**Exercise 2.**

With reference to the example “DIBRIS-BIKE” (powerpoint slides partIIlez05, example ), focusing on the part of the plant shown below, you are required to design and implement the following activities.

Diagram, schematic

Description automatically generated

1. Design and implement in MS-Sql server the tables required to store the information related to the “tubes” present in the area control quality (attributes: id, batch\_id, arrival time, due\_date, processing\_time\_on\_lasercutter1, processing\_time\_on\_lasercutter2, processing\_time\_on\_lasercutter3), and to the jobs (“cutting the tubes”) assignment to the different laser\_cutters.
2. Design and implement a scheduling algorithm in Matlab based on dynamic programming to minimise the number of jobs that are late. Store the results in MS-Sql
3. Verify the performance of the algorithms against the definition of the same problem as a mathematical problem
4. Verify such performance generating different instances of the problem