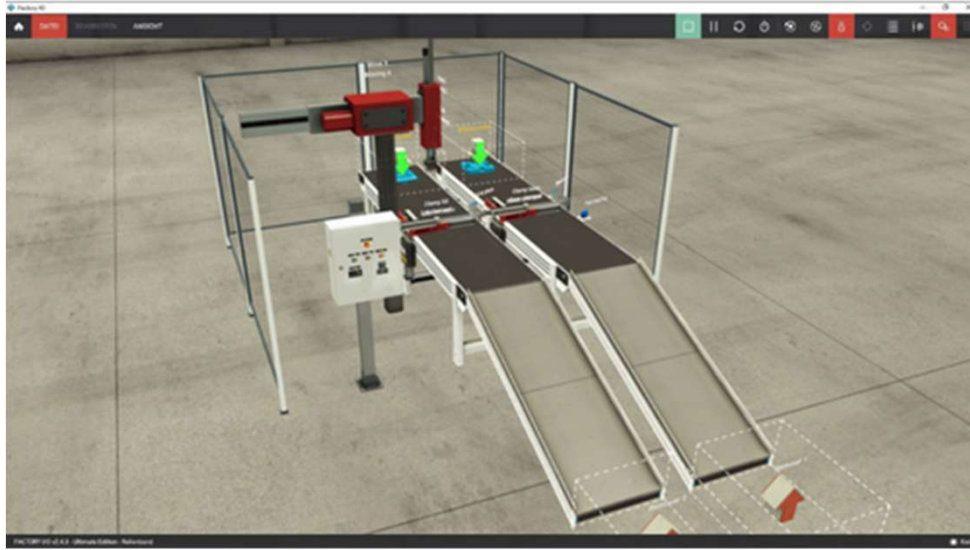


- Model Assembler



Factory IO

- **Functional Description**

Two parts are to be assembled.

The two parts are to be conveyed separately to a stop via two conveyor belts. There they are detected by a sensor and clamped by a cylinder. A 2-axis gantry robot picks up the part and positions it on the other part. Afterwards, the finished assembled part is to be transported away via the conveyor belt. For this purpose, a blockade must move up and a sensor detects the part leaving.

In/Output assignment

The in- and outputs of the model are assigned as follows (the designation input or output refers to the connected controller):

Input Nr.	Factory IO	PLC-Variable name	Specification
1	S1	I_Start	:BOOL; //S1 Start
2	S2	I_Stop	:BOOL; //S2 Stop
3	S3	I_EStop	:BOOL; //S3 Emergency stop
4	B1	I_Lid_Conveyor1_Part_present	:BOOL; //B1 Lid conveyor 1 part present
5	B2	I_Base_Conveyor1_Part_present	:BOOL; //B2 Base conveyor 1 part present
6	B3	I_Base_Conveyor2_Part_present	:BOOL; //B3 Base conveyor 2 part present
7	B4	I_Part_present_Gripper	:BOOL; //B4 part present gripper
8	X pos	I_Actual_Pos_X	:REAL; //X actual position
9	Z pos	I_Actual_Pos_Z	:REAL; //Z actual position

Output Nr.	Factory IO	PLC-Variable name	Specification
1	M1	O_Lid_Conveyor1_ON	:BOOL; //M1 Lid conveyor 1 ON
2	M2	O_Base_Conveyor1_ON	:BOOL; //M2 Base conveyor 1 ON
3	M3	O_Base_Conveyor2_ON	:BOOL; //M3 Base Conveyor 2 ON
4	Y4	O_Stop_Blade_2	:BOOL; //Y2 Stop blade up
5	Y5	O_Close_Gripper	:BOOL; //Y3 Close Gripper
6	Set X	O_Set_X	:REAL; //Set position X
7	Set Z	O_Set_Z	:REAL; //Set position Z
8	L1	O_Start_LED	:BOOL; //L1 Start LED
9	L2	O_Stop_LED	:BOOL; //L2 Stop LED