

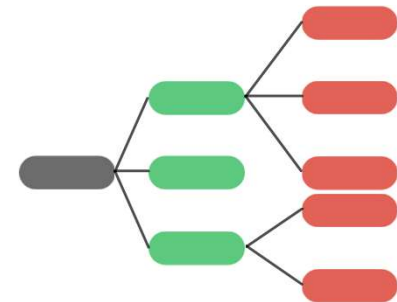


# PQ-FMEA

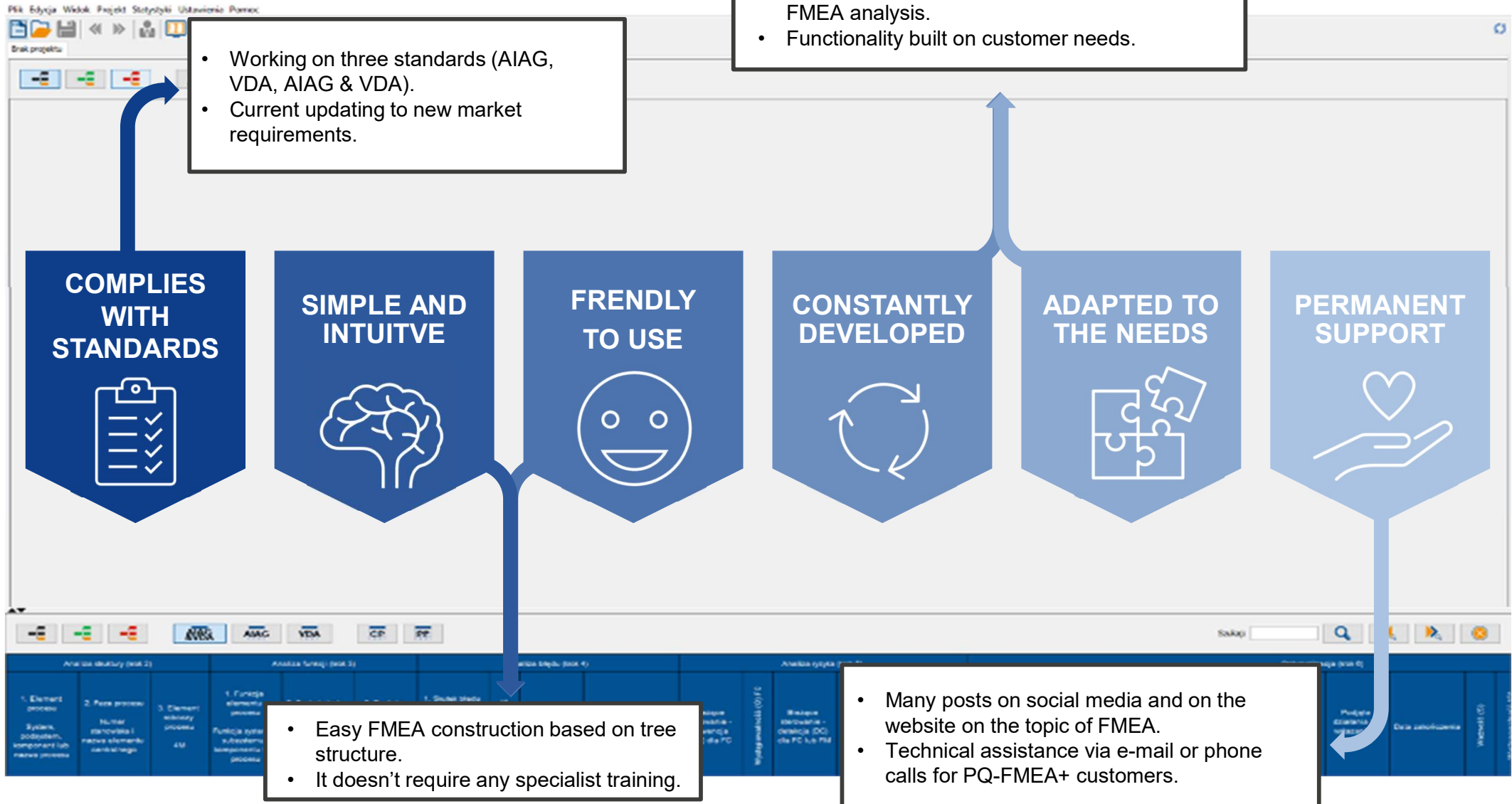
Power of quality

## PQ-FMEA+ software

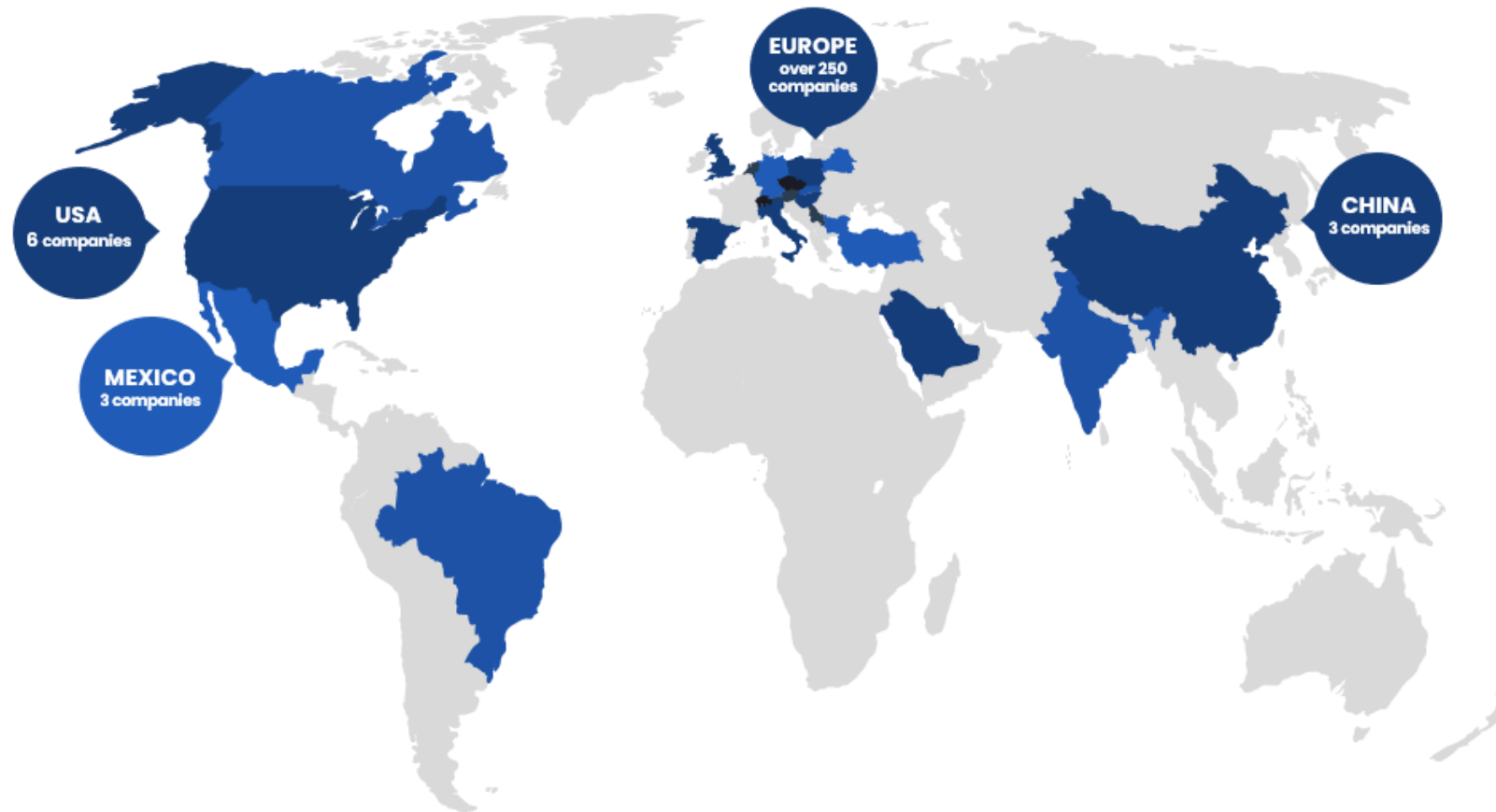
A simple and intuitive program for FMEA analysis



# Introduction



## □ About our activity



PQ-FMEA is already used by more than **300** companies in over **20** countries.

We have over **12** years of experience in the market and development of PQ-FMEA.

