



CMT

Columbia
Marking
Tools



Handy Andy X



Handy Andy

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What is included

Attn: Handy Andy X Customer

Thank you for your purchase of the Handy Andy X dot-peen marking system.

The following items should be included in your package:

1. Handy Andy marking head on stand
2. FR Filter regulator attached to stand (gauge in box for shipment)
3. Power cable to connect marking head to 110V AC
4. Blue air hose to connect marking head to FRL
5. USB cable to connect marking head to PC
6. USB drive with software
7. Manual

Items required for marking:

- A. PC – lap top or desktop with Windows operating system (not included)
- B. Power source
- C. Compressed DRY air supply and hose with ¼” NPT fitting
- D. T nuts and vice or other fixture (sold separately) to hold part secure during marking process

Assembly required before marking:

1. Gauge installed on Regulator on side of stand
2. Air hose added between marking head and FRL
3. Power cable connected between marking head and power outlet
4. USB cable connected between marking head and computer

Turn on Handy Andy:

1. Black On Off switch is located on back of marking head
2. Air pressure on – CMT recommend start pressure is at least 20psi. The amount of air pressure determines the depth of mark the more pressure the deeper the mark.

Once assembly of marking head is complete insert USB drive into PC. If the Handy Andy X Setup file does not run automatically – open the removable drive and click on this application to run the setup files. Follow the easy to use instructions on the screen. The Handy Andy software will place an icon on the desktop for easy access.

