ASTM AS ROLLED	TEM	Tensile PSI	Yield PSI	% Elong
Location	Dir	Tem	67900.0	46200.0	32.00
Location	Dir	Tem	67900.0	46200.0	37.00

Number: 420711, 420916, 420917

RECEIVED
 NOV - 6 2009
 Ryan McDonald
 Nucor Steel, Inc.

* Coil was not tested.

Robert M Chase
 QA Representative

WE HEREBY CERTIFY THAT THIS MATERIAL WAS TESTED IN ACCORDANCE WITH THE APPR

% Elongation in two inch gauge length.

SA = Soluble Aluminum

FORM QC1002
 Issue Date 10/03/00

1. Use Chemical Weighted % from material cert. and transfer to print notes PPAP Page.
2. Mechanical Results to be transferred to print notes PPAP Page.
3. Signature on Cert. approving material

ITEM	SPECIFICATION	SPECIFICATION / LIMITS		QA/QE TYPE	QTY. TESTED	ORGANIZATION MEASUREMENT R	
		MIN	MAX			Result	Piece 2
1	A36/A36M PLATE 0.5"						
	C - MAX weighed %	N/A	0.25	LAB	1	0.1800	N/A
	MN - N/A	N/A	N/A	LAB	1	0.3400	N/A
	P - MAX weighed %	N/A	0.04	LAB	1	0.0080	N/A
	S - MAX weighed %	N/A	0.05	LAB	1	0.0120	N/A
	SI - MAX weighed %	N/A	0.4	LAB	1	0.0200	N/A
	CU - MAX weighed %	N/A	0.2	LAB	1	0.1800	N/A
	Elongation (min %)	37	0	LAB	1	37%	N/A
	Tensile (ksi)	58	80	LAB	1	69300	N/A
	Yield (ksi)	38	N/A	LAB	1	46600	N/A




PPAP – Print Notes PAINT

(Includes Paint & Coating Test Results)



MARION <small>A Tradition of Quality. Since 1905</small>											
PRINT NOTES (PAINT PROCESS TEST RESULTS)											
ORGANIZATION:	SUPPLIER TO MARION BODY WORKS										
MBW PART NUMBER:								PART NAME:			
NAME OF INSPECTION FACILITY:								ENGINEERING REVISION LEVEL:			
Supplier required to provide marked up drawing to identify all "PRINT NOTES" verified.											
Document Painting Method / Industry Standard used to prepare these components.											
Method # / Finishing Requirement on Drawing:											
Cleaning Standard Utilized:											
Pretreat Standard Utilized:											
Water Break Test:											
Characteristic	STANDARD		SPECIFICATION/ LIMITS		GAGE TYPE	QTY. TESTED	SUPPLIER TEST RESULTS (DATA)			OK	NOT OK
	ZINC	WP	MIN	MAX			Piece 1	Piece 2	Piece 3		
Prime Coat:											
Blast Profile											
Thickness*											
Thickness (including blast profile)*											
Cure Time (if used)											
Ambient Cure Time (if used)											
Salt Spray											
Top Coat:											
Total Thickness (reference)*											
Thickness (over primer)*											
Permeability											
Cure Time (if used)											
(if used)											
<small>Blanket statements of conformance are unacceptable for any test results.</small>											
PRINT NAME:	SIGNATURE:	TITLE:	DATE:								

- 
1. Document what print standard, Industry Standard, & Process Steps that were used to coat the part
 2. Prime Coat Verification: Permeability, Adhesion, Thickness Salt Spray Results, Ambient Cure Time & Oven Cure Time
 3. Top Coat Verification: Permeability, Adhesion, Thickness Salt Spray Results, Ambient Cure Time & Oven Cure Time
 4. Supplier Sign Off



PPAP – Print Notes PAINT: SAMPLE

COVER	INTRO	PPAP REQUIREMENTS	DIMENSIONAL	PSW	PRINT NOTES	PRINT NOTES - PAINT	PRINT NOTES - WELDING	APPEARANCE
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6. ALL WELDS SHALL BE IAM MIL-STD-1261, CLASS 2, OR AWS D1.1/D1.1M.

7. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS WITHOUT TOLERANCE SHALL BE ± 1 mm.