## □ About our activity

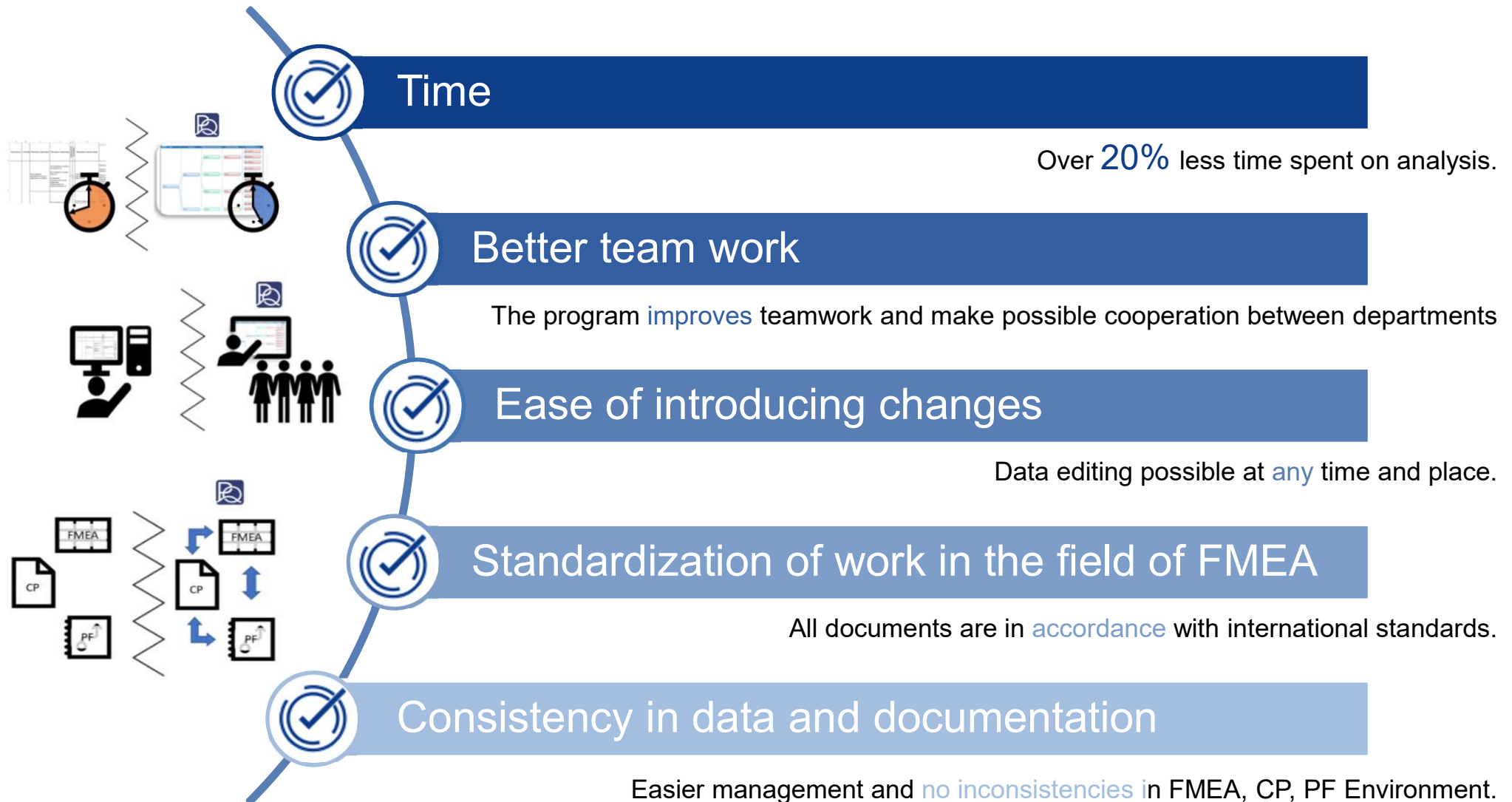
We have been trusted by companies such as:



B/S/H/



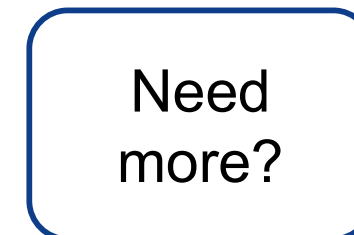
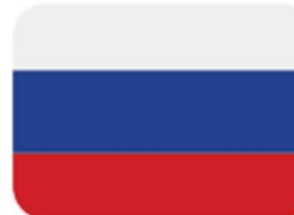
# □ What do you gain thanks to PQ-FMEA?



## □ Languages

**Our program is available in the following languages:**

Polish, English, German, Spanish, Italian, Chinese, Korean, Turkish, Hungarian, Portuguese and Russian.



# Personalization

Possibility to edit SOD tables according to internal requirements.

### Default Severity Scale

S	Effect	Impact to Your Plant	Impact to Ship-to Plant (when known)	Impact to End User (when known)	Corporate or Product Line Examples
10	High	Failure may result in health and/or safety risk for the manufacturing or assembly worker.	Failure may result in health and/or safety risk for the manufacturing or assembly worker.	Affects safe operation of the vehicle and/or other vehicles, the health of driver or passenger(s) or road users or pedestrians.	
9		Failure may result in noncompliance			
8	Moderately high	100% of production run have to be scrapped.			
7		Product may have to be portion (less than 100% deviation from primary decreased line speed manpower.			
6	Moderately low	100% of production run reworked off line and a portion of the product have to be reworked or accepted.			
5		100% of production run reworked in station before processed.			
4	Low	A portion of the product have to be reworked in its processed.			
3		Slight inconvenience to operation or operator.			
2					
1	Very low	No discernible effect.			

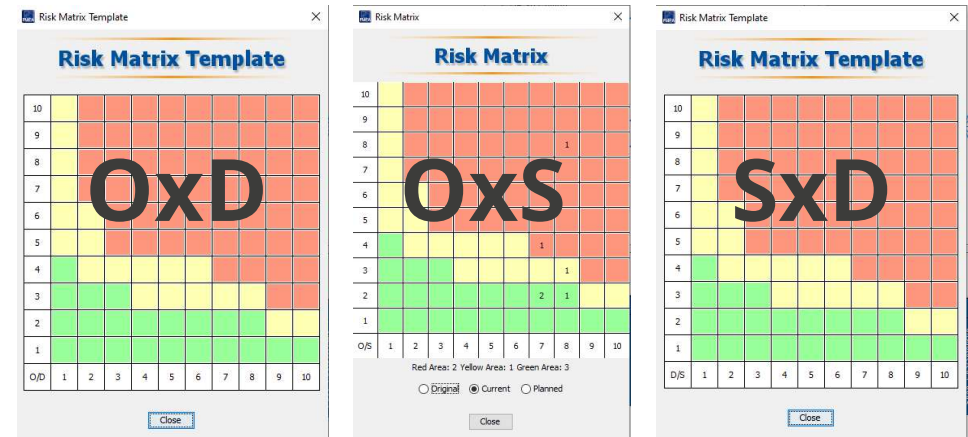
### Default Detectability Scale

D	Ability to Detect	Detection Method Maturity	Opportunity for Detection	Corporate or Product Line Examples
10	Very low	No testing or inspection method has been established or is known.	The failure mode will not or cannot be detected.	
9		It is unlikely that the testing or inspection method will detect the failure mode.	The failure mode is not easily detected through random or sporadic audits.	
8	Low	Test or inspection method has not been proven to have little gauge R (compare etc).	Human inspection (visual, tactile, audible), or use of	
7				
6	Moderate	Test or in to be effective requires a process		
5				
4	High	System is reliable (method applicable)		
3				
2		Detection effective experience verification		
1				

### Default Occurrence Scale

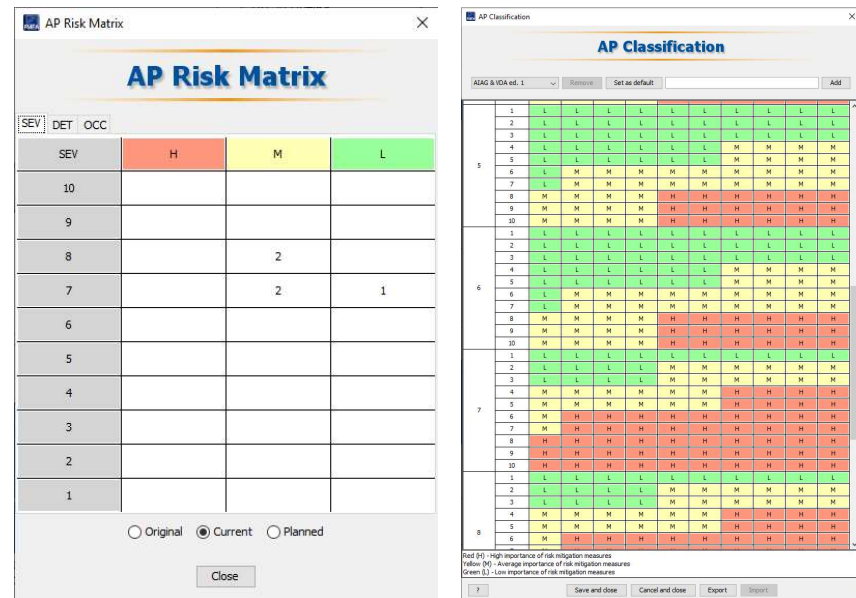
O	Prediction of Failure Cause Occurring	Type of Control	Prevention Controls	Corporate or Product Line Examples
10	Extremely high	None	No prevention controls.	
9	Very high	Behavioral	Prevention controls will have little effect in preventing failure cause.	
8				
7	High	Behavioral or Technical	Prevention controls is somewhat effective in preventing failure cause.	
6				
5	Moderate		Prevention controls are effective in preventing failure cause.	
4				
3	Low	Best Practices: Behavioral or Technical	Prevention controls are highly effective in preventing failure cause.	
2	Very low			
1	Extremely low	Technical	Prevention controls are extremely effective in preventing failure cause from occurring due to design (e.g. part geometry) or process (e.g. fixture or tooling design). Intent of prevention controls - Failure Mode cannot be physically produced due to the Failure Cause.	

The possibility of matching the risk matrix.



The image shows three instances of the Risk Matrix Template window. Each window displays a 10x10 grid with a color-coded risk matrix. The first window is labeled 'OxD' (Occurrence x Detectability), the second 'OxS' (Occurrence x Severity), and the third 'SxD' (Severity x Detectability). The matrices use a color scale from green (low risk) to red (high risk). The OxD matrix shows high risk in the top-right quadrant, OxS shows high risk in the top-left quadrant, and SxD shows high risk in the top-right quadrant. Each window has a 'Close' button at the bottom.

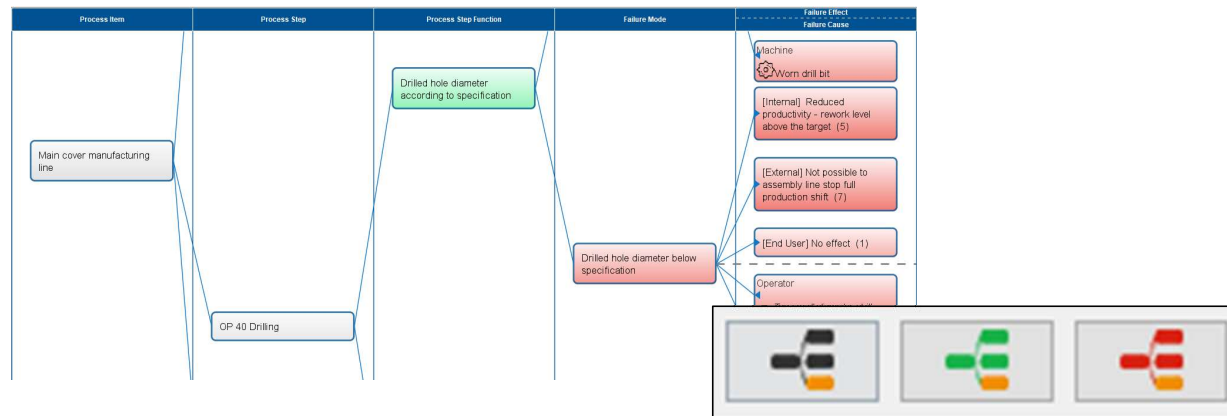
The possibility of matching the AP matrix.