Handy Andy X with Stand

Manual Z-Axis
Adjustment

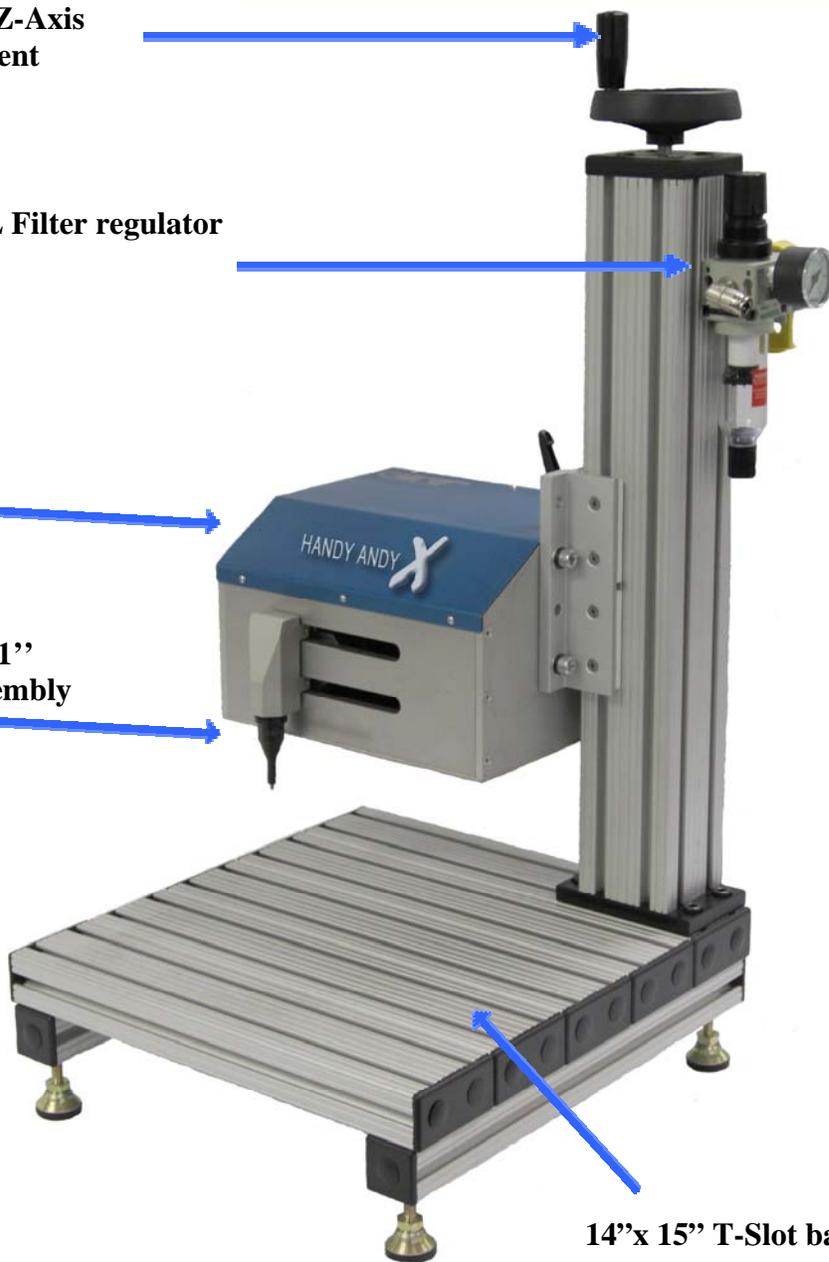
FRL Filter regulator

Handy Andy X
Marking head

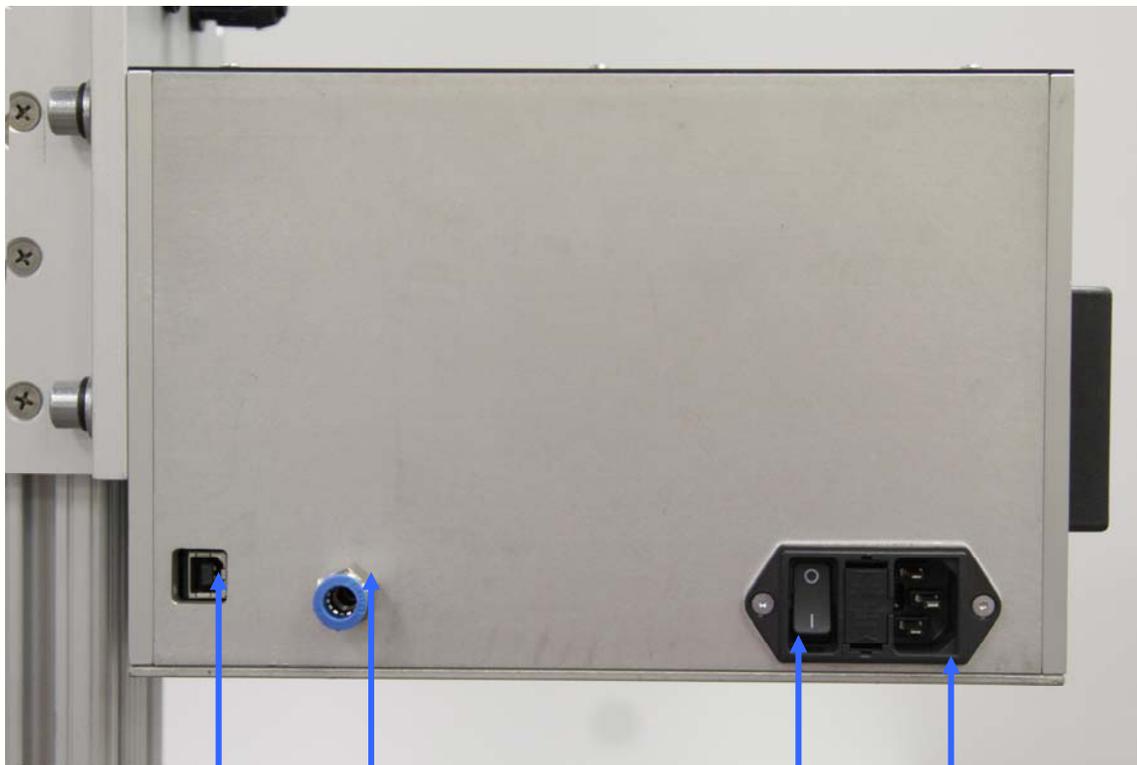
IMIDPHEX10A- 1''
Extended Pin assembly

11'' Part
clearance

14''x 15'' T-Slot base



Machine Connections



Communication USB Cable

Airline hook up 6mm tube

Marking head power switch

110V AC

Software Installation

This section will help you get the Handy Andy X marking software installed on your PC. The Handy Andy X is compatible with XP and newer will run on either 32 or 64 bit.

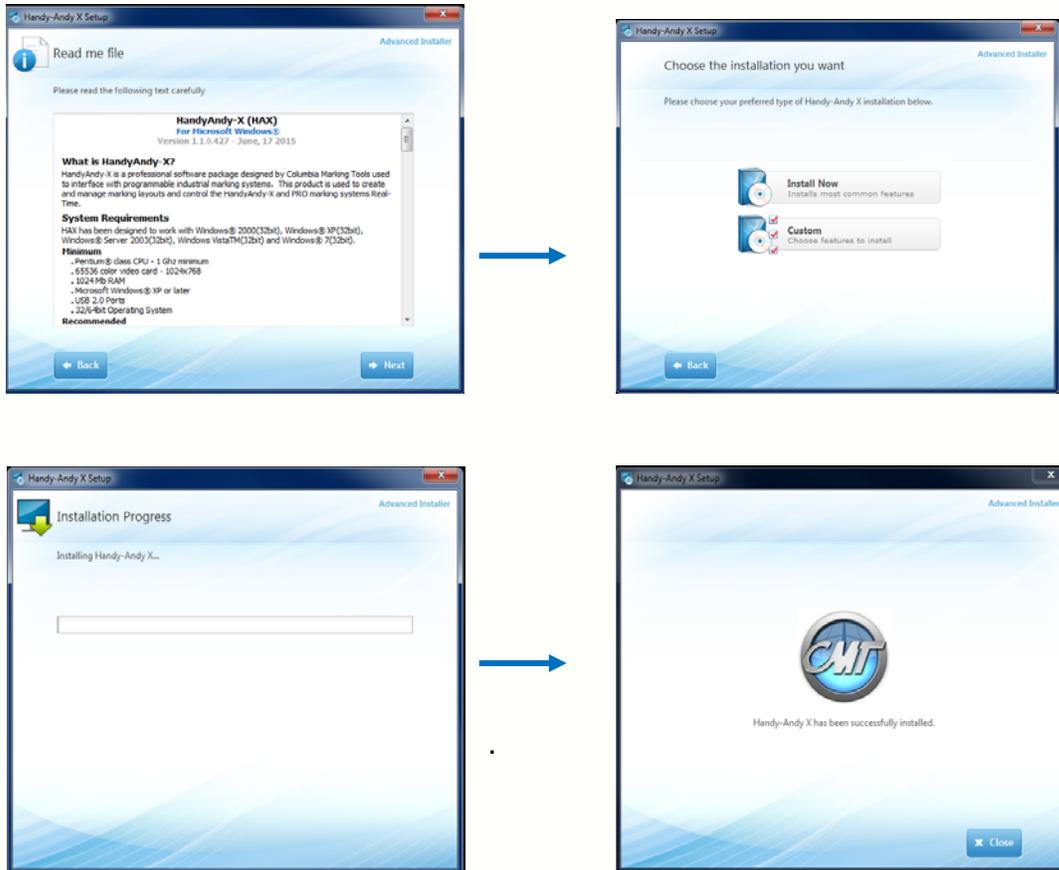
Installing Handy Andy Software:

Place the Handy Andy X Software installation USB into your computers USB port. The USB is programmed to Auto-Start with the software installation wizard.



Handy Andy **CMT** Columbia Marking Tools

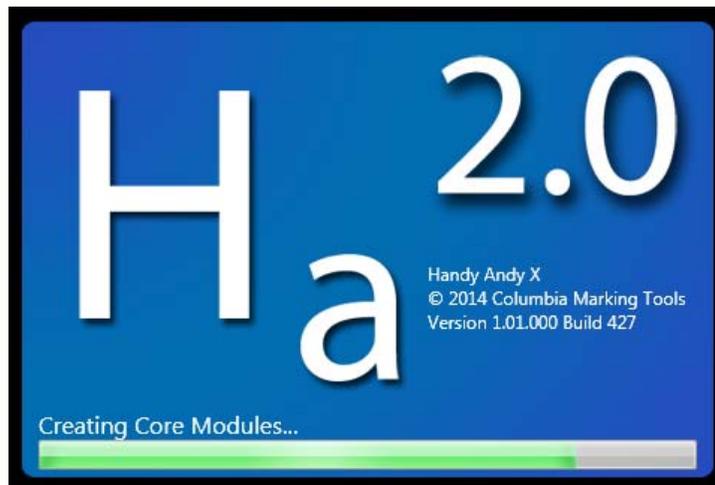
The Installation guide will walk you through setup of the software. Read the on-screen instructions to take you through the installation painlessly. Be sure to use the default settings and installation locations when going through the installer wizard



Once the install is completed your desktop icon will appear on your desktop.



