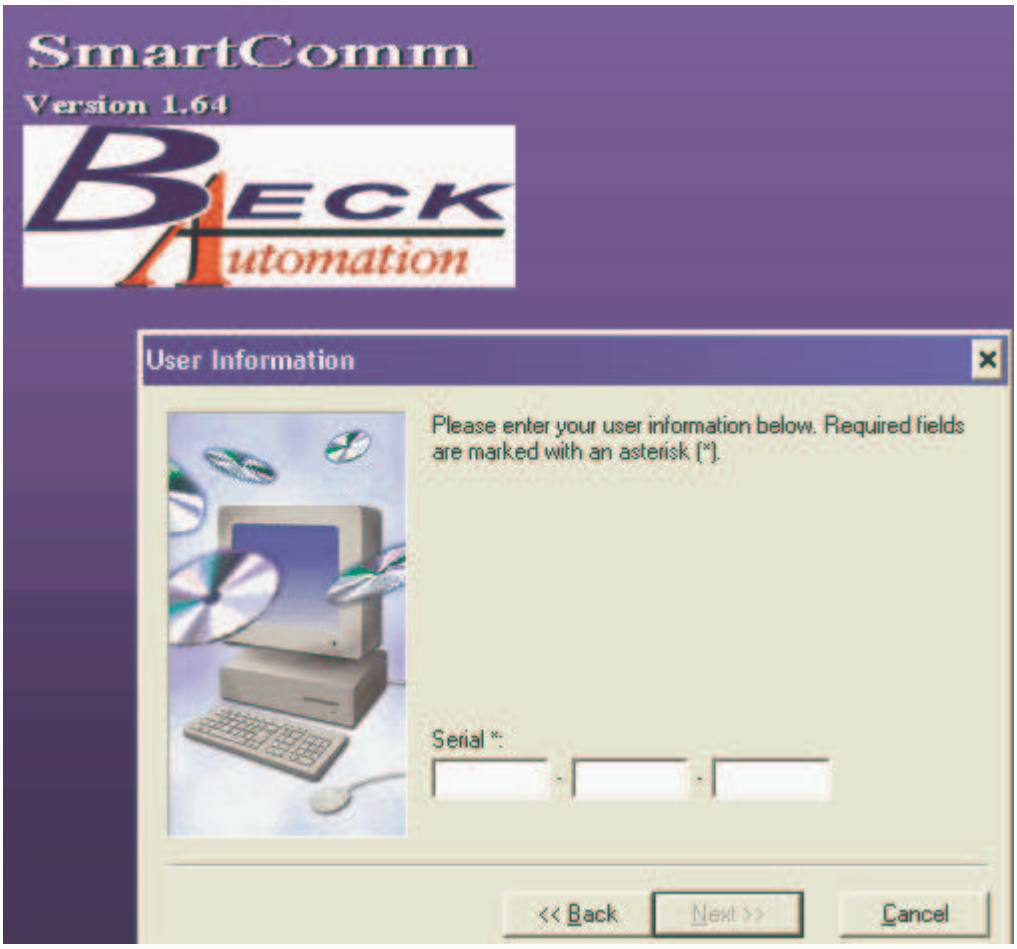
SmartComm™ Quick Start Guide

Installing the Software



Below are the instructions to install or upgrade SmartComm. If upgrading, we recommend that you first backup your existing SmartComm folder. As with any software used in production we also recommend periodic backups in case of hardware or other failure.

1. Insert the SmartComm CD containing the current release.
2. Run the install from the CD and enter through all the steps. The Serial number is on the case of the CD, Key in your number and finish installing SmartComm.
3. You are now ready to run SmartComm.
4. The next step will be to define a few things to tailor SmartComm to suit your needs.

