

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 8125 : 2004

(JFPI)

**Graphic arts—Glossary—
Digital printing terms**

ICS 01.040.37; 37.100.10

Reference number : JIS Z 8125 : 2004 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from the Japan Federation of Printing Industries (JFPI), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Date of Establishment: 2004-02-20

Date of Public Notice in Official Gazette: 2004-02-20

Investigated by: Japanese Industrial Standards Committee
Standards Board

Technical Committee on Information
Technology

JIS Z 8125:2004, First English edition published in 2005-03

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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Printed in Japan

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Contents

	Page
1 Scope	1
2 Normative references	1
3 Notation.....	1
a) Notation of number	2
b) Notation of terms	2
c) Notation of definitions.....	2
4 Classification	2
5 Terms and definitions.....	2
00. Fundamental (general)	3
01. Font information management.....	6
02. Font metric	8
03. Font shape expression	12
04. Font information processing used for rendering	16
05. Font generator	18
06. Font design	18
07. Composition element.....	23
08. Prepress, imposition.....	41
09. Bookbinding	55
10. Description language, coding mode	73
11. Character type	76
12. Document component.....	81
13. Original copy	85
14. Proofreading	89
Alphabetical index.....	95

Graphic arts—Glossary— Digital printing terms

1 Scope This Japanese Industrial Standard specifies the main terms and their definitions used in relation to a digital printing technology.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS P 0001 *Paper, board and pulp—Vocabulary*

JIS X 4051 *Formatting rules for Japanese documents*

JIS X 4153 *Information technology—Processing Languages—Document Style Semantics and Specification Language (DSSSL)*

Remarks : **ISO/IEC 10179** is identical with the said standard.

JIS X 4154 *Standard Page Description Language (SPDL)*

Remarks : **ISO/IEC 10180** is identical with the said standard.

JIS X 4161 *Information technology—Font information interchange—Part 1 : Architecture*

Remarks : **ISO/IEC 9541-1** is identical with the said standard.

JIS X 4162 *Information technology—Font information interchange—Part 2 : Interchange format*

Remarks : **ISO/IEC 9541-2** is identical with the said standard.

JIS X 4163 *Information technology—Font information interchange—Part 3 : Glyph shape representation*

Remarks : **ISO/IEC 9541-3** is identical with the said standard.

JIS Z 8105 *Glossary of colour terms*

JIS Z 8123 *Graphic arts—Glossary—Fundamental terms*

JIS Z 8124 *Graphic arts—Glossary—trading terms*

JIS Z 8305 *Dimensions of printing types*

ISO/TR 9544 : 1988 *Information processing—Computer-assisted publishing—Vocabulary*

3 Notation The notation of number, the notation of terms, the notation of definitions in this Standard are as follows:

a) Notation of number

- 1) The number is given by the train of the 2-figure decimal digit separated by “.”. The top classification item is given by the leftmost 2-figure decimal digit, and the subclassification item is followed in its right direction. The rightmost 2-figure decimal digit is the sequence number within the same classification.

2) The top 0 of a 2-figure decimal digit shall not be a blank.

b) **Notation of terms**

1) In the case of two or more terms having the same meaning, all of them are described by separating using “,”. These terms shall be used with priority according to the order described.

2) When part of a term is surrounded by “()”, it may be omitted.

3) An abbreviation, etc. shall be given in “()” which follows a term.

c) **Notation of definitions** When a term has some definitions, they are individually specified, and all of definitions are separately described by attaching “a)”, “b)” to the front of each definition.

4 Classification In this Standard, the terms are classified as follows:

- 00. Fundamental (general)
- 01. Font information management
- 02. Font metric
- 03. Font shape expression
- 04. Font information processing used for rendering
- 05. Font generator
- 06. Font design
- 07. Composition element
- 08. Prepress, imposition
- 09. Bookbinding
- 10. Description language, coding mode
- 11. Character type
- 12. Document component
- 13. Original copy
- 14. Proofreading

5 Terms and definitions The terms and definitions shall be as follows:

Remarks : The array of terms is classified every classification item, and terms of a related concept are arranged. If there is a main concept, the terms sequentially in systematic order are arranged with the term corresponding to the main concept placed first and with the term corresponding to the lower-priority concept placed second.