The image shows two windows related to AP (Automated Process) risk assessment. The left window is 'AP Risk Matrix', which displays a 10x10 grid with columns for Severity (SEV), Detectability (DET), and Occurrence (OCC). The grid is color-coded based on the risk level. The right window is 'AP Classification', which displays a 10x10 grid with columns for Severity (SEV), Detectability (DET), and Occurrence (OCC). The grid is color-coded based on the risk level. Both windows have 'Close' buttons at the bottom.

# □ PQ-FMEA+ functions

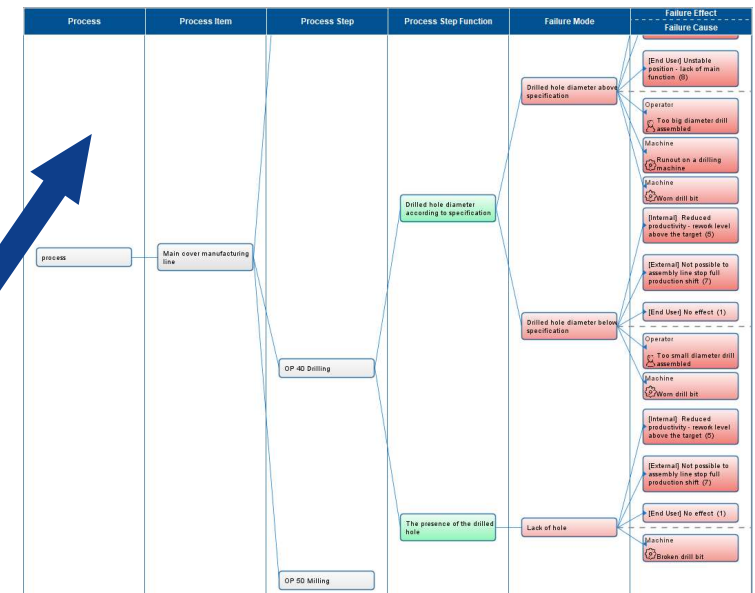
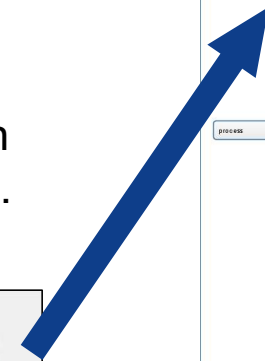
- Creation of **defect trees with a division into structures** in accordance with the new requirements.



Source: [www.aiag.org/store/quality/publications](http://www.aiag.org/store/quality/publications);  
[webshop.vda.de/QMC/de/vda-b%C3%A4nde-englisch](http://webshop.vda.de/QMC/de/vda-b%C3%A4nde-englisch)

- Documenting **FMEA according to AIAG, VDA and AIAG & VDA standards.**

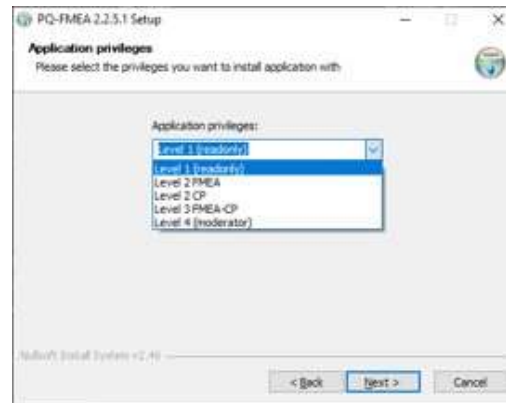
- Creating analysis of the **Generic** type – an additional column "process", thanks to which you can create extensive and complex analysis.





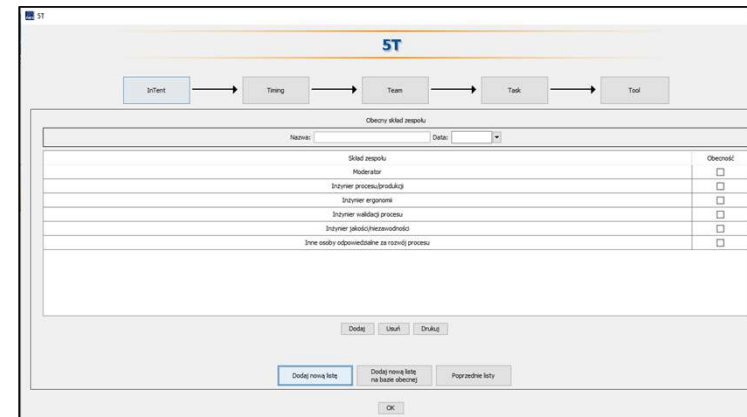
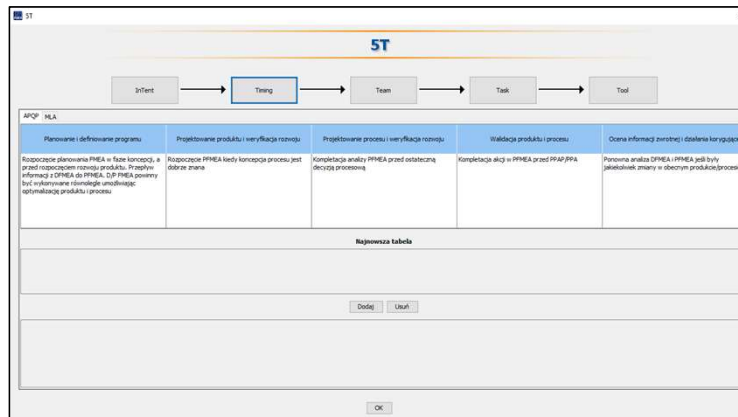
# □ PQ-FMEA+ functions

- **Access structure** that allows you to grant different permissions on different computers.



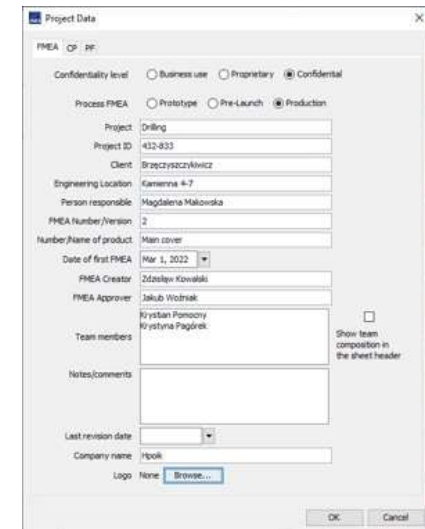
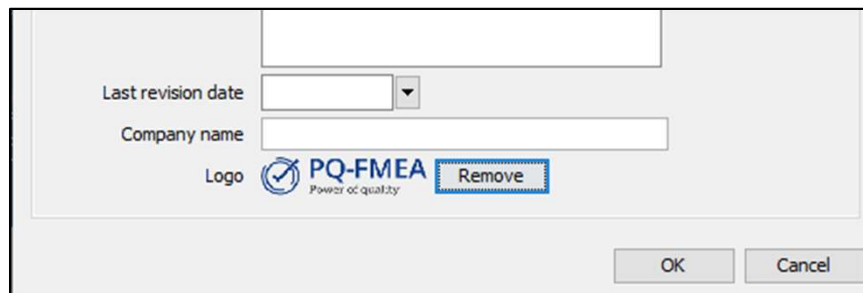
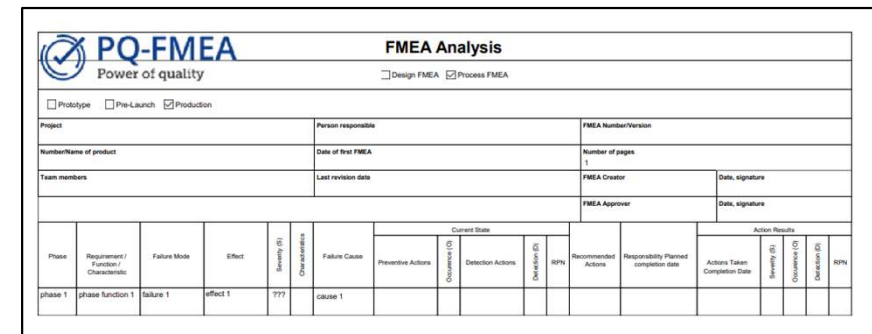
Authorization	Level 1 (reading)	Level 2 FMEA	Level 2 CP	Level 3 FMEA-CP	Level 4 (moderator)
Tree (black, green, red structure)	✓ read only	✓	✓ read only	✓	✓
FMEA sheet	✓ read only	✓	✓ read only	✓	✓
CP sheet	✓ read only	✓ read only	✓	✓	✓
PF sheet	✓ read only	✓	✓	✓	✓
FMEA project data	✓ read only	✓ read only	✓	✓	✓
CP project data	✓ read only	✓ read only	✓	✓	✓
PF project data	✓ read only	✓	✓	✓	✓
Statistics	✓ read only	✓ read only	✓ read only	✓ read only	✓
Personalization (editing SOD tables, matrix formula)					✓
Print	✓	✓	✓	✓	✓
Export	✓	✓	✓	✓	✓
Language change	✓	✓	✓	✓	✓

- Carrying out **5T** thanks to the 5T table built into the program.



