www.dispenseworks.com

815-363-3524

#### **Common Controls**

All systems share our exclusive Robotic Embedded Control System (RECS) with built-in motion and I/O controller.

A bright LCD screen and 16 key touchpad provide the interface. No PC is required.

This dual memory processor along with Compact Flash card is the latest embedded control technology available today.



## **Connection Flexibility**

The machine is connectable to your network (LAN) or RS-232. Hundreds of files may be stored on the machine for quick changeover.

Bar code scanner input will allow automatic job selection from a work order, label, etc.

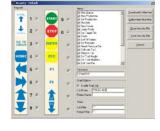
Additional I/O and component interfaces are available to satisfy virtually any application



## **Protects Your Investment**

Each machine includes a security file that enables only the features, settings and controls required for the task.

This file is user configurable and password protected.



# Visual Pattern Layout Screen

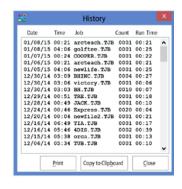
Import images of your parts directly into the software and use them for a template to set up your dispensing pattern. Supports several file types.



# **History Files**

A convenient history function displays detailed production information at the touch of a button. Date & time may be recorded to each machine cycle.

A Copy and Print function is included for production reporting.

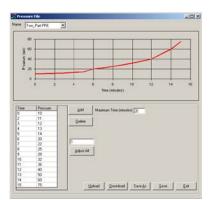




# Built-In Digital Valve & Syringe Controller

No external valve/syringe controller is required. This means much faster response times because all motion patterns and valves are controlled in "real time" from the main program.

Furthermore, working with and editing a program is all done in one file.





# **Dynamic Program Builder**

Build your dispense path / program with the dynamic editor. Draws the path as you type it, or as you teach it, directly from the machine.



#### **Dozens of Functions**

Cloning is one of the many time saving features that are included in the control package.

Define in standard Row/Column format or import custom points from a CAD file.



## **Machine Tool Quality**

Next generation digital brushless High Torque programmable motors and ultra-precise lead screws provide the performance that Dispense Works systems are known for.



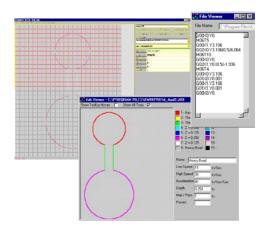
# **Modular Controller Design**

Plug in components and processor allow quick changeover for serviceability and easy custom expansion.



# **Control by Color**

Simply import the motion path from your CAD file. If you teach the path with the machine, the pattern will be drawn on the screen with G code that you may save and edit. Then change the colors on the entities (lines, arcs, dots, etc) to control. Now fill in the numbers in the Tool file for speeds, depths, settings, etc. No other system comes close to this power / simplicity ratio. It really is that simple!