00. Fundamental (general)

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
00.01	文字	The information expression element which has visualization expressions (shape, magnitude, design, etc.), the order of making strokes in writing a character, sound, meaning, the origin, function, etc. as an attribute. Remarks: The character in this Standard is targeted for only a visualization expression as an attribute.	character	In document information processing, only the limited attribute is often targeted, and the identifier such as a coding expression is assigned to the limited attribute.	MOZI
00.01.01	字体	The state of abstract structure of a little recognized as one kanji (Chinese character), which has a feature capable of clearly distinguishing from other characters for a visual perception.	abstract letter shape	In some standards of a kanji sign, the abstract letter shape is ranked as abstract concept, and what is realized as the concrete shape is defined as a letter form. In JIS X 0208 and JIS X 0213 , the subsumption standard is established and the same code position is given to them without distinguishing two or more abstract letter shapes within the scope of standard. In the "list of Chinese characters in common use" and the "list of abstract letter shape of kanji other than the table", the difference of letter form which is not considered to be the difference in abstract letter shape, but considered to be the difference in design in each is exemplified. Furthermore, the abstract letter shape which is different from the standard abstract letter shape while it is the kanji with the same meaning and pronunciation is called a variant character.	ZITAI

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
00.01.02	グリフ	The perceivable abstract graphic symbol with the difference in each design removed (see JIS X 4161).	glyph	The identification object of the identifier which is assigned in accordance with JIS X 4165 by GLOCOM (Global Communication Center) of the International University of Japan which is the International Registration Agency of ISO/IEC as required by an organization or an individual.	GURIFU
00.01.02.01	合字, リガ チャ	One glyph obtained by uniting some of two or more glyphs, and integrating them.	composite glyph, ligature	fí, fl, etc. are often used by uniting some of f, i and l, and integrating them.	GÓZI, RIGATYA
00.01.03	字形	What is actually expressed as a figure by handwriting, printing, a screen display, etc. with regard to character.	letter form	See the term of abstract letter shape.	ZIKEI
00.01.04	書体	The idea of a set of character or a symbol created based on the unified intention in order to use it for printing, a screen display, etc.	typeface		SYOTAI
00.01.04.01	フォント	The set of letter form created by a certain typeface.	font	For the metal type, it means a set of the same typeface and the same character size.	FONTO
00.01.04.02	システムフォ ント	The font built into system software.	system font		SISUTEMU FONTO
00.01.05	作字	Making a new letter form by combining the part of two or more characters, etc.			SAKUZI
00.02	地紋	The pattern attached to some or all of the ground of a printing area.		Usually, it is realized by repeating a certain unit pattern and covering with it.	ZIMON
00.03	タイポグラ フィ	a) The method for character printing. b) The idea and design of the printed matter using a character, or a character and an image.	typography	Although it refers to the letterpress printing technique which uses the metal type in a narrow sense, as the concept is expanded, it comes to refer to the character printing as a whole, and further the idea and design of the print. It is also related to the idea of typeface.	TAIPOGURAFI

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
00.03.01	組版	The general term of the work to arrange a character, an illustration, a photograph, etc. according to the specification of a manuscript and a layout.	composition	The composition does not include the imposition.	KUMIHAN
00.03.01.01	ページ物	The print with a certain level of number of pages created through the imposition process based on the page format having the almost fixed format.			PEIZIMONO
00.03.01.02	端物	The general term of the printed matter which consists of a single page or a small number of pages.		It is mainly used for commercial printings such as an advertisement, a slip, a business card.	HAMONO
00.04	オンデマンド 印刷	The method for printing the information required, when required, by only number of copies required for a required person by saving the digital data of a published matter, a catalog, etc. (see JIS Z 8124).	on-demand printing, demand printing		ON-DEMANDO INSATU
00.05	バリエアブル印 刷	Printing a variable data.	variable printing		BARIABURU INSATU
00.06	CIP3	The abbreviation of International Cooperation for Integration of Prepress, Press and Postpress. The industry-wide activities with the international spread and the data format defined by them aiming to unify the whole process of printing of a prepress, a printing and a post printing process, and exchanging the data of processing and control between each process.		The format for exchanging the data of processing and control between processes of a prepress, a printing and a post printing process is PPF (Print Production Format).	SIPPU-SURĪ
00.07	CIP4	The abbreviation of International Cooperation for Integration of Processes in Prepress, Press and Postpress. It refers to the activities in which the process control is added to CIP3.		There is JDF (Job Definition Format) is as the data format for CIP4.	SIPPU-FÔ

01. Font information management

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
01.01	欧文フォント	The font which indicates the Latin alphabet.			ŌBUN FONTO
01.02	和文フォント	The font which indicates Japanese.	Japanese font	Not only a kanji, a kana, a punctuation mark, etc. required for indicating Japanese, but also Arabic numerals, the Latin alphabet, etc. generally designed in agreement with a kanji, a kana, etc. are included.	WABUN FONTO
01.02.01	仮名フォント	The Japanese font composed of a hiragana and/or a katakana character.	kana font	A punctuation mark may be included.	KANA FONTO
01.03	数字フォント	The font composed of Arabic numerals.	numeric font	Symbols may be included.	SŪZI FONTO
01.04	中文フォント	The font which indicates Chinese.	Chinese font		TYŪBUN FONTO
01.05	ハングルフォント	The font which indicates the Korean Hangul alphabet.	Hangul font		HANGURU FONTO
01.06	記号フォント	The font composed of a punctuation mark and other symbols.	sign font		KIGŌ FONTO
01.07	外字フォント	The font composed of gaiji.	gaiji font		GAIZI FONTO
01.08	パイフォント	The font only for a character or a symbol which is not included in the usual European-languages font.	pi font		PAI FONTO
01.09	ファミリーフォントファミリー	The set of font to which a change of character width and so forth are attached with the common origin or the fixed format in the design of a typeface.	family, font family	It is also called with regard to a Japanese font. The parameter which gives the change in a family, in the Japanese font, is mainly based on a weight. The parameter which gives the change in a family in the European-languages font is diverse, and there are a stereo or italics, a weigh, an average character width, the length of descender, the length of ascender, etc.	FAMIRĪ, FONTO FAMIRĪ