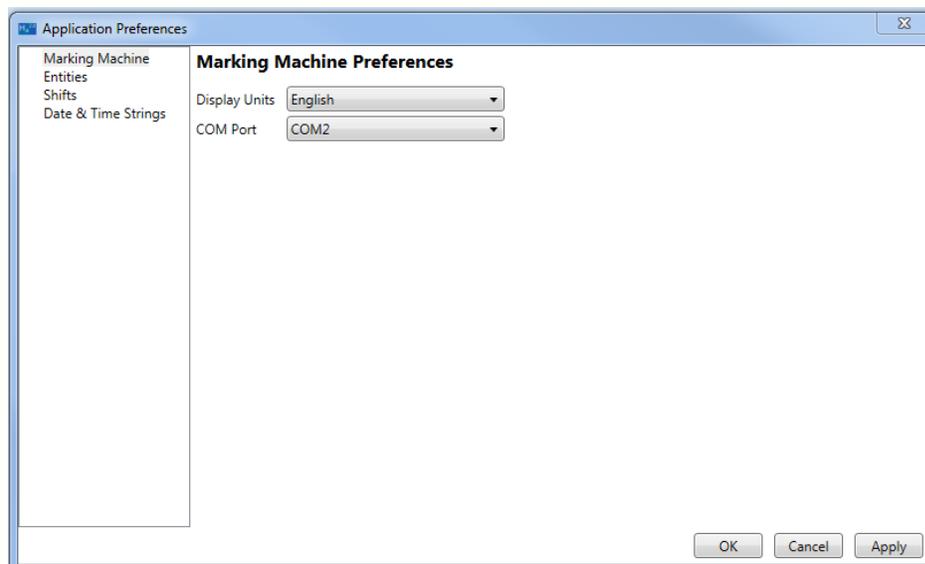
Select your Desktop icon to begin using your Handy Andy X Software.



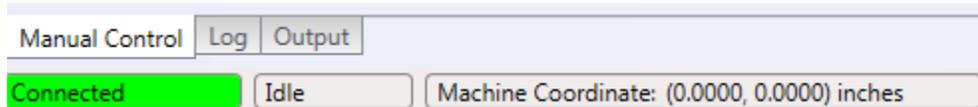
Once the Handy Andy X Program is loaded, select your communication ports on the Handy Andy X program to connect the software.

Select file in the upper left corner and select your preference settings.

Choose an available Com port from the drop down menu.



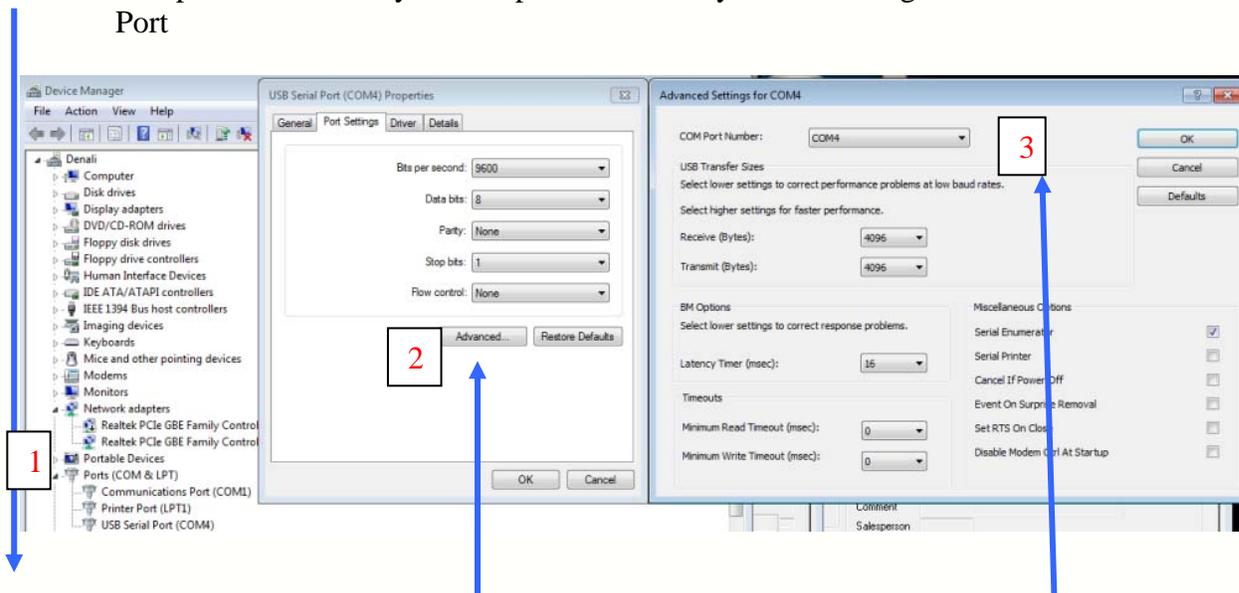
Select Apply and OK, The Properties box will automatically close and your status bar on the bottom them hand corner of the page will read connected highlighted in green.



If this status bar is not green, you are not connected and will have to manually select a com port in your device settings. The setting are located in control panel. (Follow the instructions on page 10.)

Locate the Device Manager on your pc. Here you will see list of all the devices that are installed/attached on your computer where you can do a number of options with them.

1. Locate Ports in the list and hit the + arrow to expand the option and view the available ports attached to your computer. The one you are looking for is USB Serial Port

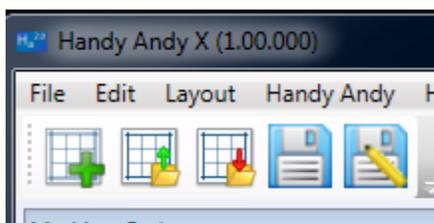


2. Then click on advanced to open up the advanced settings.
3. Locate the COM port number with the drop down menu and select the COM Port number to be used with this device.

