SYNER

Freedom in every part of the production

Solution. Confidence. Success.

The Synergy between user and data

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The new SYNER platform

We can cover that – but in a pragmatic way!

- Identify improvement opportunities in your production
- Increase efficiency reduce costs
- Bring quality and production together
- Integrate easily to your infrastructure with APIs

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The new

SYNER

platform

Industry 4.0

Big Data

Digitalization

Artificial Intelligence

OPC UA

Cloud

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How SYNER can help you?

Collecting and analyzing data from production and quality

Getting best recommendations for optimization

Using Artificial intelligence (AI) to predict errors and improve quality

Providing customized reports automatically

Using modern and secure technology

No dependency on manufacturers and processes

Easiest
way to visualize & monitor
your whole production!

One
Platform connects
people and data

Identify
anomalies & address
them before they impact you

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Cover your use-cases with SYNER?

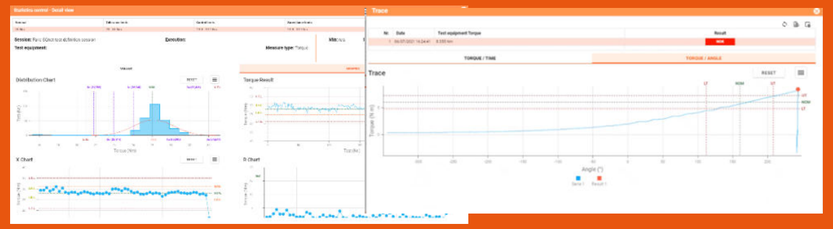
Control station and lines

Multi-brand product

Freedom,
no dependency on:
Manufacturers
Processes
Local infrastructure

SYNER Global (P+Q)

Cross data of quality and production and make Realtime analysis & AI makes it possible to detect errors before it occurs.



SYNER P for Production

Production data collection and alarms

SYNER Q for Quality

Manage and collect data from measurement device, ensure quality of tools and process

Overview SYNER

SYNER Q
for Quality
Management

SYNER
Global

SYNER P
for Production
Management

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Overview SYNER

SYNER Q for Quality Management

- Manage **assembly tools (independent)**
  - Type, position on the line, homologation, documents
- Manage **measurement devices (independent)**
  - Certificates, documents, checking frequency
- Define all your operation
  - Type of control (Tools control, joint control or manual check)
  - Frequency of check
- Get all necessary **reports** for internal & external AUDITS
- Manage **your tool and process** check tasks fast and easy
- Define your **quality control route** (SPC)
- Create your owns test definition to follow **ISO and VDI norms**

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Overview SYNER

SYNER Global

- Generate your **reports automatically**
- statistical analysis
- **Cross data between production and quality**, get best, combined overview
- **Alarm management** for all issues regarding production and quality
- Web-application
  - **Multiple device support**
  - Fully scalable
- **Adjust your reports** regarding design and content
- **One master data management** for all views (no need for administration of same data in several databases)

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Overview SYNER

SYNER P for Production Management

- **Collect all the results & traces** from your assembly line **(independent)**
- Link the result with the ID number of your product
- Complete **lifetime report** for your products (e.g., vehicle, engine, gearbox, etc.)
- **Multi-protocol compatibility to connect all your tools** and processes and store in one database, **no dependency** on manufacturers and processes
- **Monitor your production** line and react immediately
- **Including Artificial Intelligence (AI)** functions (2023):
  - Detect the operability of the tools
  - Detect assembly joint evolution
  - Predict maintenance issues and possible errors

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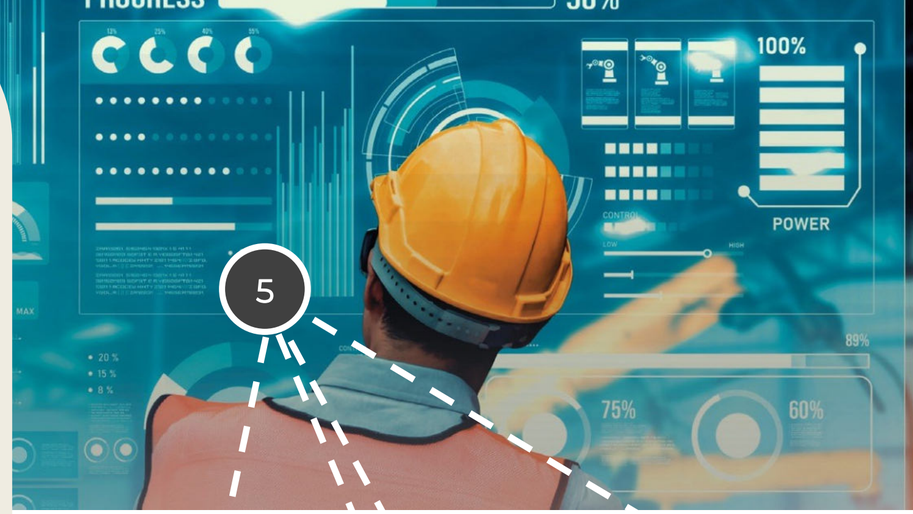
Overview
SYNER

1. Collect data with universal controller FIM or other multi-brand controllers and tools
2. Perform rework with our benches
3. Have visual guidance with our VPG+ stations incl. precise Positioning system
4. Keep control about quality with our quality control bench and perform machine & process capability
5. All data together in one platform from Quality & Production