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
01.09.01	ウェイト	The index of thickness of the drawing line of letter form in a typeface.	weight	There are no fixed criteria in the notation of a weight, and even if it is the same notation, the thickness of line often differs according to typefaces.	UWEITO
01.09.02	立体, ローマン	The European-languages font designed in the upright form.			RITTAL, RÔMAN
01.09.03	イタリック	The European-languages font designed aslant on the right.	italic		ITARIKKU
01.10	正体	The upright prototype letter form.		It is named in contrast to the wide, the narrow, and the slant.	SEITAI
01.11	変形	Applying expansion, shrinkage, slant, etc. to the upright prototype letter form in one direction, transversally or longitudinally, or the letter form to which the above operation was given.	deforming		HENKEI
01.11.01	斜体	One type of the deformation, and either or both of the transversal frame and the longitudinal frame of a character is or are made slant.	slant		SYATAI
01.11.02	長体	One type of the deformation, and the transversal width of a character is shrunken.	narrow		TYÔTAI
01.11.03	平体	One type of the deformation, and the vertical direction of a character is shrunken.	wide		HEI(HIRA)TAI
01.12	(フォント情報 管理の)送り	The displacement between the reference points to which characters lined adjacently correspond, which is defined when the font is designed.	escapement		(FONTO ZYÔHÔ KANRI-NO) OKURI

02. Font metric

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
02.01	フォントメトリク, フォント配置量	The general term of various measurement information including the size information common to the glyph expression included in a font (see JIS X 4161 and JIS X 4162).	font metric		FONTO METORIKU, FONTO HAITRYÔ
02.01.01	グリフメトリク, グリフ配置量	The general term of various measurement information including the size information common to peculiar to one letter form (see JIS X 4161 and JIS X 4162).	glyph metric		GURIFU METORIKU, GURIFU HAITRYÔ
02.02	字幅, セット	The size of the outer frame of the character of the direction to arrange. It is generally indicated by the value obtained by dividing the absolute value of width by the character size. "em, bai, or hun" are used as an unit.	character width, set	The width obtained by adding both side bearings to the rectangle circumscribed to glyph in the European-languages font.	ZIHABA, SETTO
02.02.01	a-z レンガス	The sum of the character width of the whole characters from a to z.	a-z length		a-z RENGUSU
02.02.02	プロポーショナル	Having the character width independently every character while the character width is not fixed in one font.	proportional	The European-languages font is usually made so that the proportional is satisfied.	PUROPOŠYONARU
02.02.03	モノスペース	Having the equal value for all the character widths in one font.	mono-space	Each character of a Japanese font usually has a mono-space, and it is used in the design of the square virtual body.	MONO-SUPÊSU
02.03	サイドベアリング	The length from the left end of the rectangle circumscribed to glyph of the European-languages font to the left side of the outer frame of character or the length from the right end to the right side.	side bearing	The side bearing in the left side may be written as LSB (Left Side Bearing), and the side bearing in the right side may be written as RSB (Right Side Bearing).	SAIDO BEARINGU

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
02.04	ベースライン, 並び線	The fundamental virtual line on which many glyphs in a font gather in the European-languages font, etc. (see figure 2.1).	baseline (alignment line in ISO/IEC 9541-1)	The main characters of European languages are designed on the basis of the virtual line called the base line, and characters are arranged when the composition is performed.	BÊSU-RAIN, NARABISEN
02.05	ｘハイト	The height of a small letter x measured from the base line of a European-languages font (see figure 2.1) (see ISO/TR 9544).	x-height	A small letter x is designed so that the lower end of a character aligns on the base line. Since there is no overshoot, it is used as criteria of the height of a small letter.	x-HAITO
02.05.01	ミーンライン	The virtual line parallel to the base line which shows the height of a small letter of European languages (see figure 2.1).	mean line	It is often called an x-line.	MÎN-RAIN
02.06	キャップハイト	The height of capital letter measured from the base line of a European-languages font (see figure 2.1).	cap height		KYAPPU HAITO
02.06.01	キャップライン	The virtual line which shows the height of capital letter of European languages (see figure 2.1).	cap line		KYAPPU RAIN
02.07	アセンダ	The part extended above the x height of characters such as b, d, f, h, k, l, t of a European-languages small letter (see ISO/TR 9544).	ascender		ASENDA
02.07.01	アセンダライン	The virtual line parallel to the base line which shows the topmost part of an ascender (see figure 2.1).	ascender line		ASENDA RAIN
02.08	ディセンダ	The part extended below the base line of characters such as g, j, p, q, y, of a European-languages small letter (see ISO/TR 9544).	descender		DESENDA

