 ACME COSMETIC COMPONENTS	Procedure Name:	Metal Specifications
	Revision:	04
	Approved By: Melissa McManus Management Representative	Effective Date: 06/01/18
	Page 1 of 5	

Section 1

SCOPE

The contents of this procedure apply to the use of metal in the manufacturing process, as well as to any metal used by third parties on behalf of the Company.

Section 2

PURPOSE:

This document is intended to provide guidance as to the key characteristics required for metals that would be acceptable for use in the production of products for ACME customers. It is not intended to be all inclusive or prescriptive, but rather a generalized specification that will assure conformity with current practice.

Section 3

TERMS, DEFINITIONS AND NOTES:

N/A

Section 3a

REFERENCES:


ASTM A623 & A624 (tinplate specification, latest revision)

ASTM B209 (aluminum specification, latest revision)

Section 4

PROCEDURE/INSTRUCTIONS:

The user will evaluate the use of metals against the specifications laid out below. It is recognized that variation will exist between different metals and suppliers, but it is necessary to assure that metal used to press ACME pans meet the critical characteristics laid out below, to assure the consistency of pans produced lot to lot.

 ACME COSMETIC COMPONENTS	Procedure Name:	Metal Specifications
	Revision:	04
	Approved By: Melissa McManus Management Representative	Effective Date: 06/01/18
	Page 2 of 5	

50/20 DIFFERENTIALLY TINPLATED STEEL:

Annealing Process: tinfoil is to be batch annealed unless otherwise agreed upon with supplier.

Coil widths: Coils are trimmed from master coils to the ordered width. Slit dimensions will not vary by more than five thousandths of an inch (+/- 0.005 in). Master coil slit widths will not vary by more than 1/32 of an inch (+/-0.0312).

Maximum inner diameter: 16 inches.

Maximum outer diameter: 42 inches.

Surface Finish: 7C Bright—A smooth finish with grit lines. The surface roughness will range between 10 and 25 µin. Ra [0.254 to 0.635 µm Ra].

Temper Designation: T-1 (45-53 HR30T on 30T scale)- The Rockwell Hardness range for the T-1 designation is between 45 and 53.

Tinfoil Coating Designation: 50/20 (0.25/0.10 lb/base box). See latest revision of ASTM spec for tolerances.

Thickness Tolerances: Our tinfoil adheres to the latest revision of the ASTM specifications for thickness tolerances.

General specifications:


- Homasote spacers will be put between each coil.
- Slit Coils will unwind clockwise.
- Markings will be placed on the side with a lower tin coating to differentiate the sides of the metal (DT Markings).
- All coils received into facility will be appropriately marked to maintain traceability requirements.

ALUMINUM:

Alloy Designation: 3003 series- chemical composition includes 1-1.5% manganese. See ASTM standard B209 for more details.

Annealing: aluminum is to be batch annealed unless otherwise agreed upon with supplier.

Coating: both sides - epoxy (Valspar 4810A22M or equivalent).

 ACME COSMETIC COMPONENTS	Procedure Name:	Metal Specifications
	Revision:	04
	Approved By: Melissa McManus Management Representative	Effective Date: 06/01/18
	Page 3 of 5	

Each master coil will be coated using the manufacturer/mills standard coating processes, with a nominal cured/finished film thickness of 0.05 mil DFT (dry film thickness) using ASTM D 7091 as a guiding standard for measurement.

Coil widths: Coils are trimmed from master coils to the ordered width. Width dimensions for slit coils will not vary by more five thousandths of an inch (+/- 0.005 in). Master coil slit widths will not vary by more than 1/32 of an inch (+/-0.0312).


	No. America	China
Minimum inner diameter	16 inches.	508 mm
Maximum outer diameter	42 inches	1060 mm

Temper designation: H14 - cold work that gives specific tensile strength (known as ½ Hard)

Thickness tolerance: ordered thickness on master coils will not vary from desired specification by more than five percent (+/- 5.00%).

General specifications:

- Homasote spacers will be put between each slit coil.
- Slit Aluminum coils will unwind counter-clockwise.
- All coils received into facility will be appropriately marked to maintain traceability requirements.

 ACME COSMETIC COMPONENTS	Procedure Name:	Metal Specifications
	Revision:	04
	Approved By: Melissa McManus Management Representative	Effective Date: 06/01/18
Page 4 of 5		

DEFECT CLASSIFICATION

Defects and acceptable quality levels (AQLs) will be developed using the following definitions as guidelines:

Category	Description	Maximum AQL
CRITICAL	A defect that is likely to result in a hazardous or unsafe condition for the individual using, maintaining, or depending on the components. These faults should be totally absent. However, if any such critical fault is found during a normal inspection, the batch must be considered rejected until proven otherwise by a 100% QA inspection.	NDA (No Defects Allowed)
MAJOR	A defect that will, or is likely to result in a failure to function or which will reduce the usage of the unit for its intended purpose. This also applies to defects which do not allow for normal operation conditions during production or which are objectionable or unattractive to the consumer.	2.50%
MINOR	A defect that is a departure from the established standards, having no significant effect on the production process or the usability or appearance of the units.	4.00%

DEFECT EXAMPLES

CRITICAL DEFECTS


1. Severe corrosion
2. Incorrect or missing markings.
3. Missing lacquer/coating or incorrect material.

MAJOR DEFECTS

1. Off specifications
 - a. Slit Widths
 - b. Thickness
2. Distorted, dented, heavily scratched, or punctured metal
3. Corrosion
4. Foreign matter which can be removed via air blowing.
5. Stains (including stains caused by lubrication)
6. Mixed slit widths in on pallets

MINOR DEFECTS

1. Small dents/marks that do not interfere with production process
2. Small scratches (with little/no aesthetic damage to product)

 ACME COSMETIC COMPONENTS	Procedure Name:	Metal Specifications
	Revision:	04
	Approved By: Melissa McManus Management Representative	Effective Date: 06/01/18
	Page 5 of 5	

Section 5

EQUIPMENT

N/A

Section 6

SAFETY (incl. LOCKOUT TAGOUT requirements)

N/A

REVISION LOG

Revision Number	Date of Revision	Change(s)
Original	N/A	N/A
01	04/12/17	Added Confidentiality watermark
02	11/15/17	Removed petrolatum, added Valspar reference (on Aluminum)
03	01/18/18	Added core inner/outer diameter for China slitting
04	05/17/18	Added coating specification(s) for aluminum