

eDART™ Job Started Tool Instructions

Introduction

Customers are steadily becoming more dependent on the eDART running to sort parts, control the machine or ensure a matched and stable process. This becomes particularly visible with a network and eDART Data Manager (EDM) running the system overview. However many operators forget to start the job on the eDART. Even if auto-start is being used it will not do you much good if the cable to the identifying sensors is not plugged in.

We created an optional software tool called "Job Started" that helps solve this problem. When "Job Started" runs (attached to a mold, molds etc.) it closes an OR2 contact named *Production Output / Job Started* that you have previously defined in Sensor Locations. The contact then only closes when a job is running. This contact can be wired into a machine enable input to only allow the machine to run after the eDART job is running.

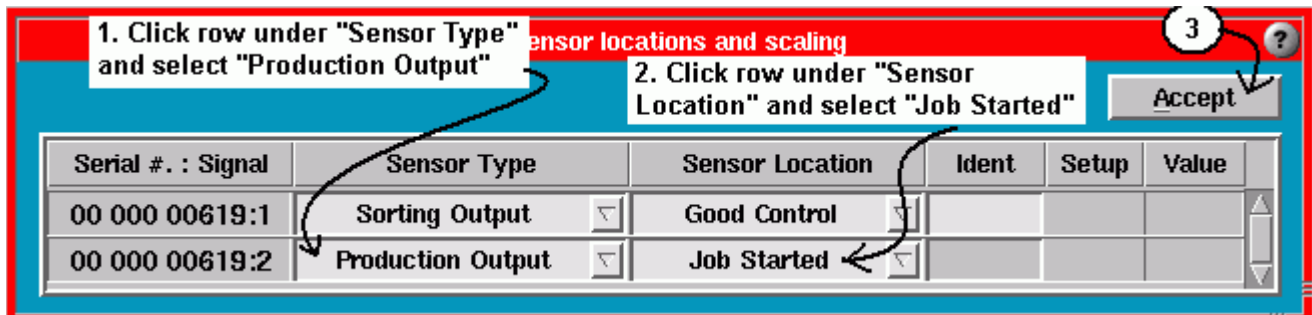
Installation

Run the eDART installer and install the Job Started tool on the eDARTs that need it. You do not need to re-start the eDART for the tool to be available. Note that the Job Started tool will only work with eDART software releases 8.0 and above.

Usage

This tool was built to turn on the relay (OR2-D) output "Production Output", "Job Started" whenever it is running. The idea is that if the Job Started tool is "attached" to a mold, all molds or material then whenever that job is running with the output will be on and whenever the mold runs without the tool attached it will be off.

