2nd Assignment. Tubular Manuf. without Transportation

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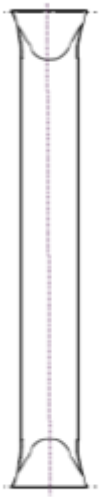
1. VSM and explanation

We start with a storage of the tubular element.

Raw

Then we do the first process that consist of pressing the endings of the tubular element. That it is done on a first workstation.

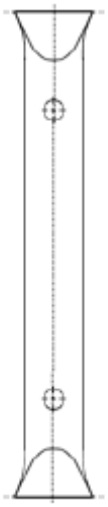


Phase1

At the end of the first action, we storage the modification on a new storage section. In the instructions it says that this storage is moved from workstation one to two, that are separated 2 meters. For the FlexSim model, for this first assignment the teacher specified not to used transportation, so we put a storage between the two workstations, without a

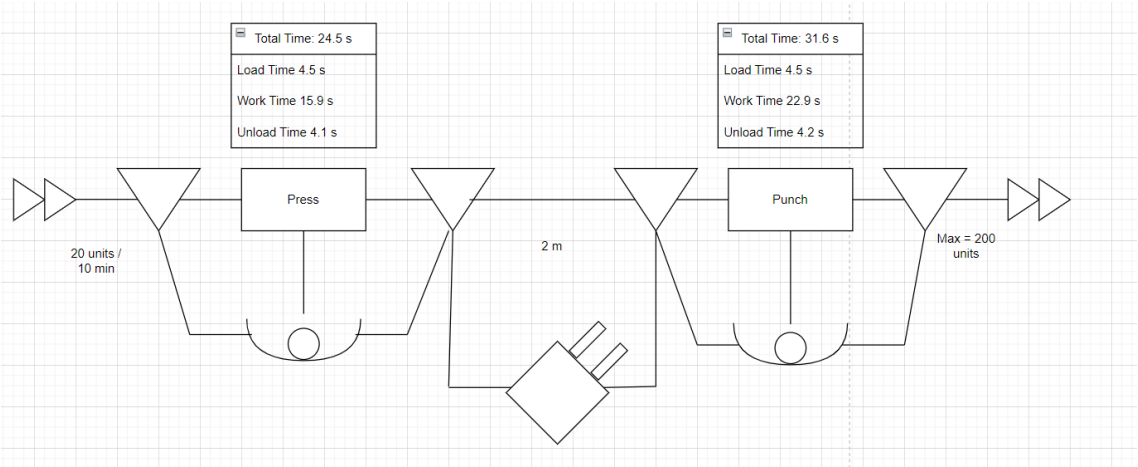
forklift to move it. For this new assignment, we create a model that follows exactly the VSM.

Then we do the second process, on a new workstation, which consist of punching the same endings of the element.



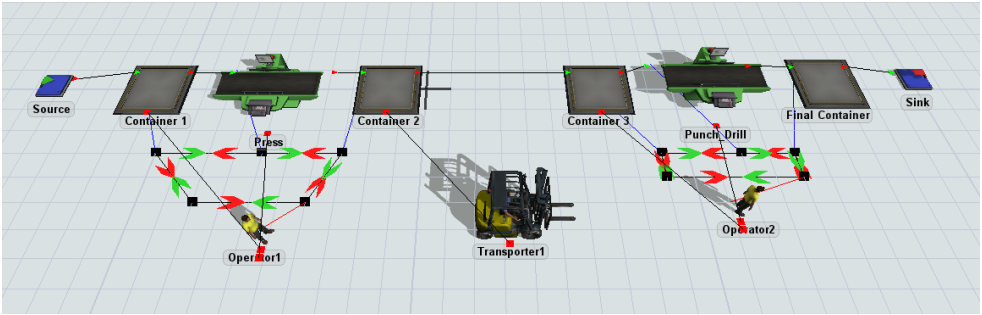
Phase2

When finishing that process, the final product is unloaded on a new container. When the container is filled, it is moved to the next section.



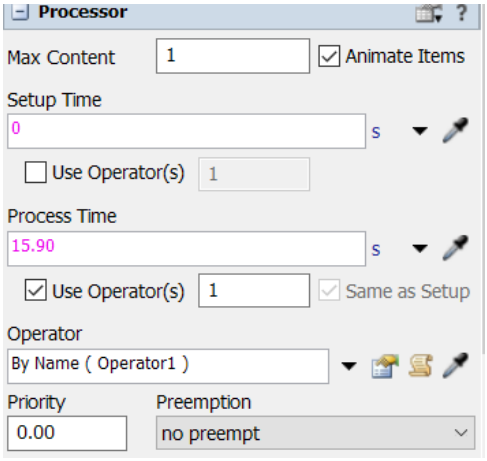
2. Explanation of the FlexSim Model

We use the VSM above to create the FlexSim model.

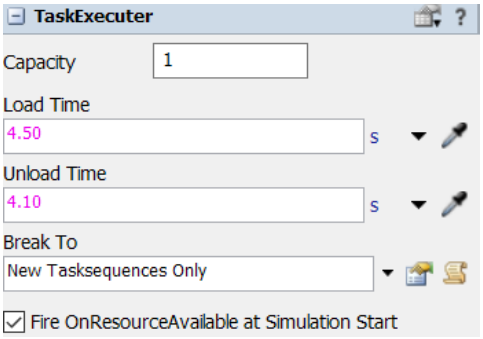


On the different processes we put a process time that is the result of the added times on the statements without the loading and unloading. And we engage the operator to the process, and add the loading and unloading times.

