

TABLET COMPRESSION

HELTON M. M. SANTOS AND JOÃO J. M. S. SOUSA

University of Coimbra, Coimbra, Portugal

Contents

- 1 Introduction
- 2 Theory of Particle Compaction
- 3 Compactibility
- 4 Tablet Compression
- 5 Equipment for Tablet Compression
- 6 Tablet Press Tooling
- 7 Tablet Engraving
- 8 Tablet Shape and Profile
- 9 Tablet Bisect
- 10 Problems during Tablet Manufacturing
 - 10.1 Capping and Lamination
 - 10.2 Picking and Sticking
 - 10.3 Mottling
 - 10.4 Weight and Hardness Variation
- References

1 INTRODUCTION

Tablets are the most important pharmaceutical dosage form and their design has always been of great interest to pharmaceutical engineering. Since tablets are made by a process of die compaction, although commonly called tablet compression, many investigations have been involved in the task to describe the mechanisms involved in this process. Nevertheless, some considerations should be taken regarding the definitions of stages involved in tablet compression. Compression is one of two