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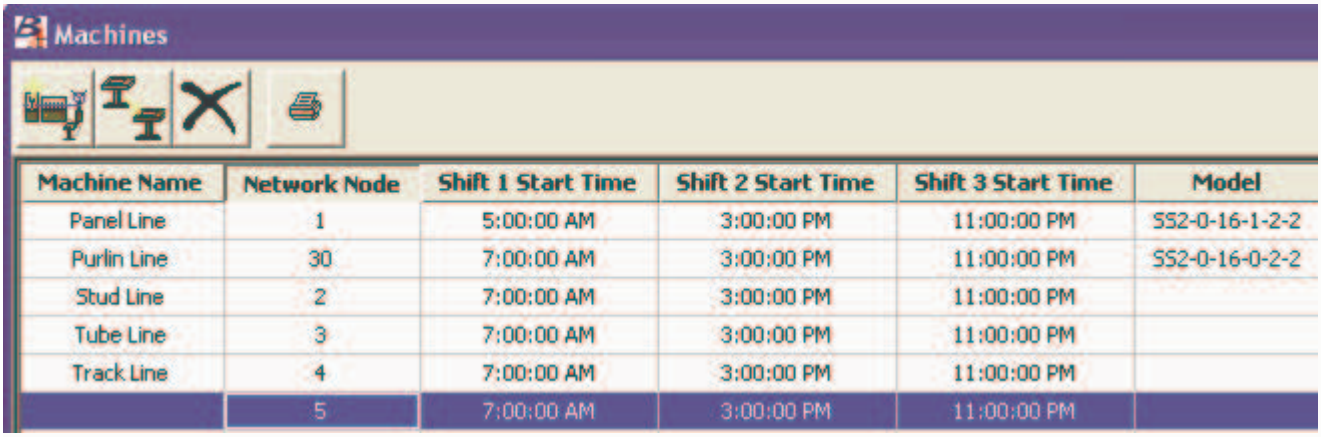
Machine Definitions

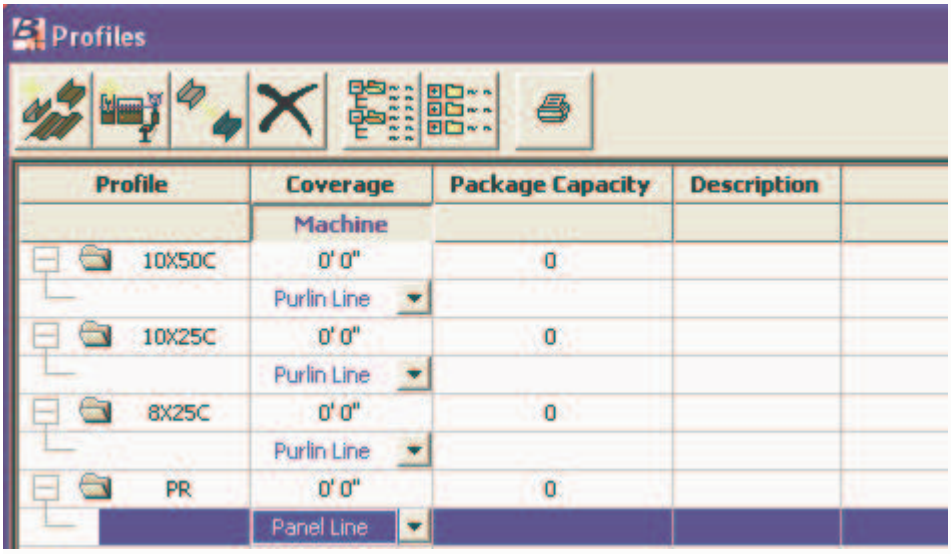


Machine Name	Network Node	Shift 1 Start Time	Shift 2 Start Time	Shift 3 Start Time	Model
Panel Line	1	5:00:00 AM	3:00:00 PM	11:00:00 PM	SS2-0-16-1-2-2
Purlin Line	30	7:00:00 AM	3:00:00 PM	11:00:00 PM	SS2-0-16-0-2-2
Stud Line	2	7:00:00 AM	3:00:00 PM	11:00:00 PM	
Tube Line	3	7:00:00 AM	3:00:00 PM	11:00:00 PM	
Track Line	4	7:00:00 AM	3:00:00 PM	11:00:00 PM	
	5	7:00:00 AM	3:00:00 PM	11:00:00 PM	

Each controller that will be connected to the SmartComm network must be identified.

