





P22 TYPE FOUNDRY

A computer font of **GD&T** symbols

(Geometric Dimensioning & Tolerancing)

Complies with ASME Y14.5M-1994

Letters A-Z are in the Shift a-z positions.

Numbers are in the 1-0 positions.

Numbers without frames are in the **Alt 0131-0140** positions.

P22 GD&T is designed to be used along with whatever font is chosen as body copy. When using 12pt Times, just type the necessary GD&T characters (using the accompanying chart) then select them and choose P22 GD&T from the font menu. Times will then become P22

## **HOW TO USE THE FONT**

GD&T and proportionally the correct size.

The font is fairly straightforward, refer to the character map for the location of the symbols. To maintain correct spacing always use the vertical line (\) as a spacer. To get \( ---\.\text{0.02} \) type **a** \( \cdot \cdot 0 2 \) 1

Here are some examples and how to create them:

To get **8** × **45**°

Type [ 8 X ` 4 5 / ]
To get \_\_\_\_\_Ø0.08@A

Type | \w 0 . 0 8 m \ A

## HOW TO USE THE SPECIAL FEATURES OF THE FONT

To make use of the Datums; type the top and bottom datums after the letter. Type the right datum after the right frame end, and the left datum

before the left frame beginning. To get A type [A']
To get A ▼ type [A]"

The Arc's are also typed after the numbers. If 1 number is typed follow it with the (<), If 2 numbers are typed follow them with the (>), If 3 numbers are typed follow them with the (?).

To get î type Alt-0131 <

To get 24 type Alt-0132 Alt-0134 >

To get 456 type Alt-0134 Alt-0135 Alt-0136 ?

The Dimension not to scale underline is achieved by typing after each number and decimal point.

To get 14.5 type 1 Alt-0153 4 Alt-0153 . Alt-0153 5 Alt-0153

To get 44.5 type 4 Alt-0153 4 Alt-0153 . Alt-0153 5 Alt-0153

The Datum Target, Composite Position symbol and the Target point are included. To make them the correct size they must be doubled from whatever point size is being used. These characters are only functional by themselves they do not work with the rest of the font.

SYMBOL NAME	SYMBOL	KEY	SYMBOL NAME	SYMBOL	KEY
STRAIGHTNESS	IEI	a	FEATURE CONTROL FRAME (LEFT)	[	. [
FLATNESS		b	FEATURE CONTROL FRAME (MIDDLE)	I	١
CIRCULARITY		d	FEATURE CONTROL FRAME (RIGHT)	]	]
CYLINDRICITY	<u> </u>	е	CONICAL TAPER	$\bigvee$	Shift 2
PROFILE OF A LINE		g	SLOPE	7	Shift 3
PROFILE OF A SURFACE		h	COUNTERBORE/SPOTFACE		Shift 4
ANGULARITY		i	COUNTERSINK	>	Shift 5
PERPENDICULARITY		j	DEPTH/DEEP	₩	Shift 6
PARALLELISM	//	k	SQUARE		Shift 7
POSITION	<del>•</del>	n	DIMENSION NOT TO SCALE (USE AFTER NUMBERS)	-	Alt 015
POSITION (NO FRAME)	<b>+</b>	Shift 9	NUMBER OF PLACES	×	Х
CONCENTRICITY	0	0	EMPTY FRAME BOX		Shift 8
SYMMETRY	三	q	PLUS	+	Shift :
CIRCULAR RUNOUT	Z	u ·	MINUS	Ξ	-
TOTAL RUNOUT	Z.	٧	PLUS/MINUS	±	,
AT MAXIMUM MATERIAL CONDITION	<u>®</u>	m	DEGREE	-	/
AT LEAST MATERIAL CONDITION	0	_	INSPECTION DIMENSION (LEFT)	(	Shift
PROJECTED TOLERANCE ZONE	<u>®</u>	р	INSPECTION DIMENSION (RIGHT)	)	Shift
FREE STATE	<u>•</u>	f	FRAME VERTICAL (DISCRETIONARY)		Shift
TANGENT PLANE	<u> </u>	t	DATUM (TOP)	▼	;
DIAMETER	Ø	w	DATUM (BOTTOM)	<b>A</b>	'
DIAMETER (NO FRAME)	ø	Shift -	DATUM (LEFT)	<b>-</b>	Shift
SPHERICAL DIAMETER	SØ	Z	DATUM (RIGHT)	-◀	Shift
RADIUS	R	ſ	DECIMAL NO FRAME		Alt 013
SPHERICAL RADIUS	SR	у	ALL AROUND (DOWN-LEFT)	<b>P</b>	Alt 018
CONTROLLED RADIUS	CR	С	ALL AROUND (DOWN-RIGHT)	9	Alt 01
REFERENCE (LEFT)	(	Alt 0150	ALL AROUND (UP-LEFT)	8	Alt 01
REFERENCE (RIGHT)	)	Alt 0151	ALL AROUND (UP-RIGHT)	8	Alt 01
ARC LENGTH (1 NUMBER)		Shift,	FRAME SPACER (USE TO ADD EXTRA SPACE)		` .
ARC LENGTH (2 NUMBERS)		Shift.	DATUM TARGET (HALF SIZE)	$\Theta$	Alt 01
ARC LENGTH (3 NUMBERS)		Shift /	COMPOSITE POSITION (HALF SIZE)	•	Alt 01
STATISTICAL TOLERANCE	<u>⟨ST⟩</u>	=	TARGET POINT (HALF SIZE)	X	Alt 01
STATISTICAL TOLERANCE (NO FRAME)	(ST)	S	REGARDLESS OF FEATURE SIZE (OBSOLETE)	<u>®</u>	Alt 02:
BETWEEN	-	Shift 0	Alt numbers are accessed through the number		
DIMENSION ORIGIN	Φ-	Shift `	(not the numbers on the main keyboard) Number lock	needs to be	on.
DIMENSION ORIGIN		Shift 1			