

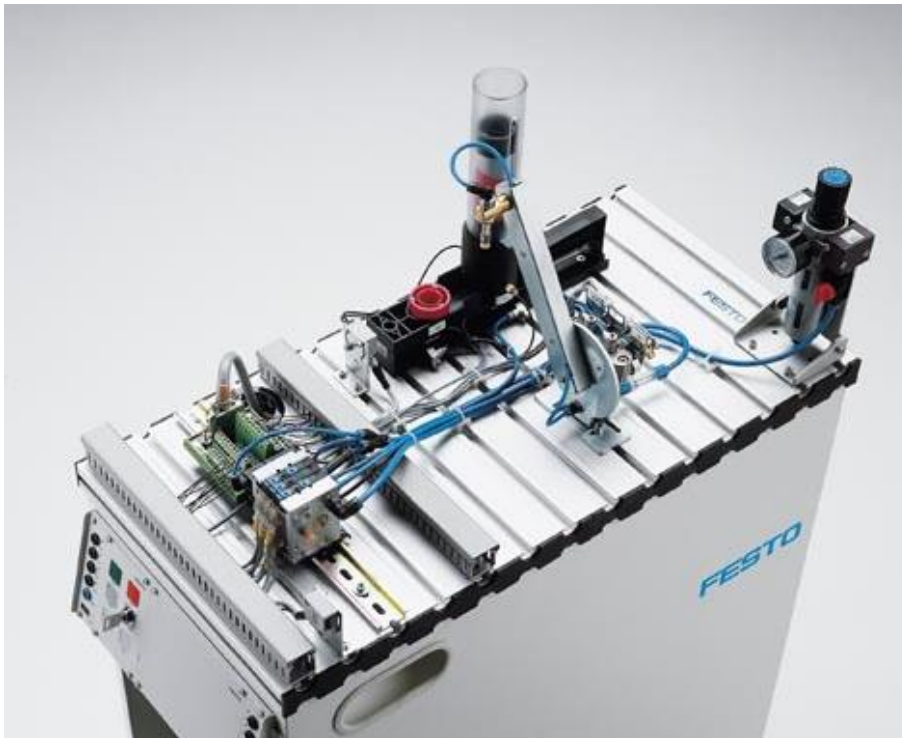
HW Test project for hardware participant

Assembly and commissioning of a distribution station

Maximum time: 90 minutes

Situation

You are responsible for the complete assembly of a distribution station. The station will be used by a customer in France to automate the production process.