1. From the pull down menu at the top of the screen, click on Definitions and then Machines. The Machines Screen will then appear.
2. Click on the “Add” machine icon  in the toolbar. Enter a desirable name for the line you are adding.
3. Assign this machine a network node number. This same number must be entered in the controller’s “Network Unit Number” parameter. A unique number will be required for each machine.
4. If you would like to keep track of production by shift, the start times for each shift must be entered. By default, the times will be setup for one 24-hour shift.
5. The Model serial number, hardware version, and software version information will appear after you are connected to the controller.
6. Click the “Add”  or “Copy”  button to add any other machines that you have on the network and configure these machines as you did the first machine.

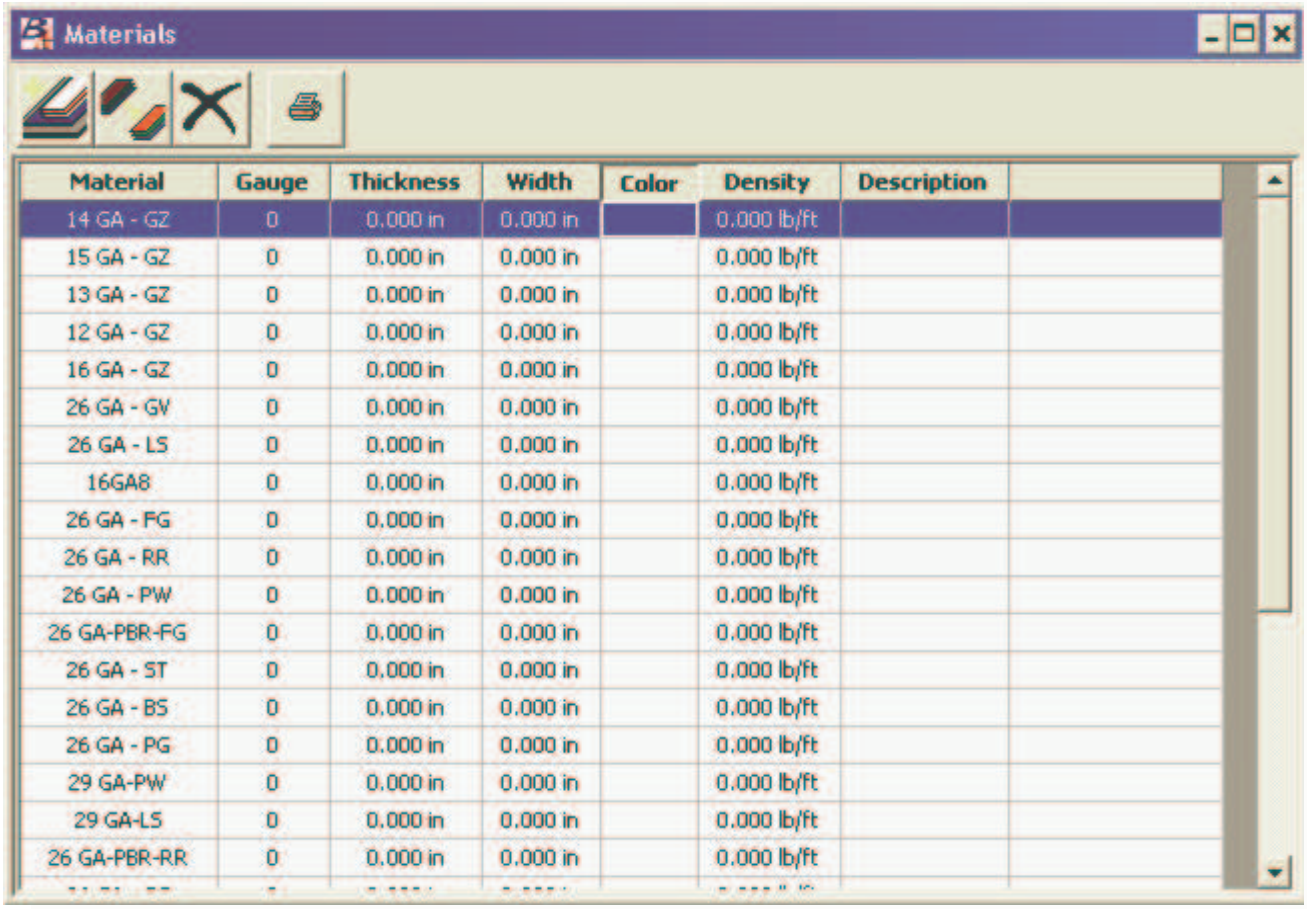
Profiles



SmartComm uses profiles to determine which machines can run each job. A job with a profile assigned to it may only be downloaded to a line capable of running that profile. This prevents a job from being downloaded to a line that is not capable of running the job.