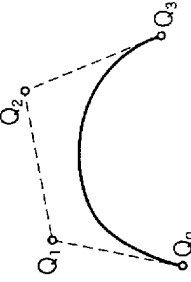
No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
02.08.01	ディセンダラ イン	The virtual line parallel to the base line which shows the lowermost end of a descender (see figure 2.1).	descender line		DESENDA RAIN
Figure 2.1 Reference font metric of European languages					
02.09	オーバッシュ ト, オーバハ ング	Designing so that the circular or acutely-angled part of the upper part or the bottom part of O, A, V of capital letter and o, c, v, of small letter, etc. of European languages is slightly protruded from the base line, or the cap line or mean line (see JIS X 4163).	overshoot, overhang	When designing so that these characters align at the same height as other characters, they tend to look small visually. The overshoot corrects it.	ÔBASYÛTO, ÔBAHANGU
02.10	文字サイズ	The size of character. Usually, the length of the outer frame or the imaginary body in the direction of line feed of a character.	character size	For the unit indicating the size of character, in addition to the point (1 point = 0.351 4 mm) specified in JIS Z 8305, Q (1 Q = 0.25 mm) is mainly used. For the font for newspapers, 1 U (0.01 1 inches) is the unit of a character size.	MOZI SAIZU

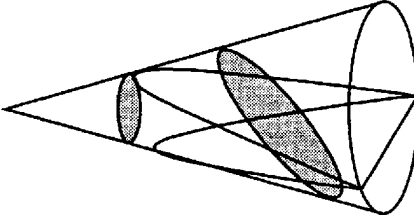
No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
02.10.01	ポイント	The unit of a character size. 1 point is equal to 0.351 4 mm (see JIS Z 8305).	point	There are some point systems (Fournier point system, Didot point system, etc.), and the American point system is regularly used in Japan. In the proofreading and editing work, it is written as “ $\frac{1}{72}$ ” (PO). It is also used as the unit which indicates the size of letter space, letter feed, line space or line feed. 1 point may be equal to $1/72$ mm $\times$ 25.4 mm depending on a point system.	POINTO
02.10.02	Q	The unit of a character size. 1 Q is equal to 0.25 mm.		It is the size of a quarter of 1 mm, and it is expressed by Q taken from the initial of quarter. It is also used as the unit which indicates the size of letter space, letter feed, line space or line feed. In this case the unit of H ($1 H = 1 Q = 0.25$ mm) is also used.	
02.10.03	全角	a) The size of the character of the square to which deformation is not applied. b) The relative unit of the length equal to a).		It is equivalent to em.	ZENKAKU
02.10.04	エム	The relative unit of the length equal to a character size (see ISO/TR 9544).	em	Since the ratio of height to width of M of a European-languages character is about 1, em has been treated as full width. It is mainly used for the case of European languages.	EMU
02.10.05	二分, 半角	The length of one-half the full width.			NIBU (NIBUN), HANKAKU
02.10.06	エン	The width of one-half the character size (see ISO/TR 9544).	en	Since the ratio of height to width of n of a European-languages character is about one-half, en has been treated as NIBU. Mainly used for the case of European languages.	EN

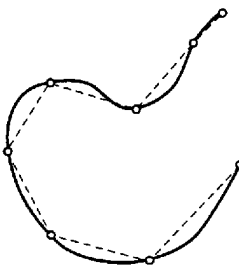
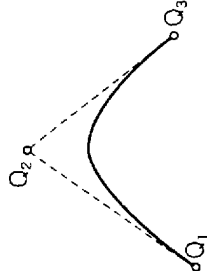
No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
02.10.07	三分	The length of a third of the full width.			SANBU (SANBUN)
02.10.08	四分	The length of a quarter of the full width.			SIBU (SIBUN)
02.11	仮想ボディ	The virtual rectangle area occupied by one character.	imaginary body	The metal type has a rectangular column called body, and its cross section is a rectangular portion occupied by a character. Since there is no physical body in phototype-setting and the character of a digital font, it is used as the criteria at the time of designing letter form or arranging a character by creating the area equivalent to it virtually.	KASÔ BODI
02.12	字面	The area of letter form actually indicated.	face	The size of face is based on the size of imaginary body. The actual standard face of a kanji is one size smaller than an imaginary body, and the face of a kana is often further one size smaller than a kanji.	ZIZURA

03. Font shape expression

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
03.01	ビットマップ フォント	The font which expresses the shape of glyph by dividing face in a grid pattern, and by designating black and white to each square of the grid.	bitmap font		BITTO-MAPPU FONTO
03.02	グレースケール フォント	The font of a system expressing the shape of a character using also midtone in addition to a binary of white and black.	grayscale font	It is effective for marking a character in the marking system which is low especially in resolution.	GURÊ-SUKÊRU FONTO

