

Lesson 1 Tutorial Introduction

Lesson 1 introduces the basic concepts of diagramming and building a simple model. Building a diagram of the process is a great way to start every model that you will build in FlexSim. If you can not build a diagram, flowchart, or at least see a picture in your mind of how the process works, you will have a difficult time building the model in FlexSim.



Note: if you have already gone through the [Getting Started tutorial](#), many of the concepts you learn in this lesson will not be new. However, subsequent lessons build upon this lesson, so it is probably a good idea to go through it anyway.

What You Will Learn

- How to build a simple layout
- How to connect ports for routing flowitems
- How to detail and enter data into FlexSim objects
- How to navigate in the animation views
- How to view simple statistics on each FlexSim object

New Objects

In this lesson you will be introduced to the [Source](#), [Queue](#), [Processor](#), Conveyor, and [Sink](#) objects.



Conveyor Module Required

This lesson requires the conveyor module. If you do not have this module, you can download and install it from the main menu under **Help > Online Content**.

Approximate Time to Complete this Lesson

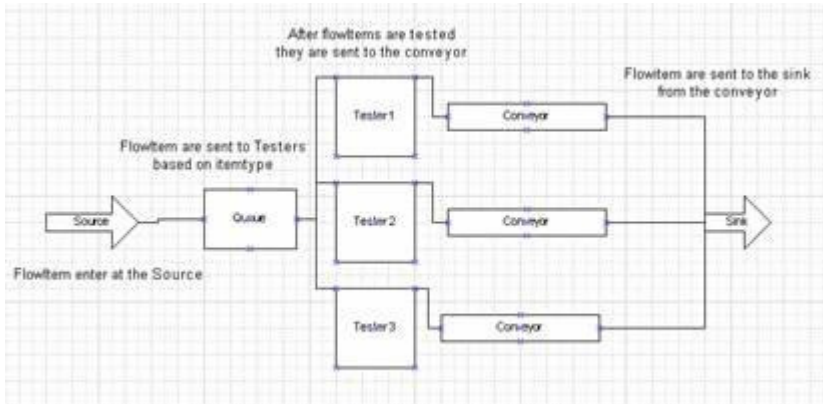
This lesson should take about 30-45 minutes to complete.

Model Views

FlexSim uses a three-dimensional modeling environment. There are two options for the view: [perspective view and orthographic view](#). The orthographic view will look more flat, whereas the perspective view will have a more real world feel to it. You may use any view option to build or run the model. You may open as many view windows as you want in FlexSim. Just remember that as more view windows are opened the demand on computer resources increases.

Model 1 Description

In our first model we will look at the process of testing three products coming off a manufacturing line. There are three different flowitem types that will arrive based on a normal distribution. Types will be uniformly distributed between type 1, 2, and 3. As flowitems arrive they will be placed in a queue and wait to be tested. Three testers will be available for testing. One tester will be used for type 1, another for type 2, and the third for type 3. Once the flowitem is tested it will be placed on a conveyor. At the end of the conveyor the flowitem will be sent to a sink where it will exit the model. Figure 1-1 shows a diagram of the process.



Click [here](#) for the Step-By-Step Tutorial.

Model 1 Data

Source arrival rate: normal(20,2) seconds

Queue maximum size: 25 flowitems

Testing time: exponential(0,30) seconds

Conveyor speed: 1 meter per second

Flowitem routing: Type 1 to Tester 1, type 2 to Tester 2, type 3 to Tester 3.