

JIS

JAPANESE INDUSTRIAL STANDARD

**Handprinted Katakana Characters
for Optical Character Recognition**

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Handprinted Katakana Characters
for Optical Character RecognitionX 9005-1979
(Reaffirmed: 1985)1. Scope

This standard provides the specifications of handprinted katakana characters used in optical recognition, hereinafter referred to as the "OCR" and related specifications.

2. Definition of Terms

Major terms used in this standard are as follows:

- (1) katakana characters Forty nine characters, アイウエオ カキクケコ
サシスセソ タチツテト ナニヌネノ ハヒフヘホ マミムメモ ヤユヨ ラリルレロ ワヲン
"(voiced sound symbol), °(semi-voiced sound symbol) and-
(prolonged sound symbol).
- (2) character shape A shape of individual characters.
- (3) character style (Font) A set of standard character shapes for a group of katakana characters.
- (4) character stroke Segment with width constructing individual character.
- (5) stroke width Width of character strokes forming a character shape.
- (6) spacing Space intentionally kept between character strokes.
- (7) projection Short character stroke almost perpendicular to long character stroke, which is seen in characters, ア, ウ, オ, カ, キ, ケ, サ, セ, タ, ナ, ヌ, ヒ, ホ, マ, ム, メ, and ヤ (see character shapes in 4.)
- (8) barb Short character stroke affixed almost perpendicularly to the end of a long character stroke, which is seen in characters, ウ, カ, シ, セ, ソ, ツ, ヤ, ワ, and ン (see each character shape in 4.)
- (9) short character stroke Relatively short character stroke in a character shape consisting of a plural number of character strokes, which is seen in characters, シ, ソ, ツ, ネ, ホ, ン, and " (see each character shape in 4.)
- (10) depth of depression The depth of a depression in a character shape having a barb measured horizontally or vertically (see Attached Fig. 1).
- (11) document reference edge The edge used as standard on machine reading (see Attached Fig. 2).
- (12) printing frame Rectangle having sides parallel and perpendicular to the document reference edge, which shows the position of handprinting a katakana character (inside) (see Attached Fig. 2).

- (13) width of printing frame Horizontal distance between vertical lines composing a printing frame (see Attached Fig. 2).
- (14) height of printing frame Vertical distance between horizontal lines composing a printing frame (see Attached Fig. 2).
- (15) printing zone A smallest rectangular zone containing all of a series of printing frames in a line, which has sides parallel and perpendicular to the document reference edge (see Attached Fig. 3).
- (16) pitch of printing frame Horizontal distance between vertical bisector of the width of printing frames adjoining each other in a printing zone (see Attached Fig. 2).
- (17) Line spacing Vertical distance between horizontal bisectors of the height of printing frames adjoining each other in the row direction (see Attached Fig. 2).
- (18) space between printing frames Horizontal distance between two printing frames adjoining each other in a printing zone (see Attached Fig. 2).
- (19) character boundary The smallest rectangle within which all character strokes of a character shape are contained, which has sides parallel and perpendicular to the document reference edge (see Attached Fig. 2).
- (20) character stroke boundary The character boundary formed when a character stroke composing a character is deemed to be a character shape.
- (21) slope of vertical character stroke The ratio of horizontal and vertical sides at the character stroke boundary of a vertical character stroke composing a character shape (see Attached Fig. 4).
- (22) slope of horizontal character stroke The ratio of vertical and horizontal sides at the character stroke boundary of a horizontal character stroke composing a character shape (see Attached Fig. 4).
- (23) clear area A rectangular area containing the printing zone and space around it, which has sides parallel and perpendicular to the document reference (see Attached Fig. 3).
- (24) dropout color A color which can be distinguished from that of surrounding space by human eyes, whose hue and brightness cannot be detected by the OCR.

3. Kind and Designation of Character Style

The character style shall be of one kind, and is called OCR-HK.