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
03.03	ストローク フォント	The font which expresses a glyph shape by the vector of the skeleton of its drawing line.	stroke font		SUTORÔKU FONTO
03.04	アウトライン フォント	The font which indicates the profile of a character with a mathematical formula (see JIS Z 8124).	outline font		AUTORAIN FONTO
03.04.01	ベジエ曲線	One of the curves used for the outline representation of an outline font. There are the "interpolation method" and the "approximating method" in making the curve which the designer imagined approximate on a computer, and a Bézier curve belongs to the approximating method. If it is expressed by a diagram, it is as follows.  Q_0 and Q_3 are called an extreme point (or a start point, an end point), and Q_1 and Q_2 are called a control point.	Bézier curve	This name comes from Bézier of France who proposed this curve. The Bézier curve has the following features. - The operation such as rotation is easy to perform. - The indication of curves is easy to perform. - The amount of data can be lessened as compared with the broken line approximation. It is used for the general-purpose use for expressing a font shape from these features. There is the "extended Bézier curve" as the approximated curve which introduced a factor which controls a swelling into the formula of Bézier curve. The "extended Bézier curve" enables the expression of multiple Bézier curves by using one extended Bézier curve.	BEZYE KYOKUSEN

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
03.04.02	円すい(錐)曲 線	One of the curves used for the outline expression of outline font. The cutting plane figure obtained by cutting a cone with a plane which does not include the apex of the cone.	conic curve	The location of a cut makes a circle, an ellipse, a parabola, and a hyperbola (see the following figure). 	ENSUI KYOKUSEN

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
03.04.03	スプライン曲線	One of the curves used for the outline expression of an outline font. The typical approximated curve of an interpolation method. It is defined as a curve which passes sequence of points. Since generally the increase of sequence of points makes the order of formula higher, and as a result it may become different from an intention of design, the range is divided into some parts, and a polynomial equation is applied to each part. The curve obtained in this way is called a spline curve. The example of a spline curve is shown in the following figure. 	spline curve	A spline originally refers to a free ruler, and it is named from generating curves so that when a sequence of points is given, the smooth curve which passes along this sequence of points is created by a free ruler.	SUPURAIN KYOKUSEN
03.04.04	Bスプライン曲線	One of the curves used for the outline expression of an outline font. The curve generated using the B spline basis function. The example of a B spline curve is shown in the following figure. 	B-spline curve	A curve is expressed by making the vertices of a polygon into the control point as is the case with a Bézier curve. Since the normalized B spline basis function which takes the value which is not 0 only in a specific section is used, there is an advantage such that the effect of the control point is localized. As compared with a Bézier curve, it is easy to express the curve connected continuously and smoothly to curvature.	B-SUPURAIN KYOKUSEN

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
03.05	グリフ座標系	The two-dimensional Cartesian coordinate system used for defining the shape of glyph and the amount of glyph arrangement (see JIS X 4161).	glyph coordinate system		GURIFU ZAHYÔKEI
03.06	ステム	The main drawing line which constitutes the shape of glyph (see JIS X 4163).	stem	It is mainly used for a European-languages font. In JIS X 4163 , it is applied also to a kanji.	SUTEMU
03.07	ヒンテイング	The procedure designation information or the declaratory designation information added to the geometrical shape of glyph for saving the balance and feature of glyph (see JIS X 4163).	hinting		HINTINGU

04. Font information processing used for rendering

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
04.01	レンダリング	Preparing how the information indicating the shape of a character should be drawn in the memory for display.	rendering		RENDARINGU
04.02	ラスタ化	Drawing the data converted by rendering in the actual memory for display.	rasterization	It is also called RASUTARAIZU (rasterize). In JIS X 4163 , it refers to the hinting and the processing including filling. The software or the apparatus which performs rasterization is called rasterizer.	RASUTA-KA
04.02.01	スケーリング	The processing performed so that the designated display size is obtained in order to display font data.	scaling	Since especially an outline font is described by the method independent of a display size, this processing is needed.	SUKERINGU

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
04.02.02	塗りつぶし	The processing performed so that all the insides of an outline are made into the specified colour.	filling		NURITUBUSI
04.02.03	ジャギー	The unevenness of a display outline based on the structure of raster data.	jaggy		ZYAGÍ
04.02.03.01	スムージング	The processing to remove and reduce jaggies or the unnecessary unevenness other than those.	smoothing	It is also called HEIKATUKA. Smoothing the jaggies at the time of expanding especially a bitmap font is called HEIKATUKA (smoothing) of a dot.	SUMÚZINGU
04.02.03.02	アンチエイリアス	One of the techniques which smoothes jaggies seemingly. The processing to make jaggies inconspicuous by interpolating the pixel of the contour part where jaggies occur in neutral colours.	anti-aliasing	One technique of smoothing.	ANTI-EIRIASU
04.02.04	キャッシング	The processing to reuse the rasterized data in order to reduce the processing time of font data.	caching	The location where the rasterized data is stored when caching is performed is called KYASSYU (cache) or FONTO KYASSYU (font cache).	KYASSINGU
04.03	グレースケール	The multi-valued data for gradation expression including a monochromatic intermediate value.	grayscale		GUREI-SUKEIRU
04.04	黒み, 組上り 濃度	The visual concentration by the relative thickness of the displayed font.	typographic colour	It is based on the relative width of main stems, etc. in the case of a European languages font.	KUROMI, KUMIAGARI NÓDO