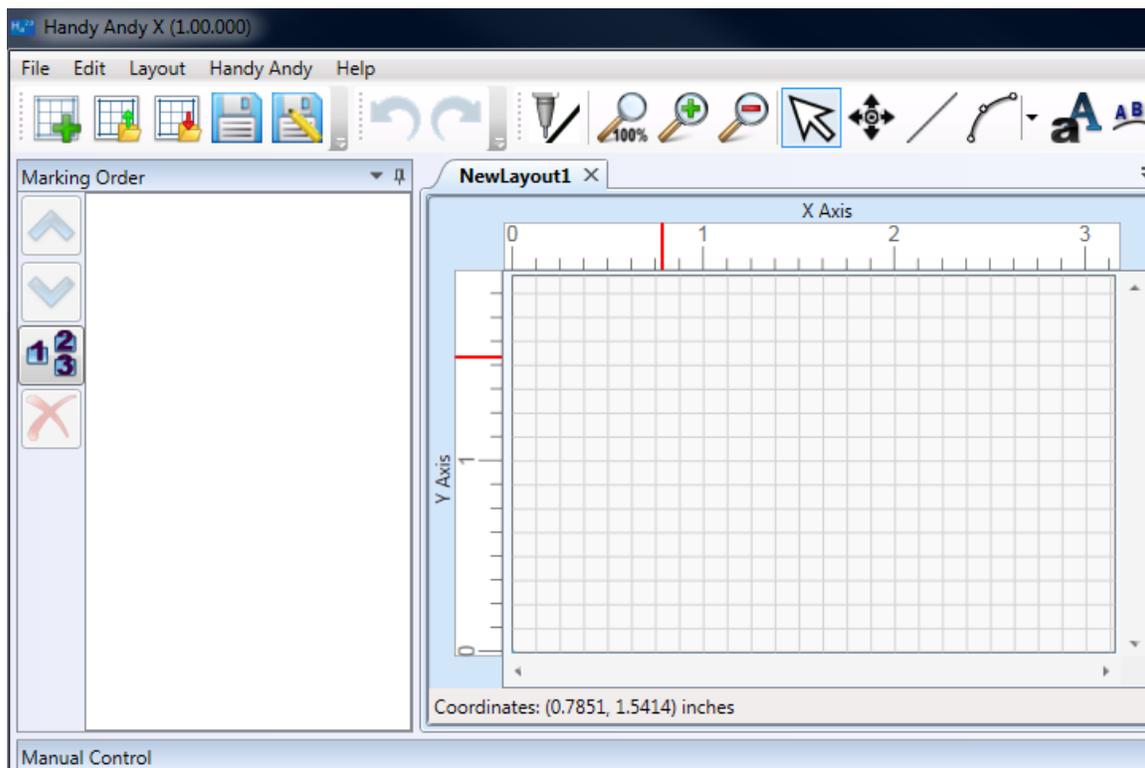
After you have finished this close out all of the windows you have open and continue to use your standard manual for setup and operations of the Handy Andy.

Creating a New Layout

To create a new layout, you select the grid with a green plus sign in the top right corner of your program ribbon.



After you select the new layout icon you will see a grid appear on your canvas.



Now you will select what type of entity you would like to add to your layout.

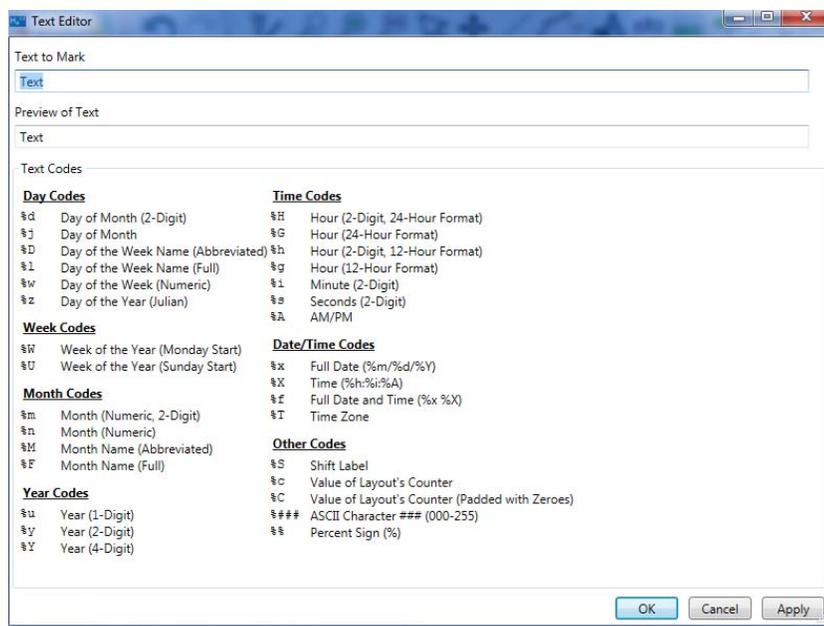


The options you have to choose from are:

- A line
- An Arc
- Text
- Arched text
- Graphic
- Waypoint.

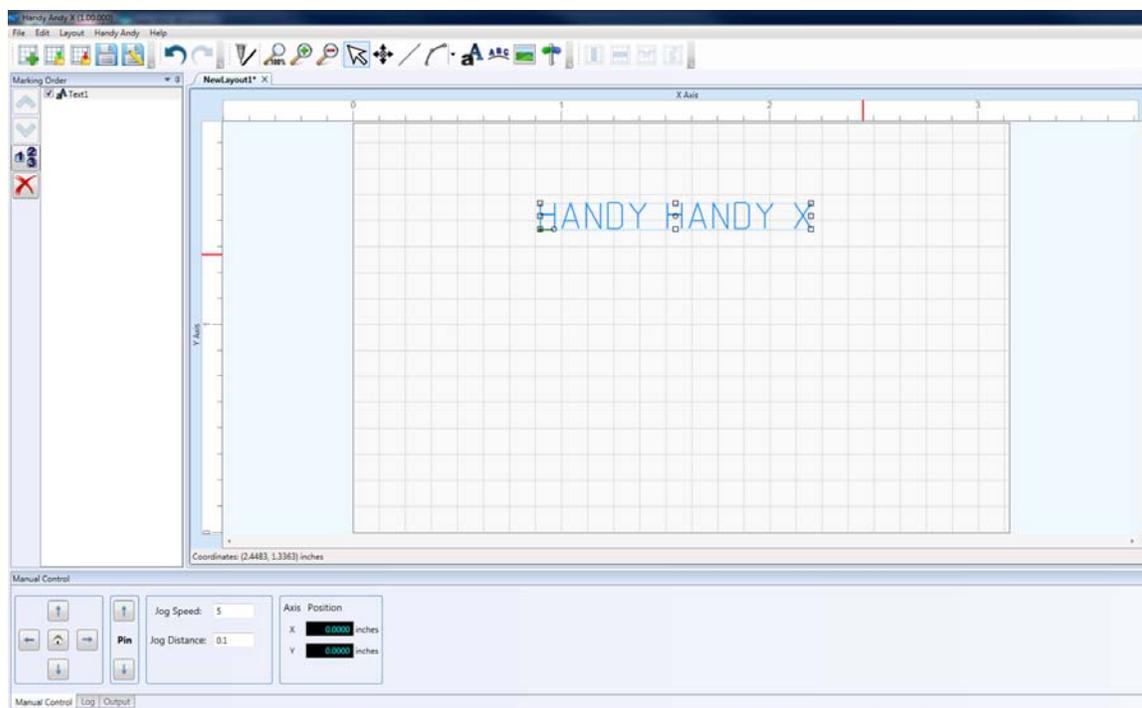
Select your entity and select anywhere on your canvas to add your entity to the layout.
(This can also be done under the layout menu at the top of the screen)