1. From the pull down menu, click on Definitions, then Profiles. The Profile window will appear.
2. Click on the "Add" profile icon  in the toolbar.
3. Edit the name of the profile.
4. Coverage, package capacity and description are optional fields that may be useful for your record keeping. You can enter any appropriate data or simply leave them blank.
5. From the dropdown list, pick the first machine that can run this profile.
6. If additional machines can run this profile, click the "Add Machine" icon  in the toolbar and select another machine. Repeat this step until all machines capable of running this profile are listed.
7. Repeat the above steps for each profile. The Copy icon  will make entering similar profiles much faster.

Materials

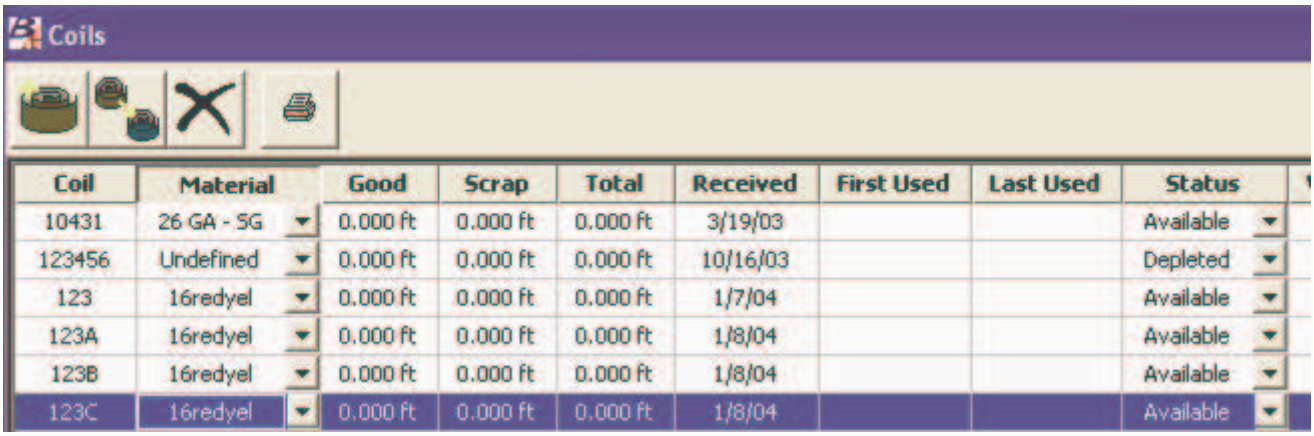


Material	Gauge	Thickness	Width	Color	Density	Description
14 GA - GZ	0	0.000 in	0.000 in		0.000 lb/ft	
15 GA - GZ	0	0.000 in	0.000 in		0.000 lb/ft	
13 GA - GZ	0	0.000 in	0.000 in		0.000 lb/ft	
12 GA - GZ	0	0.000 in	0.000 in		0.000 lb/ft	
16 GA - GZ	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - GV	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - LS	0	0.000 in	0.000 in		0.000 lb/ft	
16GA8	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - FG	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - RR	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - PW	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA-PBR-FG	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - ST	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - BS	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA - PG	0	0.000 in	0.000 in		0.000 lb/ft	
29 GA-PW	0	0.000 in	0.000 in		0.000 lb/ft	
29 GA-LS	0	0.000 in	0.000 in		0.000 lb/ft	
26 GA-PBR-RR	0	0.000 in	0.000 in		0.000 lb/ft	

SmartComm uses materials to inform the operator which material/coil to load for a job. Each job has a material associated with it and the line operator will see this information on the controller. If you choose not to use materials, the job's material may be set to undefined.

