TP 260.v2

This person is not surfing in internet.
He is just maintaining his machine.

TP 260.v2

The new training package offers the possibity to train with the industrial digitalisation, setting a pneumatic application as an example.

Most important topics as a glance:

- Smart maintenance
- Condition monitoring
- Data analysis
- Network set up
- Human – machine communication

Electro-pneumatic application → **digital application**

TP 260.v2 for vocational education

Target group: The students and teachers with initial electropneumatics experience (with TP 201) which:

- **need to cover the digital training requirements that are in the curricula**
- **need to cover maintenane topics such as predictive maintenance, condition monitoring etc.**
- **want to improve skills towards I4.0 and smart maintenance**

Basic Pneumatics

TP 101

Basic Electro-Pneumatics

TP 201

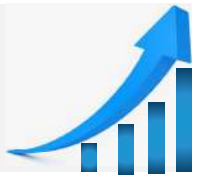
Digitalisation in Pneumatics

TP 260.v2

TP 260.v2 for industry

Target group: Maintenance, designers, teachers which need the digital maintenance skills to improve the performance of the production.

How to increase the efficiency in production?



How can digitalisation improve the efficiency?

Repair the breakdowns as soon as possible

- High-End technical knowledge
- Immediate and accurate information about breakdown
- Accurate technical data about the machine and the components

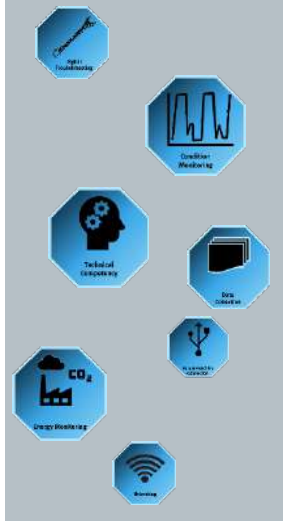
Prevent from breaking down again

- Condition monitoring
- Machine data collection and analysis
- Predictive maintenance

Prevent wasted energy and performance

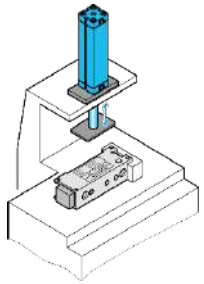
- Energy consumption monitoring
- Performance monitoring
- Performance data analysis

Full Digital Support-TP 260.v2



Training with TP 260.v2

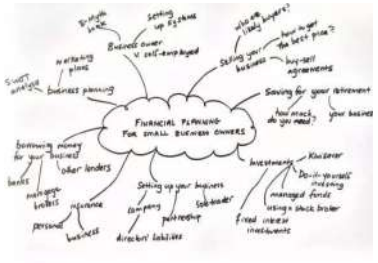
The training with TP260 is designed partially as a role playing. In the first period of the training, the participants design a conventional machine and make a production. Then they improve the machine by implementing the necessary digitalisation for smart maintenance.

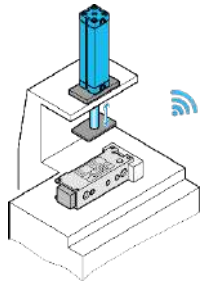


1st training period
Conventional machine

- Low production numbers
- Long set up times
- Long downtimes (TP 101+)
- High energy consumption
- High scrap rate
- Late delivery to customer

Brainstorming:
How can I improve the production by the support of digitalisation?





2nd training period
Modified machine with high use of digitalisation

- High production numbers
- Short set up times
- Short downtimes (TP 101+)
- Low energy consumption
- Low scrap rate
- On time delivery to customer

TP 260.v2

The learning outcomes with TP 260.v2

After being trained with the training package, the participant can answer the following questions:

- How do I modify a conventional machine for I4.0?
- Which data and how should I monitor?
- Which data should I collect?
- How do I monitor the energy consumption?
- How do I communicate with the machine to achieve Smart maintenance?
- How do I implement a network communication?
- How do I better troubleshoot the machine?

