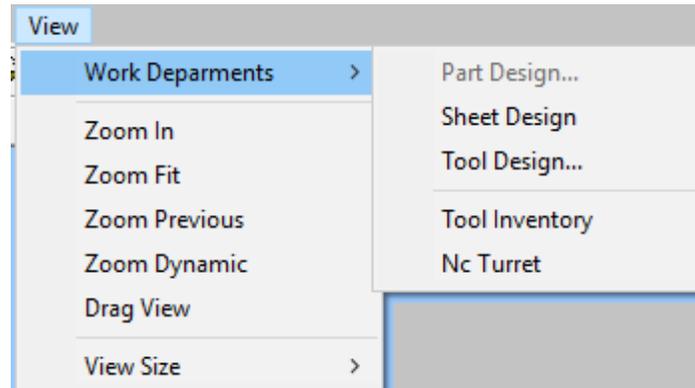
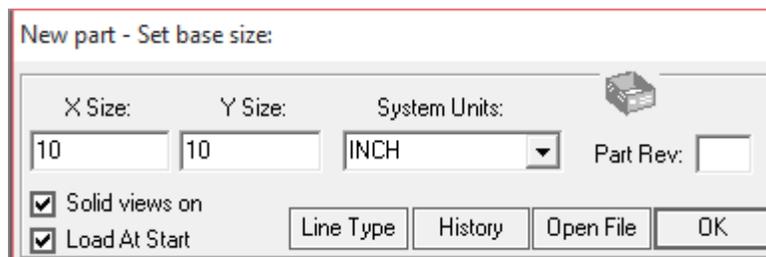


# GPUNCHER WORK SPACE AREAS

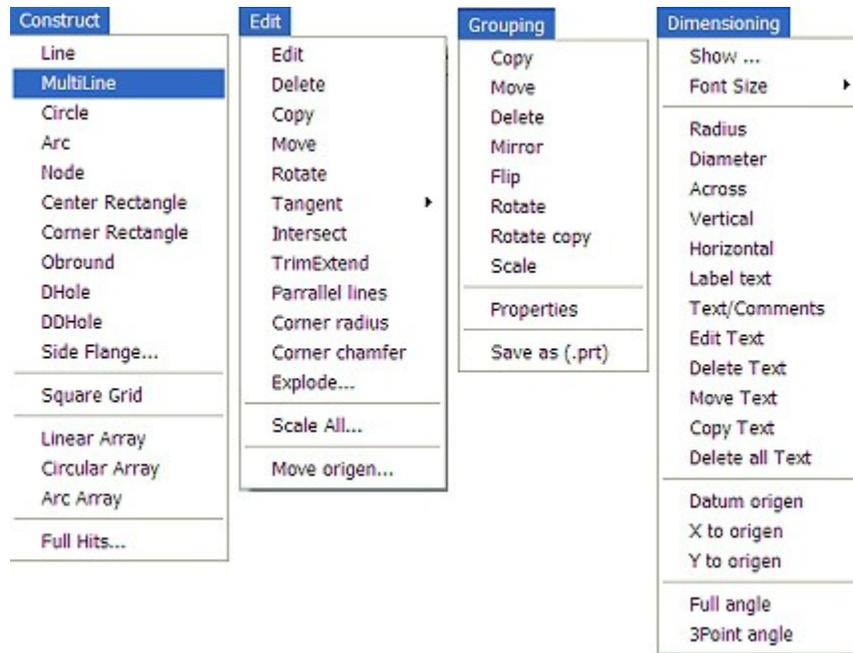


## 1. Part Designing Area

This is the default entrance of the GPuncher. The initial dialog box is to start with your part base size, enter the type of units either inch or metric as shown below.



The part designing area has all the tools to develop the most demanding sheet metal flat pattern, some shown below.



Use the Construct menu to develop your flat pattern and add lines, circles, rectangles and sheet metal shapes as Obrounds, D-holes, DD-holes plus special tools hits when Full Hits command is selected, develop your lay out adding flange by flange when the Side Flange is active.