1. From the pull down menu, click on the Definitions, then Material. The Materials window will appear.
2. Click on the "Add" material icon  in the toolbar.
3. Edit the name of the material.
4. Gauge, Thickness, Width, Color, Density and Description are optional fields that may be useful for record keeping. You can enter any appropriate data or simply leave them blank.
5. Repeat the above steps for each material. The Copy icon  will make entering similar material much faster.

Coil Inventory



If you would like to keep track of coil data, the inventory must be entered into SmartComm. If the inventory already exists in electronic format, you can speak to Beck Automation about the possibility of importing from that system. Keeping track of coils is completely optional.

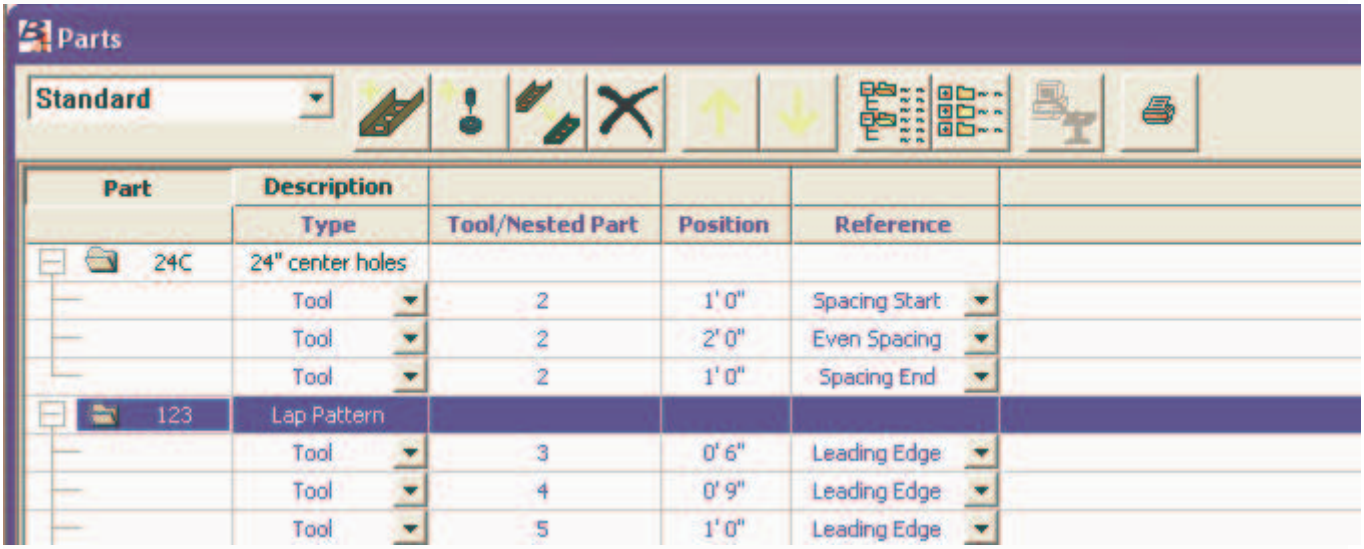
When a coil is loaded at the line, the operator will be prompted for a coil number. The production and scrap that is created will be reported back to SmartComm and totaled for that coil.

SmartComm can also verify the correct coil is loaded. Coil validation may be enabled on the preference dialog. This feature will lookup the newly loaded coil's material and compare it to the current job's material. If the materials do not match, the line operator will be sent a warning message.

Below are the instructions for entering coils into inventory.

1. From the pull down menu, click on Definitions, then Coil Inventory. The Coils window will appear.
2. Click on the "Add" Coil icon  in the toolbar.
3. Edit the name of the Coil.
4. From the dropdown list, pick what material this is.
5. From the next dropdown list, pick the status of this material.
6. Vendor, Weight, Length and Notes are optional fields that may be useful for record keeping. You can enter any appropriate data or simply leave them blank.
7. Select the grade in the next drop-down list. This is also only for record keeping.
8. Repeat the above steps for each coil you have in stock. The Copy icon  will make entering similar coils much faster. You will also do this for each new coil you receive.