05. Font generator

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
05.01	(フォントデザイン)のグリッド	The grid defined in order to place the data point on the outline which constitutes a letter form.	grid		(FONTO DEZAIN NO) GURIDDO
05.01.01	グリッドサイズ	The minimum interval between the data points on the outline which constitutes a letter form.	grid size		GURIDDO SAIZU
05.02	原字	The character figure created by a typeface designer.	artwork	When emphasizing that it is especially an analog, it is called ANARO GU GENZI (analog artwork).	GENZI
05.03	デジタル化	Making the digital data of a character from an analog artwork.	digitizing		DIZITAIZINGU
05.04	フィッティング	Applying a straight line or a curve to the artwork or the rasterized data faithfully in creating an outline font.	fitting		FITTINGU
05.05	(フォントの)補間	Generating the intermediate shape from the information on two or more shapes.	interpolation	For example, generating a medium face from a light face and a bold face in creating a font as a family.	(FONTO NO) HOKAN

06. Font design

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
06.01	印刷書体	(Breakdown name)			INSATU SYOTAI

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
06.01.01	和文書体	The typeface for displaying Japanese.		The character which constitutes a typeface includes a kanji, a kana, a European language character, a punctuation mark, a sign, etc. For a kana or European languages, they are often used in combination with other typefaces. The main typeface samples are shown as follows. 明朝体 ゴシック体 丸ゴシック体 教科書体 楷書体 行書体 隷書体 江戸文字 ポップ書体	WABUN SYOTAI

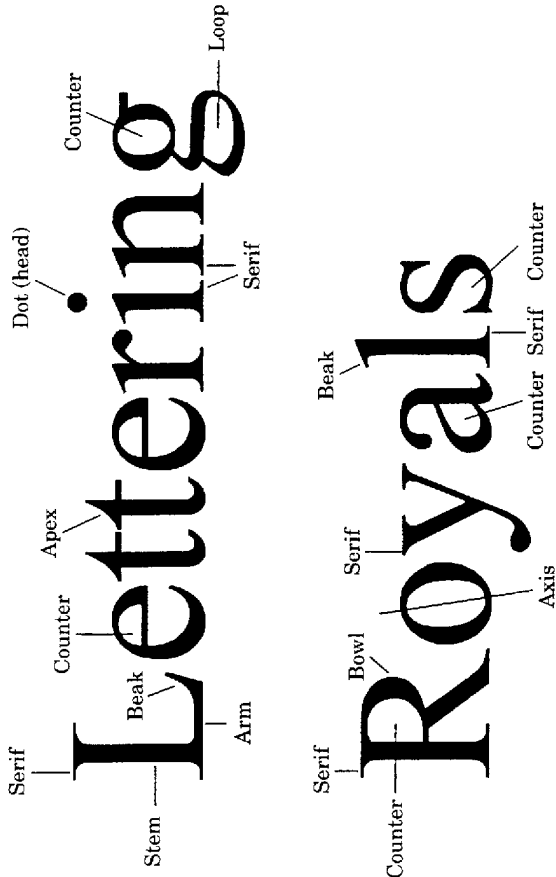
No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
06.01.02	欧文書体	The typeface for displaying the language spelled in the Latin alphabet.	roman typeface	The main typeface samples are shown as follows. Sanserif Roman <i>Italic</i> Typewriter	ÔBUN SYOTAI
06.01.03	本文書体	The typeface aiming to use for the text of a book, a journal, etc.	text typeface, book typeface	A Mincho typeface in Japanese, and a roman in European languages are often used, which attaches importance to readability. They are often used in a size of 8 points to 12 points.	HONBUN SYOTAI
06.01.04	見出し書体	The typeface aiming to use for a header.	display typeface	It is the typeface which attaches greater importance to the power to appeal than to readability. It is used not only for a header, but also for a flyer, a signboard, etc.	MIDASI SYOTAI
06.01.05	新聞書体	The typeface aiming to use for a newspaper text, a header, etc.	newspaper typeface	In Japan, the newspaper typeface for a text is a flat Mincho typeface, and the readability is improved by making the space within a character larger.	SINBUN SYOTAI
06.02	モジュール	The set of the dimension used as the criteria when designing a European-languages typeface.	module	It is given as a base line, a cap line, a mean line, an ascender line, a descender line, etc.	MOZYÛRU
06.03	ストローク	The part of a character which can be written with one stroke.	stroke		SUTORÔKU
06.04	エレメント	The element which constitutes a letter form.	element		EREMENTO