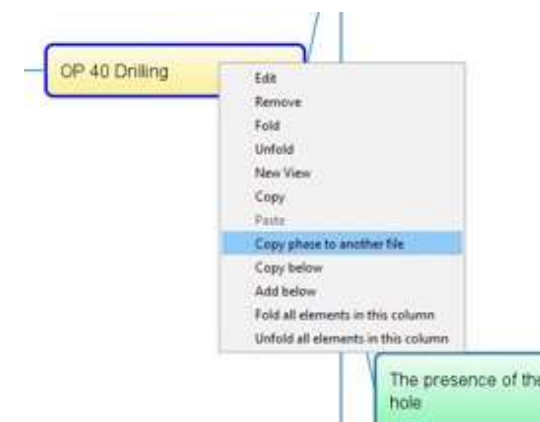
# □ PQ-FMEA+ functions

- Possibility to define **project data** separately for FMEA, CP and PF. The data appears later in the header of each of the forms.
- **Adding a logo** - we can add a company logo in the project data, which will be later visible when printing forms.

Phase	Requirement / Function / Characteristics	Failure Mode	Effect	Severity (S)	Detectability (D)	Failure Cause	Current State				Recommended Actions		Responsibility Planned completion date		Action Results			
							Preventive Actions	Detection Actions	Detection (D)	RPN			Actions Taken	Completion Date	Severity (S)	Detectability (D)	RPN	
phase 1	phase function 1	failure 1	effect 1	???		cause 1												

- Ability to work in teams on parts of a large analysis, and then combine the effects of the work into a single analysis by **copying phases between files**.



# □ PQ-FMEA+ functions

- The program allows you to **define your own tables** for the assessment of severity, frequency of occurrence and detection or to use predefined ones (compliant with AIAG ed. 4 and AIAG & VDA ed. 1 standards).

Default Severity Scale					
AIAG - VDA		AIAG ed.4			
S	Effect	Impact to Your Plant	Impact to Ship-to Plant (when known)	Impact to End User (when known)	Corporate or Product Line Examples
10	High	Failure may result in health and/or safety risk for the manufacturing or assembly worker.	Failure may result in health and/or safety risk for the manufacturing or assembly worker.	Affects safe operation of the vehicle and/or other vehicles, the health of driver or passenger(s) or road users or pedestrians.	
9		Failure may result in inplant regulatory noncompliance.	Failure may result in inplant regulatory noncompliance.	Noncompliance with regulations.	
8	Moderately high	100% of production run affected may have to be scrapped.	Line shutdown greater than full production shift; stop shipment possible; field repair or replacement required (Assembly to End User) other than for regulatory noncompliance.	Loss of primary vehicle function necessary for normal driving expected service life.	
7		Product may have to be sorted and portion (less than 100%) scrapped; deviation from primary process; decreased line speed or added manpower.	Line shutdown from 1 hour up to full production shift; stop shipment possible; field repair or replacement required (Assembly to End User) other than for regulatory noncompliance.	Degradation of primary vehicle function necessary for normal driving during expected service life.	
6	Moderately low	100% of production run may have to be reworked off line and accepted.	Line shutdown up to one hour.	Loss of secondary vehicle function.	
5		A portion of the production run may have to be reworked off line and accepted.	Less than 100% of product affected; strong possibility for additional defective product; sort required, no line shutdown.	Degradation of secondary vehicle function.	
4		100% of production run may have to be reworked in station before it is processed.	Defective product triggers significant reaction plan; additional defective products not likely; sort not required.	Very objectionable appearance, sound, vibration, harshness, or haptics.	
3	Low	A portion of the production run may have to be reworked in-station before it is processed.	Defective product triggers no minor reaction plan; additional defective products not likely; sort not required.	Moderately objectionable appearance, sound, vibration, harshness, or haptics.	
2		Slight inconvenience to process, operation or operator.	Defective product triggers no reaction plan; additional defective products not likely; sort not required; requires feedback to supplier.	Slightly objectionable appearance, sound, vibration, harshness, or haptics.	
1	Very low	No discernible effect.	No discernible effect or no effect.	No discernible effect.	

Default Detectability Scale				
AIAG - VDA		AIAG ed.4		
D	Ability to Detect	Detection Method Maturity	Opportunity for Detection	Corporate or Product Line Examples
10	Very low	No testing or inspection method has been established or is known.	The failure mode will not or cannot be detected.	
9		It is unlikely that the testing or inspection method will detect the failure mode.	The failure mode is not easily detected through random or sporadic audits.	
8	Low	Test or inspection method has not been proven to be effective and reliable (e.g. plant has little or no experience with method, gauge R&R results marginal on comparable process or this application etc.).	Human inspection (visual, tactile, audible), or use of manual gauging (attribute or variable) that should detect the failure mode or failure cause.	
7			Machine-based detection (automated or semi-automated with notification by light, buzzer, etc.) or use of inspection equipment such as a coordinate measuring machine that should detect failure mode or failure cause.	
6	Moderate	Test or inspection method has been proven to be effective and reliable (e.g. plant has experience with method, gauge R&R results are acceptable on comparable process or this application, etc.).	Human inspection (visual, tactile, audible), or use of manual gauging (attribute or variable) that will detect the failure mode or failure cause (including product sample checks).	
5			Machine-based detection (semi-automated with notification by light, buzzer, etc.) or use of inspection equipment such as a coordinate measuring machine that will detect failure mode or failure cause (including product sample checks).	
4	High	System has been proven to be effective and reliable (e.g. plant has experience with method on identical process or this application), gauge R&R results are acceptable, etc.	Machine-based automated detection method that will detect the failure mode downstream, prevent further processing or system will identify the product as discrepant and allow it to automatically move forward in the process until the designated reject/unload area. Discrepant product will be controlled by robust system that will prevent outflow of the product from the facility.	
3			Machine-based automated detection method that will detect the failure mode in station, prevent further processing or system will identify the product as discrepant and allow it to automatically move forward in the process until the designated reject/unload area. Discrepant product will be controlled by a robust system that will prevent outflow of the product from the facility.	
2		Detection method has been proven to be effective and reliable (e.g. plant has experience with method, error-proofing verifications, etc.).	Machine-based detection method that will detect the cause and prevent the failure mode (discrepant part) from being produced.	

Default Occurrence Scale				
AIAG - VDA		AIAG ed.4		
O	Prediction of Failure Cause Occurring	Type of Control	Prevention Controls	Corporate or Product Line Examples
10	Extremely high	None	No prevention controls.	
9	Very high	Behavioral	Prevention controls will have little effect in preventing failure cause.	
8				
7	High	Behavioral or Technical	Prevention controls is somewhat effective in preventing failure cause.	
6				
5	Moderate		Prevention controls are effective in preventing failure cause.	
4				
3	Low	Best Practices: Behavioral or Technical	Prevention controls are highly effective in preventing failure cause.	
2	Very low			
1	Extremely low	Technical	Prevention controls are extremely effective in preventing failure cause from occurring due to design (e.g. part geometry) or process (e.g. fixture or tooling design). Intent of prevention controls. Failure Mode cannot be physically produced due to the Failure Cause.	

- Possibility to export and import own S, O, D tables.

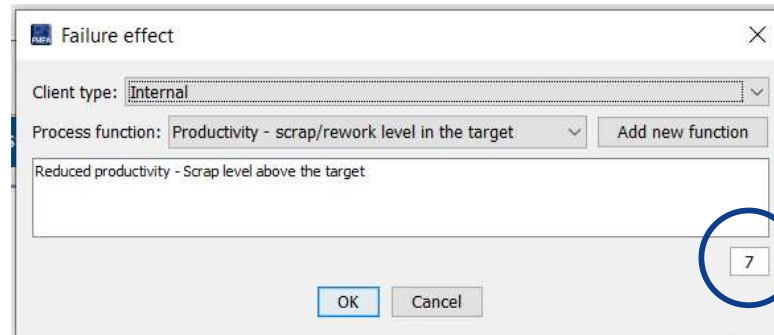
Export SOD tables

Import SOD tables

# □ PQ-FMEA+ functions

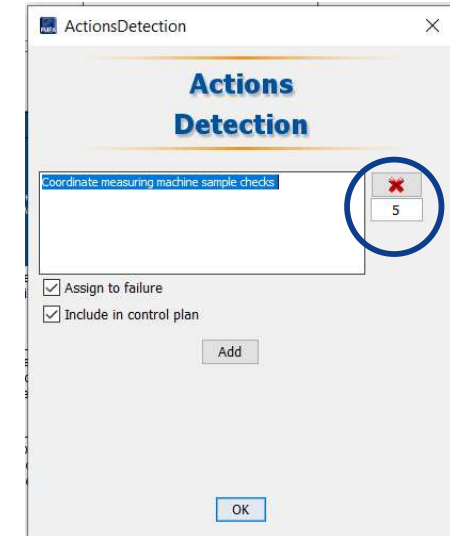
- **Dedicated fields for S and D assessment.**

In the „Failure effect" and „Detection Actions" cells, we can immediately assign Severity and Detection ratings. The values specified in the above-mentioned cells will automatically be loaded into the FMEA sheet.



Failure effect dialog box showing:

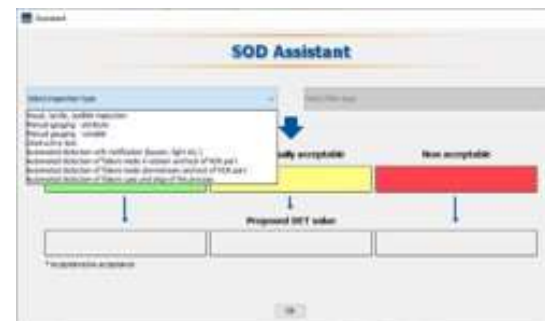
- Client type: Internal
- Process function: Productivity - scrap/rework level in the target
- Failure effect: Reduced productivity - Scrap level above the target
- Severity rating: 7



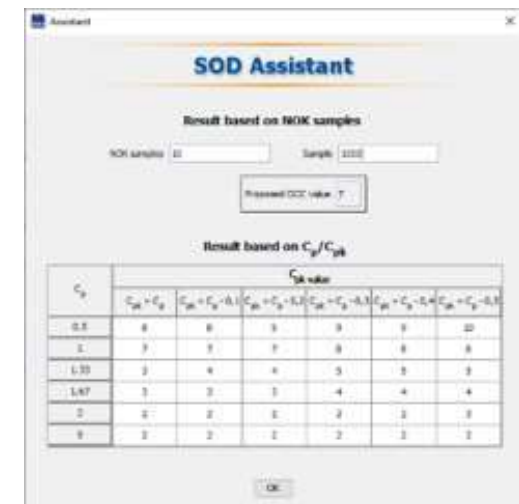
Actions Detection dialog box showing:

- Action: Coordinate measuring machine sample checks
- Detection rating: 5
- Assign to failure:
- Include in control plan:

- **Quality assistant**, which suggests what value to choose for:
  - Occurrence (O) based on nonconforming items or Cp and Cpk.
  - Detectability (D) based on the results from the selected control type.



