Autodesk Inventor™

Autodesk

DESIGN YOUR WORLD

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Hot Keys

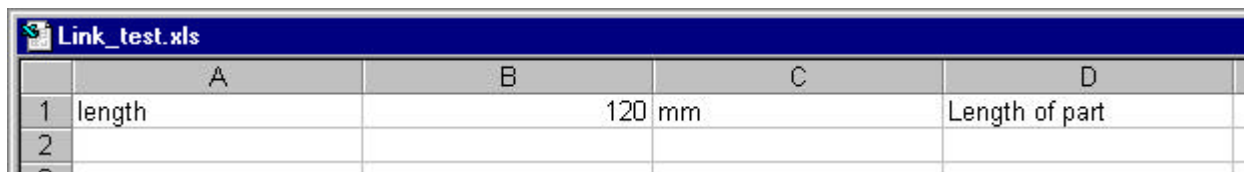| Functionality	Key or Key combination	Notes
Help	F1	Starts DSS
Pan	F2	Transparent – click to activate
Zoom	F3	Transparent – click to activate
Rotate	F4	Transparent – click to activate
Zoom Previous	F5	Back 10 views/steps
Zoom Last	Shift F5	Forward after Previous
Zoom Window	Alt V W	To store on SpaceMouse buttons
Zoom Selected	Alt V S	To store on SpaceMouse buttons
Zoom All	Alt V A	To store on SpaceMouse buttons
Common View	Alt V R Space	To store on SpaceMouse buttons
Look at	Alt V L	To store on SpaceMouse buttons
Measure	Alt T D	To store on SpaceMouse buttons
Sketch	S	Part
Sketch Line	L	Part
Sketch / Drawing Dimension	D	Part/Drawing
Extrude	E	Part
Revolve	R	Part
Hole	H	Part
Place Component	P	Assembly
Place Constraint	C	Assembly
Ordinate Dimension	O	Drawing
Balloon	B	Drawing
Feature Control Frame	F	
Window switch	Ctrl Tab	
Used as command/selection modifiers	Control or Shift	Add/Remove segment, profile, feature or part to/from selection. Override constraints in drawings
Abort Command	Escape	
Clear Last Sketch Selection	Backspace	Cancel the current line segment creation
Delete selected object	Delete	
Rotate grid in the grid orientation command OR select next	Spacebar	Dual function
Disables automatic constraints	Control + sketch draw command	
Pan in selected direction	Keyboard Arrow keys	Only the 4 major directions
Zoom – or select next	Roll wheel – Intellimouse	Dual function
Pan	Hold down wheel or middle button – Intellimouse or 3 button mouse	
Rotate part or assembly – pan and zoom drawing	Spacemouse – Spaceball	No functions on buttons

Standard Windows Keys:

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Ctrl-Z=Undo,Ctrl-Y=Redo,Ctrl-C=Copy,Ctrl-V=Paste,Ctrl-S =Save,Ctrl-O =Open,Ctrl-N =New doc,Ctrl-P =Print.
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Format for Excel Spread Sheets:
Excel sheets shall be created before linking according to the following format:

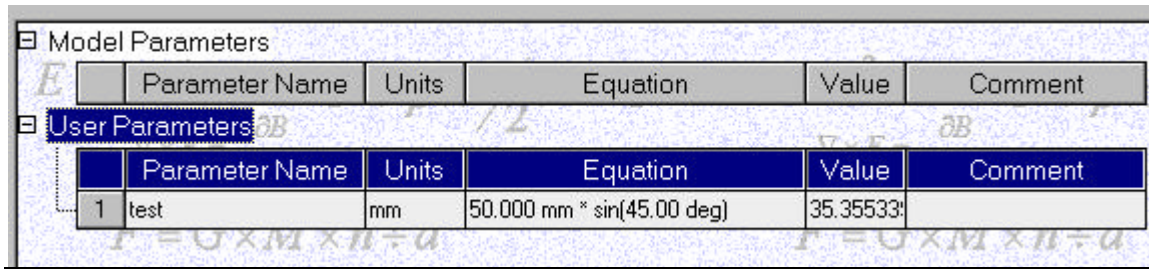| Parameter name	Value	Unit	Comment

Link_test.xls

	A	B	C	D
1	length	120	mm	Length of part
2				

OBS: Parameter names are case sensitive
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Equation Operators and Functions

Keep track of when units are to be used in parameters. The default units are dependent of the unit system in the actual file. If You wonder why You in some cases get a factor 10 error when making a typo in a mm based file – it's because the base unit for Inventor is cm (= 10 mm). Behavior of this area will change during R1 – don't make too complex parameter driven designs at this point.

If you want to use the Sine function in a parameter – use the following way of define the parameter – and the correct value 35.35 will be returned.

Equation Operators and Functions

Equation Operators	Explanation	Example	Result
+	Addition	1 + 2	3
-	Subtraction	2 – 1	1
*	Multiplication	2 * 3	6
/	Division	2 / 3	0.6667
%	Floating Point modulo (rest)	4 % 3	1
^	Power *(unitless)	pow(2.0 ul;2.0 ul)	4.0
(and)	expression delimiter	(1+2)/(3+4)	.428571
;	delimiter for multi-argument functions - used in min/max functions	max(32.000 m;33.000 mm)	32000
e	Exponent *(unitless)	10e12	1.00e+013 ul
Functions:	**Explanation**	**Example**	**Result**
Cos	Cosine *(unitless)	cos(60.00 deg)	0.5
Sin	Sine *(unitless)	sin(45.00 deg)	0.707
Tan	Tangent *(unitless)	tan(45.00 deg)	1.00
Acos	Arccosine *(unitless)	acos(45.00 deg)	0.667
Asin	Arcsine *(unitless)	asin(45.00 deg)	0.903
Atan	Arctangent *(unitless)	atan(45.00 deg)	6.65
Cosh	Hyperbolic cosine *(unitless)	cosh(45.00 deg)	1.32
Sinh	Hyperbolic sine *(unitless)	sinh(45.00 deg)	0.868
Tanh	Hyperbolic tangent *(unitless)	tanh(45.00 deg)	0.655
Sqrt	Square root *(unitless)	sqrt(2.000 ul)	0.141
Exp	e^x (exponential)	exp(2.500)	12.182
Pow	Power - same as ^ operator *(unitless)	pow(3.0 ul;2.0 ul)	9.0
Ln	Natural Logarithm *(unitless)	ln(5.000 ul)	1.609
Log	Logarithm *(unitless)	log(5)	0.698
Floor	Floor *(unitless)	floor(45.568 ul)	45
Ceil	Ceiling *(unitless)	ceil(45.568 ul)	46
Round	Round off *(unitless)	round(4.512 ul)	5
Abs	Absolute value *(unitless)	abs(-11.000 ul)	11
Sign	returns 1 (positive)or 0 (negative)	sign(d4 - d7)	0 or 1
Max	Maximum – takes 2 arguments, separated by a semicolon – beware of units	max(32.000 m;33.000 mm)	32000 (OBS meters)
Min	Maximum – takes 2 arguments, separated by a semicolon – beware of units	min(32.000 m;33.000 mm)	33.000 (OBS millimeters)
Random	returns a random number between 0 and 1	random()	0 (bug error)
Isolate	Allow function to evaluate independently of the unit system. Example: New parameter (mm) to define translation from angle with following d0 = 50 mm; d1 = 35 deg	isolate(d0*d1;mm ;deg)	1750 (mm)
Isolate (cont..)	If you used d0 * d1 the result would be 30.54 and an warning regarding mixed units would be shown		