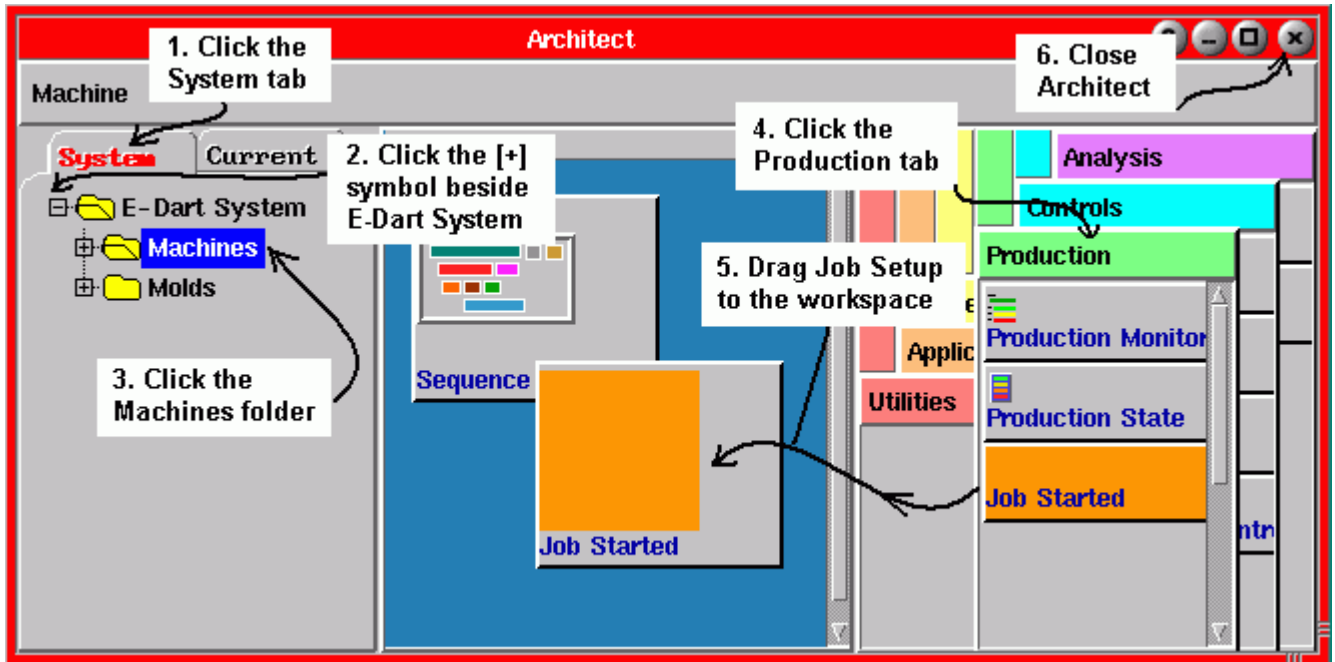
So the first step is to pick an OR2 output in Sensor Locations and define it as Job Started.



Note that the definition of the *Job Started* output remains with the machine. We assume that the contact closure is wired to the machine. Therefore regardless of which mold you run on the machine the output will remain defined as *Job Started*.

Setup for Job Started on All Jobs

To use the Job Started tool in its most basic form is to set the tool to start with any mold. This means dragging it on to the "Machines" folder in Architect. Use the "Molds" folder for eDART releases prior to Release 8.6.



Note:

Due to a current quirk in the Architect, when dragging a tool to a folder other than the currently running mold folder you may need to stop the job and start it again to get the Job Started tool to run and turn the output on.

After the Job Started tool is running it will place a banner message up on the screen that reads as shown at right.

