



Standard Guide for Examination of Mechanical Checkwriter Impressions¹

This standard is issued under the fixed designation E 2285; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide provides procedures for examinations that should be used by forensic document examiners (E 444) for examinations and comparisons involving mechanical checkwriters and their impressions (exclusive of rubber stamp checkwriter impressions or computer generated checkwriter impressions).

1.2 These procedures are applicable whether the examination(s) and comparison(s) are of questioned and known items or of exclusively questioned items.

1.3 These procedures include evaluation of the sufficiency of the material available for examination.

1.4 The particular methods employed in a given case will depend upon the nature and sufficiency of the material available for examination.

1.5 This guide may not cover all aspects of particularly unusual or uncommon examinations.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

E 444 Descriptions of Scope of Work Relating to Forensic Document Examiners²

E 1732 Terminology Relating to Forensic Science²

E 2195 Terminology Relating to the Examination of Questioned Documents²

3. Terminology

3.1 *Definitions*—For definitions of terms in this Guide, refer to Terminology E 1732 and Terminology E 2195.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *blemish, n*—a small extraneous spot found near inked regions of checkwriter impressions that is characteristic of machines that use ribbons as their ink source.

3.2.2 *checkwriter, n*—a device manually or electrically powered or computer generated, designed to ink, emboss, print, perforate, or shred a monetary value, along with other peripheral information, onto a document.

3.2.3 *impression, n*—an image formed by pressure on the document.

3.2.4 *impression format, n*—the manner in which the paper is embossed or shredded.

3.2.5 *individual prefix, n*—a prefix especially designed for a particular customer.

3.2.6 *payee perforator, n*—an optional device on a checkwriter that perforates or shreds a pattern above the numeric impression region for the purpose of protecting the payee entry from alteration.

3.2.7 *perforation, n*—penetration through the document.

3.2.8 *platen, n*—a bar-shaped object that pushes the paper stock against the typeface and provides the pressure necessary to obtain an impression.

3.2.9 *prefix, n*—the portion of the checkwriter impression located immediately to the left of the numeric value.

3.2.10 *printing element, n*—the parts of the total checkwriter impression that are not parts of the prefix which may encompass the currency type, decimal points, and commas.

3.2.11 *ribbon shift, v*—the movement of a multi-colored inking ribbon allowing for a change in color to manifest itself in an impressed character.

3.2.12 *segment, n*—a single device on which is forged or attached a set of numerals or symbols which can be set by the operator in establishing an impression value. On some machines a different segment is used for each digit.

3.2.13 *variation, n*—imprecise duplication in multiple impressions from the same machine.

4. Significance and Use

4.1 The procedures outlined here are grounded in the generally accepted body of knowledge and experience in the field of forensic document examination. By following these procedures, a forensic document examiner can reliably reach an opinion concerning whether two or more impressions were

¹ This guide is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.02 on Questioned Documents.

Current edition approved March 10, 2003. Published April 2003.

² *Annual Book of ASTM Standards*, Vol 14.02.