

291758

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VMS291758

12/13/18 10:25

CUSTOMER NAME			CUST CODE		PROC CODE		PART ID			SUB		
STAR MANUFACTURING INC.			STARMF		NI		16268-0S010-0002					
EQUIPMENT USED			PART NAME & INFORMATION					CUSTOMER PO #				
BNA			BRACKET					16173				
SHOP ORDER DATE		POUNDS		PIECES		CONTAINERS			SHIPPING #			
12/13/18		790.00		9,300		31 PANS						
PROCESS SPECIFICATION				SHIP TO				FINAL INSPECTION				
<p>WE CERTIFY THAT THIS LOT OF PARTS WAS PROCESSED TO THE FOLLOWING PARAMETERS:</p> <p>NICKEL (.0002" MINIMUM) (NO COPPER) PER TSH6503G-A</p> <p>QUALITY CONTROL DEPARTMENT VARLAND METAL SERVICE, INC.</p> <p>PRIMARY DEPARTMENT: 4 ALTERNATE DEPARTMENT: 3</p>				STAR MANUFACTURING INC. 1200 RUSSELL CAVE ROAD LEXINGTON, KY, 40505								
				PRODUCTION RECORDING							X-RAY DATA	
				DATE	SHIFT	OP LETTER	DEPT	QUANTITY (LBS)	EMP	LD #	THICK (MILS)	ALLOY %
PART & MATERIAL DESCRIPTION				11.682 PCS / LB				85.60 LBS / M				
COLD ROLLED STEEL X 90 MM X 29 MM X 46 MM X 1.6 MM THICK				0.79 FT ² / LB				68.03 FT ² / M				
				47.00 LB / FT ³				0.08560 PC WT				
				38.827053 GRAMS / PC				63.204698 CM ² / PC				

REV DATES:	SPEC INST 08/09/17 16:55	JP:JP	LAST ORDER 12/06/18	291523
	STD PROC 08/15/18 08:25	MMJ:MMJ	PREV ORDER 11/28/18	291207
	LOADINGS 08/15/18 10:23	MMJ:MMJ	QUOTE INFO 09/07/17	68606 \$/E VALID
	PART SPEC 08/16/18 17:28	MMJ:MMJ		

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A. DEPT 04 CLEAN @ 4 MIN. A-1 (HOT ACID)
7 LOADS @ 112.9 # W/ 10.0 VOLT LIMIT

CODE: S10V4A1 01/08/13

08/16/18
(MAX: 115.0)

6 LOADS @ 131.7 # W/ 10.0 VOLT LIMIT

08/15/18
(MAX: 141.0 1)

***** DELICATE PARTS - USE CAREFUL HANDLING DURING ALL STEPS *****
***** UNLOAD CAREFULLY INTO TUBAR - MINIMIZE DROPPING DISTANCES *****

CLEANER LINE SET UP:

1. CLEANER VOLTAGE: 10 VOLTS
2. BBL SPEED: SETUP "1"
3. UP BBL ROTATION: OFF

4. 4 MIN. A-1 (HOT ACID)

B. DEPT 04 NICKEL PLATE ***** HIGH RELIABILITY *****
7 LOADS @ 112.9 # 120 AMPS 440 MIN @ 3 RPM W/ 10.0 VOLT LIMIT

CODE: STAR 08/15/18

08/16/18
(MAX: 115.0 123 440 1.4 5.00)

6 LOADS @ 131.7 # 114 AMPS 540 MIN @ 3 RPM W/ 10.0 VOLT LIMIT

08/15/18
(MAX: 141.0 122 540 1.1 5.00 1)

NICKEL LINE SET UP:

1. LANE SETUP: #1
2. UP BBL ROTATION: "OFF"

***** NOTE: WILL NEED TO SET DRYER TIME TO 7 MINUTES *****

SPECIAL SAFETY NOTE:

1. FACE SHIELD MANDATORY WHEN HOT BASKET DIPPING

POST DIP & DRYING PROCEDURE:

1. ***** RECLEAN AFTER NICKEL *****
2. UNLOAD INTO 2 DRYER BASKETS
3. PRESS START BUTTON PRIOR TO PUTTING FIRST BASKET IN DICHROMATE
4. PLACE 1ST BASKET IN DICHROMATE
4. PLACE 2ND BASKET IN DICHROMATE
5. ONCE THE DICHROMATE TIMER ALARMS PRESS THE BUTTON TO SILENCE THE ALARM.
6. LIFT 1ST BASKET OUT OF DICHROMATE AND DRAIN FOR 10 SEC. TILTING BASKET TOWARDS YOU.
7. PLACE 1ST BASKET IN "RINSING DRYER"

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8. ONCE DRYER LIGHT COMES ON PLACE BASKET IN FIRST RINSE.
9. LIFT 2ND BASKET OUT OF DICHROMATE AND DRAIN FOR 10 SEC. TILTING BASKET TOWARDS YOU.
10. PLACE 2ND DRYER BASKET IN "RINSING DRYER"
11. WHILE 2ND DRYER BASKET IS RINSING IN THE "RINSING DRYER" CONTINUE RINSING FIRST BASKET THROUGH THE REMAINING RINSES. GOING IN/OUT 2X WITH NO PAUSE.
12. PLACE 1ST BASKET IN DRYER AND DRY WELL WITH HEAT.
13. REMOVE 2ND DRYER BASKET FROM "RINSING DRYER" AND RINSE IN ALL 3 RINSES GOING IN/OUT 2X IN EACH RINSE WITH NO PAUSE
14. DRY WELL WITH HEAT.

INSPECTION GUIDELINES:

- ADHES:**
1. PARTS MUST HAVE EXCELLENT ADHESION - NO BLISTERING, ETC.
 2. BEAD BLAST TEST 2 PCS/LOAD - MUST BE NO ADHESION LOSS.
- APPEAR:**
1. PARTS SHOULD GENERAL BRIGHT APPEARANCE. SHOULD NOT BE DULL - BUT HIGH LEVEL BRIGHTNESS IS NOT A REQUIREMENT
 2. PARTS MUST BE RUST FREE, LOOK CLOSELY AT EDGES.
 3. PARTS SHOULD NOT BE STAINED OR HAZY. MAY SEE SOME MINOR DICHROMATE STAINS, BUT MUST BE VERY MINIMAL - UNDER 2% OF PARTS.
- THICK:**
1. CHECK 5 PCS ON LOADS 1,5,10 ETC. ON XRAY USING THE "MISC" DIRECTORY, NI/FE AT THE LOCATION LISTED BELOW
 2. TARGET MEAN (MILS) = .375" - .425", NO CHECKS < .200
 3. HIGH THICKNESS TARGET FOR IMPROVED SALT SPRAY

MATERIAL HANDLING:

1. PACK INTO LINED ORIGINAL CUSTOMER CONTAINERS.
2. OKAY TO MIX LOADS AS LONG AS ALL INSPECTION PARAMETERS ARE MET.

08/09/17

THICKNESS LOCATION: SEE PICTURE IN PCDATA\THICKNESS LOCATION

- C. DEPT 16 FINAL INSPECT NICKEL** **CODE: NISTAR 02/13/18**
- ADHES:**
1. VISUAL 25 PCS/LOT FOR BLISTERING OR FLAKING PLATE. MUST BE NO ADHESION LOSS.
 2. INSPECT BEAD BLAST TEST DONE BY PLATERS UNDER THE MICROSCOPE. LOOK FOR BLISTERED OR LIFTING NICKEL.
- APPEAR:**
1. SEE ABOVE UNDER PLATING &/OR BELOW FOR SPECIFIC GUIDELINES
- THICK:**
1. SEE ABOVE UNDER PLATING FOR SPECIFIC GUIDELINES

******* SEND THICKNESS CHECKS TO CUSTOMER *******