TP260 assures you to gain the right digital skills to improve towards I4.0

What‘s new in TP 260.v2

- New controller Siemens S7/1200 with analogue inputs and outputs for further PLC trainings.
- Desktop PC with pre-installed TP260 software to be used as a server.
- Grafcet as a step diagram.
- New exercises to understand the need for digitalisation and role playing to simulate a production environment.
- Exercises to measure the effectiveness of digitalisation implementation.
- Defective components to simulate breakdowns and smart troubleshooting.

Customer benefits

- State of the art exercises and methods to gain skills for digitalisation, from beginners to experts.
- No previous PLC knowledge is necessary for various customer groups.
- The package is alone very useful for further PLC trainings, from basics to advanced.
- Defective components included to simulate breakdowns and smart troubleshooting.
- No software installation or configuration is necessary, just plug play*.
- Very detailed user guide for start up.

* This is about Windows, and TP 260.v2 software. During the training, the participants already do some configurations to establish network communication which is one of the training aims. S7-TIA Portal should also be installed by the participants.

TP 260 v2 versus v1

TP 260.v2.V2 Order no: 8107242				TP 260.v2.V1 Order no: 8083380		
PN	Component	Q		PN	Component	Q
8108025	Prop-press reg. D:TP-PPV-VPPE-SIBU	1		539779	Prop-press reg. D:TP-PPV-VPPE-SIBU	1
8036235	Flow sensor D:P-BG-SFAB-50U-HQ6-2SV-	1		8036235	Flow sensor D:P-BG-SFAB-50U-HQ6-2SV-	1
183347	Emg-off button	1		183347	emg-off p/butt D:S-EST-16R-SIBU	1
8115009	Edutrainer Siemens S7-1200 CPU: 1214 C	1		8084384	Edutrainer D:ET-BG-LOGO8-ERW-ER	1
8107521	Software Simatic Step 7 (TIA Portal V15.1)	1		8040050	Software D:6ED1058-0BA08-0YA1-LO&	1
567280	Ethernet Cable	3		567280	Cable D:AS-KA-PATCH-2M-GR-CAT&	3
8086515	W-LAN Router	1		8086515	var. power sup. D:AS-ET-AC1200-DIR-842	1
8107245	Memory card D:MDE-SW-TP260-S7	1		8086647	Memory card D:MDE-SW-TP260	1
8072997	Multi-soc. str. D:AS-ET-SDL-C14-3SCHUKO	1		8072997	Multi-soc. str. D:AS-ET-SDL-C14-3SCHUKO	1
8107348	PC Workstation D:AS-ET-PC-TP260	1				
8070415	Keyboard D:AS-ET-KEYB-UK-FUNK	1				
5042759	Cylinder Defective	1				
2344752	Prox. sensor D:TP-BG-SMT-DID	2				
8064260	Filter-SET Defective	1				
151496	Tubing PUN-4X0,75-10M	1		151496	Tubing D:AS-PUN-4X0,75-10M	1
8107244	Storage system	1		8084335	Storage system D:P-OM-260-KPL	1
8087101	Accom.leaflet D:AS-ET-LP-8086515	1		8087101	Accom.leaflet D:AS-ET-LP-8086515	1
8084353	Ident.clip D:ZKT-KAB-20X13	20		8084353	Ident.clip D:ZKT-KAB-20X13	20
8086527	Accom.leaflet D:AS-ET-LP-8084353	1		8086527	Accom.leaflet D:AS-ET-LP-8084353	1
573280	DVD D:DVD-TP-TU-X4	1		573280	DVD D:DVD-TP-TU-X4	1
750224	Accom.leaflet D:LP-TP-SIHI-X4	1		750224	Accom.leaflet D:LP-TP-SIHI-X4	1
8107243	Product label	1		8084337	Product label D:AS-ET-PB-38X30-8083380	1
				572745	Pressure sensor D:TP-BG-SPAU-D10-Q4-M8	1
Workbooks	de 8111486					
	en 8111487			Workbooks	de 8083281	
	es 8111488				en 8083285	
	fr 8111489					