SOD Assistant dialog box showing a flowchart for determining SOD values based on process capability and control type.



SOD Assistant dialog box showing a table of SOD values based on Cp and Cpk.

Cp	Cpk value					
	Cpk > 1.33	Cpk = 1.33	Cpk = 1.33	Cpk = 1.33	Cpk = 1.33	Cpk = 1.33
0.5	8	8	8	8	8	8
1	7	7	7	7	7	7
1.33	6	6	6	6	6	6
1.67	5	5	5	5	5	5
2	4	4	4	4	4	4
3	3	3	3	3	3	3

# □ PQ-FMEA+ functions

- Display the flow of the selected element from function and failure structure in PFMEA and DFMEA.

Chain of functions ✕

**Process Step Function**

Process Function	Process Step Function	Work Element function
[Main cover manufacturing line] [Internal] Productivity - scrap/rework level in the target	[OP 40 Drilling] Drilled hole diameter according to specification	[Operator] Assembled drill bit size according to specification
[Main cover manufacturing line] [External] Possible to assembly		[Machine] Drilling machine condition as specified
[Main cover manufacturing line] [End User] Stable position - the main function		

Chain of failures ✕

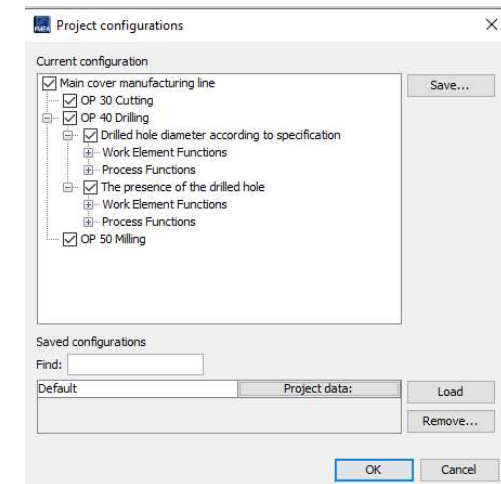
**Failure cause**

Failure effect	Failure mode	Failure cause
[Main cover manufacturing line] [Internal] [Productivity - scrap/rework level in the target] Reduced productivity - Scrap level above the target (7)	[OP 40 Drilling] [Drilled hole diameter according to specification] Drilled hole diameter above specification	[Operator] [Assembled drill bit size according to specification] Too big diameter drill assembled
[Main cover manufacturing line] [External] [Possible to assembly] Difficult to assembly, line stop less than 1hour (6)		
[Main cover manufacturing line] [End User] [Stable position - the main function] Unstable position - lack of main function (8)		

Close

# □ PQ-FMEA+ functions

- **Project configuration** - the program allows you to create an FMEA version for different clients within one file. This can be done through the configuration panel and selecting phases, phase functions, work items and process from a file for individual projects.
- **Task manager** - An automatically created panel that helps with managing all the tasks. Every optimization activity is shown in one window
- Creating **employee lists** with assigning tasks to be performed (generating reports).



Action type	Recommended Actions	Name	Position	Department	Target Complet...	Status	Completion Date	Action Taken	Number
Prevention Action	One type of drill bit diameter on the machine - decision to produce one type of product on the line	John Smith	Production Engineer	Engineering	2020-06-28	Open			2

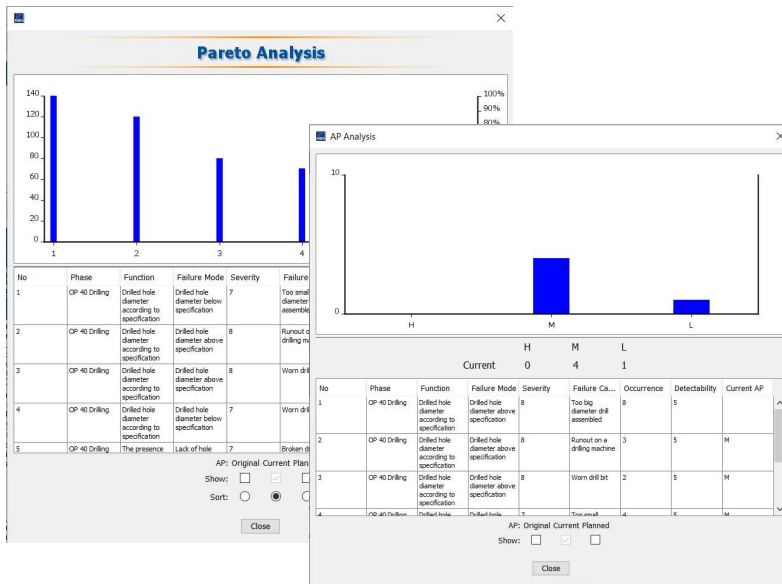
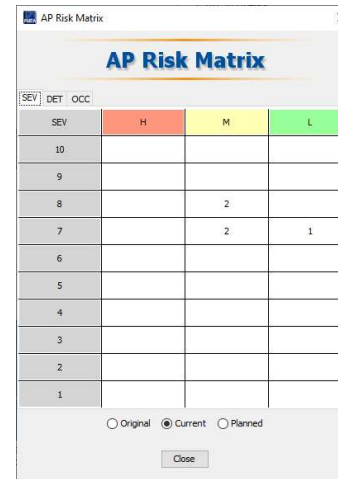


No	Phase	Function	Failure Mode	Failure Ca...	Recommended Act...	Due Date	Notes
1	OP 40 Drilling	Drilled hole diameter according to specification	Drilled hole diameter above specification	Too big diameter drill assembled	One type of drill bit diameter on the machine - decision to produce one type of product on the line	2020-06-28 (26)	
2	OP 45 Drilling	Drilled hole diameter according to specification	Drilled hole diameter above specification	Too big diameter drill assembled	One type of drill bit diameter on the machine - decision to produce one type of product on the line	2020-06-28 (26)	

# □ PQ-FMEA+ functions

## ANALYSIS SUMMARY

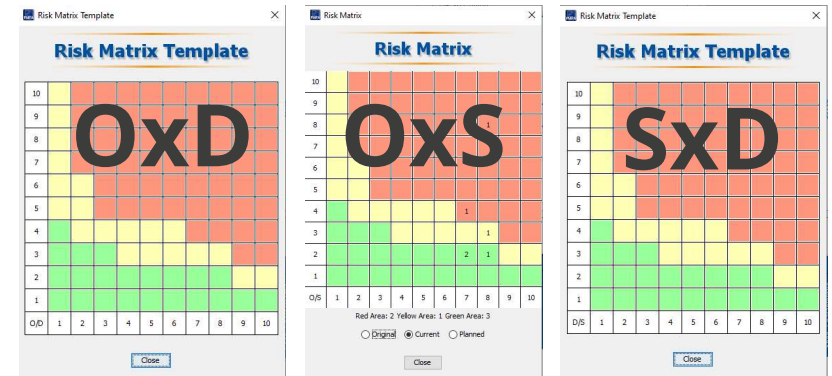

- Summary of the analysis with Pareto Analysis, AP and OxS/OxD risk matrix, task list, revision history and AP summary.

**AP Risk Matrix**

SEV	DET	OCC	H	M	L
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					

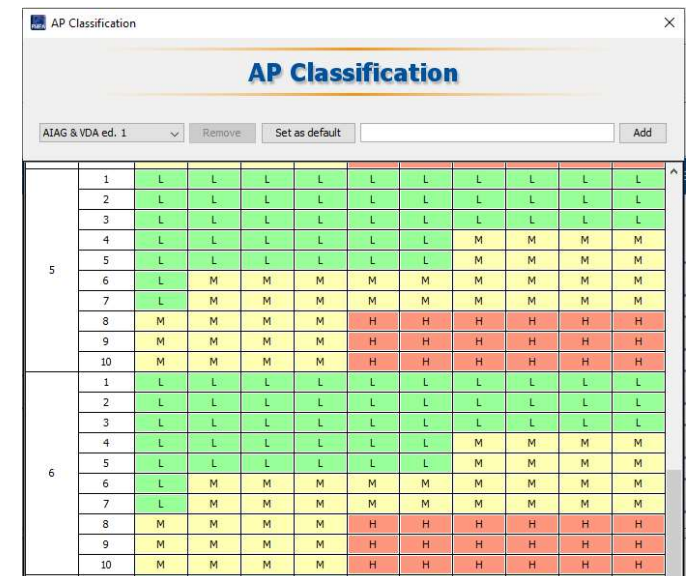
○ Original ○ Current ○ Planned

**Revisions history**

Date	Revision number	Description	FMEA	CP	RP
2022-03-21 (1:1)	R001		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2022-03-21 (1:2)	R002		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2022-03-21 (1:3)	R003		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2022-03-21 (1:4)	R004		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Buttons: Add, Export, Generate PDF, Close