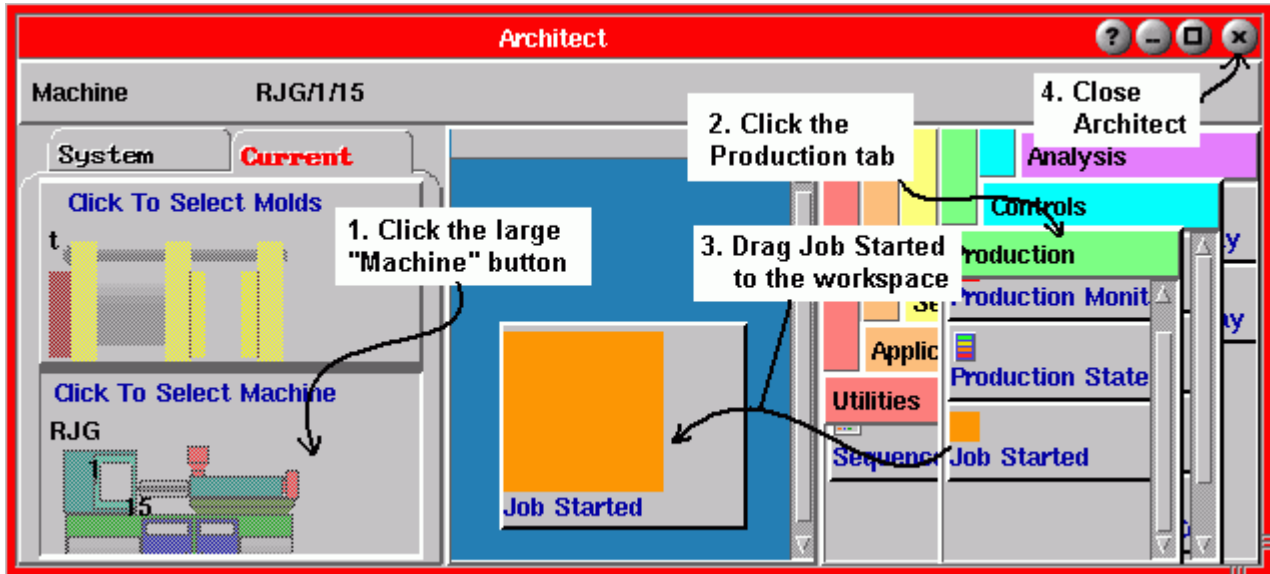


If you have not defined the Job Started output in Sensor Locations the message at right will appear instead.



Attaching Job Started to the Current Machine

Because the *Production Output / Job Setup* is wired to a specific machine you might choose to just drag it on to those machines for which it is wired. This way you will not have the Job Setup tool display showing “output missing” when no output is defined and wired.



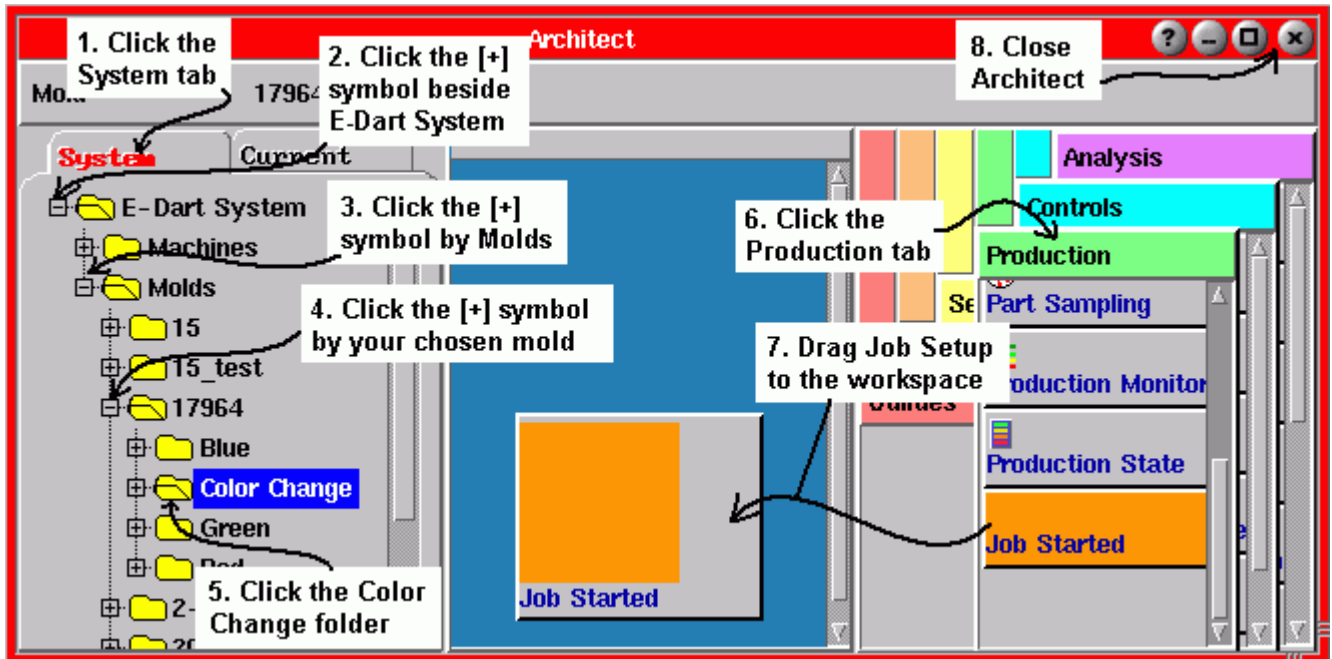
Using the Job Started Tool on Specific Molds

This is the simplest to start. Just open the Architect and drag Job Started onto the current workspace. This will start the Job Started tool immediately. Job Started then remains attached to that mold to turn the on the *Job Started* output ON each time the mold is run (if the output is defined).