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SYNER

Quality

Easy process & tool check

AUDIT relevant documents on one platform

Cover norms and standards

One Platform

Get transparency & uncover potential improvements

Correlation of all data

Improve data exchange between departments

Production

100% data documentation

Fullfill product liabilty requirements

Trend analysis & notifications

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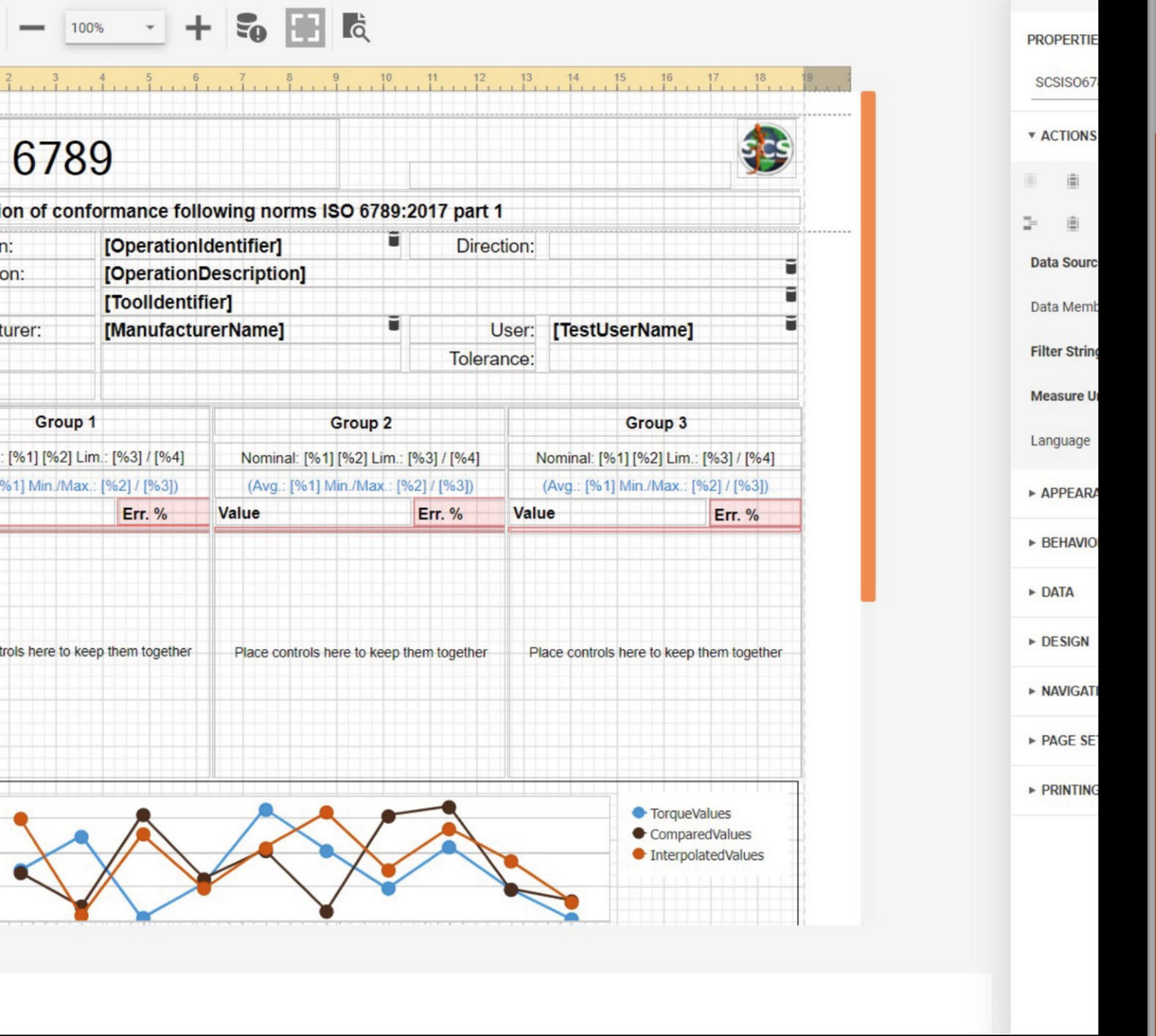
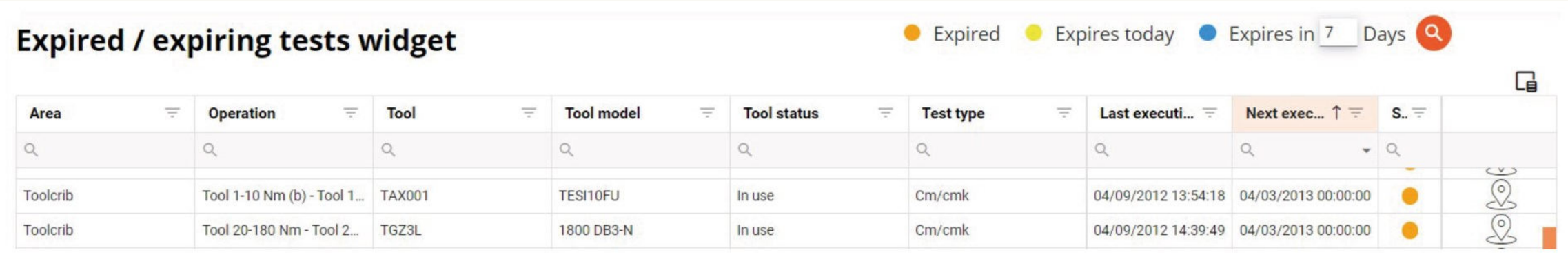


Let's Show a few examples...

SYNER Q SYNER P

Use task planner to manage operation & tool test

(SYNER Q – Basic)



- Get a fast and easy overview over the tool and process check tasks.
- No navigation needed to reduce time effort for users.

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Easy management for manufacturers, tool models and tools

(SYNER Q – Basic)

TOOLS | TOOL MODELS | MANUFACTURER

Drag a column header here to group by that column

Identifier	Serial number	Manufacturer	Tool model	Tool category	Tool type	Tool status
		scs				
TEV001	0002655	SCS Concept	Easy 100 TA (113 23 0100)	Tightenings category	Indicating wrench	In use
123456789233333333ABC	123456789233333333ABC	SCS Concept	Easy 100 TA (113 23 0100)	Tightenings category	Indicating wrench	In use
EAS XXT 20 Nm 21370001	21370001	SCS Concept	EAS XXT 20 Nm	Tightenings category	Power tool	Testing
TER001	L005471	SCS Concept	111 41 0100	Tightenings category	Click wrench	Desaparecida
TEJ001	L010370	SCS Concept	Easy 600 (113 22 0600)	Tightenings category	Indicating wrench	In use
SN21370010	SN21370010	SCS Concept	EAS clutch 20 Nm	Tightenings category	Power tool	In use
TEK002	L011442	SCS Concept	Easy 50 (113 22 0050)	Tightenings category	Indicating wrench	In use
TEK001	L011441	SCS Concept	Easy 50 (113 22 0050)	Tightenings category	Indicating wrench	In use
TEQ002	TEQ002	SCS Concept	Easy 350 (113 22 0350)	Tightenings category	Indicating wrench	In use
TEQ001	M002837	SCS Concept	Easy 350 (113 22 0350)	Tightenings category	Indicating wrench	In use
TEL002	L011443	SCS Concept	Easy 200 (113 22 0200)	Tightenings category	Indicating wrench	In use
TEL001	L011444	SCS Concept	Easy 200 (113 22 0200)	Tightenings category	Indicating wrench	In use
TEQ003	N008343	SCS Concept	Easy 350 TA (113 23 0350)	Tightenings category	Indicating wrench	In use
TES001	M005528	SCS Concept	Easy 10 (113 22 0010)	Tightenings category	Indicating wrench	In use
TEK003	LO11452	SCS Concept	Easy 50 TA (113 23 0050)	Tightenings category	Indicating wrench	In use

- Have **all tools, models and manufactures** in one view.
- Easy and fast setup of these items, fast filtering and editing.
- Find the status and history of tools.
- All information in one place including certificates support a fast AUDIT.