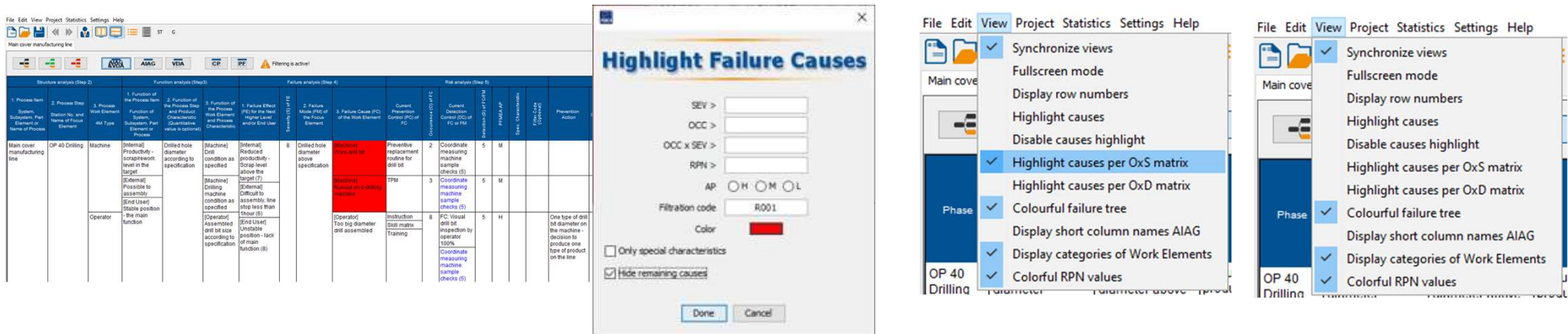
**AP Classification**

AIAG & VDA ed. 1 Remove Set as default Add

	1	2	3	4	5	6	7	8	9	10
5	1	L	L	L	L	L	L	L	L	L
	2	L	L	L	L	L	L	L	L	L
	3	L	L	L	L	L	L	L	L	L
	4	L	L	L	L	L	M	M	M	M
	5	L	L	L	L	L	M	M	M	M
	6	L	M	M	M	M	M	M	M	M
	7	L	M	M	M	M	M	M	M	M
	8	M	M	M	M	H	H	H	H	H
	9	M	M	M	M	H	H	H	H	H
	10	M	M	M	M	H	H	H	H	H
6	1	L	L	L	L	L	L	L	L	L
	2	L	L	L	L	L	L	L	L	L
	3	L	L	L	L	L	L	L	L	L
	4	L	L	L	L	L	M	M	M	M
	5	L	L	L	L	L	M	M	M	M
	6	L	M	M	M	M	M	M	M	M
	7	L	M	M	M	M	M	M	M	M
	8	M	M	M	M	H	H	H	H	H
	9	M	M	M	M	H	H	H	H	H
	10	M	M	M	M	H	H	H	H	H

# □ PQ-FMEA+ functions

- The analysis data can be filtered for S, O, OxS, RPN, AP with filter codes, special characteristics. It is also possible to hide reasons that do not meet the filter criteria.



The screenshot shows the PQ-FMEA+ software interface. On the left is a table with columns for Process Item, Function analysis, Failure analysis, and Risk analysis. A dialog box titled 'Highlight Failure Causes' is open, allowing users to filter by SEV, OCC, RPN, AP, and Filtration code. The 'View' menu is also open, showing options like 'Synchronize views', 'Fullscreen mode', 'Display row numbers', 'Highlight causes', and 'Highlight causes per OxS matrix'.

- Possibility to highlight causes according to the matrix OxS and OxD
- Highlighted RPN and AP values in AIAG ed. 4 and VDA 4 - values are highlighted according to AP levels.

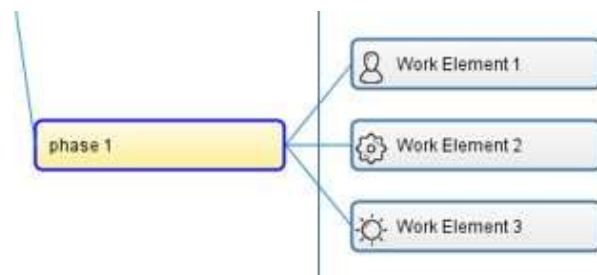
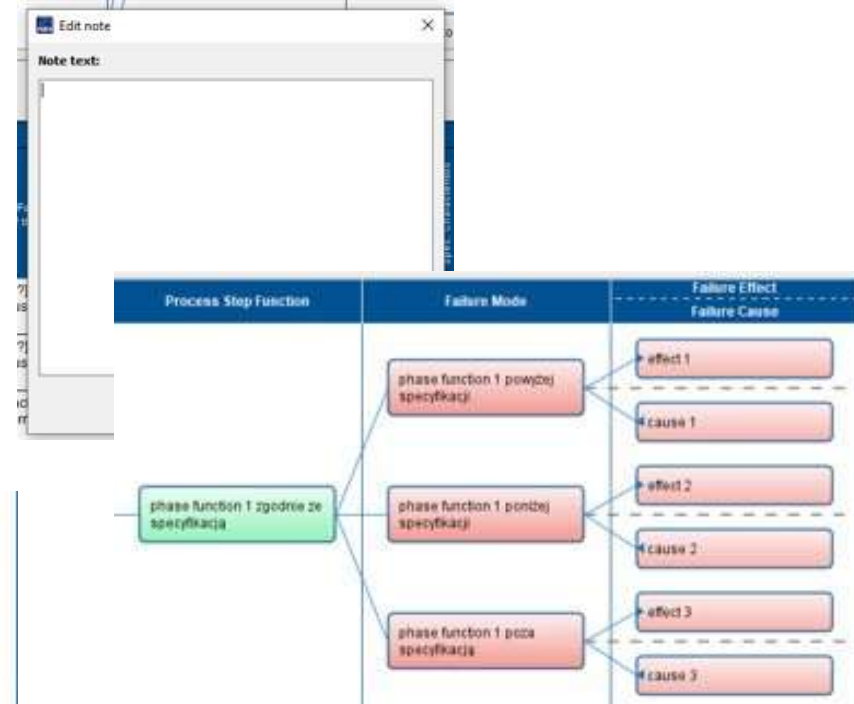
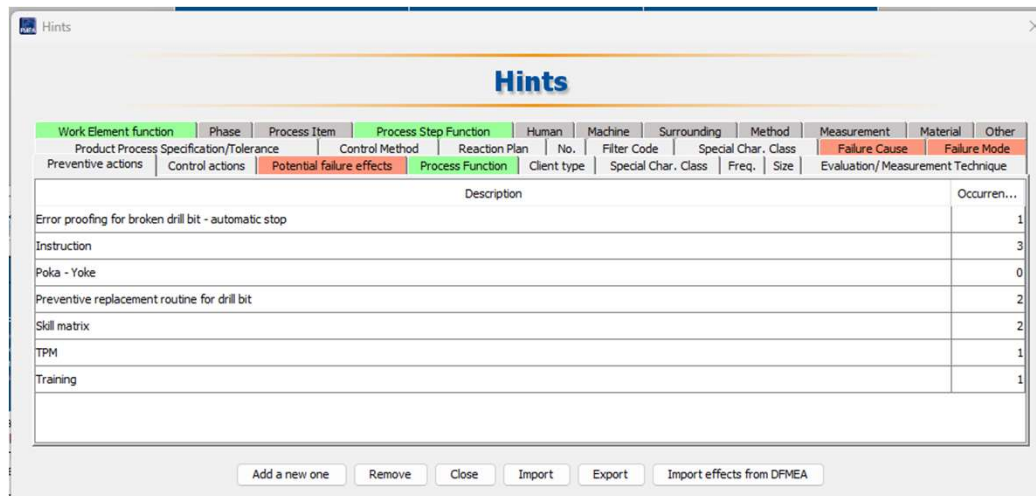
Phase	Requirement / Function / Characteristic	Failure Mode	Effect	Severity (S)	Characteristics	Failure Cause	Current State				Action Results							
							Occurrence (O)	Detection (D)	RPN	Recommended Actions	Responsibility Planned completion date	Actions Taken Completion Date	Severity (S)	Occurrence (O)	Detection (D)	RPN		
OP 40 Drilling	Drilled hole diameter according to specification	Drilled hole diameter above specification	Reduced productivity - Scrap level above the target (7) Difficult to assembly, line stop less than 1 hour (6) Unstable position - lack of main function (8)	8	<ul style="list-style-type: none"> <li>Too big diameter drill assemble d</li> <li>Runout on a drilling machine</li> <li>Worn drill bit</li> </ul>	Too big diameter drill assemble d	Instruction Skill matrix Training	8	FC: Visual drill bit inspection by operator 100% Coordinate measuring machine sample checks (5)	5	320	One type of drill bit diameter on the machine - decision to produce one type of product on the line	John Smith (Production Engineer, Engineering) 2020-06-28 (26)	Click to edit No date	8	1	1	(8)
						Runout on a drilling machine	TPM	3	Coordinate measuring machine sample checks (5)	5	120		Click to edit No date	Click to edit No date				
						Worn drill bit	Preventive replacement routine for drill bit	2	Coordinate measuring machine sample checks (5)	5	80		Click to edit No date	Click to edit No date				
						Too small diameter drill assemble	Instruction Skill matrix Instruction	4	Coordinate measuring machine sample checks (5)	5	140	One type of drill bit diameter on the machine	John Smith (Production Engineer, Engineering)	Click to edit No date	7	1	1	(7)



# □ PQ-FMEA+ functions

## IMPROVEMENTS

- Extended hints with the possibility of transferring the effects from the DFMEA analysis to the PFMEA analysis.
- Copying individual elements, so it is possible to copy cell data on trees along with their connections and previously completed data.
- Possibility to add notes on the FMEA form.
- Automatically add defect cells and work items with default content.



# □ PQ-FMEA+ functions

- Creation of **control plans and process flow diagrams based on data downloaded from FMEA** - individual modules (defect trees, FMEA form and CP and PF forms) are interrelated - common data is transferred and updated automatically.