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
06.04.01	漢字の要素 メント	The element which constitutes a letter form of a kanji.		Although the name and the breakdown are not fixed, the typical elements and the name of the part are shown in figure 6.1.	KANZI NO EREMENTO
Figure 6.1 Elements of typical KANJI					
06.04.02	仮名の要素 メント	The element which constitutes the type-face of a kana.		Although the shape of a hiragana is diverse according to the way of handling a brush, it can be classified into the element for performing the design unification. The element of a typical hiragana and its name are shown in figure 6.2.	KANA NO EREMENTO

Figure 6.1 Elements of typical KANJI

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
06.04.03	欧文のイレメント	The element which constitutes the type-face of European languages.		The element of typical European languages and its name are shown in figure 6.3.	ÔBUN NO EREMENTO

Figure 6.2 Element of typical HIRAGANA

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
		 Figure 6.3 Element of typical European languages			

07. Composition element

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.01	組方向	The horizontal composition or vertical composition.			KUMI-HÔKÔ

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.01.01	横組	Arranging a character horizontally from the left to the right in a line, a line from the top to the bottom in a page, a column from the left to the right. Furthermore, the condition that the character is arranged in such a way.	horizontal composition		YOKOGUMI
07.01.02	縦組	Arranging a character vertically from the top to the bottom in a line, a line from the right to the left in a page, a column from the top to the bottom. Furthermore, the condition that the character is arranged in such a way.	vertical composition		TATEGUMI
07.02	アキ	The space between adjoining characters or adjoining lines.	space	The relative values to the character to be used (em space, en space, etc.) or the absolute value to the character to be used (point unit, Q unit, etc.), which specifies the amount of space.	AKI
07.03	スペーシング	Leaving a word space of European languages and/or a space between lines.	spacing	It is also called ZIKUBARI. It may be used for the meaning of a letter spacing.	SUPEISINGU
07.04	字間	The space between the virtual bodies of two adjoining characters of the same line.	letter space		ZIKAN
07.04.01	字間調整	Changing a letter space.	letter spacing	In European languages, it is called RETÁ SUPEISINGU.	ZIKAN TYÓSEI
07.04.02	字送り	The distance between the reference points of adjoining characters of the same line.			ZI-OKURI
07.04.03	ベタ組	Arranging characters without leaving a letter space by touching the imaginary body.	solid, solid matter	It is also called ZIKAN BETA. When arranging characters without leaving a space between lines, it is called a solid of GYÓKAN BETA.	BETAGUMI

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.04.04	アキ組	The method for arranging characters by putting a fixed space between characters.		As examples of AKIGUMI, there are the case where the letter space of a haiku is made to be a quarter of space or a half of space, the case where the letter space of a Chinese poetry is made to be a half of space, and so forth.	AKIGUMI
07.04.04.01	均等割り	Leaving a letter space uniformly, and having both ends of a letter string justified to the head of the line and the end of the line.	equal space		KINTÓWARI
07.04.05	字取り	The method for arranging characters by having the head and the end of a letter string justified to both ends of the length specified by the multiple of a using character size.		It is also called BAIDORI. For example, in the case where in the composition of a list of names six characters are picked as a name, when a name is composed of less than six characters, surplus space is equally divided, and when a name is composed of seven characters or more, the length of six characters is kept by deforming the characters.	ZIDORI
07.04.06	トラッキング	The function to change a character feed totally from a character feed of solid. In European languages, changing a character feed totally from a peculiar character feed which an individual character has.	tracking	There may be a case where a letter space looks wider when a character size of the same typeface made to be larger. In order to correct this, a total letter space is shortened by using tracking. To the contrary, when a character size is made to be smaller, there may be a case where a letter space looks shortened, and therefore the composition with a letter space made to be wider may be performed.	TORAKKINGU

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.04.07	カーニング	Performing the letter spacing by feeding characters using the different character width from the peculiar character width (usually narrower than the peculiar character width).	kerning	It is called PEA KÂNINGU (pair kerning) to perform the adjustment of a letter spacing by setting the amount of increase and decrease every combination of the back and forth characters such as "A" and "V", "T" and "O", "r" and "e", etc.	KÂNINGU
07.04.08	詰め組	The method for arranging characters by tightening a character feed as compared with that of solid.		There are a uniform tightening, a face tightening, an encroachment tightening, etc. It is often used for the field related to advertising print media. It is also called TUME.	TUMEGUMI
07.04.08.01	仮名詰	The method for arranging characters by tightening the letter space between a kana and an adjoining character as compared with that of solid.	kana-tracking, kana-kerning	A uniform tightening and a face tightening are typical.	KANATUME
07.04.08.02	均等詰	The method for arranging characters by tightening a fixed amount of the letter space as compared with solid.			KINTÔTUME
07.04.08.03	食込み詰	The method for arranging characters by tightening to the space within a character and to the area of face of a character.		There are a method in which the amount of tightening of the adjoining characters is given in the table, a method in which the amount of tightening is calculated from the outline information of adjoining characters, etc.	KUIKOMITUME
07.04.08.04	字面詰	The method for arranging characters by tightening to such a degree that the face such as a kana, a punctuation mark does not overlap.			ZIZURATUME
07.04.09	和欧間スペース	The space between the adjoining Japanese part and European-languages part in the mixed typesetting of Japanese and European languages.			WA-ÔKAN SUPÊSU

