United States Department of Agriculture Agricultural Marketing Service Fruit and Vegetable Division

## **Fresh Products Branch Bulletin**

FPB 98-1TOLERANCE TESTING OF PRODUCE SIZING RINGS3/16/98

I. PURPOSE This bulletin is to set forth and standardize Branch procedures for determining tolerance verification of sizing rings. (Please remove bulletin FPB 98-1 dated 1/7/98, and replace with this version.)

II. BACKGROUND In 1988, the Branch set guidelines for sizing rings, including minimum thickness of metal and tolerances for variations of different size openings. The guidelines did not provide for sizers made of material other than metal. The updated guidelines, are as follows:

## Type of Material

1. Plastic or plastic composite materials for openings up to 1-3/8 inches providing the material is a minimum of 1/18 of an inch thick (.055). Other materials that absorb moisture are not approved for official product sizing and certification. There is no tolerance for sizing blades under the minimum thickness.

2. Aluminum or aluminum alloy for all diameters providing the blade is .06 of an inch thick. There is no tolerance for sizing blades under the minimum thickness. This is an increase from the original .04 specifications. Sizing blades previously purchased with .04 thickness will remain acceptable as long as the individual size openings meet the variations set forth in this bulletin.

## Acceptable Variation for Specified Round Openings

1. For openings up to 2-1/2 inches in diameter, no more than .005 of an inch (5 thousandths) larger or smaller.

2. For openings 2-1/2 inches or larger in diameter, no more than .008 of an inch (8 thousandths) larger or smaller.

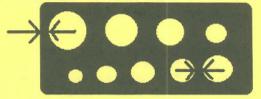
Width of Material at Narrowest Point Between Round Openings and From Round Opening to the Edge On Same Blade.

Distribution: HQ, FM, FS, CM

Originating Office: Field Operations Section

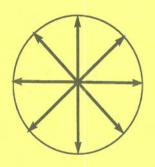
File Maintenance Instructions: File in Bulletin Binder

The minimum distance between openings or to the edge on the same sizing blade is .30 of an inch (30 hundredths).



III. POLICY To establish uniformity in the procedures used to determine tolerance verification of sizing rings, Branch policy is as follows:

> Using a micrometer or caliper capable of reading in the thousands the above tolerances on the respective size openings shall be applied. Two perpendicular measurements of the opening shall be made. If the readings are within tolerance, verification is achieved. If both readings are out of tolerance the blade shall be taken out of use. If one of these readings is found to be out of tolerance, two more perpendicular readings shall be taken with the four readings averaged and compared to the applicable tolerance. If the averaged tolerance is met, the respective size on that sizing blade shall be considered to be in tolerance. If tolerance is not met, then the sizing blade shall be taken out of use. Do not take more than four readings to achieve compliance with the specified tolerance.



NOTE: These requirements do not apply to nut sizing rings.

Bon

Larry B. Lace Branch Chief