

**PRODUCT TESTING AND PRODUCT DEVELOPMENT  
BEST PRACTICES**

Contributions by:

British-American Tobacco Company, Cigaretten-Fabriken  
British-American Tobacco Company, Limited  
Brown & Williamson Tobacco Corporation  
Companhia Souza Cruz Industria E Comercio  
Imperial Tobacco Products, Limited

APRIL, 1992

Copy: 2

LIMITED: DO NOT COPY OR SHOW TO UNAUTHORIZED PERSONS.

202205136

**BAT Industries document for Province of British Columbia 15 April 1999**

PRODUCT TESTING AND PRODUCT DEVELOPMENT  
 BEST PRACTICES  
TABLE OF CONTENTS

	<u>Page No.</u>
FOREWORD . . . . .	1
OVERVIEW . . . . .	2
<b>1. PRODUCT RESEARCH/TESTING</b>	
FOREWORD . . . . .	3
PHILOSOPHY AND BEST PRACTICES . . . . .	4
CONSUMER NEEDS/BEHAVIOR TRACKING . . . . .	4
EXPERT SMOKING PANEL . . . . .	4
CONSUMER PRODUCT SCREENING . . . . .	5
FULL-SCALE CONSUMER PRODUCT TEST (CPT) . . . . .	5
CONTEXT ASSESSMENT . . . . .	6
AWARENESS, USAGE, AND CONVERSION TRACKING . . . . .	6
ON-GOING PRODUCTION . . . . .	7
ON-GOING CRITIQUE AND ADJUSTMENT . . . . .	8
COMPETITIVE TESTING PRACTICES . . . . .	8
<b>2. OVERALL PRODUCT DEVELOPMENT PROCESS</b>	
ESTABLISHING GOALS AND OBJECTIVES . . . . .	10
PROJECT ORGANIZATIONAL STRUCTURE . . . . .	11
PROJECT PLANNING AND EXECUTION . . . . .	14
PRODUCTION/COMMERCIALIZATION OF FINAL PROTOTYPE . . . . .	21
<b>3. CRITICAL USIB PRIMARY PROCESS OPERATIONS</b>	
FOREWORD . . . . .	23
PROCESS . . . . .	23
<b>4. PRODUCT FORMULATION</b>	
OVERVIEW . . . . .	27
LEAF BLEND . . . . .	27
BY-PRODUCTS . . . . .	33
CASING AND FLAVORING . . . . .	42
CIGARETTE DESIGN . . . . .	47
<b>5. APPENDIX</b>	
APPENDIX 1. SOUZA CRUZ PRODUCT BRIEF	
APPENDIX 2. GENERAL GLT AND PRIMARY PROCESS	

202205137

## FOREWORD

One of the major challenges facing BAT is to consistently deliver products which are judged by the consumers in each market to be superior to competitive offerings. Successfully meeting this challenge requires the effective application of innovative scientific capabilities to improve product performance. Management of the process by which this occurs - product testing and development - are critical to the ultimate success of these efforts.

Project management tools and techniques are essential in directing the product development process. Effective project management allows the balancing of the potential benefits of pursuing promising technologies with the overall project objectives, cost, and schedule. Also critically important is the consistent use of reliable, effective product development practices regarding the identification and evaluation of new technologies and designs.

This Handbook summarizes the best product testing and development practices currently utilized in BAT. It has been prepared by the B&W and BATCF staff with significant collaboration with BATCO, Souza Cruz, Imasco, and BAT Suisse. While the emphasis is on USIB, the testing and development process described here has equal application for all BAT products. The scope encompasses all phases of product design and testing from the establishment of initial product objectives through final consumer testing. Every product component is addressed in this framework - leaf blends, casings and flavors, reconstituted tobacco, ROOT Technology, non-tobacco components, and cigarette design.

## **OVERVIEW**

The taste characteristics of leading international cigarette brands are becoming increasingly uniform throughout the world. Changes which took twenty years in western Europe are already occurring in Latin America at an accelerated pace. Product Development BEST Practices recognize this and lead rather than resist change. BEST Practices accept as much standardization of materials as possible and are based on agreed measurement standards. BEST Practices strive for simplicity whether it be in characterization of leaf grades or formulation of flavors. BEST Practices avoid "mumbo-jumbo" and "not invented here." BEST Practices are factual, objective and receptive.

BEST Product Development Practices follow Total Quality principles.

Our Mission is Superior Customer Satisfaction:

- For product development, this means products preferred at the 95% confidence level in sequential monadic testing plus supporting attributes among target (200-400) consumers.

We work as a Team:

- With Marketing and Marketing Research in developing the Product Brief.
- With Manufacturing and Engineering in developing the product designs and technology transfer.
- With the combined expertise of the BAT Group for enhancing smoking quality and technical interchange.

We do the Right Things Right:

- By rigorous up-front project planning.
- By developing and testing hypotheses for product improvement.
- By ensuring that all materials and designs are in compliance with current and anticipated regulations.

We Provide Products and Services of the Highest Quality:

- By continuously increasing our scientific underpinnings of tobacco/smoke/sensory chemistry, and especially our understanding of Root technologies, and
- By using robust design principles which allow for variations introduced by our raw materials, suppliers, or process capabilities.