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.04.10	ワードスペース, (欧文の) 語間	The space between words in European languages.	word space	Although the word space from a quarter to a third of a using character is desirable as the standard word space, it differs according to the condition of a using typeface, a line length, etc.	WÂDO SUPÊSU, (ÔBUN NO) GOKAN
07.04.11	分ち組	The method for arranging characters by putting a space between each constituent taking the word constituting a sentence and its upper component as a unit.			WAKATIGUMI
07.05	行	(Breakdown name)	line		GYÔ
07.05.01	行幅	The length in the direction of line feed of the imaginary body in the character of the largest character size of the same line.			GYÔHABA
07.05.02	行間	The distance between the imaginary bodies in the character of the largest character size of adjoining lines.		The space between lines is usually 1/2 to 1 times as long as the line width.	GYÔKAN
07.05.03	行送り	The distance between the reference points of the adjoining lines.	line feed		GYÔ-OKURI
07.05.04	行長	The length of a character line composed by performing the justification (see JIS Z 8124).	line length		GYÔTYÔ
07.05.04.01	字詰	The number of characters in the case where the line length is specified by the multiple of a character size.			ZIZUME
07.05.05	改行	Beginning a new line.	line feed, line break		KAIGYÔ
07.05.06	行頭	The position where a line starts.	line head		GYÔTÔ

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.05.06.01	天付き	a) Justifying to the head of the adjoining lines by using a half of the character width, etc. for the parenthesis located in the line head. b) Justifying to the head of the adjoining lines without performing the indent of the line head in the first line of the paragraph.			TENTUKI
07.05.06.02	字下げ	Moving the position of the line head in the direction of the line end.	indent		ZISAGE
07.05.07	行末	The position where a line ends.	line end		GYÔMATU
07.05.07.01	字上げ	Moving the position of the line end in the direction of the line head.	indent		ZIAGE
07.05.08	行取り	Securing the magnitude of the direction of a line feed of the area where a header, etc. are arranged by a line unit.			GYÔDORI
07.06	字詰方向	The direction in which one character is followed by the next character in one line.			ZIZUME HÔKÔ
07.07	行送り方向	The direction in which one line is followed by the next line.			GYÔ-OKURI HÔKÔ
07.08	そろえ	(Breakdown name)			SOROE
07.08.01	上そろえ	a) The method for arranging by justifying to the upper side of a character in the case of the horizontal composition. b) The justification to the line head in the case of the vertical composition.			UE-SOROE
07.08.02	下そろえ	a) The method for arranging by justifying to the lower side of a character in the case of the horizontal composition. b) The justification to the line end in the case of the vertical composition.			SITA-SOROE

No.	Term (Japanese character)	Definition	English equivalent	Informative	Reading
07.08.03	左そろえ	a) The method for arranging by justifying to the left side of a character in the case of the vertical composition. b) The justification to the line head in the case of the horizontal composition.	b) flush left		HIDARI-SOROE
07.08.04	右そろえ	a) The method for arranging by justifying to the right side of a character in the case of the vertical composition. b) The justification to the line end in the case of the horizontal composition.	b) flush right		MIGI-SOROE
07.08.05	ベースライン そろえ	The method for arranging by justifying the baseline in European languages.			BEISURAIN-SOROE
07.08.06	行頭行末そろえ	The method for arranging by justifying the first character of each line to the line head and justifying the last character of each line to the line end.	justification	It is also called GYÔ SOROE or TÔMATU SOROE. In European languages, it is also called ZYASUTIFIKÊSYON (justification).	GYÔTÔ GYÔMATU-SOROE
07.08.07	行頭そろえ	Justifying the initial character of a character string to the position of line head.			GYÔTÔ-SOROE
07.08.08	行末そろえ	Justifying the final character of a character string to the position of line end.			GYÔMATU-SOROE
07.08.09	中央そろえ	Justifying the centre of a character string to the central position between the line head and the line end.	centring		TYŪÔ-SOROE
07.08.10	ラグ組	The method for arranging characters in which the line head is justified in solid, but the line end is not justified.			RAGUGUMI
07.09	禁則処理	The treatment performed in order to avoid prohibitions such as a line head wrap, a line end wrap, a prohibition on separation (division).			KINSOKU SYORI