



WORK INSTRUCTION


SHEET METAL TYPICAL FUNCTIONAL FLOW

REVISION: 03

PROCEDURE NO.: WI-8.2.4.2

DATE EFFECTIVE: 05/23/2023


	Operation Description	Documentation Clarifying Characteristics (as applicable for each operation)	Monitoring & Measurement Activities	Monitoring & Measurement Records/Check Lists
1	Shear Blank - If Applicable	Set-Up Sheet/Program for CNC Operations and/or Drawings Manufacturing Order	1 st piece verification on set-up using tape measure	None
2	CNC Set-Up (Tool Changes)	Set-Up Sheet/Program for CNC Operations and/or Drawings Manufacturing Order	Verification based on visual review	None
3	Cut Blank (CNC, Laser, Manual or Water Jet)	Set-Up Sheet/Program Part or Assembly Drawing Manufacturing Order	1 st Piece Verification based on set-up sheet, visual review or tape measure/ caliper if required	Order Tracker
4	Deburring – If Applicable	Part Drawing or Visual Review	Visual Verification	None
5	Marking - If Applicable	Part or Assembly Drawing Manufacturing Order	Verification based on visual review	Order Tracker
6	Forming - If Applicable	Part or Assembly Drawing Manufacturing Order	1 st piece verification on set-up using tape measure, caliper or protractor. Check fit	Order Tracker
7	Spot Welding - If Applicable	Part or Assembly Drawing Manufacturing Order	Verification based on visual review	Order Tracker
8	Assembly - If Applicable	Part or Assembly Drawing Manufacturing Order	Verification based on visual review or tape measure/caliper	Order Tracker

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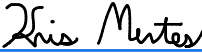
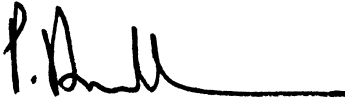

	Operation Description	Documentation Clarifying Characteristics <small>(as applicable for each operation)</small>	Monitoring & Measurement Activities	Monitoring & Measurement Records/Check Lists
9	Final Test Verify Part Number and Manufacturing Order.	Part or Assembly Drawing and Manufacturing Order	1 st piece dimension inspection Visual verification Ongoing dimension inspection based on random sample.	Order Tracker

REVISION HISTORY

REVISION LEVEL	DATE OF REVISION	SECTIONS	DESCRIPTION OF CHANGE
00	03/05/09	All	Initial release
01	03/24/14	All	Operation 1 added <u>and calipers</u> , Operation 4 removed, Operations 5-10 become Operations 4-9, Operation 7 (was Operation 8) added <u>and measuring devices</u>
02	05/17/2022	All	Operation 1 added "If Applicable", changed 2 nd , 3 rd , 4 th & 5 th column. Operation 2 changed 3 rd column. Operation 3 changed 2 nd , 3 rd , & 5 th column. New Operation 4 added. Operation 4 becomes 5 and changed 2 nd & 5 th column. Operation 6 removed "number" and changed 4 th column. Operation 7 removed "number". Operation 8 removed "number" and changed 4 th column. Operation 9 removed. Operation 10 becomes 9 and changed 2 nd & 4 th column.
03	05/23/2023	All	Add the word "none" to operations 1, 2, & 4. Change #9 Monitoring Activities to read: 1 st piece dimension inspection. Visual verification. Ongoing dimension inspection based on random sample.

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AUTHORIZATION

POSITION	HELD BY	AUTHORIZATION SIGNATURE OR INITIALS
Prepared By: Production Engineering Manager	Kris Mertes	 <u>Kris Mertes (May 26, 2023 12:33 CDT)</u>
Director of Manufacturing Operations:	Ananda Palanichamy	
Senior Management Representative/ Management Representative:	Samir Patel	 <u>Samir Patel (May 30, 2023 12:05 CDT)</u>












WI_8.2.4.2SheetmetalProcessFlow

Final Audit Report

2023-05-30

Created:	2023-05-26
By:	Heather Dee (heatherdee@tempco.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAAtqs2Qvd1HQPfhGGMB9B_oYamJfxbmahp

"WI_8.2.4.2SheetmetalProcessFlow" History

-  Document created by Heather Dee (heatherdee@tempco.com)
2023-05-26 - 5:09:13 PM GMT- IP address: 12.156.249.130
-  Document emailed to krismertes@tempco.com for signature
2023-05-26 - 5:11:02 PM GMT
-  Email viewed by krismertes@tempco.com
2023-05-26 - 5:31:58 PM GMT- IP address: 213.188.91.180
-  Signer krismertes@tempco.com entered name at signing as Kris Mertes
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-  Document e-signed by Kris Mertes (krismertes@tempco.com)
Signature Date: 2023-05-26 - 5:33:40 PM GMT - Time Source: server- IP address: 75.146.109.233
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 Signer samirpatel@tempco.com entered name at signing as Samir Patel

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