If you need to change the properties, position or shape of an entity use the Edit pull down menu to move copy, rotate, scale any object in your part.

For group of entities use the Grouping pull down menu to change properties or move, rotate, flip all in one move.

If your part need dimensions for better understanding and description add dimension to it with the pull down menu Dimensioning.

## 2. The Sheet Design Area

Tip: to switch between work spaces press the tab key in your keyboard or pull down menu View-WorkSpace.

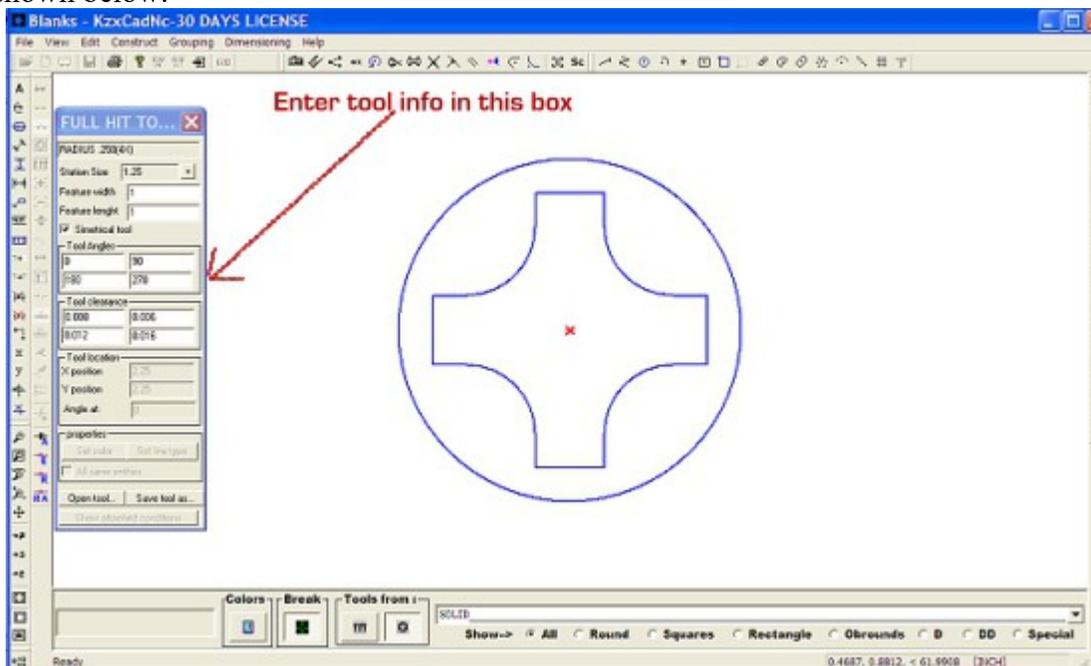
The Sheet Layout Area is where you going to grid your part in a sheet a metal and you do so by activating that part thru pull down menu Blank-Part grid/Activate to show the grid box as shown below.

YIELD properties	
Blank Size:	48 30 
Mat Thk:	0.06 Material Type
Runs Qty:	1
Part properties:	
Untitled2	Rev
Rotate part:	0 0
Location:	1 4
X, Y quantity:	4 2
Spacing:	0.75 0.75
Parts Qty:	8
Part size:	10.0000, 10.0000
Parts in group = 0	
Clamps Position:	
6	42
Left end	Right end
Table Size: 72.0000 X 70.0000	
Do Singles	Do Rows Do columns
Save as default	Load defaults

Change the grid box values to get as many part as you need.

### 3. The Tool designing Area

Here you draw all of your special tools. Add objects from the Construct menu just as you would when drawing a part and add your tool information in the properties box as shown below.



Other modules are:

- **The Tool Inventory** click pull down menu Tooling Up-Tool Room-Inventory, here you add, edit or remove tools from your shop tool inventory, as shown below.

