

PROCEDURE NOTEProcedure Note No. 93-27Date: 8/10/93Temporary XEffective Date 8/24/93Review Date 5/31/94Permanent Type: Product Process Packaging Flavor Tobacco XMaterial Specifications X

This Procedure Note will supercede PN 92-40 (1992 Crop Flue-Cured Tobacco Processing Specifications), PN 93-3 (RJR Burley Processing Specifications), and PN 93-13 (Stem/Scrap Specifications).

SUBJECT: 1993 TOBACCO PROCESSING SPECIFICATIONS

BACKGROUND: At July 16, July 23 and July 30 meetings of Tobacco Processing, Leaf Processing, Engineering-Tobacco Processes, Tobacco Storage, Quality Assurance, and Leaf and Blends, two alternatives for processing 1993 crop flue-cured, burley, and Maryland tobaccos were discussed. Those alternatives, jointly developed by Leaf and Blends, Leaf Processing, and QA are:

- 1) Maintain the 1992 Processing Specifications.
- 2) Modify the 1992 specifications based on needs that have arisen due to the transition from a predominant use of by-products in G7 to other processes (CRES and uncut tobacco). Included in the modifications are: longer stems separated by stalk position, increased moisture targets for stems and scrap, and eliminating Kabat on RJR produced stems. The desired characteristics of stem and scrap size and moisture are stated in the specifications. However, because of the shortage of by-products and the necessity of speculative purchases in which little or no data are available, stems and scrap which exceed the specifications would not be rejected as long as the products are usable for the intended purpose.

ALTERNATIVE - RISK CONSIDERATIONS:

- 1) Alternative 1 fails to address the need to provide the by-products required to produce CRES and uncut tobacco with a higher, more consistent filling value, minimum product degradation, higher yields, and larger particle sizes.
- 2) Alternative 2 maintains the current strip processing specifications, nicotine specifications, and rework/process operating guidelines but increases stem and scrap moistures, increases stem length targets, provides stems for CRES by stalk position, sets moisture targets for stem fiber/stem scrap, and removes Kabat from RJR produced stems while maintaining current Kabat levels on dealer domestic and offshore stems.

BENEFITS

- Increased stem moisture and length - Increased CRES filling capacity, reduced energy costs for drying, reduced product degradation, and higher yields (see attached memos from Jerry Mitchell 7/23/93 and Danny Beeson 7/29/93).
- Stems by stalk position - increased CRES cylinder filling value - tests have shown that upper stalk stems yield greater than 50 points more than lower stalk stems (Jerry Mitchell 7/23/93).
- Increased scrap moisture - reduced energy for drying, less degradation, Improved yields, and Improved particle size (Danny Beeson 7/29/93).
- Eliminating Kabat from Brook Cove produced stems - reduces Brook Cove operating costs by at least \$100,000 per year based on expected 1993 production.
- Provides revised stem and scrap designations to cover current production with stem stalk positions included and new designations-to-be implemented with the Redried Inventory Update scheduled to be completed October 3, 1993, which will more clearly define flue-cured, burley, and Maryland scrap by particle size.

RISKS

- Increased stem length will increase the number of boxes and increase trucking costs. This cost increase is estimated to be \$75,000 per year (Danny Beeson 7/29/93). There are no anticipated incremental operational costs (Daryl Ball 7/27/93) or storage costs (Danny Beeson 7/29/93).
- There are no anticipated incremental operating costs associated with separating stems by stalk position since only grade marking changes are proposed. No operational changes are proposed (Jerry Mitchell 7/23/93).
- There is no incremental cost to the Brook Cove storage compound and storage space would be affected minimally by producing stems by stalk position (Mike Landy 7/21/93)
- There is no risk of spoilage associated with putting stems and scrap up at the recommended 11% moisture target. A test was conducted at Brook Cove where stems were processed at 13% moisture and no problems were seen (Daryl Ball 7/19/93). Scrap coming into tobacco processing has moistures within the range recommended. Dealers process their tobacco at the recommended moisture.

- There is little risk involved with the elimination of Kabat on the Brook Cove produced stems according to members of the Kabat team. Insects in Brook Cove stems have not been a problem in years past; the problems have been with dealer produced and off-shore stems, and it is recommended that Kabat continue to be applied to these stems.
- There is a maximum cost, estimated at \$205,000 per year, associated with purchasing stems and scrap at 11.0% instead of our current 9% (see attached Financial Impact Estimation). It is expected that filling capacity and yield improvements will offset these costs. Tests have shown that additional savings of \$2,256,000 can be realized by using longer stems. The impact of increased moisture will not be known until testing is completed in October, 1993 (Danny Beeson 7/29/93).