If you choose text or arched text it will bring up the text editor box where you type what you would like your text to read.



Layout

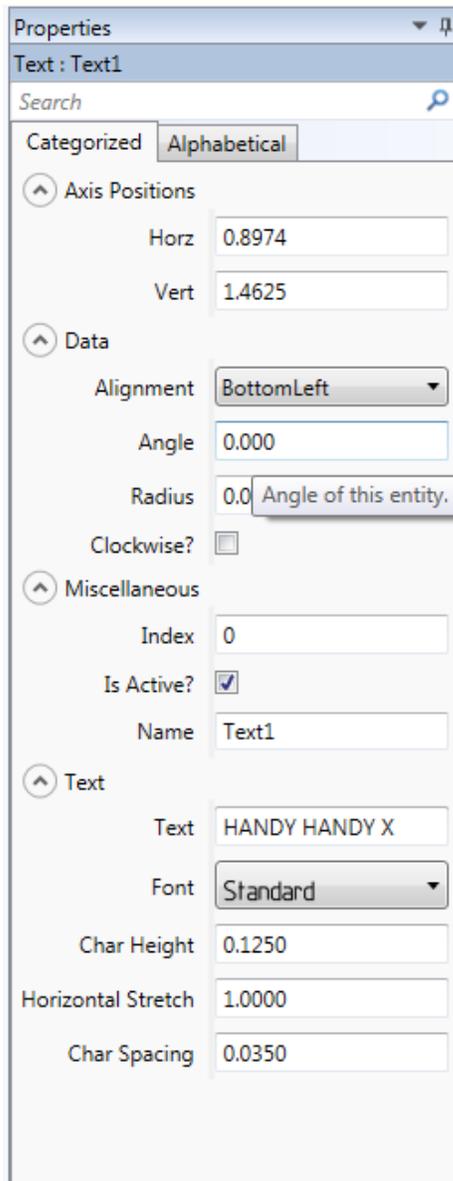
After you have your desired text typed in select ok to place the text onto your marking canvas.



Now the text will appear in the layout, you can now modify you text

Text Properties

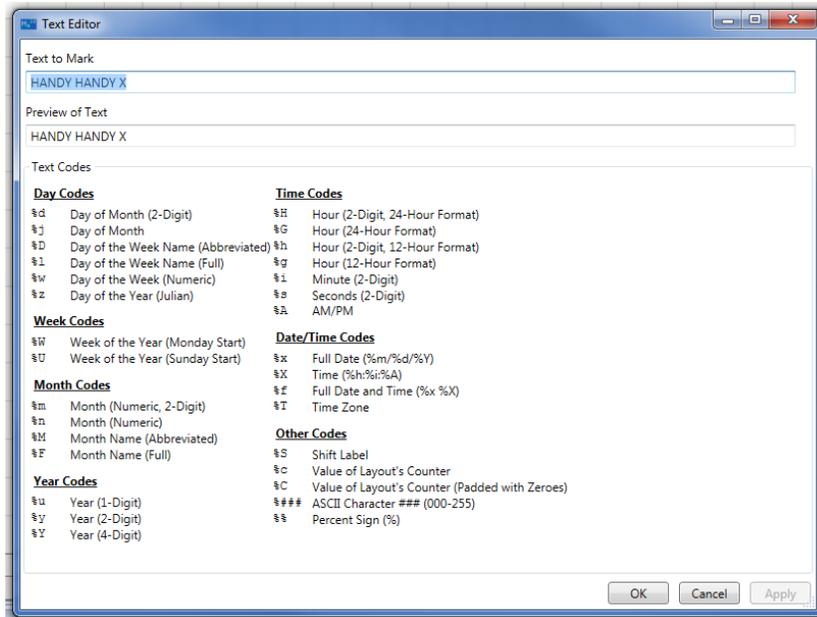
To the right of your layout in your properties panel you will find your text properties.



These fields can be modified by typing or using the drop down menu when applicable.

- You will see where your current text location appears on screen.
- Set your alignment orientation.
- What your text reads
- What font currently have selected.
- Character height, stretch and spacing.

If you wish you change or modify your text. Double click on the text to bring your text editor box up. Change your text and select ok.



The text editor will allow you to input fixed or dynamic text into a string.

Fixed text = Fixed text is any text string that does not change such as a name or part number.

Dynamic Text= Text that is constantly updating such as a counter, date or time.

Using the text editor you can create a string that contains fixed text, dynamic text or a combination of both.