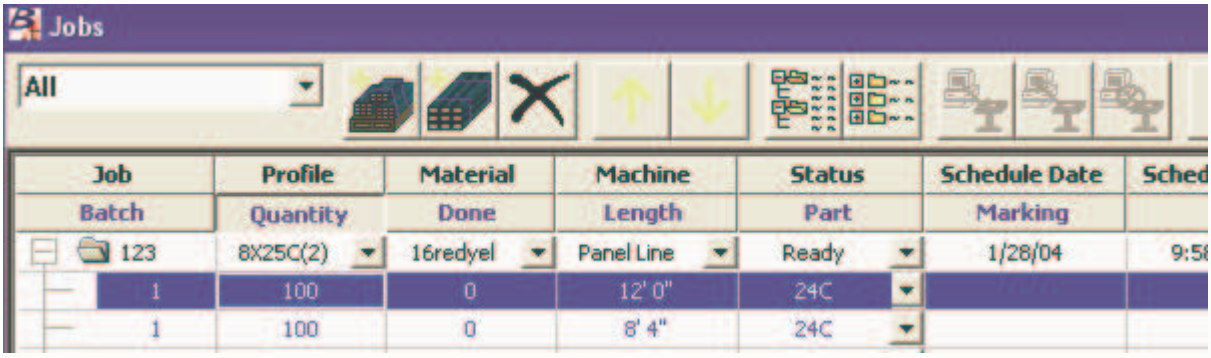
Parts



Parts define the punch locations for an item. A punch operation consists of a tool number (this may simply be a press number on lines without gags), a location for the operation, and a reference. The reference may be Leading Edge, Trailing Edge, Leading Center, Trailing Center, as well as Even Spaced with limits.
There are also options to nest parts within parts. This is useful if the same cluster of holes is repeated. Nesting also allows parts with alternating hole patterns (left-hand/right-hand) to be made.
Instructions to create a part:

1. From the pull down menu, click on “Program”, then “Parts” or click on the “Parts” icon  in the toolbar.
2. Click on the “Add Part” icon  in the toolbar.
3. Edit the name of the part you are keying in.
4. The description is optional unless you have a part printer. Then this field is for programming the print message.
5. From the dropdown list under your part, choose Tool or Nested Part. Edit the Tool/Nested Part ID, Position for that Tool, and the Reference.
6. For additional operations in that part, click the “Add Operation” icon  in the toolbar. Edit the Type, Tool/Nested Part, Position and Reference.
7. Repeat the above steps for each part you need. The Copy icon  will make entering similar parts much faster.
8. Highlighting the desired part definitions and then clicking the print icon  can print parts.

Job Entry



A Job is a group of any number of items with a common profile and material. Jobs may be imported or entered directly at SmartComm. Jobs are entered similar to the way data would be entered into a spreadsheet. The Enter and Tab keys will transition you to the next cell, making the use of the mouse unnecessary.

Entering Job data:

1. From the pull down menu, click on “Program”, then “Jobs” or Click on the “Jobs” icon  in the toolbar.
2. Click on the “Add Job” icon  in the toolbar.
3. Edit the Job name.
4. From the dropdown list, choose the correct Profile.
5. From the dropdown list, choose the appropriate Material
6. If you know which machine you want to run this job on, you can select that at this time.
7. Skip over the Status dropdown list. This field changes automatically. You can force the status to HOLD if you want to prohibit production. You can also force the status of a COMPLETED job back to READY if you want to run it again.
8. If you desire to schedule production, you may enter a Schedule Time. This would cause the job to be automatically downloaded to selected machine at this time.
9. A new line should have been created under the job heading for the first batch. Enter the batch number in this item.
10. Edit the desired Quantity.
11. Enter the desired Length. If the part has tool 1 (shear tool) defined, it will fill the length field in automatically.
12. From the dropdown list, choose which part you are going to run. Select “Shear Only” for items that do not get punched.
13. Repeat steps 9 to 12 for each batch in the job.

Downloading Jobs.