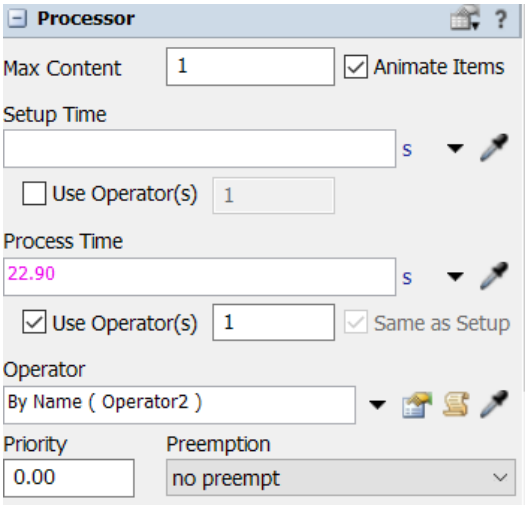
For the first process, pressing:



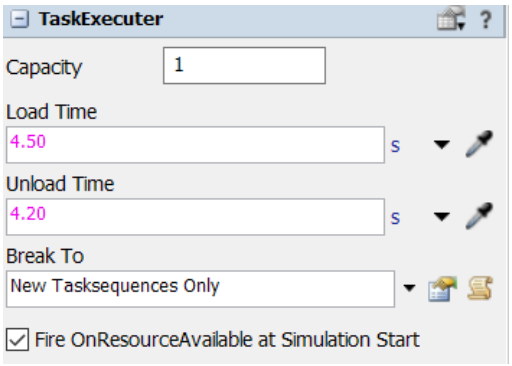
With the first operator:



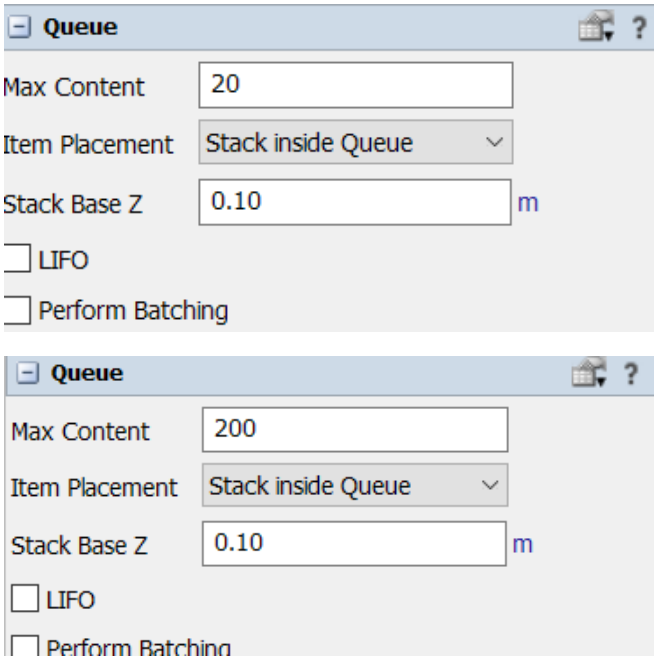
For the second, the punching:



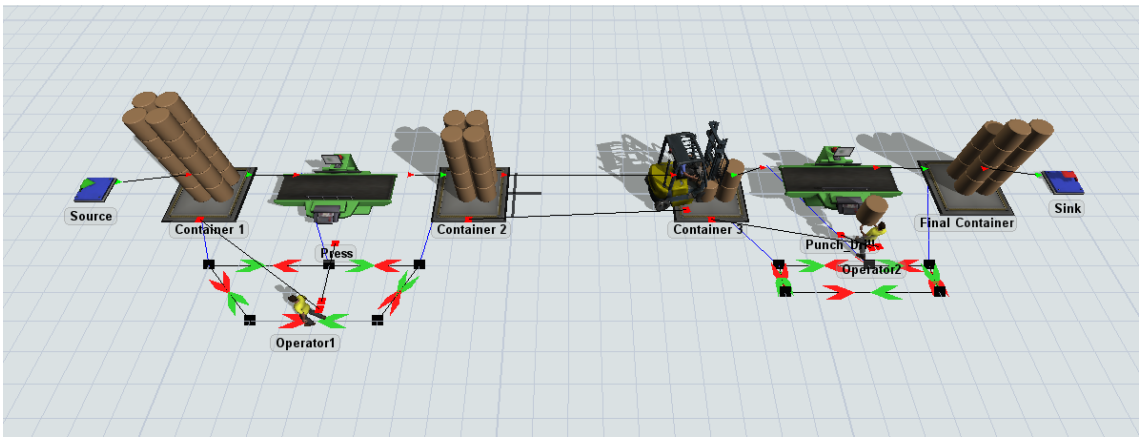
With the second operator:



Also, on the storage containers we set a maximum of 20 and 200 on the last one.



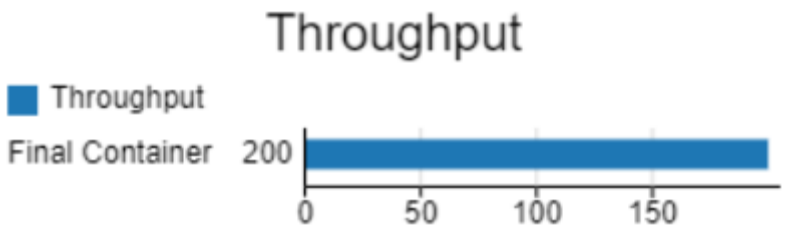
If we simulate the process, we can see the following result:



3. Dashboards

The dahsboards are very important for the recopilation of the data. We choose to collect data from the workers anda products.

First, is very important to know the number of objects that we can produce per hour.



At the end is very important to define the effect of each worker on the production. And measure their effect. In this case we also study on the per hour units, so it can be easier for the definition of the salary.