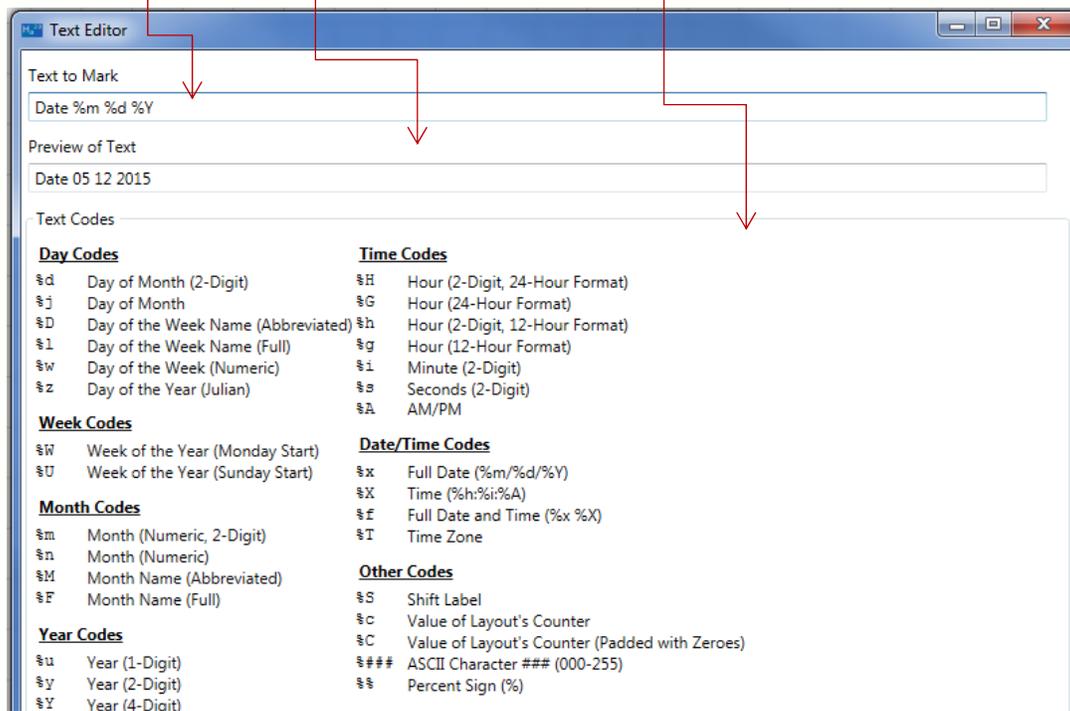
Let's start with a simple date code containing fixed and dynamic text.

You will notice that once you enter text into the input field it will also appear in the preview window.

For dynamic text objects you can type in the code from the list below.

As you build the string the preview window will show the results that the machine will print.

Input field
Preview Field
Text Codes



Text Codes

Day Codes	Time Codes
%d Day of Month (2-Digit)	%H Hour (2-Digit, 24-Hour Format)
%j Day of Month	%G Hour (24-Hour Format)
%D Day of the Week Name (Abbreviated)	%h Hour (2-Digit, 12-Hour Format)
%l Day of the Week Name (Full)	%g Hour (12-Hour Format)
%w Day of the Week (Numeric)	%i Minute (2-Digit)
%z Day of the Year (Julian)	%s Seconds (2-Digit)
	%A AM/PM
Week Codes	Date/Time Codes
%W Week of the Year (Monday Start)	%x Full Date (%m/%d/%Y)
%U Week of the Year (Sunday Start)	%X Time (%h:%i:%A)
Month Codes	%F Full Date and Time (%x %X)
%m Month (Numeric, 2-Digit)	%T Time Zone
%n Month (Numeric)	
%M Month Name (Abbreviated)	Other Codes
%F Month Name (Full)	%S Shift Label
Year Codes	%c Value of Layout's Counter
%u Year (1-Digit)	%C Value of Layout's Counter (Padded with Zeroes)
%y Year (2-Digit)	#### ASCII Character ### (000-255)
%Y Year (4-Digit)	% Percent Sign (%)

After you click enter you will see the updated text appear in the marking layout.

Fonts

Handy Andy X comes pre-loaded with 24 different fonts to choose from.



You will notice that the font preview of will show how it will be marked on your part.

If you like a certain font you can make that font your default, along with any other defaults you would like to set in your preferences under Entity preferences.

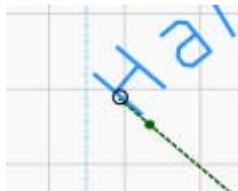
Angular Text

To create an angular text select the arc text entity in the layout.

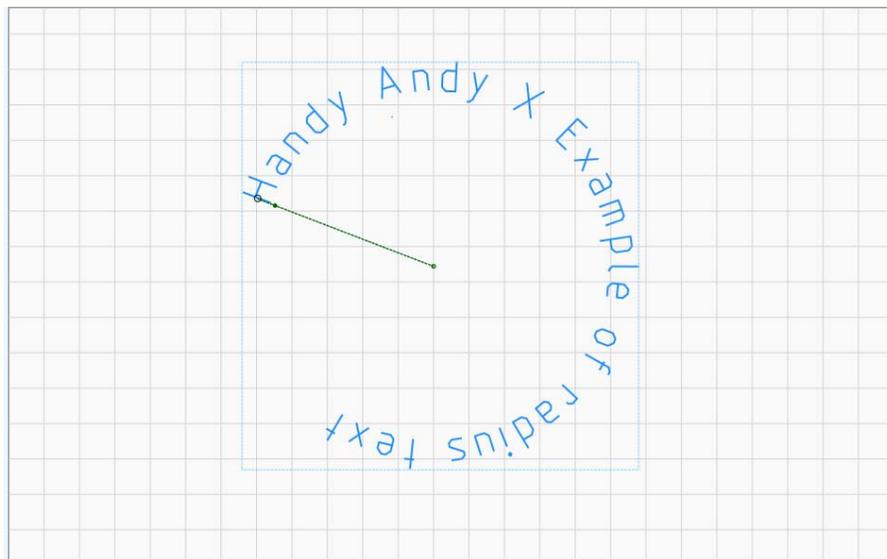
Your text editor will come up for you to type the text you want.

Once you select ok you will be able to move your mouse around to set your desired orientation.

If you chose to change the angle of your text click on the rotate handle (circle) at that is outside edge of your first character.



Once you are in the location let go of the mouse button and your layout orientation will be set.