Row	Phase	Process characteristics	Preceding phases	Symbol	Following phases	Description	Product characteristics
1	OP 10						
2	OP 20						
3	OP 40 Drilling	Drill bit size					
4	OP 45 Drilling 2	Drill bit size					

Name / number of process / operation description		Machine, Device, Jig, Tools for Mfg	Characteristics			Special Char. Class	Methods					Reaction Plan
No.	Product	Process	Process / product specification / tolerance	Evaluation/ Measurement Technique	Sample		Control Method					
Size	Freq.											
OP 40 Drilling	Driller 450	1	Diameter		Acc. to drawing - diameter 14 +/- 0,3	CMM	3pcs	2h	Coordinate measuring machine sample checks	According to Instruction QMS 134-CP-R		
		3	Drilled hole presence		Acc. to drawing - one hole (14 +/- 0.3)	Operator	each drill bit	100%	FC: Visual inspection by operator 100%	According to Instruction QMS 134-CP-R		
						Machine measurement module	each part	100%	Machine-based detection method that will detect the broken drill bit - automatic stop	According to Instruction QMS 134-CP-R		
		2		Drill bit size	Process technology	Operator	each drill bit	100%	FC: Visual drill bit inspection by operator 100%	According to Instruction QMS 134-CP-R		
OP 45 Drilling 2	Driller 450		Diameter						Coordinate measuring machine sample checks			

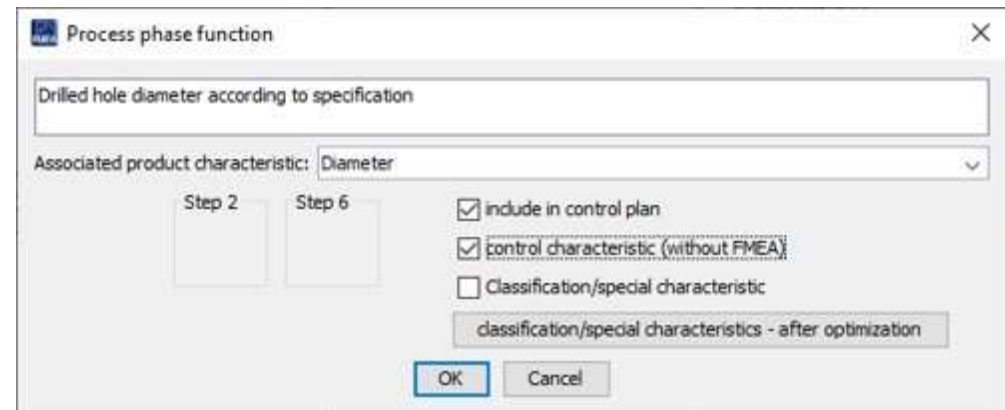
# □ PQ-FMEA+ functions

- Possibility to add photos in the control plan.



OP 45 Drilling 2	Driller 450	Diameter						Coordinate measuring machine sample checks
		Drilled hole presence						FC: Visual inspection by operator 100%
								Machine-based detection method that will detect the broken drill bit - automatic stop
								
			Drill bit size					FC: Visual drill

- Ability to add control characteristics to the control plan that are not included in the FMEA.



# □ PQ-FMEA+ functions

- Printing and exporting to \* .xls. sheet file with FMEA analysis, control plan and process flow diagram

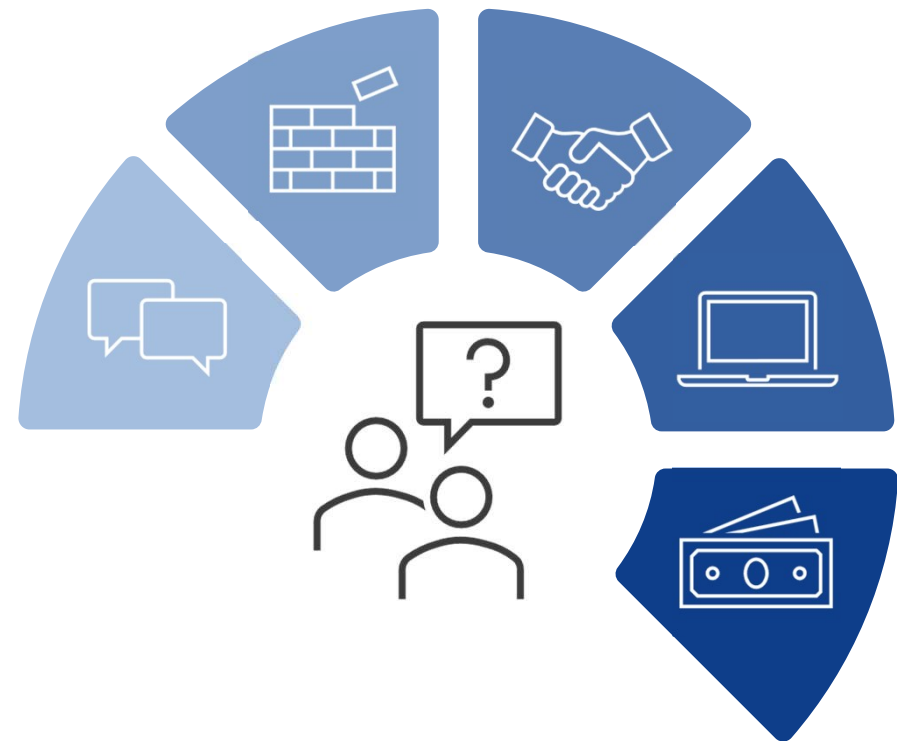
- Print AIAG-VDA
- Print FMEA
- Print CP
- Print PF
- Print VDA
- Export AIAG-VDA to XLSX
- Export FMEA to XLSX
- Export CP to XLSX
- Export PF to XLSX
- Export VDA to XLSX

FMEA Analysis																	
<input type="checkbox"/> Process FMEA <input type="checkbox"/> Product FMEA <input type="checkbox"/> Process FMEA																	
<input type="checkbox"/> Process <input type="checkbox"/> Product <input type="checkbox"/> Process																	
Project				Project responsible				FMEA Number/Version									
Number/Name of product				Date of this FMEA				Number of pages									
Team members				Last revision date				FMEA Creator		Date, signature							
								FMEA Approver		Date, signature							
Item	Requirement / Customer / Dimension	Failure Mode	Effect	Severity (S)	Detectability	Failure Cause	Current State				Recommended Action	Action Results					
							Prevention Action	Control Action	Detection Action	RPN		Analysis Date / Completion Date	Done (S)	Done (C)	Done (I)	Done (R)	
CP 40 CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	5	1	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g

Item	Requirement / Customer / Dimension	Failure Mode	Effect	Severity (S)	Detectability	Failure Cause	Current State				Recommended Action	Action Results					
							Prevention Action	Control Action	Detection Action	RPN		Analysis Date / Completion Date	Done (S)	Done (C)	Done (I)	Done (R)	
CP 40 CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	5	1	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g	CP 40g CP 40g CP 40g CP 40g

## □ Do you have specific requirements?

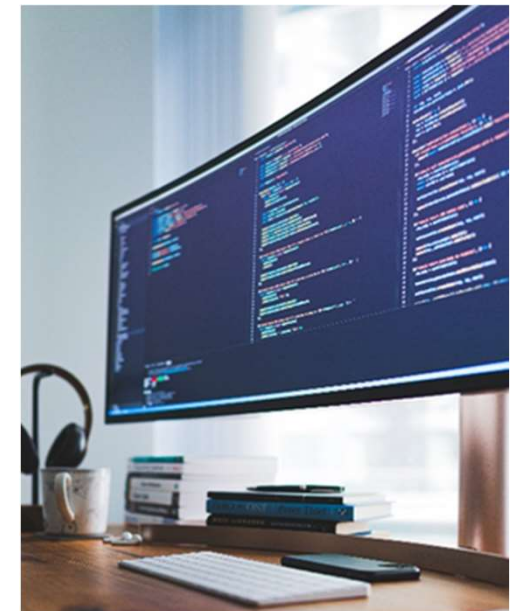
- We can adjust the program functions to the client's needs.
- We have had many "customization" of PQ-FMEA behind us, from adding individual columns or changing headers, to introducing complex functions personalized to the requirements of companies, compatibility with the SAP system and many others.
- We modify PQ-FMEA by adding functions in accordance with the given specification or we work together to develop changes based on a conversation with the client.
- When modifying, we do not increase the license price, we only add the cost of introducing the changes.



# □ System requirements



	Requirements
<b>Operating system</b>	Windows operating system (XP or newer). To install and update the software, administrator's privilege is required.
<b>Additional software</b>	Java (version from 1.8.0, latest version recommended). If not available, the software will ask for approval when installing.
<b>Hard disk space</b>	Hard disk space ca. 50 MB (not applicable to Java space).
<b>RAM memory</b>	Free RAM memory min. 512 MB, any graphic card (no special requirements).
<b>Internet connection</b>	Access to the Internet (required to update the software, permanent connection is not required).
<b>Additional</b>	<ul style="list-style-type: none"> <li>• PDF software (possible to open manual),</li> <li>• Microsoft Office software (readout of files exported to .xls format),</li> <li>• Any printer supported by Windows (for the purposes of printout)</li> </ul>



- The program is installed on a single computer. You can't install it on your web (you don't need a server to run program).
- No data base software is required.

## □ Price list\*

### Purchase license for an unlimited time

Number of licenses for one localisation	Net price
1 device	EUR 2313 per license
2 – 4 devices	EUR 1612 per license
5 and more devices	EUR 1565 per license
Unlimited devices	EUR 13762 for entire package

\* Each bet is treated separately. An unlimited license is assigned to one plant location.

**The license covers the installation of the program on desktops or laptops that are not network computers or servers.**

**The limitation does not include an unlimited number of licenses.**

### Discounts - corporate purchase

Number of plants **	Percentage from the standard price
The first plant	100%
Second plant	90%
Third plant	80%
Fourth plant	70%
Fifth and next plants	60%

\*\* The discount is applied to the purchase of unlimited licenses for each subsequent bet.

**\*The price list given in the presentation is not binding.**

## □ Price list\*

### Purchase licenses for temporary – subscription

Subscription type for one localisation	Net price
Annually subscription paid monthly	EUR 818 paid every month
Annually subscription paid quarterly	EUR 2079 paid quarterly
Annually subscription paid semi-annually	EUR 3855 paid semi-annually
Annually subscription paid annually	EUR 7360 paid every year

Subscription purchase is for unlimited licenses only for one year or more.

