Test Project

Task E

Mechatronics

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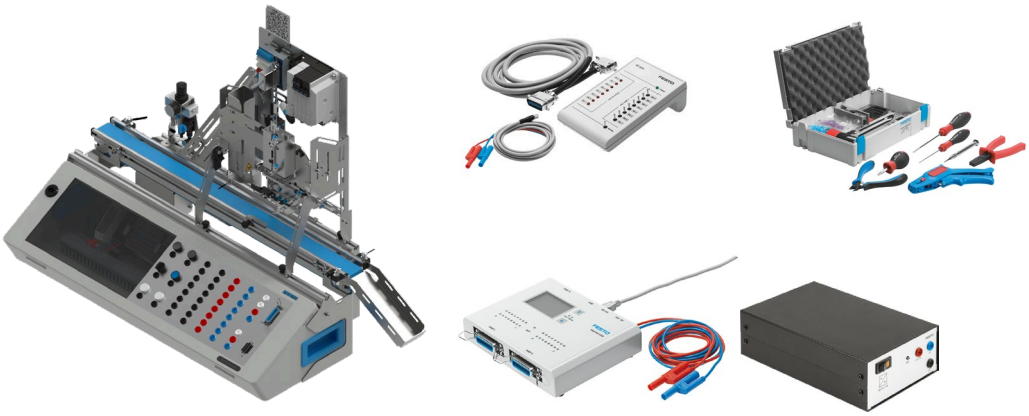
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Introduction to Test Project E

Shared Tasks Commissioning, Maintenance at a Conveyor System with cap assembling

TMAX	INFORMATION
15 min	

Scenario



- The customer calls you because the workpiece that has to handle changed and the System needs to adjust for the new product. But also some misaligned Sensors have to adjust.
- Starting situation:
  - No errors in the program
  - Workpieces are on the slide with seperator
  - All cylinders are retracted, gripper glosed
  - Pressing the start button initiates production
  - Process: Distribution by the slide – Mounting a cover – Press Reset button to continue the Transport on the slide at the right end of the conveyor belt

Aids

- Provided Tools
- Digital simulation box
- FluidSim: For Reset the Program press STOP and Start again

Task

- To get their system up and running again.
- You have 15 minutes to get the system running again.
- The evaluation will focus on the functionality in individual sections and the time required for complete operation.

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Allocation Module SKC

I/O TERMINAL: 1 SIGNAL INDICATES	FLUIDSIM TAG
DI 0: workpiece at start of conveyor	xSENS_START
DI 1: workpiece at end of conveyor	xSENS_END
DI 2: Button start pressed	xBTN_START
DI 3: Button stop not pressed	xBTN_STOPP
DI 4: Automatic mode	xSWITCH
DI 5: Button reset pressed	xBTN_RESET
DI 6: not used	-
DI 7: not used	-

I/O TERMINAL: 1 SIGNAL SET	
DO 0: Move conveyor to right hand side	xCONV_RIGHT
DO 1: Move conveyor to left hand side	xCONV_LEFT
DO 2: Creep speed on	xCONV_CREEP
DO 3: Indicator light start switched on	xLED_START
DO 4: Indicator light reset switched on	xLED_RESET
DO 5: Indicator light Q1 switched on	xLED1
DO 6: Indicator light Q2 switched on	xLED2
DO 7: Separate WP from slide	xSEP_SLIDE

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Allocation Module Assembling

I/O TERMINAL: 1 SIGNAL INDICATES	
DI 0: Gripper is down	xSENS_CYL1_EXT
DI 1: Gripper is up	xSENS_CYL1_RET
DI 2: Gripper is extended	xSENS_CYL2_EXT
DI 3: Gripper is retracted	xSENS_CYL2_RET
DI 4: Gripper is open	xSENS_GRP_OPEN
DI 5: Magazin not empty	xSENS_WP_MAGAZINE
DI 6: Workpiece at stopper	xSENS_WP_CONV
DI 7: not used	-

I/O TERMINAL: 1 SIGNAL SET	
DO 0: Move gripper down	xCYL1_EXT
DO 1: Move gripper up	xCYL1_RET
DO 2: Extend gripper	xCYL2_EXT
DO 3: Retract gripper	xCYL2_RET
DO 4: Open gripper	xGRP_OPEN
DO 5: Open stopper	xSTOPPER_OPEN
DO 6: not used	-
DO 7: not used	-

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