RECOMMENDATION:

- Adopt new specifications, Alternative 2.
- Review processing results in May, 1994, and determine future direction.

Recommended for Authorization:

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See attached sheets for recommended 1993 Processing Specifications, Stem and Scrap Designations and supporting memos.

Distribution Includes Signers and Product Standards File (Naomi Foote)

g:\PN93-27.rgs

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1993 PROCESSING SPECIFICATIONS

SPECIFICATIONS	BROOK COVE (Rotex)	DOMESTIC DEALER (Newcomb, Cardwell)	OFF-SHORE DEALER (Newcomb)
Size Specifications: (LCL/Target/UCL)			
On One Inch (%):	na/19	na/25*	na/30**
Total On Half Inch (%)	67/76	67/76	67/76
Pass Quarter Inch (%):	6/11	6/11	6/11
Pass Eight Mesh (%)	0.7/1.3	0.5/0.9	0.5/0.9
PERCENT MOISTURE SPECIFICATIONS:			
Strip			
◆ Flue-Cured	11.3/12.5/13.7	11.3/12.5/13.5	11.3/12.5/13.5
◆ Burley	12.0/13.0/14.5	12.0/13.0/14.5	12.0/13.0/14.5
Stem:	10/11/12	10/11/12	10/11/12
Scrap:	10/11/12	10/11/12	10/11/12
Stem Fiber/Stem Scrap	10/11/12	10/11/12	10/11/12
PERCENT STEM SPECIFICATIONS:			
Total Stem:	2.2/3.5	2.2/3.5	2.2/3.5
Objectionable Stem:	0.4/0.7	0.4/0.7	0.4/0.7
Stem Size:			
Flue-Cured	RJR mixed	RJR long and short	RJR long and short
Burley/Maryland	RJR mixed	RJR mixed	RJR mixed
KABAT SPECIFICATIONS (ppm):			
Strip: (min):	5	5	5
Stem (min):	0	5	5
NICOTINE SPECIFICATIONS:			
Grade Target:	+/- 0.5%	+/- 0.5%	+/- 0.5%
Range:	1.0%	1.0%	1.0%
REWORK/REPROCESS OPERATING GUIDELINES:			
Objectionable Stems: +0.7	restem	restem	restem
Total Stems: +3.5	restem	restem	restem
Strip Size:	store and monitor	rescreen where possible	
Moisture: High Low	reblend after screens store	adjust or reblend	
Low KABAT:	store and fumigate	store and fumigate	

* DOMESTIC TOBACCO
** TRIPLE TIP WHERE POSSIBLE

word/leaf/spco

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PN 93-27

RJR STEM SPECIFICATIONS**♦ STEM LENGTH****RJR SHORT STEMS (PRN 91-33 May 13, 1991)**

Av. Target Length: 1.00 inch
 Less than 5% over 2.5 inch
 Less than 10% under 0.5 inch

♦ STEM MOISTURE

- ♦ Upper /control Limit - 12.0%
- ♦ Target - 11.0%
- ♦ Lower Control Limit - 10.0%

RJR Mixed Stems (PRN 93-4 January 7, 1993)

Av. Target Length: 1.50 inch
 Less than 5% over 4 inch
 Less than 10% under 0.5 inch

♦ ALL STEMS SHOULD BE SCREENED FOR DIRT REMOVAL**RJR Long Stems (PRN 91-33 May 13, 1991)**

Av. Target Length: 2.50 inch
 Less than 5% over 4 inch
 Less than 10% under 0.5 inch

♦ LESS THAN 2% BUTT STEMS SHORTER THAN 1 INCH**STEM DESIGNATIONS****1. Brook Cove (RJR specifications)****♦ Flue-Cured Stems:**

- ♦ C Mixed stalk position, short lengths
- ♦ C1M Lower stalk position, mixed lengths
- ♦ C2M Mixed stalk position (including C grades), mixed lengths
- ♦ C3M Upper stalk position, mixed lengths
- ♦ CSF Mixed stalk position, stem fiber without scrap

♦ Burley Stems:

- ♦ K Mixed stalk position, short lengths
- ♦ KM Mixed stalk position, mixed lengths
- ♦ KSF Mixed stalk position, stem fiber without scrap

2. Dealer (RJR specifications)**♦ Flue Cured Stems:**

- ♦ CD Mixed stalk position, short lengths
- ♦ CDM Mixed stalk position, mixed lengths
- ♦ C1DL Lower stalk position, long length
- ♦ C2DL Mixed stalk position, long length
- ♦ C3DL Upper stalk position, long length
- ♦ CDSF Mixed stalk position, stem fiber without scrap

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Burley Stems:

- ◆ KD Mixed stalk position, short lengths
- ◆ KDM Mixed stalk position, mixed lengths
- ◆ KDL Mixed stalk position, long lengths
- ◆ KDSF Mixed stalk position, stem fiber without scrap

3. Dealer-Speculative Purchases (Not processed to RJR Specifications)**Flue-Cured Stems:**

- ◆ CDS Mixed stalk position, majority of short lengths
- ◆ CDMS Mixed stalk position, mixed lengths
- ◆ CDLS Mixed stalk position, majority of long lengths

Burley Stems:

- ◆ KDS Mixed stalk position, majority of short lengths
- ◆ KDMS Mixed stalk position, mixed lengths
- ◆ KDLS Mixed stalk position, majority of long lengths

RGS/STMEPCS/08-01-93

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REDRIED SCRAP CLASSIFICATION**BROOK COVE**

	<u>Current</u>	<u>Updated</u>	
Flue Cured	C624	C6/24	-6 mesh +24 mesh
Burley	K630	K6/30	-6 mesh +30 mesh
Maryland	M630	M6/30	-6 mesh +30 mesh

DEALER-RJR SUPERVISED PURCHASES

	<u>Current</u>	<u>Updated</u>	
Flue Cured			
	C 48D	C4/8D	-4 mesh +8 mesh
	C416D	C4/16D	-4 mesh +16 mesh
	C432D	C4/32D	-4 mesh +32 mesh
	C816D	C8/16D	-8 mesh +16 mesh
	C832D	C8/32D	-8 mesh +32 mesh
	C163D	C16/32D	-16 mesh +32 mesh
	CS32	CS32	Stem Fibers and Scrap Mixed 30% Max Stem
Burley			
	K48D	K4/8D	-4 mesh +8 mesh
	K416D	K4/16D	-4 mesh +16 mesh
	K432D	K4/32D	-4 mesh +32 mesh
	K816D	K8/16D	-8 mesh +16 mesh
	K832D	K8/32D	-8 mesh +32 mesh
	K163D	K16/32D	-16 mesh +32 mesh
	KS32	KS32	Stem Fibers and Scrap Mixed 30% Max Stem
Maryland			

Similar grade designations using M

EXAMPLE: M4/16D -4 mesh +16 mesh

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DEALER-SPECULATIVE PURCHASES

Classification of speculative purchases is a judgement of the Leaf Department based on limited samples for visual checks and little or no process data from dealers. The dealer will certify that the classification is correct and that stem and moisture specifications have been met.

	<u>Current</u>	<u>Updated</u>	
Flue cured			
	C48S	C4/8S	-4 mesh +8mesh
	C416S	C4/16S	-4 mesh +16 mesh
	C432S	C4/32S	-4 mesh +32 mesh
	C816S	C8/16S	-8 mesh +16 mesh
	C832S	C8/32S	-8 mesh +32 mesh
	C163S	C16/32S	-16 mesh +32 mesh
	CSS32	CSS32	Stem Fibers and Scrap Mixed 30% Max Stem
Burley			
	K48S	K4/8S	-4 mesh +8 mesh
	K416S	K4/16S	-4 mesh +16 mesh
	K432S	K4/32S	-4 mesh +32 mesh
	K816S	K8/16S	-8 mesh +16 mesh
	K832S	K8/32S	-8 mesh +32 mesh
	K163S	K16/32S	-16 mesh +32 mesh
	KSS32	KSS32	Stem Fibers and Scrap Mixed 30% Max Stem

Maryland

Similar grade designations using M
EXAMPLE: M4/16S -4 mesh +16 mesh

SCRAP SPECIFICATIONS**Size**

Maximum 10% greater than top screen, 10% less than bottom screen

Stem

Maximum stem content in No. 4 scrap - 0.4 percent