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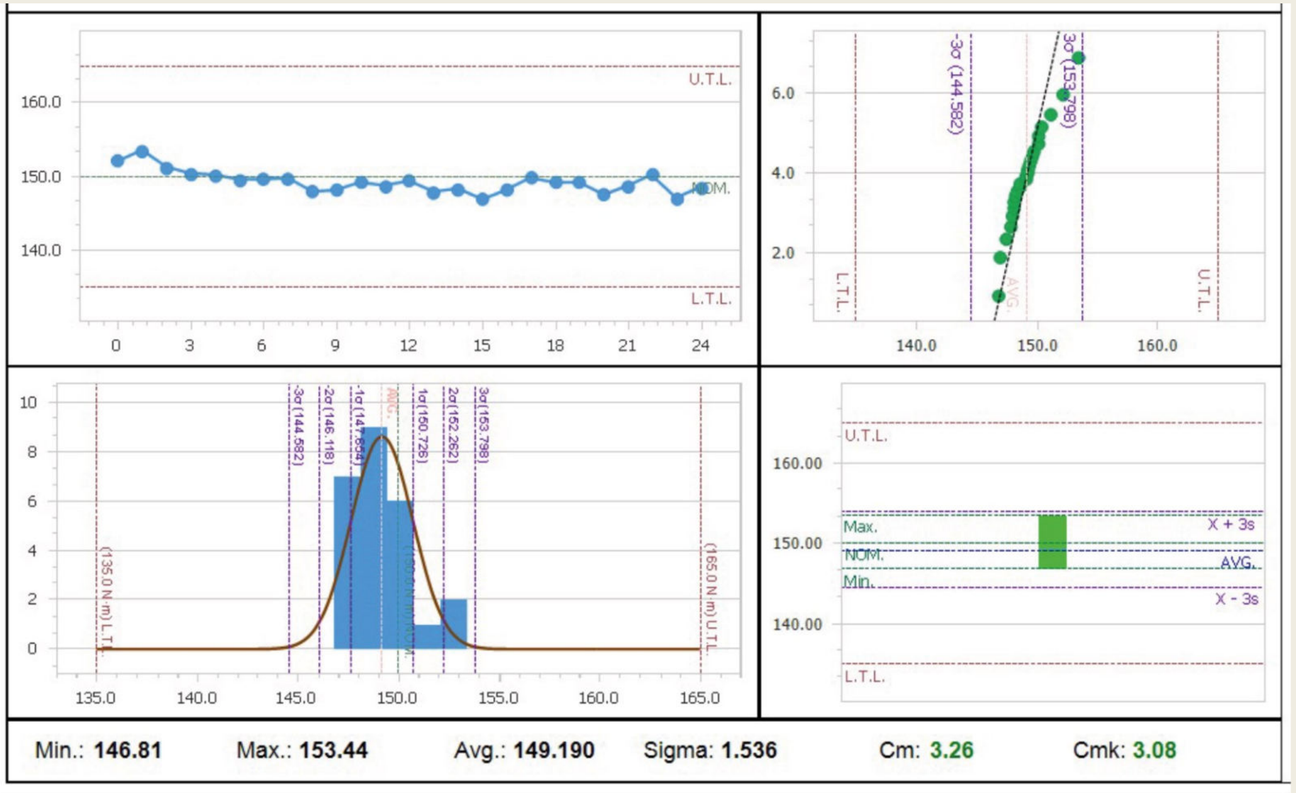
Statistical analysis for tool and process

(SYNER Q – Basic, Advanced)



- Find out in a fast way, how your process is working.
- See issues immediately and bring improvements into your quality.
- Be prepared with standardized reports for AUDITs.
- Machine Capability Test (MCT) and Process Capability Test (PCT) can be done based on international norms and standards.

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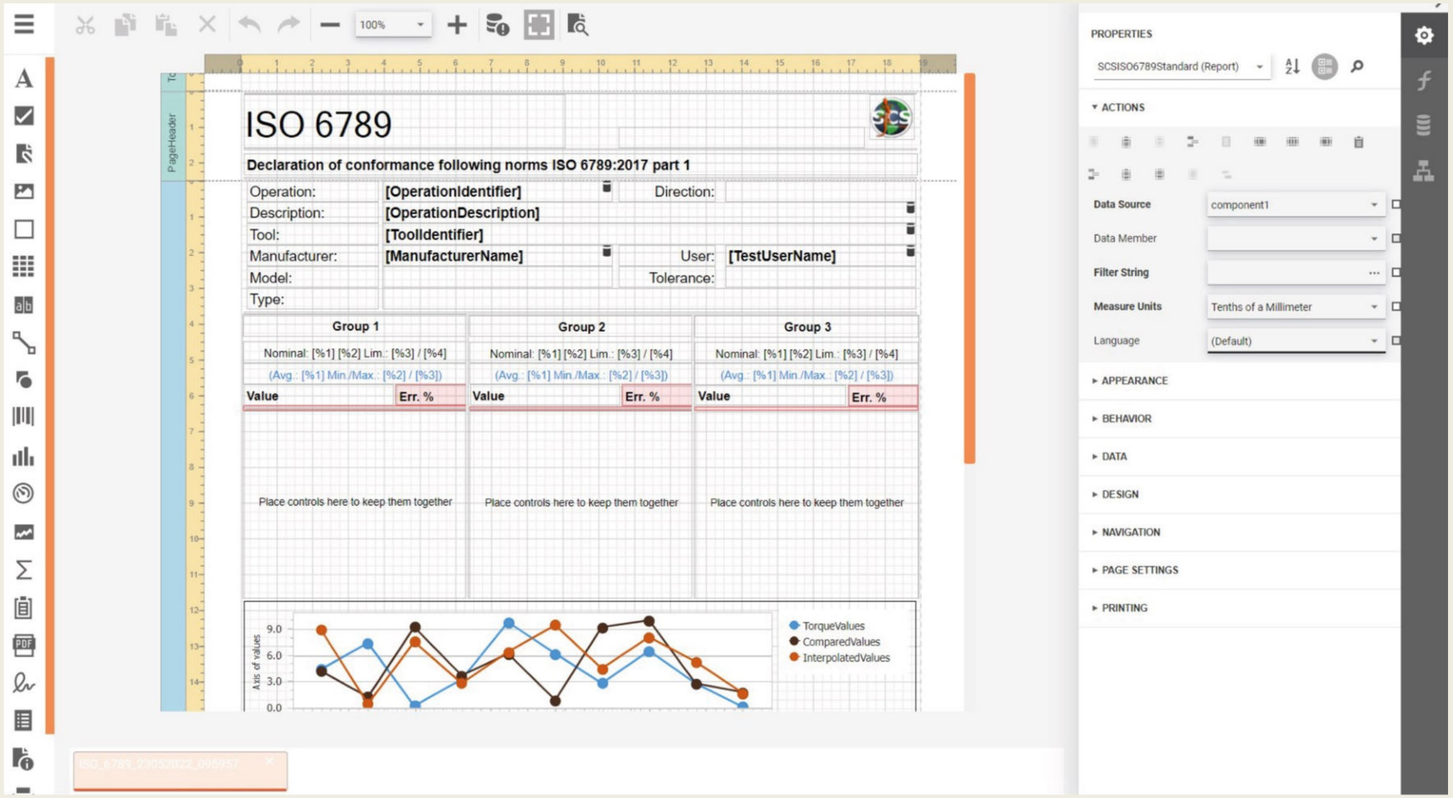
Use report designer and Adjust the reports to your needs