Task

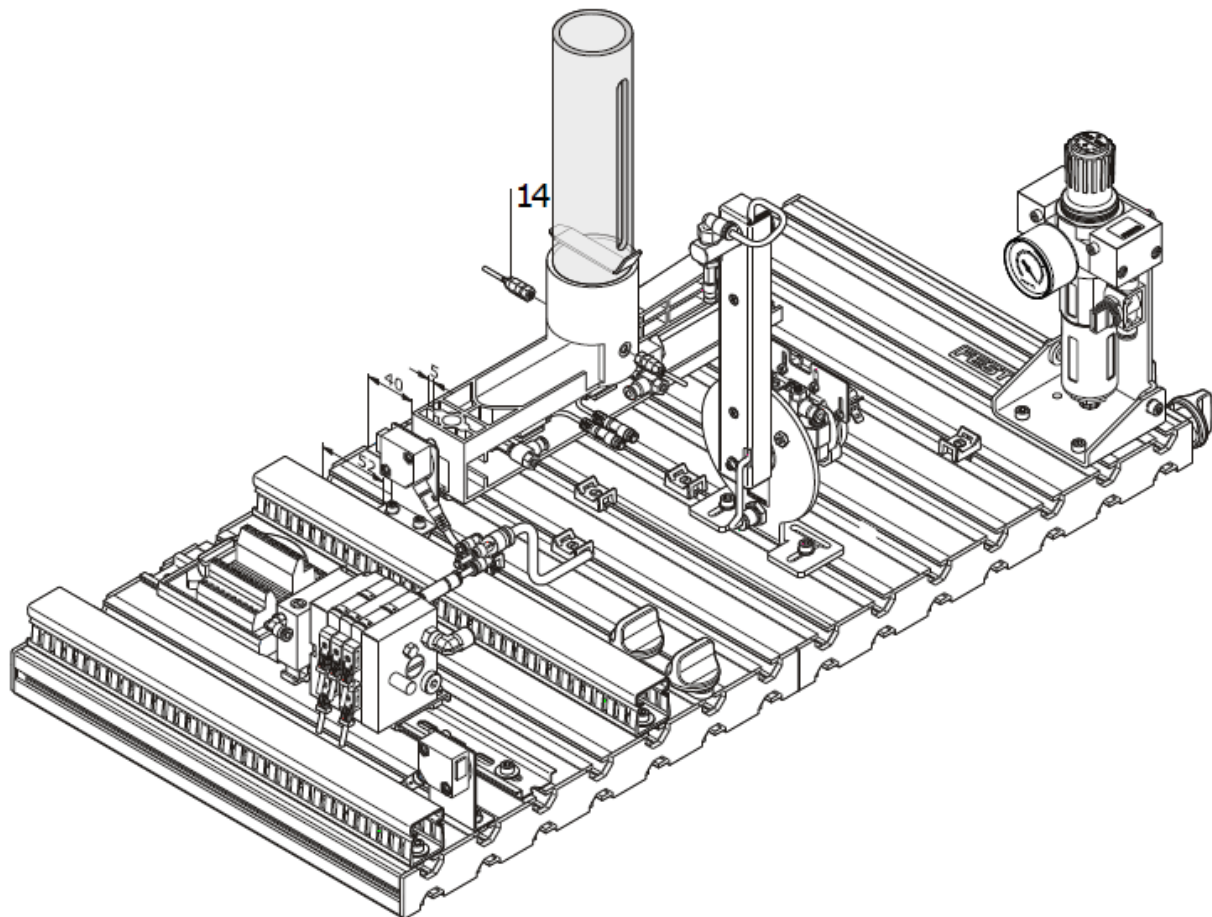
Assembly, wire and tube the distribution station on the profile plate production according to the technical documentation.

Your task is complete when:

1. The station is mechanically assembled on the profile plate, correctly wired, connected and its correct operation has been verified (based on evaluation using the simulation box).
2. The system meets the specifications (in accordance with the 'Agreement on Professional Practice' judgment).

The station will be sent to the customer as soon as you are finished. You will have no opportunity to make improvements later.