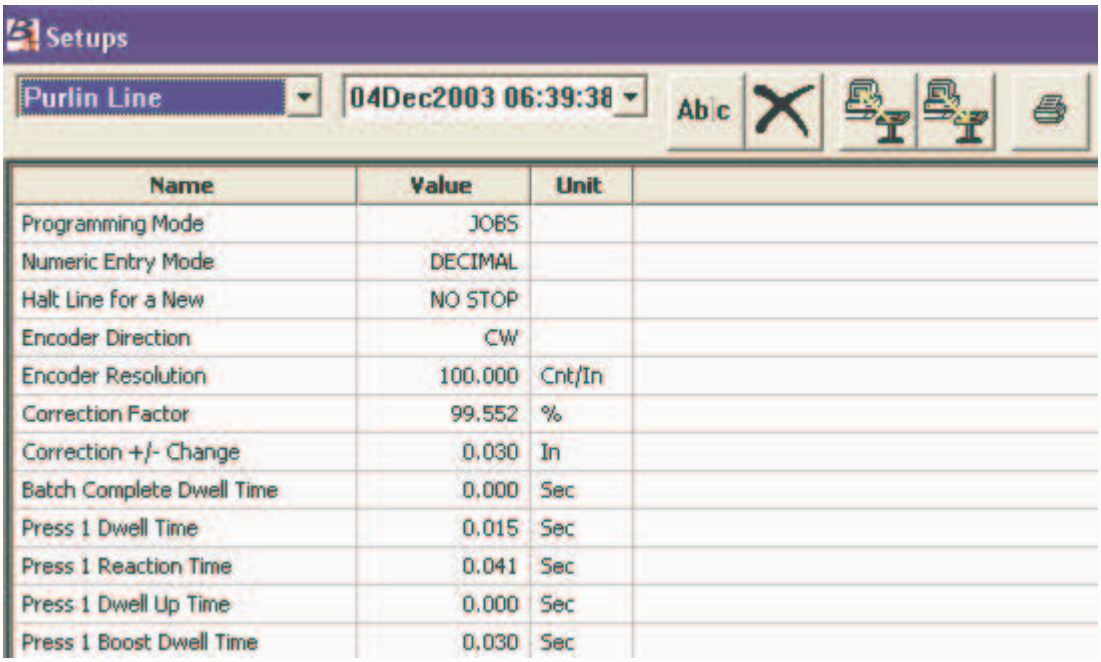
There are three ways to download jobs to the controller.

Highlight the jobs to download and click the Download Icon. This is the most common way and is generally used by a foreman who oversees production and decides what to run. Jobs may be downloaded a week or more in advance allowing the operator to run them in any order.

Jobs may be scheduled to run on a certain day. Choosing a machine and setting the Schedule date and time accomplish this.

If you are interested in prioritizing Jobs and allowing the operator to request the highest priority job, please contact Beck Automation for more details.