(SYNER Q – Advanced)



- Paying for every software adjustment regarding reports? → Not with SYNER.
- With the SYNER Q Advanced package you get the possibility to adjust the reports to your company needs.
- Fast and easy, without waiting for the vendor to do the job for you!
- DIY – save costs!

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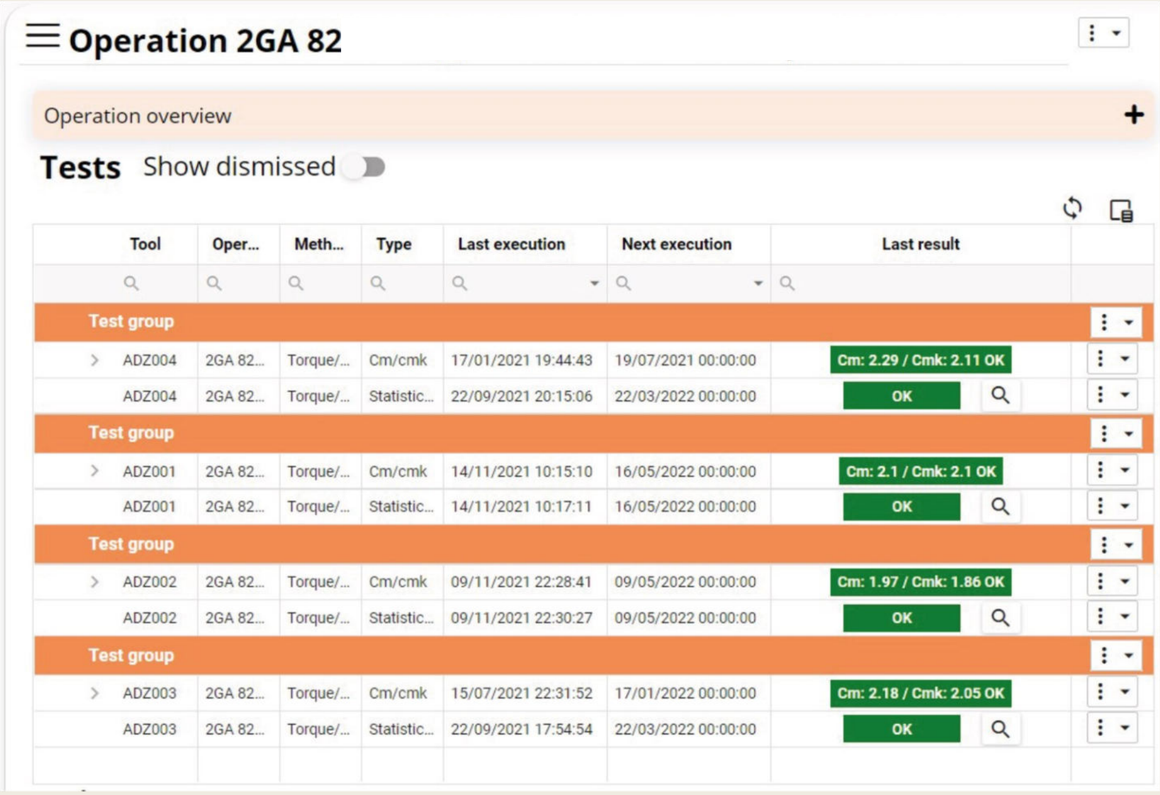
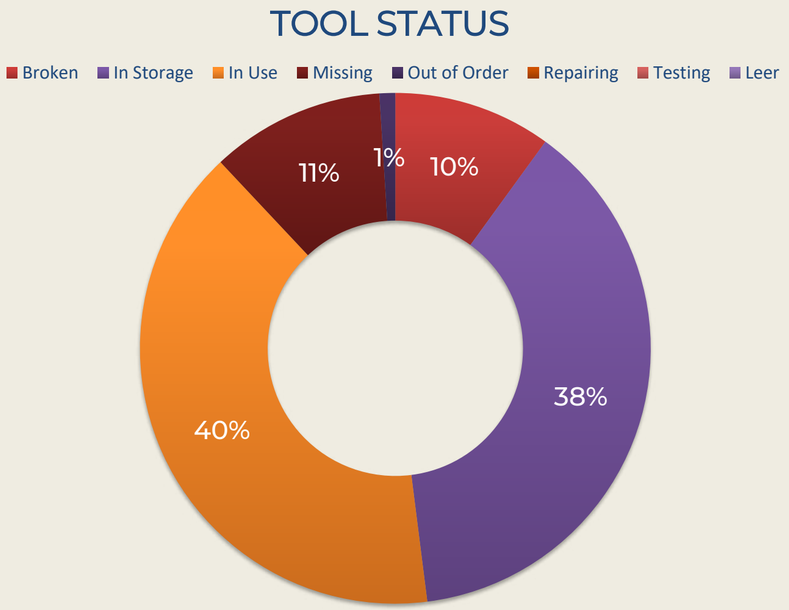
Identify fast NOK process or tools

(SYNER Q – Basic)



