Exercise: Coupling Stations

Learning objective

When you have completed this task

- You will be able to control several stations simultaneously with one PC.
- You can adjust the optical sensor

Problem description

The Stacking magazine station is to work together with the Conveyor station. If the push button is activated the stacking magazine is to push a workpiece onto the belt and the belt stationis then to transport this workpiece to the end of the belt. The stacking magazine should only push a workpiece onto the belt if the the belt is free.

Task

- Describe the necessary modification of the stations. Draw a schematic.
- Describe how you will ensure that a workpiece is only pushed out if the the belt is free.
- Carry out the modification and set up the system. Make sure that the sensors are working properly and use the data sheets to adjust the sensors.
- Create the circuit diagram in FluidSIM to control the two stations using two EasyPorts.

Aids

- Theory book
- FluidSIM®
- Stations Stack Magazine and Conveyor
- Data Sheeof of Optical Sensor SOE4-FO-L-HF2
- Tools (Allen Key)

Name:	Class:	Date:

1. Describe the necessary modification of the stations. Draw a schematic diagram.

2. Describe how you will ensure that a workpiece is only pushed out when the beginning of the belt is free.

3. Make the modifications and set up the system. Make sure that the sensors are functioning properly. Also use the data sheet of the sensor.

4. Create the circuit diagram in FluidSIM to control the two stations using two EasyPorts.