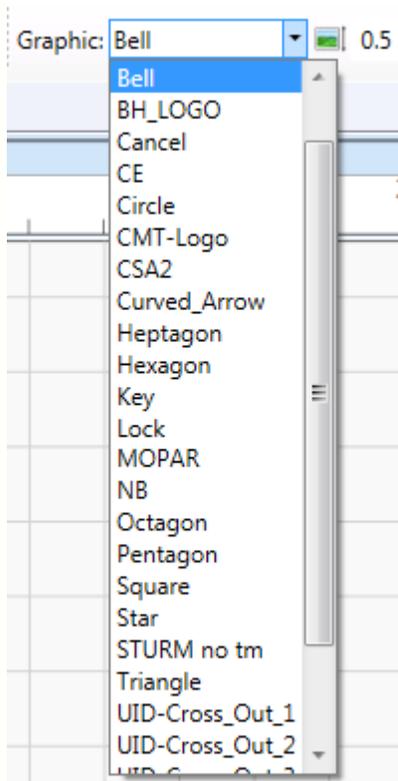
Graphics

Handy Andy X also allows you to add DXF graphics or logos to your marking layout,

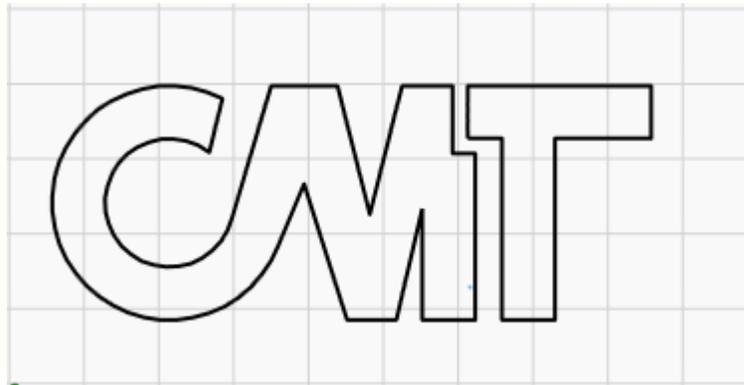
You can input a graphic by selecting graphic from the ribbon or dragging it for the entity tool box.



Once you click on the graphic icon a drop down menu will appear where you can select one of the pre-loaded graphics or chose to import your own.

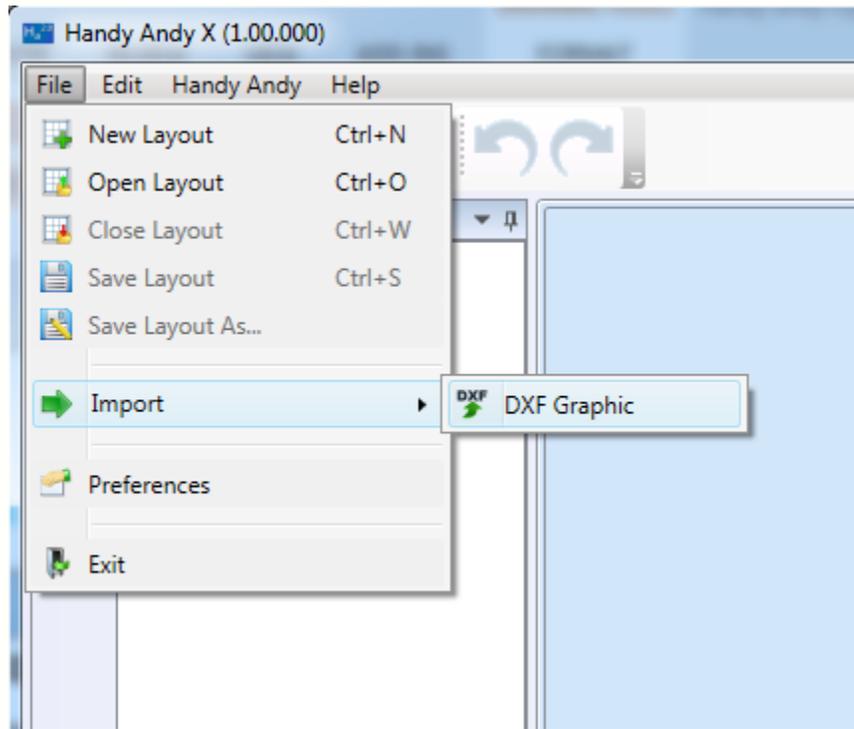


Once you have your graphic chose. Select anywhere in your layout to insert onto your canvas.



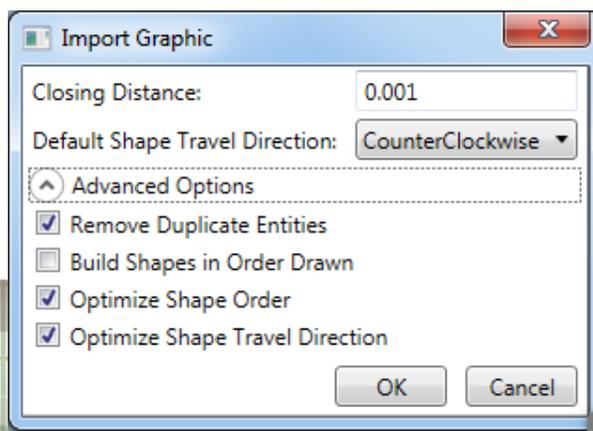
If you double click on your graphic, your graphic properties will open on the right hand on the layout. Here is where you can alter as necessary.

Handy Andy X does come preloaded with some graphic files. However a DXF converter is built into the software if you would like to create your own.



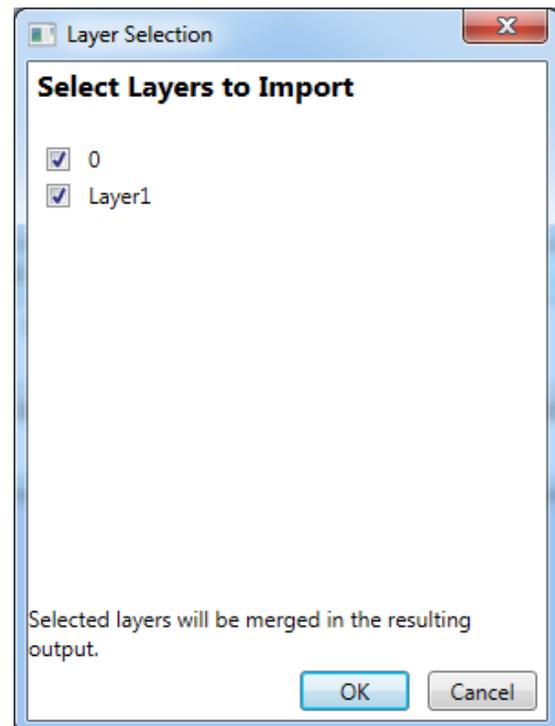
Found under the File menu Import DXF Graphic

**Currently only supports DXF format.



DXF Importer

- DXF conversion algorithm
- Close gap in points
- Shape order optimization
- Shape direction optimization
- Removes overlapping or duplicate entities
- Layer support to allow multi-layer DXF Files
- File saved in public Dir as.cmtg
- Supports Arc, Polyline.