Tool	Oper...	Meth...	Type	Last execution	Next execution	Last result
Test group						
ADZ004	2GA 82...	Torque/...	Cm/cmk	17/01/2021 19:44:43	19/07/2021 00:00:00	Cm: 2.29 / Cmk: 2.11 OK
ADZ004	2GA 82...	Torque/...	Statistic...	22/09/2021 20:15:06	22/03/2022 00:00:00	OK
Test group						
ADZ001	2GA 82...	Torque/...	Cm/cmk	14/11/2021 10:15:10	16/05/2022 00:00:00	Cm: 2.1 / Cmk: 2.1 OK
ADZ001	2GA 82...	Torque/...	Statistic...	14/11/2021 10:17:11	16/05/2022 00:00:00	OK
Test group						
ADZ002	2GA 82...	Torque/...	Cm/cmk	09/11/2021 22:28:41	09/05/2022 00:00:00	Cm: 1.97 / Cmk: 1.86 OK
ADZ002	2GA 82...	Torque/...	Statistic...	09/11/2021 22:30:27	09/05/2022 00:00:00	OK
Test group						
ADZ003	2GA 82...	Torque/...	Cm/cmk	15/07/2021 22:31:52	17/01/2022 00:00:00	Cm: 2.18 / Cmk: 2.05 OK
ADZ003	2GA 82...	Torque/...	Statistic...	22/09/2021 17:54:54	22/03/2022 00:00:00	OK



- Get a fast overview, which tools are not capable to produce high quality products or which process is not stable and need adjustments.

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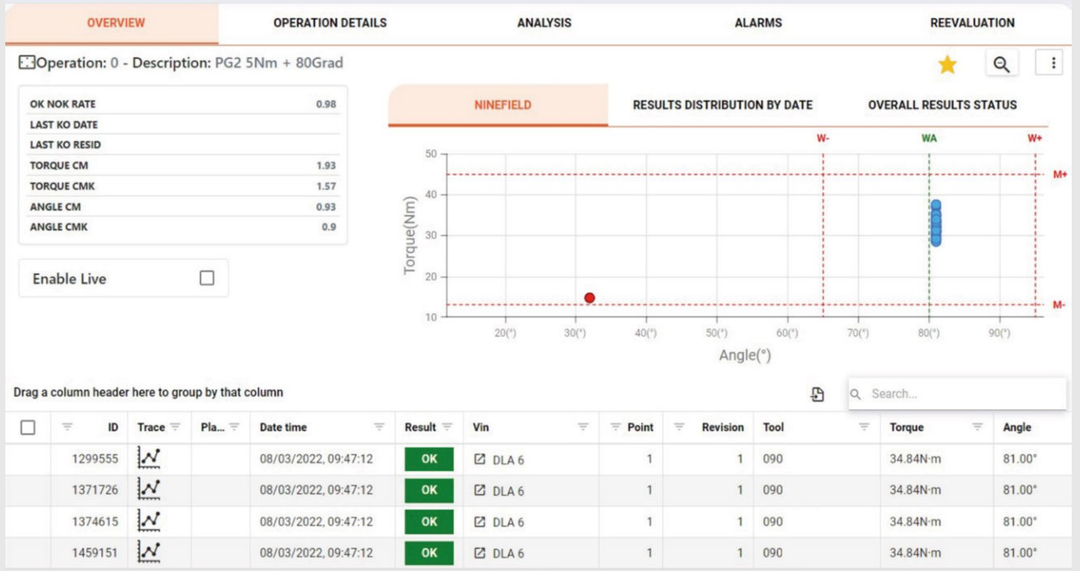
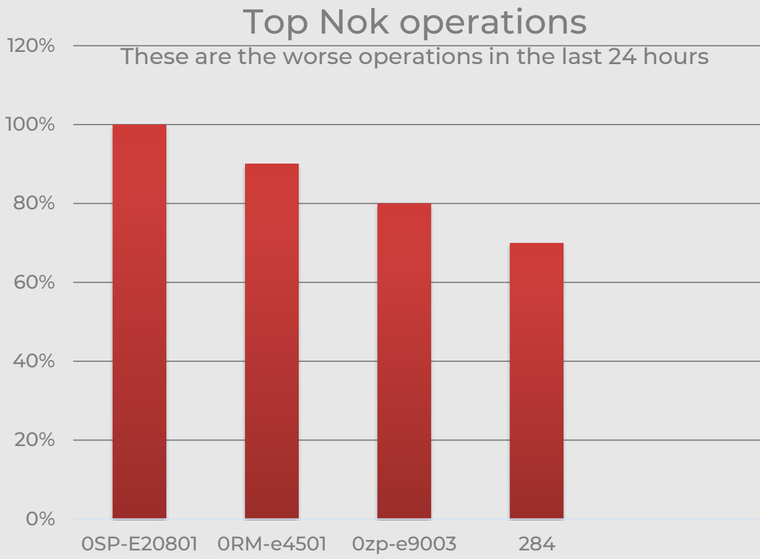
Fast and easy access to all data

(SYNER P – Basic)

- Collect & Analyze, track & trace process data, independent on manufacturer and process
- Find your data fast, have quick overview over trace results and get summery of results in one view for each operation (e.g., tightening, riveting, gluing, drilling, etc.)
- Get informed about your NOK operations inside the production and its error causes and make improvements with new tool settings, trainings for employees, material changes, etc.





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Find root causes for errors

(SYNER P – Basic)

- To get an NOK doesn't help for make improvements for quality.
- But having the reason for an NOK changes all.
- With SYNER P you will find the most error causes of all your operations.