Using the Job Started Tool for Material Changes

It may be useful to produce different assemblies depending on the material in use. One customer had several different color materials that they ran. When they changed colors they used the Job Started tool to turn on the output and tell the robot to not place the expensive inserts in the mold. This allowed them to run mostly on cycle without the mold cooling due to purges etc. They also changed the valve gate sequencing. Thus during the material change they would run the *mold / Color Change* job which would turn on *Job Started*. When the manifold was clean they would stop the job and start the job with the correct color. With the *Job Started* output turned off the robot would go back to placing inserts again.

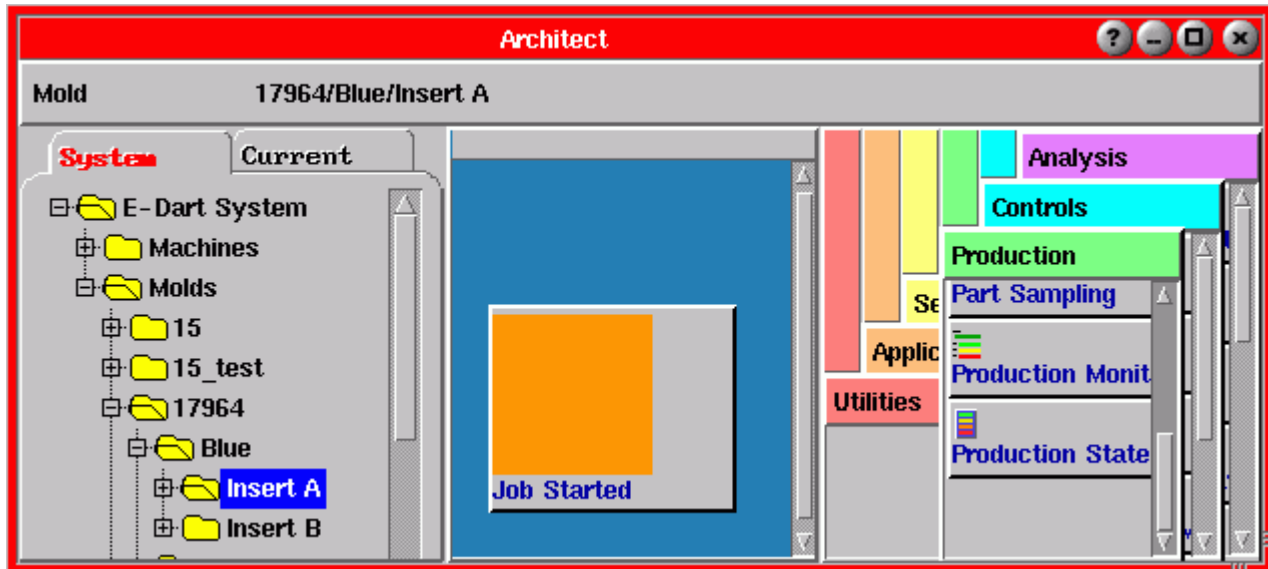
Here is the method they used for setup. If you do not have all of the colors or the “Color Change” material created you can click the right mouse over the mold name folder and create these sub folders one at a time.



When purging the mold during a material change, stop the job and start the job with the “Color Change” folder. With the Job Started tool attached to that folder the *Job Started* output will go on. When running with the proper color (after the material change), stop the job and start the job with the correct color name.

Using the Cavities Level to Control Auxiliaries

You can use a method to the above to change the behavior of a robot depending on the “Cavities” level of the job. Perhaps you run the mold in one case with a particular insert and in another with a different one. You could select the material folder, create two “Cavities” folders underneath named “Insert A” and “Insert B”. Then drag Job Started to “Insert A”, for example.



In this case the robot will know when the *17964 / Blue / Insert A* job is running.