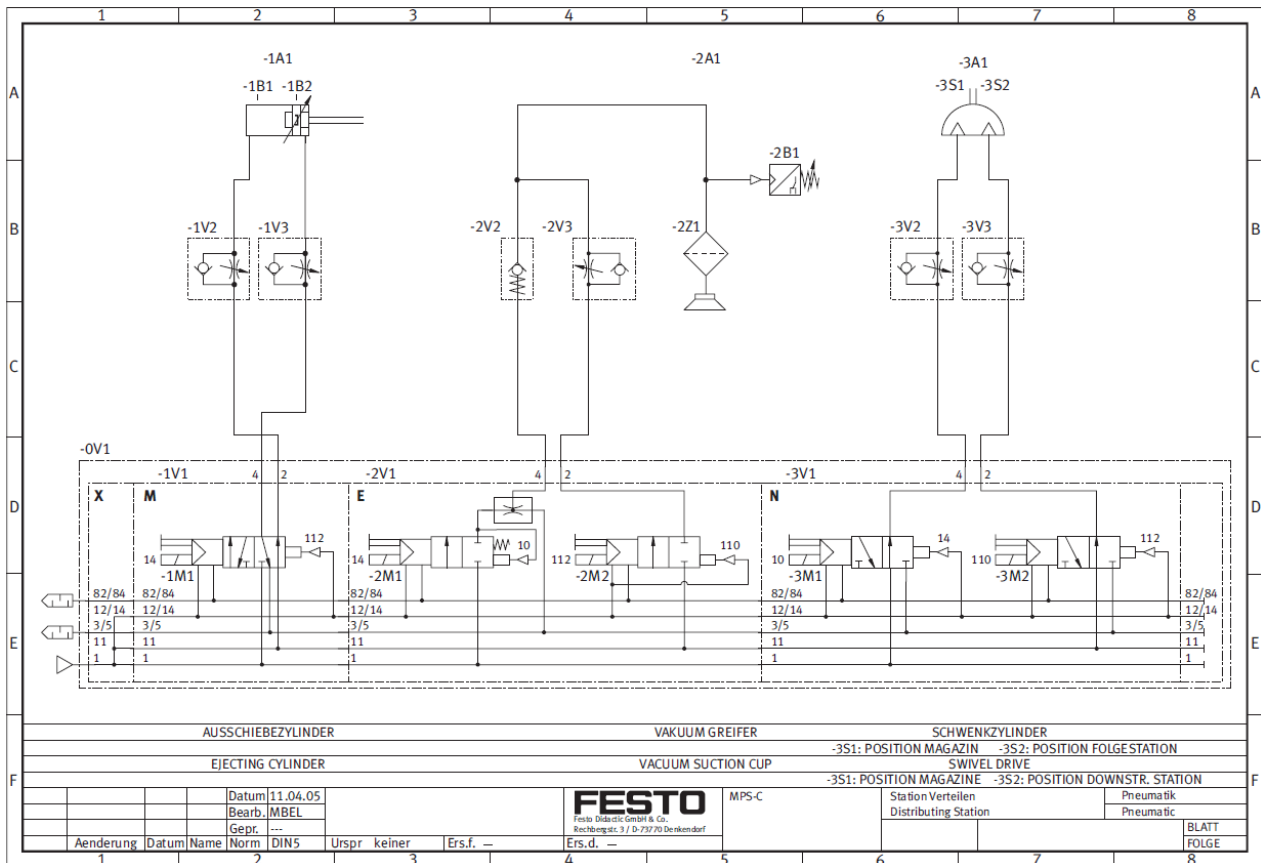
Mechanical information – Station layout



Initial position

- Ejecting cylinder is extended
- Rotary drive is in position “magazine”
- Vacuum OFF
- No workpiece on the station

Pneumatic information – Circuit diagram



Evaluation form HW Test project for hardware participant


Assembly and commissioning of a distribution station

Competitor:

Expert at the evaluation (name, signature):

Maximum time: 90 minutes

Time needed:

Function to be checked using simulation box and wiring of the I/O Terminal			Result	Mark Awarded
Preparation: Connect the simulation box to the I/O terminal (Output 0 – 7: signal 1 or 0); (Input 0 – 7: signal 1 or 0)				
I/O Terminal IN	Comment – Signal 1 indicates			
DI 0				
DI 1	Ejecting cylinder extended			0.5
DI 2	Ejecting cylinder retracted			0.5
DI 3	Workpiece gripped			0.5
DI 4	Swivel drive in magazine position			0.5
DI 5	Swivel drive in downstream station pos.			0.5
DI 6	Magazine empty			0.5
DI 7	Downstream station free			0.5
I/O Terminal OUT	Comment – Signal 1 set			
DO 0	Ejecting cylinder push out workpiece			0.5
DO 1	Vacuum on			0.5
DO 2	Ejection impulse on			0.5
DO 3	Swivel drive to magazine			0.5
DO 4	Swivel drive to downstream station			0.5
DO 5				
DO 6				
DO 7				
Total SimuBox				6

Description	Result	Mark Awarded
„Professional Practice“ The Professional Practice list is controlled by scoring. Excellence: 3p; Professionnel: 2p; Optimization / rework necessary: 1p; Not acceptable: 0p		
1. Cleanliness of the workplace and the station while approval		1.2
2. Routing of tubes and cables		1.2
3. Mechanical implementation		1.2
4. Electrical installation and wiring of the components		1.2
5. Special cases announced by experts and the overall impression		1.2
Total Professional Practice		6

Description	Result	Mark Awarded
Time evaluation only if the maximum number of points is achieved for simulation box function and at least 4 points for professional practice judgment 0.15 points for each minute gained		
Total time evaluation		3

Description	Result	Mark Awarded
Points for SimuBox		6
Points for Professional Practice		6
Points for time evaluation		3
Total points		15