OVERALL RESULT STATUS | RESULT DISTRIBUTION BY DATE | TREDN BY GROUP SIZE | TOOL ERROR STATISTIC

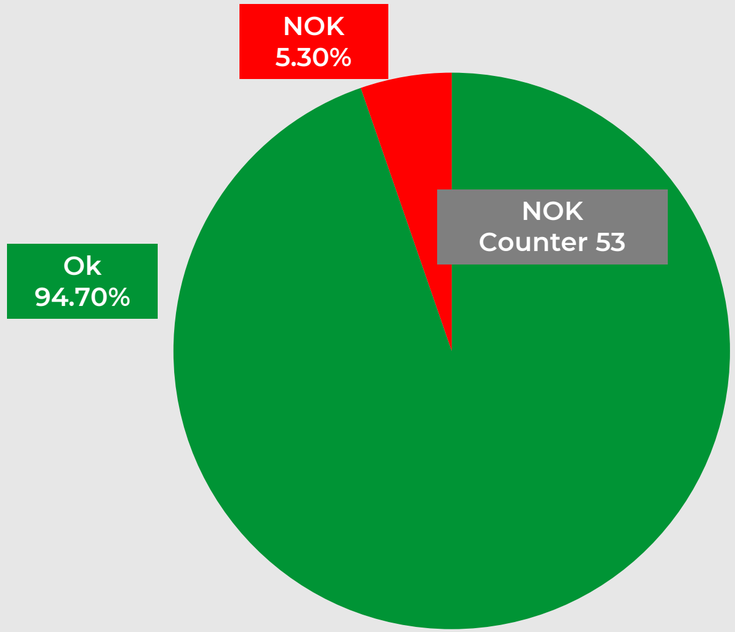
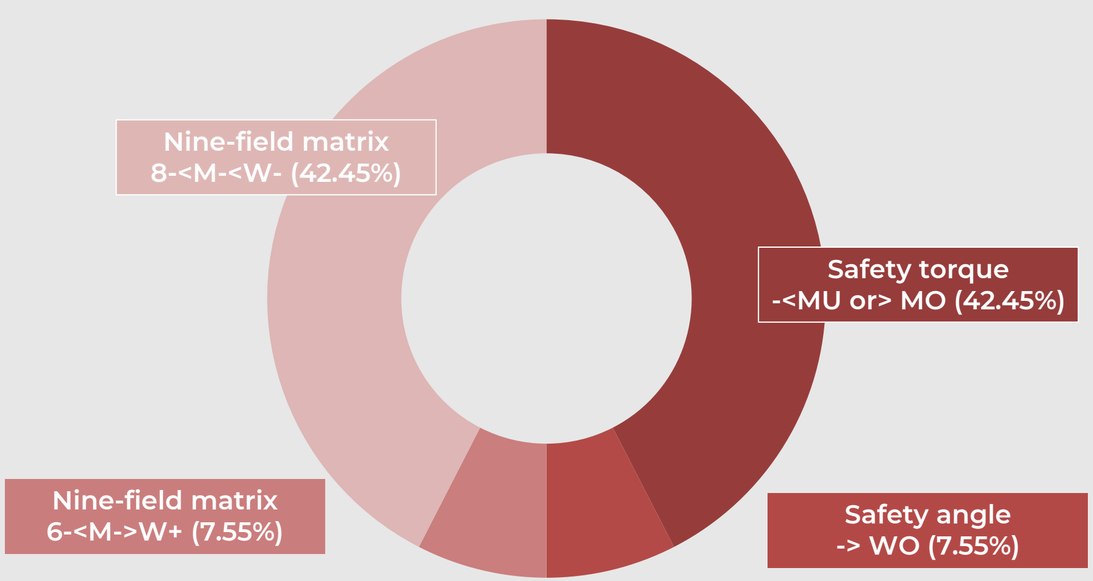


TABLE | COMPOSITION | TREND | NINEFIELD | GRAPHICS

OVERALL RESULT STATUS | RESULT DISTRIBUTION BY DATE | TREDN BY GROUP SIZE | TOOL ERROR STATISTIC



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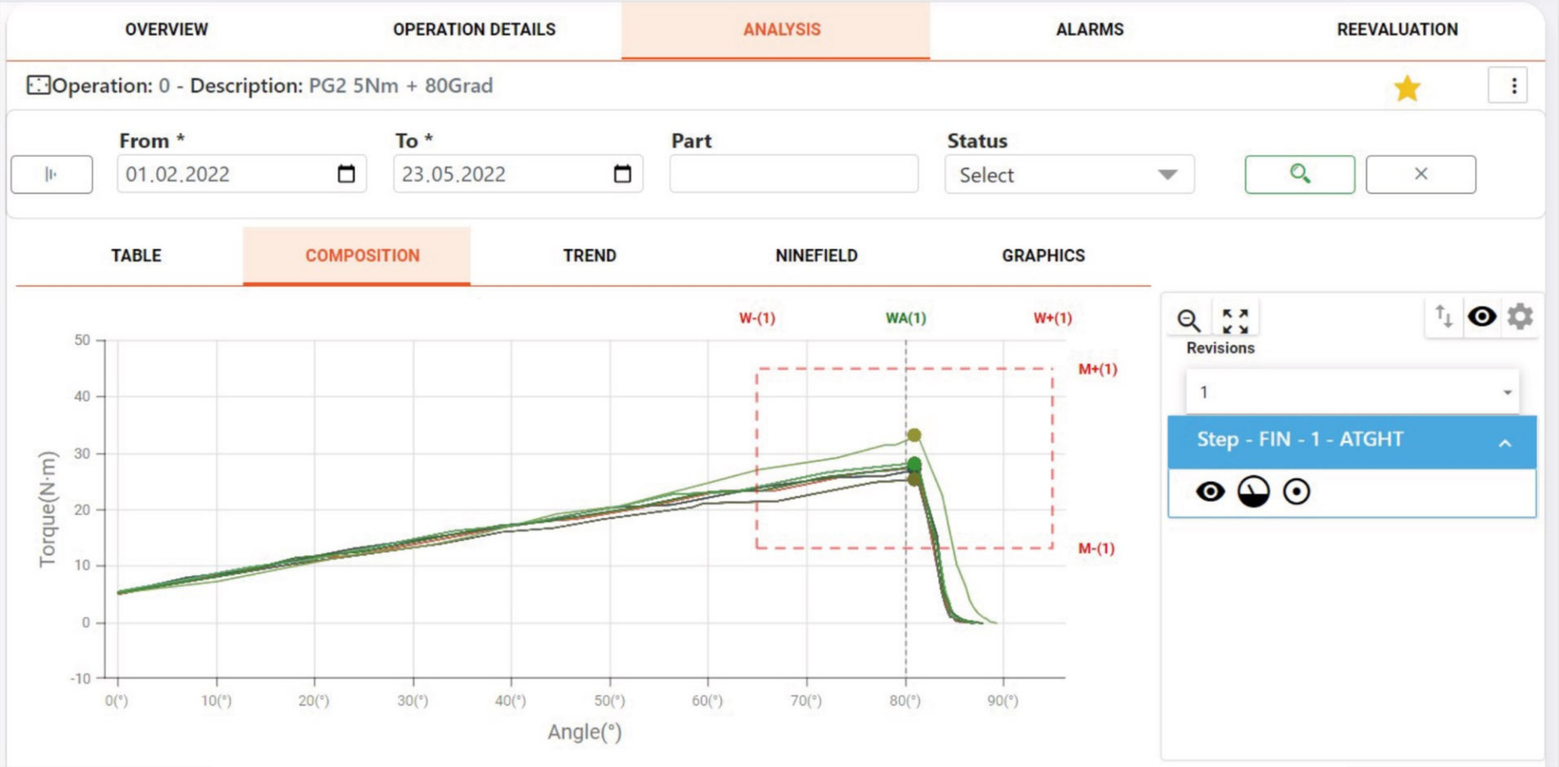
Detailed trace analysis and re-evaluation of history

(SYNER P – Premium)

- To have measurement values like torque, angle and a status can give you a hint what is going on inside your production.
- Having the traces, compare them, see anomalies is mandatory in our times to see the real quality of your process and products.
- In case of having issues, it is easy with SYNER P to find anomalies even on historical data and products.
- Trace inspection helps to find error causes.