2		Disp Rate	A/F Out	Pause	Dwell	Laser Pwr	Passes	Depth/Pass	Clear	Depth	Z Feed%	Accel	High Spd	Low Spd	Name	
3   Cyanocaylaye   1   10   100   100   1   0   5   1   100   100   0   6   225     4   Epowy 1   1   4   100   50   0   2   5   0   100   250   0   1   2500     5   Epowy 1   1   4   100   50   0   0   5   0   100   225   0   1   2500     6   Epowy 4   1   4   100   70   25   1   5   1   100   50   0   4   100     7   Epowy 4   1   8   200   60   0   1   5   0   100   35   0   2   100     8   Lube	125	2000	1	0	250	100	0	5	0	0	75	400	7	1	Dispense Epoxy	1
4         Epowy 1         1         4         100         50         0         2         5         0         100         250         0         1         250           5         powy 1         1         4         100         90         0         0         5         0         100         225         0         1         200           6         Epowy 4         1         4         100         70         .25         1         5         1         100         50         0         4         100           7         Epowy 4         1         8         200         60         0         1         5         0         100         50         0         2         100           8         Lube         1         6         100         100         0         1         5         0         100         95         0         2         100           9         Grease # 4         1         8         100         100         .050         .1         5         1         100         125         0         1         255           10         Solder Paste 1         1         8         100	200	2000	2	0	125	100	1	5	1	.500	75	400	7	1	UV Cure	2
5         Except 1         1         4         100         50         0         0         5         0         100         225         0         1         200           6         Except 4         1         4         100         70         25         1         5         1         100         50         0         4         100           7         Except 4         1         8         200         60         0         .1         5         0         100         50         0         2         100           8         Lube         1         6         100         100         0         .1         5         0         100         355         0         2         100           9         Greate #4         1         8         100         100         .050         .1         5         1         100         125         0         1         255         1         100         125         0         1         255         1         100         125         0         1         300         2         100         1         3         1         1         200         1         3         1         2 <td>250</td> <td>225</td> <td>6</td> <td>0</td> <td>100</td> <td>100</td> <td>1</td> <td>5</td> <td>0</td> <td>1</td> <td>100</td> <td>100</td> <td>10</td> <td>1</td> <td>Cyanocarylaye</td> <td>3</td>	250	225	6	0	100	100	1	5	0	1	100	100	10	1	Cyanocarylaye	3
6         E poxy 4         1         4         100         70         .25         .1         5         1         100         50         0         4         100           7         E poxy 4         1         8         200         60         0         .1         5         0         100         50         0         2         100           8         Lube         1         6         100         100         0         .1         5         0         100         395         0         2         100           9         Greese # 4         1         8         100         100         050         1         5         1         100         125         0         1         250           9         Greese # 4         1         8         100         100         0.50         0         5         1         100         125         0         1         250           10         Solder Paste 1         1         8         100         100         0         5         0         100         125         0         1         5500           11         Solder Paste 2         1         7         100	250	2500	1	0	250	100	0	5	2	0	50	100	4	1	Ероху 1	4
7 Epony 4 1 8 200 60 0 1 1 5 0 100 50 0 2 100 9 Grease #4 1 8 100 100 0.50 1 5 0 100 35 0 2 100 10 Solder Paste 1 1 8 100 100 0.50 1 5 1 100 125 0 1 255 10 Solder Paste 2 1 7 100 100 0 0 5 5 0 100 125 0 1 550	250	200	1	0	225	100	0	5	0	0	50	100	4	1	Ероху 1	5
8 Lube 1 6 100 100 0 .1 5 0 100 355 0 2 100 9 Grease # 4 1 8 100 100 .050 .1 5 1 100 125 0 1 255 10 Solder Paste 1 1 8 100 100 .050 0 5 1 100 220 0 1 300 11 Solder Paste 2 1 7 100 100 0 0 5 5 0 100 125 0 1 5500	250	100	4	0	50	100	1	5	.1	.25	70	100	4	1	Ероху 4	6
9 Grease #4   1   8   100   100   050   1   5   1   100   125   0   1   255   1   100   125   0   1   255   1   100   125   0   1   255   1   100   125   0   1   3000   1   3000   1   3000   1   3000   1   3000   1   3000   1   3000   1   3000   1   3000	250	100	2	0	50	100	0	5	.1	0	60	200	8	1	Ероху 4	7
10         Solder Paste 1         1         8         100         100         0.50         0         5         1         100         220         0         1         300d           11         Solder Paste 2         1         7         100         100         0         0         5         0         100         125         0         1         5500	125	100	2	0	355	100	0	5	.1	0	100	100	6	1	Lube	8
11 Solder Paste 2 1 7 100 100 0 0 5 0 100 125 0 1 5500	125	255	1	0	125	100	1	5	.1	.050	100	100	8	1	Grease # 4	9
	50	3000	1	0	220	100	1	5	0	0.50	100	100	8	1	Solder Paste 1	10
10 0 11 11 12 1 1 0 100 100 0 0 5 0 100 0 0 0 100	50	5500	1	0	125	100	0	5	0	0	100	100	7	1	Solder Paste 2	11
12 Solder Mask BL   3   100   100 U U 5 U   100 U U 2 450	50	450	2	0	0	100	0	5	0	0	100	100	3	1	Solder Mask BL	12
13 Solder Mask Pk 1 3 100 100 0 2 5 0 100 0 0 2 25	525	25	2	0	0	100	0	5	2	0	100	100	3	1	Solder Mask Pk	13
14 RTV GE 1 3 100 100 0 2 5 0 100 20 0 2 250	300	250	2	0	20	100	0	5	2	0	100	100	3	1	RTV GE	14
15 RTV Sil Gard 1 3 100 100 0 2 5 0 100 20 0 1 250	500	250	1	0	20	100	0	5	2	0	100	100	3	1	RTV Sil Gard	15
16 Paste 1 1 100 100 0 0 5 0 100 0 0 1 250	350	250	1	0	0	100	0	5	0	0	100	100	1	1	Paste	16

## **Remote Diagnostics**

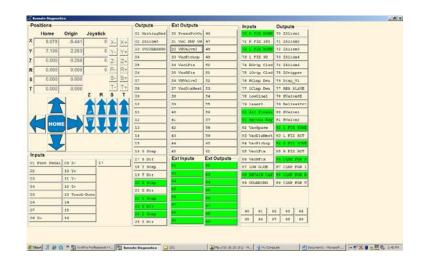
Powerful tool allows viewing machine status in real time with access to all inputs, outputs and all axes of motion.

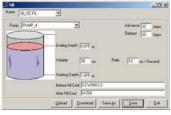
Great for setup and debugging the system and working out or modifying a program.

All buttons are user labeled for clear identification and change color when activated.

Includes: Motion Control, Inputs, Outputs, Limits

This Remote Diagnostic file resides on the Compact Flash card in every machine.









# **Pre Programmed Functions**

That's right. No programming experience required. Instead, intuitive graphical based dialog screens step the user through setup of canned functions.

Just fill in the blanks and save the file. Several files may reside on the CF card in the machine.

Your program simply "calls" that file by name and all motion, outputs, timers, etc., execute automatically.

Fill – Cap – Scale
Files are just three of the
dozens of functions included
with our Windows Software
Suite.



## **Optimize Motion Path Function**

Left image is imported from a "raw" DXF file. Note the motions are erratic with no optimization. The Optimize function will redraw the image "looking ahead" to connect points for a logical continuous contouring motion. The algorithm will also control the connected circles to execute in CW and CCW motion (figure 8) for no change in velocity during the dispensing cycle. Furthermore, the program is greatly shortened.