TOOL NAME	TOOL SIZE	STA SIZE	STATION ANGLES	DTE CLEARANCES
ROUND	0.190	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.200	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.213	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.250	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.266	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.312	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.375	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.466	0.500		0.008, 0.012, 0.018, 0.022
ROUND	0.500	1.250		0.008, 0.012, 0.018, 0.022
ROUND	0.562	1.250		0.008, 0.012, 0.018, 0.022
ROUND	0.625	1.250		0.008, 0.012, 0.018, 0.022
ROUND	0.750	1.250		0.008, 0.012, 0.018, 0.022
ROUND	0.875	1.250		0.008, 0.012, 0.018, 0.022
ROUND	1.000	1.250		0.008, 0.012, 0.018, 0.022
ROUND	1.000	2.000		0.008, 0.012, 0.018, 0.022
ROUND	1.250	2.000		0.008, 0.012, 0.018, 0.022
ROUND	1.500	2.000		0.008, 0.012, 0.018, 0.022
ROUND	1.875	2.000		0.008, 0.012, 0.018, 0.022
ROUND	2.000	3.500		0.008, 0.012, 0.018, 0.022
ROUND	2.500	3.500		0.008, 0.012, 0.018, 0.022
ROUND	2.750	3.500		0.008, 0.012, 0.018, 0.022
ROUND	3.000	3.500		0.008, 0.012, 0.018, 0.022
SQUARE	0.080	0.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.125	0.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.187	0.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.200	0.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.250	0.500	0, 90, 180, 270, 45, 135, 225, 315	0.008, 0.012, 0.018, 0.022
SQUARE	0.375	0.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.500	1.250	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.625	1.250	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.750	1.250	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	0.872	1.250	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	1.000	2.000	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	1.250	2.000	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	1.500	2.000	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	2.000	3.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	2.500	3.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022
SQUARE	3.000	3.500	0, 90, 180, 270	0.008, 0.012, 0.018, 0.022

- **The Turret** click pull down menu Tooling Up-Tool Room-Nc Turret, here you will add tools to your turret just as the machine operator does it in the shop. To add tools to the turret the tool has to be in your tool inventory as well, you have to do this before you can assign tools to your part pattern. The tool has to be in the turret as shown below.

STA #	TOOL	STA TYPE	STA SIZE	ANGLE AT	STATION ANGLES	TABLE TRAVEL	TOOL ANGLES
132	SQUARE 0.500	REVER	1.250	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	0.50, 180, 270
133		REVER	1.250	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
134		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
235		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
336		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	
237	RECTANGLE 0.200X4.000	REVER	4.000	90.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	0.50, 180, 270
138		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
239		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
340		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
141	CORDED 0.250X1.000	REVER	1.250	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	0.50, 180, 270
342	D_TOOL 0.500X3.750	REVER	1.250	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	0.50, 180, 270
143		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
244		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
345		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	
246		REVER	2.000	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
147		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
048		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	
349		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
150	<RADIOS .250(4X)> 1.000X1.000	REVER	1.250	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	0.50, 180, 270
351	ROUND 1.000	REVER	1.250	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
152		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
253		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	
354		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
255	<LOPPER 0.250X.030.250> 0.500X3.000	REVER	3.000	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	0.50, 180, 270
256		HOTREVER	1.250	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
154		REVER	2.000	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
165		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
266		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
367		REVER	0.500	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	
168	D_TOOL 0.600X3.750	REVER	1.250	0.000	0, 90, 0, 0, 0, 0, 0	72.440, -0.393, 69.661, -1.568	0.50, 180, 270
369		REVER	1.250	0.000	0, 90, 180, 270, 0, 0, 0, 0	72.440, -0.393, 71.811, 1.181	
170		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	
271		HOTREVER	0.500	0.000	0, 0, 0, 0, 0, 0, 0	72.440, -0.393, 70.236, -0.393	