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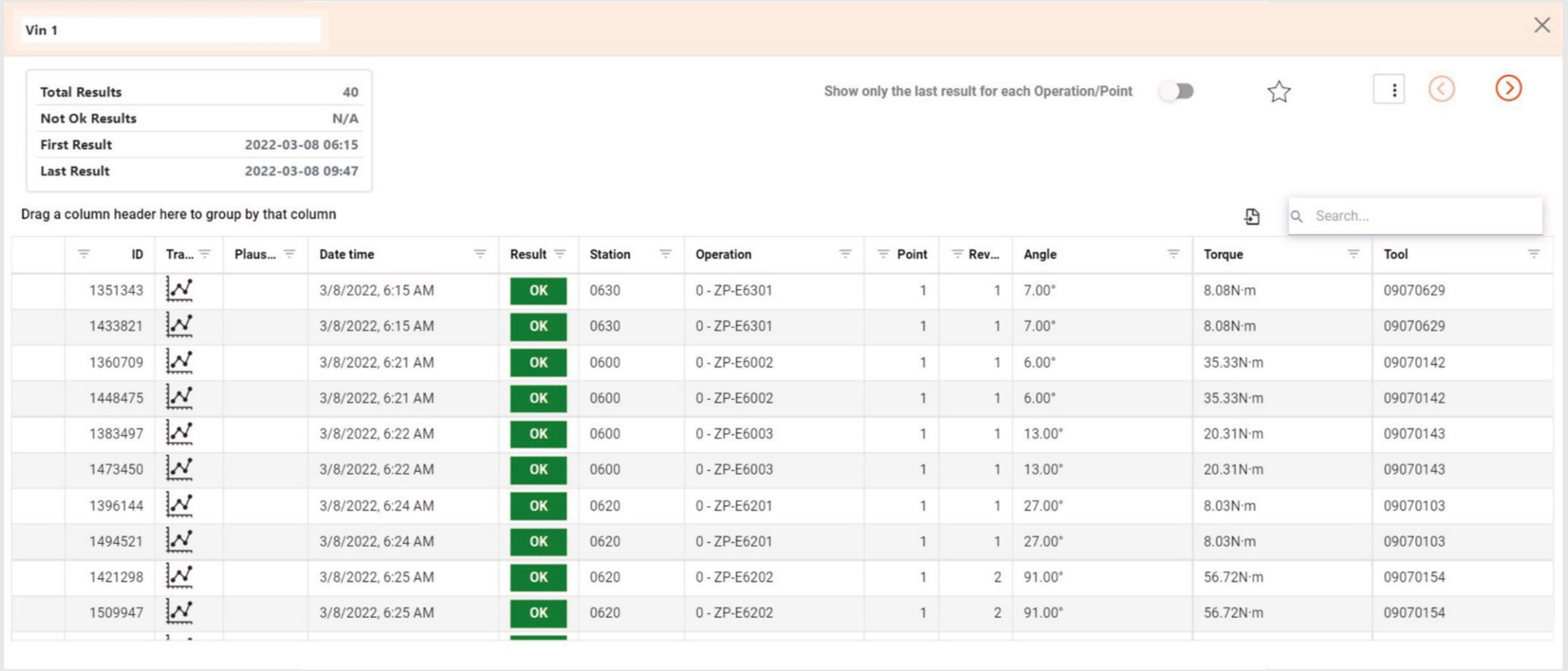
Product lifetime report

(SYNER P – Basic)

- Find all results from all processes in one report.
- Filter all information based on product ID.
- You don’t have to use for every process an own system from a vendor.
- Have all your data in one database and get a complete report to each manufactured product.



ID	Tra...	Plaus...	Date time	Result	Station	Operation	Point	Rev...	Angle	Torque	Tool
1351343			3/8/2022, 6:15 AM	OK	0630	0 - ZP-E6301	1	1	7.00°	8.08N·m	09070629
1433821			3/8/2022, 6:15 AM	OK	0630	0 - ZP-E6301	1	1	7.00°	8.08N·m	09070629
1360709			3/8/2022, 6:21 AM	OK	0600	0 - ZP-E6002	1	1	6.00°	35.33N·m	09070142
1448475			3/8/2022, 6:21 AM	OK	0600	0 - ZP-E6002	1	1	6.00°	35.33N·m	09070142
1383497			3/8/2022, 6:22 AM	OK	0600	0 - ZP-E6003	1	1	13.00°	20.31N·m	09070143
1473450			3/8/2022, 6:22 AM	OK	0600	0 - ZP-E6003	1	1	13.00°	20.31N·m	09070143
1396144			3/8/2022, 6:24 AM	OK	0620	0 - ZP-E6201	1	1	27.00°	8.03N·m	09070103
1494521			3/8/2022, 6:24 AM	OK	0620	0 - ZP-E6201	1	1	27.00°	8.03N·m	09070103
1421298			3/8/2022, 6:25 AM	OK	0620	0 - ZP-E6202	1	2	91.00°	56.72N·m	09070154
1509947			3/8/2022, 6:25 AM	OK	0620	0 - ZP-E6202	1	2	91.00°	56.72N·m	09070154

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Your advantages with our platform

One platform connects users and data

Cross data from production & quality

Collect all data from your production lines

Automatic management reports

Web-Access to your data with all devices

SYNER

Easiest way to visualize & monitor your assembly lines

Proactive events to keep you informed

Your features with our platform

SYNER P
Syner Production

+

- Multi brand data collection
- Multi process support (e.g., tightening, riveting, gluing, etc.)
- Multi protocol support
- Multi database support – reduce database costs
- Use KPIs and Dashboard for fast overviews
- Statistical analysis
- Alarm and trend signals
- High-performance data collection
- Use only one master data for all departments
- Using artificial intelligence (AI) to predict issues
- Accessibility on browsers for all types of devices
- Available in the cloud
- API for third party systems (e.g. SAP, etc.)
- No hidden costs:
- Full service package available