Controller Setups

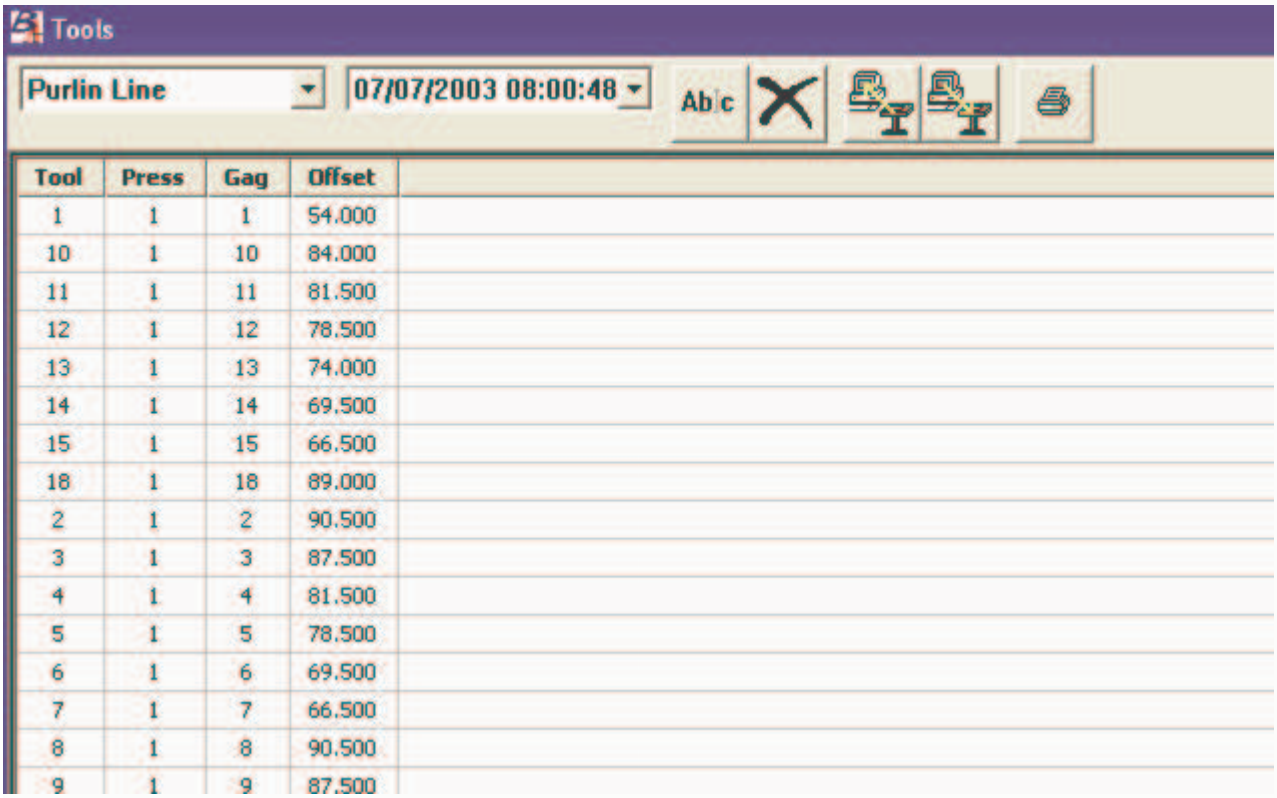


Name	Value	Unit
Programming Mode	JOBS	
Numeric Entry Mode	DECIMAL	
Halt Line for a New	NO STOP	
Encoder Direction	CW	
Encoder Resolution	100.000	Cnt/In
Correction Factor	99.552	%
Correction +/- Change	0.030	In
Batch Complete Dwell Time	0.000	Sec
Press 1 Dwell Time	0.015	Sec
Press 1 Reaction Time	0.041	Sec
Press 1 Dwell Up Time	0.000	Sec
Press 1 Boost Dwell Time	0.030	Sec

The controller setup parameters may be saved in SmartComm. They may not be altered in SmartComm, but they may be restored to the controller.

1. From the pull down menu, click on “Machine Configure”, then “Setups” or Click on the “Setup”  icon in the toolbar, the setups window will appear.
2. From the dropdown list, select a machine.
3. Click on the “Upload” icon  in the toolbar. After a few seconds the setup parameters will appear.
4. Once it is complete, the second dropdown list will display the date and time that you uploaded the Setups for that machine. You can edit this to whatever you like by clicking the “Rename” icon  in the toolbar.
5. Repeat the above steps for each machine you have.
6. If desired, click the print icon  to print the setup parameters currently being viewed in the window. It may be useful to have a printout at each controller.

Controller Tool Data



Tool	Press	Gag	Offset
1	1	1	54.000
10	1	10	84.000
11	1	11	81.500
12	1	12	78.500
13	1	13	74.000
14	1	14	69.500
15	1	15	66.500
18	1	18	89.000
2	1	2	90.500
3	1	3	87.500
4	1	4	81.500
5	1	5	78.500
6	1	6	69.500
7	1	7	66.500
8	1	8	90.500
9	1	9	87.500

If any of the controllers use tools, these definitions may be saved on SmartComm. The tools cannot be defined or changed at SmartComm, but are saved so that they can be restored in the event of a memory loss.

1. From the pull down menu, click on “Machine Configure”, then “Tools” or click on the “Tools” icon  in the toolbar.
2. From the dropdown list, pick the machine you wish to upload tool on.
3. Click the “Upload” icon  in the toolbar. This will take a few seconds.
4. Once it is complete, the second dropdown list will display the date and time that you uploaded the tools. You can edit this to whatever you like by clicking the “Rename” icon  in the toolbar.
5. Repeat the above steps for each machine.
6. If desired, click on the print icon  to print the tools setup parameters currently being viewed in the window. It may be useful to have a printout at each controller.