**\*The price list given in the presentation is not binding.**



## □ PQ-FMEA in numbers

∞

This is the validity of the purchased license, so after purchasing the program, you can use it without any time limits.



12

For so many months after the purchase, you receive a period of free updates and technical support.



10%

This percentage of the current license price is equal to the cost of extending the update for another year (extension is not obligatory).

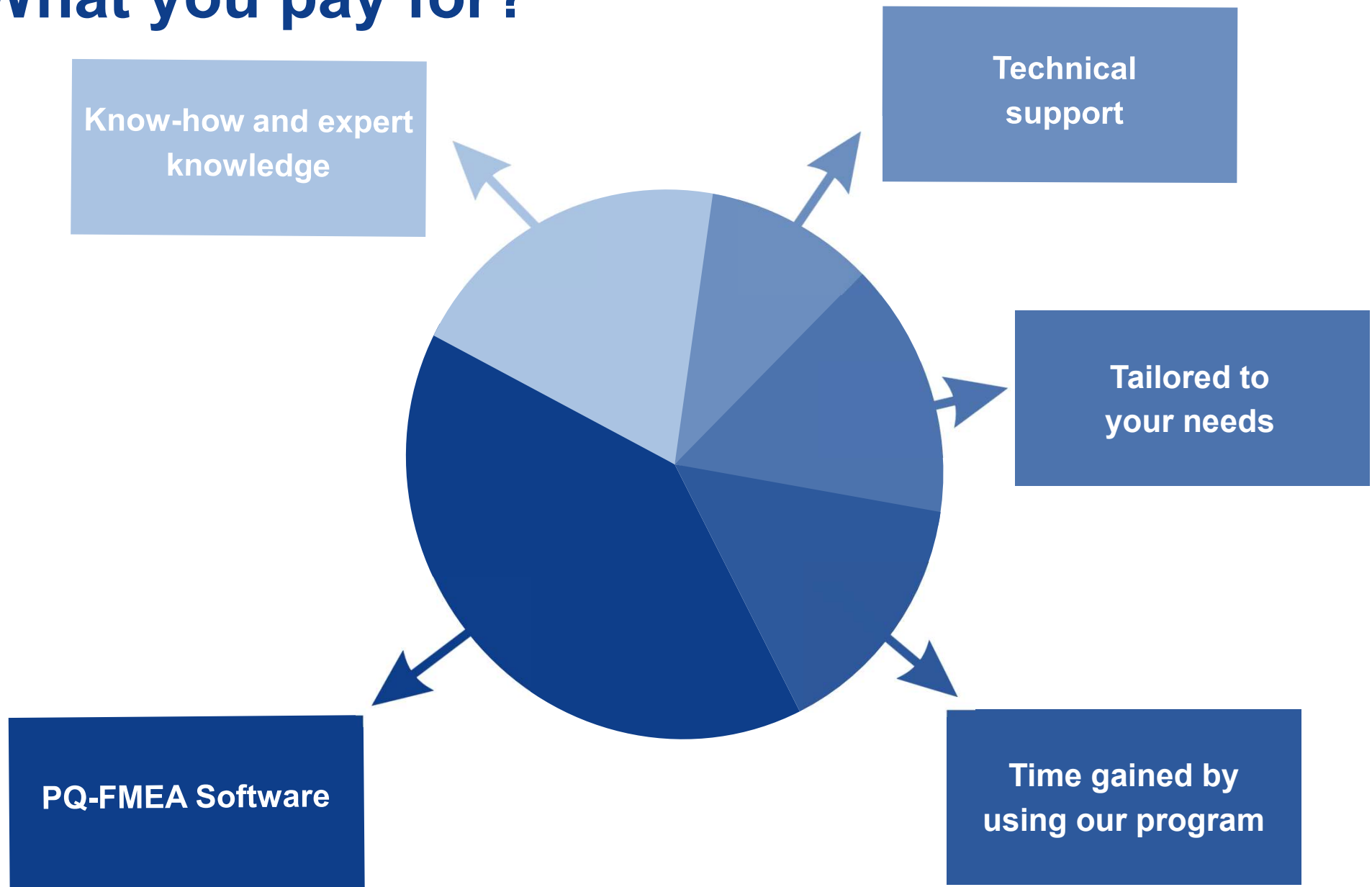


5

That's how many times a year we release PQ-FMEA+ software updates, with new content and new functions

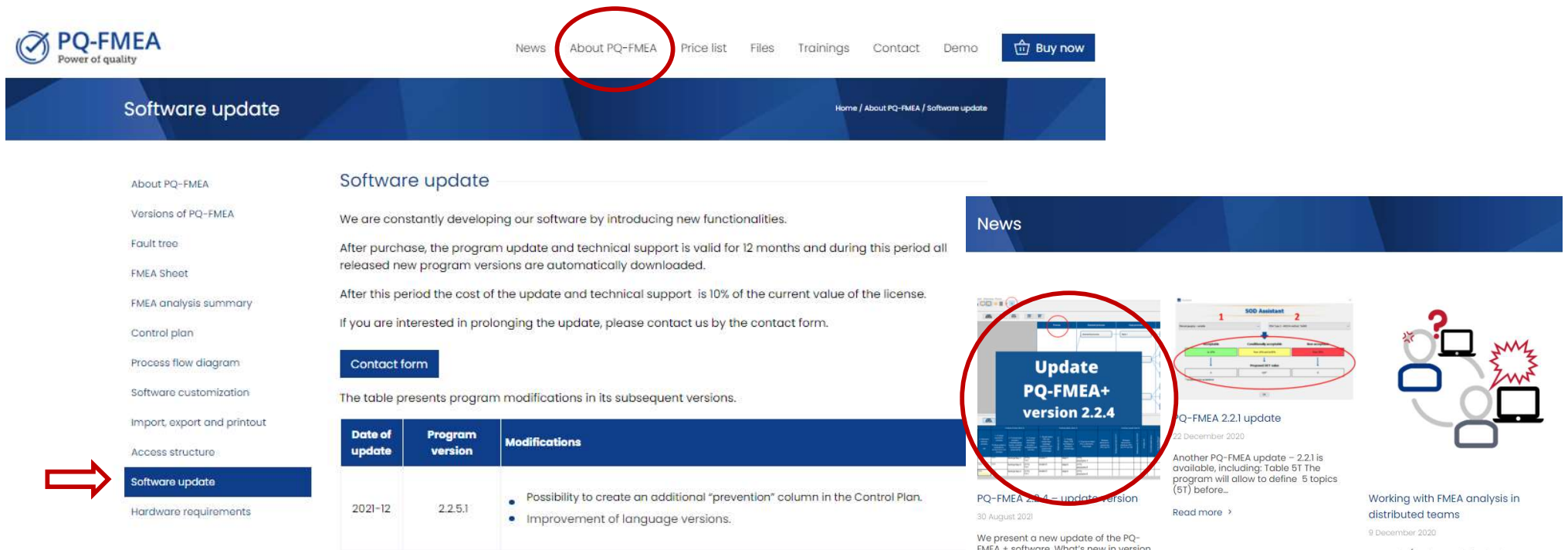


## □ What you pay for?



# □ Additional information - update

- The program is developed on an ongoing basis, therefore on our website, in the "About the program" tab, you can find information about all versions of the PQ-FMEA program (dates of their introduction and description of functions).
- Information about the update will also be displayed in the purchased program.
- Additionally, on the website, in the "News" tab, information is published with a detailed description of the functions introduced.



**Software update**

We are constantly developing our software by introducing new functionalities.

After purchase, the program update and technical support is valid for 12 months and during this period all released new program versions are automatically downloaded.

After this period the cost of the update and technical support is 10% of the current value of the license.

If you are interested in prolonging the update, please contact us by the contact form.

[Contact form](#)

The table presents program modifications in its subsequent versions.

Date of update	Program version	Modifications
2021-12	2.2.5.1	<ul style="list-style-type: none"> <li>• Possibility to create an additional "prevention" column in the Control Plan.</li> <li>• Improvement of language versions.</li> </ul>

**News**

**Update PQ-FMEA+ version 2.2.4**

PQ-FMEA 2021 – update version  
30 August 2021

We present a new update of the PQ-FMEA + software. What's new in version

**Q-FMEA 2.2.1 update**  
22 December 2020

Another PQ-FMEA update – 2.2.1 is available, including: Table 5T The program will allow to define 5 topics (5T) before...

[Read more >](#)

Working with FMEA analysis in distributed teams  
9 December 2020

## □ Available content

- We invite you to our social media (LinkedIn or Facebook), where we keep you informed about new updates, as well as publish substantive content.
- On our website, in the "Files" tab, auxiliary materials, such as videos, which show step by step work with PQ-FMEA, sample analyzes, are available.



Examples, videos, PQ-FMEA instruction







Below are materials that will allow you to obtain additional information about the program. You can find here, among others: instructional videos, instructions and sample FMEA analyzes made in the program.



 [www.pq-fmea.com](http://www.pq-fmea.com)

## PQ-FMEA+

Software that improves work  
with FMEA analysis

-  Work in accordance with the requirements of ISO, AIAG, VDA, AIAG & VDA
-  Simple and intuitive operation
-  Readability and ease of introducing changes
-  Data consistency also in the control plan and process flow diagram
-  Ability to create analyses: PFMEA, DFMEA and work with RPFMEA, LFMEA, MFMEA, SwFMEA, UFMEA
-  Available languages:



**Try our program and download a free demo:**



[www.pq-fmea.com/free-demo/](http://www.pq-fmea.com/free-demo/)

### Questions? Feel free to contact us

Contact regarding purchases:

phone.:+48 71 363 21 42

e-mail: [biuro@pq-fmea.pl](mailto:biuro@pq-fmea.pl)

Technical support for PQ-FMEA license holders:

e-mail: [helpdesk@pq-fmea.pl](mailto:helpdesk@pq-fmea.pl)

phone.:+48 71 363 21 42