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## Company Information:

Domaille Engineering, LLC is an precision manufacturer distinguished by the accuracy of our products and services. One of our critical goals is to provide excellent customer service. Please contact us for service, support or input on how we can improve our service to you.

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## Inter-Machine Process Transfer

The APM-HDC-5200 is equipped with a USB data storage slot. This feature allows machine-stored processes to be copied onto a USB data storage device, thus allowing duplication of process definitions across multiple APM-HDC-5200 machines. This feature significantly reduces multiple machine set up time and assures consistency in the definition of polishing processes.

This process transfer feature can also be used as a backup and retrieval tool.

### To copy from machine memory to a USB data storage device:

1. Insert USB flash drive into the USB slot.
2. Select Process Transfer tab.
3. Highlight the process name on the "Machine Memory" list that you want to copy to the memory card.
4. Touch the "<<" button to copy to the USB data storage device.

All processes in machine memory can be copied to the USB storage device by selecting the "<All" button.

### To copy from a USB data storage device to machine memory:

1. Insert USB flash drive into the USB slot.
2. Select Process Transfer tab.
3. Highlight the process name on the "Memory Card" list that you want to copy to machine memory.
4. Touch the ">>" button to copy to machine memory.

All processes on the USB data storage device can be copied to machine memory by selecting the ">All" button.

**To copy process variable settings** refer to the System Configuration section in this guide. The process variables settings reside in a separate file.

### To re-set a maintenance schedule

Once a maintenance task has reached its set interval, an alarm will be triggered in the production screen (Maint OK will turn from blue to red). The user will be able to continue polishing even if the maintenance is not reset. To re-set the maintenance:

1. Go to System Config tab in the menu system.
2. Select Maintenance Schedule from configuration drop down box.
3. All maintenance intervals needing re-set will be highlighted in red.
4. With stylus, press the red re-set tab.
5. The re-set tab will change from red to blue. The hours accumulated (Accum) will revert to zero hours upon a successful re-set.

## Process Setup

The number of processes that can be defined and stored on the APM HDC-5200 is only limited by the amount of internal memory. Hundreds of processes can be stored on a single machine. Additional processes can be stored on a USB data storage device, thus allowing an unlimited number of processes to be pre-defined and readily available for use.

### To define a process:

1. Select the Process Config. tab.
2. A new process can be setup in two ways.
  - Select the "New" button to define a process from scratch.
  - To begin with a copy of an existing process, select the process you want to copy using the down arrow in the "Process" selection box to display a list of processes stored in machine memory. Select the desired process to copy and then touch the "Duplicate" button.
3. Enter a new process name as prompted. The process name can include up to 16 alphanumeric characters and will not allow spaces, dashes and punctuation. Select "OK".
4. Select the quantity (QTY) of connectors that will be polished for this process using the down arrow to display a valid range of numbers. If you have chosen to allow the machine operator to change the quantity on the Production

screen (based on the number of connectors actually loaded into the fixture), the maximum connectors the operator can select is based on the number selected on this screen.

NOTE: Processes can only be deleted under the Process Transfer tab.

### Defining steps within a process:

Index tab “A” allows you to define Time, Speed, Speed Ramp Up, Pressure and Pressure Ramp Up for each step in the process. Index tab “B” allows you to select Pad, Lubricant, Film, Film Change Interval and Step Notes for each step.

1. Select tab “A”.
2. Touch the “Time” box to access the keypad. Enter the number of seconds to run this step. Select “OK”.
3. Touch the “Speed” box to access the keypad. Enter the RPM's desired in this step. Select “OK”.
4. Touch the “Speed Ramp Up (Sec)” box to access the keypad. This feature will slow start the platen. Enter the number of seconds desired from zero RPM to the programmed speed. The maximum value is 20 seconds. Select “OK”.
5. Touch the “Pressure” box to access the keypad. Enter the pressure in pounds or kilograms, depending on the unit selected in System Config. and displayed in this box. Select “OK”.
6. Touch “Pressure Ramp Up” box to access keypad. This feature will slow start the pressure. Enter the number of seconds desire to go from zero pressure to programmed pressure. The maximum value is 20 seconds. Select “OK”.
7. Select tab “B”. The parameters under tab “B” are used to communicate to the operator the pad, lubricant, film, film change interval and step notes.
8. Touch the “Pad” down arrow. Select the desired pad for this step in the process.
9. Touch the “Lubricant” down arrow. Select the desired lubricant for this step in the process.
10. Touch the “Film” down arrow. Select the desired film for this step in the process.

11. Touch “Film Change Interval” box to access keypad. Enter the numeric value of the number of cycles the film is used for that polishing step. The APM-HDC-5200 will track the number of uses of the film and send an alarm message when the film needs to be re-set. The maximum numeric input for the film change interval is 99. Select “OK”.
12. Touch “Step Notes” box to access key pad. The text box is used to convey process information to the users. Enter in pertinent information as needed. Select “OK”.
13. Select “New” or “Copy” in the Step definition area to define the next step. Repeat the above instructions for all steps in a process. See Copy Function below to begin a new step based on a previously defined step within the same process.

**Testing During Process Setup:** To test a process set while in Process Setup mode, select the step and press the Step Start Button. This allows you to run and test an individual step without having to access the process under the Production tab.

**Rework:** The “Rework” box allows an operator to restart the polishing process from a predefined point. The number selected is the step in the process where rework will begin. The rework program will then execute this step plus all remaining steps. Upon completion, the program will return to step #1.