8. FINISH: FINAL PROTECTIVE FINISH IAM 12420325 METHOD 4 OR 1.

9. DIMENSIONAL LIMITS APPLY BEFORE PAINTING.



1. Print Note Paint Note Requirement

2. Document what print standard or Industry Standard the part has been painted to.

MARION		PRINT NOTES								
A Tradition of Quality. Since 1905		(PAINT PROCESS TEST RESULTS)								
ORGANIZATION:	SUPPLIER TO MARION BODYWORKS									
MBWPART NUMBER:		PART NAME:								
NAME OF INSPECTION FACILITY:	ENGINEERING REVISION LEVEL:									
DATE:	Supplier required to provide marked up drawing to identify all "PRINT NOTES" verified.									
Document Painting Method / Industry Standard used to prepare these components.										
Method # / Finishing Requirement on Drawing:										
Cleaning Standard Utilized:										
Pretreat Standard Utilized:										
Water Break Test:										
Characteristic	STANDARD		SPECIFICATION/LIMITS		QTY. TESTED	SUPPLIER TEST RESULTS (DATA)			OK	NOT OK
	ZINC	WP	MIN	MAX		Piece 1	Piece 2	Piece 3		
Prime Coat:										
Blast Profile:										
Thickness*										
Thickness (including blast profile)*										
Cure Time (if used)										
Top Coat:										
Total Thickness (reference)										
Thickness (over primer)*										
Permeability										
Adhesion										
Ambient Cure Time (if used)										
Cure Time (if used)										

3. Prime Coat Verification

1. Reference standard for each process step
2. Document blast profile
3. Document actual thickness including profile
4. Ensure that the thickness spec includes blast (*1.0mil blast profile + 1.3 mil primer = 2.3 min thickness including blast profile*)

4. Top Coat Verification

5. Supplier Sign Off

Blanket statements of conformance are unacceptable for any test results.

PRINT NAME	SIGNATURE	TITLE	DATE
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PPAP – Welding Specification: SAMPLE

- COVER
- INTRO
- PPAP REQUIREMENTS
- DIMENSIONAL
- PSW
- PRINT NOTES
- PRINT NOTES - PAINT
- PRINT NOTES - WELDING
- APPEARANCE



MARION
A Tradition of Quality. Since 1905

PRINT NOTES (WELDING)

ORGANIZATION: **ON BODY WORK** PART NUMBER: **5**

SUPPLIER: **1** PART NAME: **4** **DR.GTT,6-TON,PANAMA**

NAME OF INS: **2** FACILITY: **3** MBW ENGINEERING REVISION: **1** LEVEL: **B**

DATE: **1/2017**

Supplier required to provide marked up print to identify ALL Weld Items.

ITEM	WELD SYMBOL	WELD DESCRIPTION	WPS#	PQR# (if not pre-qualified)	CHECK FOR CONFORMANCE			OK	NOT OK
					WELD SIZE	WELD LENGTH	WELD QTY		
W1		DOUBLE FILLET	MBW-WPS-STL-013		0.25	2.75	3	X	
W2		FILLET	MBW-WPS-STL-013		0.25	3	3	X	
W3		DOUBLE FILLET	MBW-WPS-STL-013		0.25	2.75	3	X	
W4		FLARE BEVEL	MBW-WPS-STL-013		0.25	3	3	X	
W5		FILLET WELD	MBW-WPS-STL-014		0.25	4.25	36	X	
W6		FILLET WELD	MBW-WPS-STL-014		0.25	CONTINUOUS	3	X	

1. Document the Welding Symbol / Weld Description from “bubble print”.
2. Document the Welding Specification /Weld Symbol from “bubble print”.
3. Document WPS / PQR (if not prequalified)
4. Document visual verification of weld size, Weld length, Weld Quantity.
5. Supplier Sign Off

5

PRINT NAME: _____ SIGNATURE: _____ TITLE: _____ DATE: _____

Make sure the design record (bubble print) matches the numbering on the dimensional results.

Note: WPS's, PQR's and welder certifications must be provided upon request.



PPAP – Questions, Comments or Concerns

For any questions, comments or concerns regarding PPAP documentation, please contact:

ppap@marionbody.com