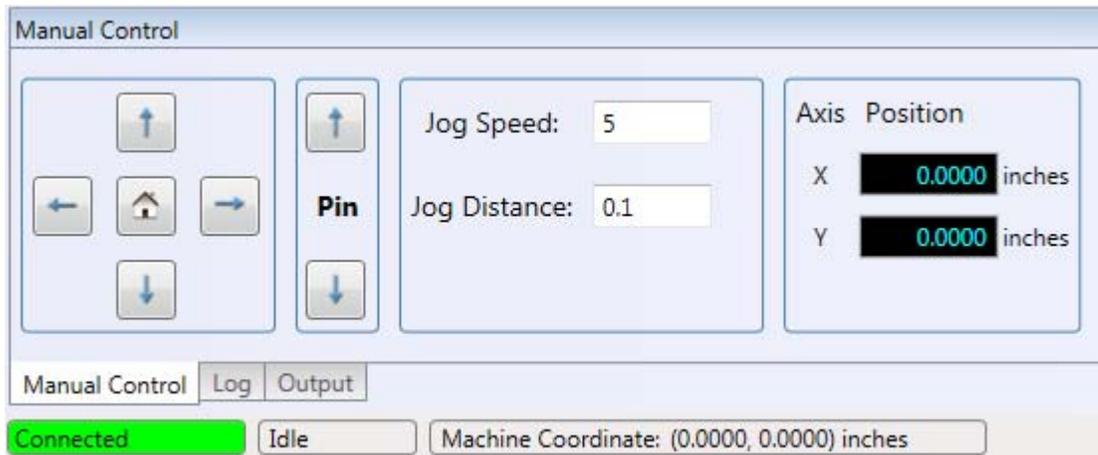


Teach Function

Manually teach your marking head to the location that you would like your text starting point on your part to be.

Click on your text in your marking layout. To highlight the entity.

In the bottom left hand corner you will see the manual controls panel.



You will use the open and down arrows to move your marking pin along the X-Axis

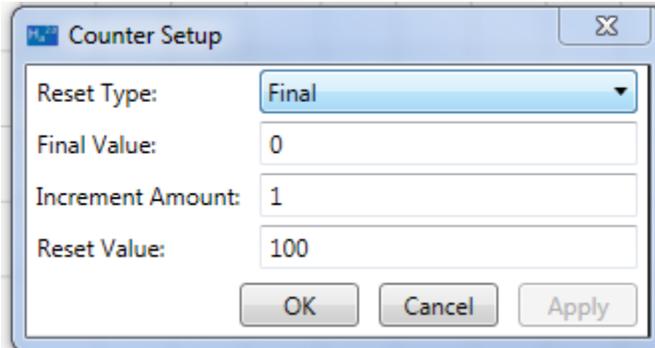
The left and right arrows will move along the Y- Axis

Once you have the marking pin over the part where you want to start marking right click on the text and select Teach Position.

Your text should move to the new taught position.

Setting up Counter

You will need to setup up the values of your counter in the counter set up. (This is found in the layout menu in the top of your screen.)



Now create a new layout.

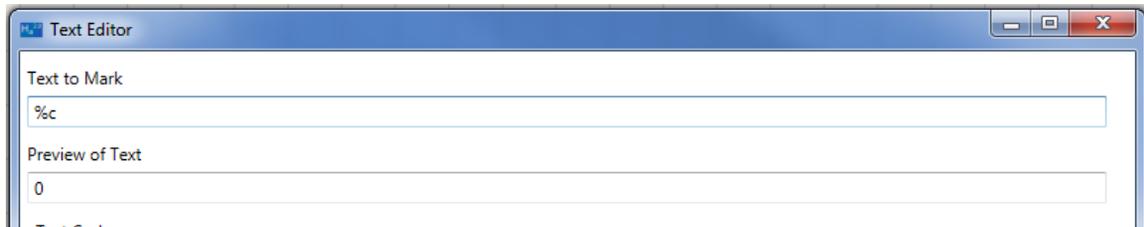
Select the text entity



In the pre-programmed codes select the option of counter you would like.

%c Value of layouts counter

%C Value of layouts counter (padded with zeros)



Select apply, teach your program and begin marking.

PM Schedule

Part	Part Number		Frequency
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 <p>Part# IMIDPINEX10 IMID Series Carbide Marking Pin</p>	<p>IM-ID-PINEX10-1" Extended pin replacement 45 degree</p>		<p>3-6 Months average lifespan for moderate production. May be re-sharpened 2-3 times.</p>
 <p>Part# IMIDPHEX10A IMID Series Complete Assembly</p>	<p>IMIDPHEX10A- 1" Extended Pin assembly including: A) IM-IDPINEX10 (extended pin 1") B) IM-IDPHEX10 (Extended pin housing) C) Spring D) O Ring</p>		<p>Once per year</p>
 <p>IMIDPIN01 Pin Spring</p>	<p>IMIDSPRING- Pin spring</p>		<p>Once every 6-12 months. Depending on usage.</p>
 <p>Part# IMIDPHEX10 IMID Series Pin Housing</p>	<p>IMIDPHEX-10 extended pin housing (for use with IM-ID-PINEX10)</p>		<p>Once a year.</p>

Email Quotes@columbiamt.com for spare parts. Spare parts generally ship with 1 week or less.

Trouble Shooting Guide

Make sure your part is properly fixture.

1. Light mark

Handy Andy

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- a. Pin chipped
- b. Worn pin housing
- c. Air supply restricted
- d. Dirt in pin cartridge
2. Poorly shaped characters
 - a. Speed and/or dwell time need adjustment
 - b. Drive belt loose (should rotate ~ 90deg)
 - c. Failed linear bearing assembly(will have lateral movement)
 - d. Drive belt clamping cleat loose
 - e. Drive pulley loose on motor shaft
3. No Mark
 - a. Failed head cable
 - b. Failed internal wiring
 - c. Failed solenoid valve
 - d. Interrupted air supply
 - e. Broken pin
4. Miss-Located Characters
 - a. Home limit flag problem (Possibly loose and inaccurately homing)
 - b. Drive pulley loose on motor shaft
 - c. Speed too high for program
 - d. Head orientation not allowed (M-Series machines always pin towards earth)
5. Missing Characters

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COLUMBIA MARKING TOOLS



**Wide Range of Products:
Programmable Systems
Dot-Peen & Scribe**



Handy Andy

www.marking-machines.net