SYNER Q
Syner Quality

+

- Multi brand support
- Multi process support
- Manage all your measurement devices & certifications
- Statistical reports
- Report designer for customized reports
- SPC route management
- Perform all machine & process capability tests
- Cover VDI norms/standards (ISO5393, ISO6789, ISO2645-2, ISO2645-3)
- Accessibility on browsers for all types of devices
- Available in the cloud
- Use offline function on benches
- API for third party systems (e.g. SAP, etc.)
- No hidden costs:
- Full service package available

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SYNER

Your advantages with our platform

Reduce costs because of:

- Free choice of vendor for tools no dependency
- Less amount of software systems for several process types
- Free choice of database vendor (MS SQL can be used instead of expensive Oracle solution)
- Alarms will inform you in case of issues you don’t have to browse active inside the system
- One system for quality and production no need for several software systems
- Cross data from production with quality data learn based on these data improve settings of tools
- Don’t pay for every module choose between few packages

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SYNERQ

PACKAGES

Basic

- ✓ Up to 5 simultaneous users
- ✓ Central database
- ✓ SPC / route function
- ✓ Tool & measurement management
- ✓ Checklist
- ✓ Statistics (cm/cmk)
- ✓ ISO 5393 & 6789
- ✓ Label printing
- ✓ Full test support

Advanced

- ✓ Includes QUALITY Basic
- ✓ Up to 10 simultaneous users
- ✓ Report designer
- ✓ Full operations management
- ✓ AUDIT Support
- ✓ Widgets / KPI‘s

Premium

- ✓ Includes QUALITY Advanced
- ✓ Unlimited users
- ✓ VDI norms
- ✓ Customization available

* Basic is also available as Bench / Single Version for Standalone solutions.

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SYNERP

PACKAGES

Basic

- ✓ Results overview
- ✓ Product / serial no. history
- ✓ Error KPI‘s
- ✓ Parameter changes
- ✓ Full details for operations
- ✓ Trace analysis

Advanced

- ✓ Includes PRODUCTION Basic
- ✓ Alarms based on conditions
- ✓ Dashboards & Widgets / KPI‘s
- ✓ Statistical graphs (e. g. normal distribution)
- ✓ Tool overview with maintenance warning

Premium

- ✓ Includes PRODUCTION Advanced
- ✓ Artificial intelligence (AI) integrated
- ✓ Re-evaluation of traces
- ✓ Report Designer
- ✓ Customization available

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SYNER

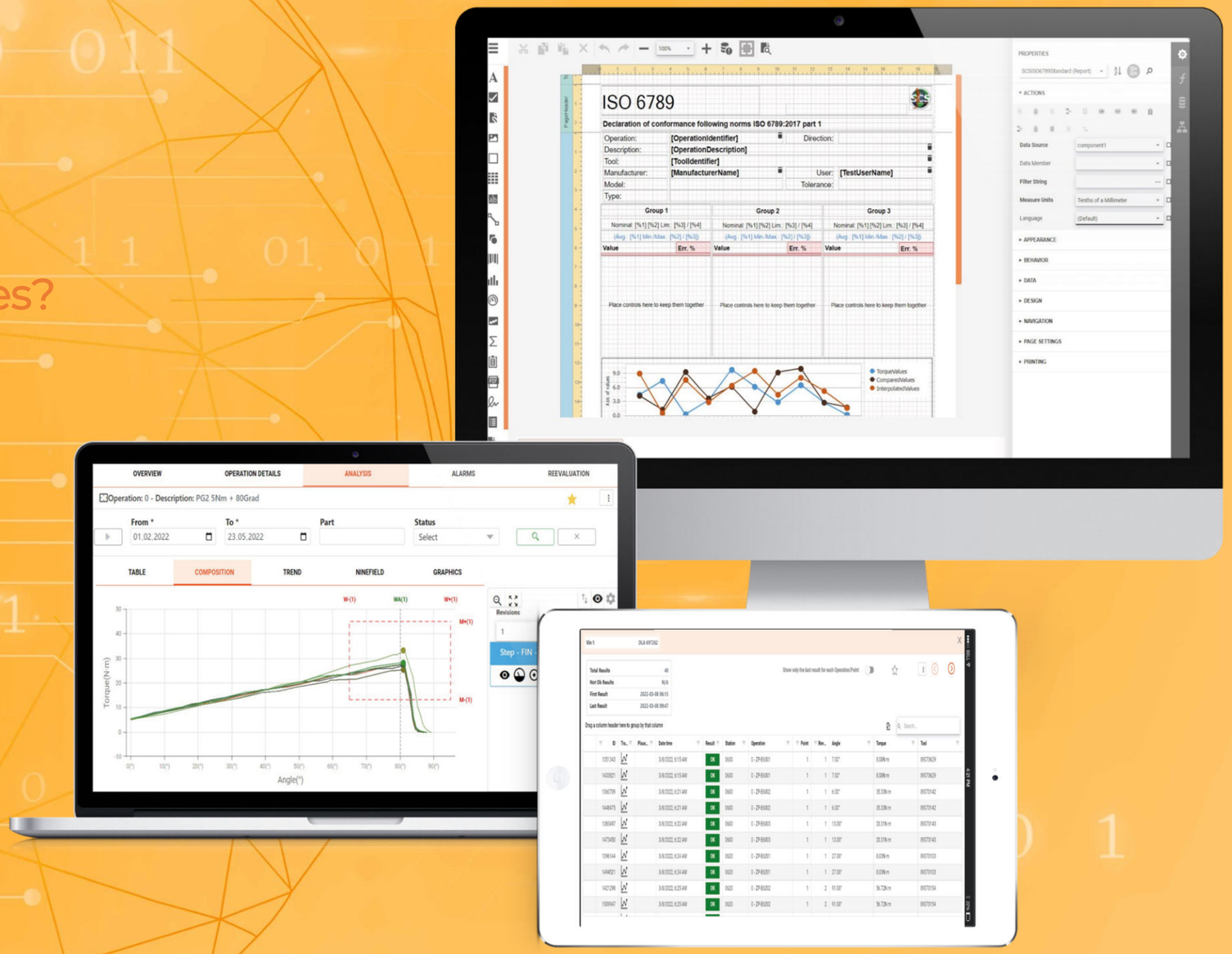
PLATFORM

Curious about our platform?
Not seen all functions and possibilities?

Of course we have many more functions but we don’t want to bore you with thousands of slides

- Request live demo
- Request demo access with own user to our cloud version
- Challenge us and make a proof of concept with us?

  We will install SYNER for you connect devices and let you experience the software yourself!



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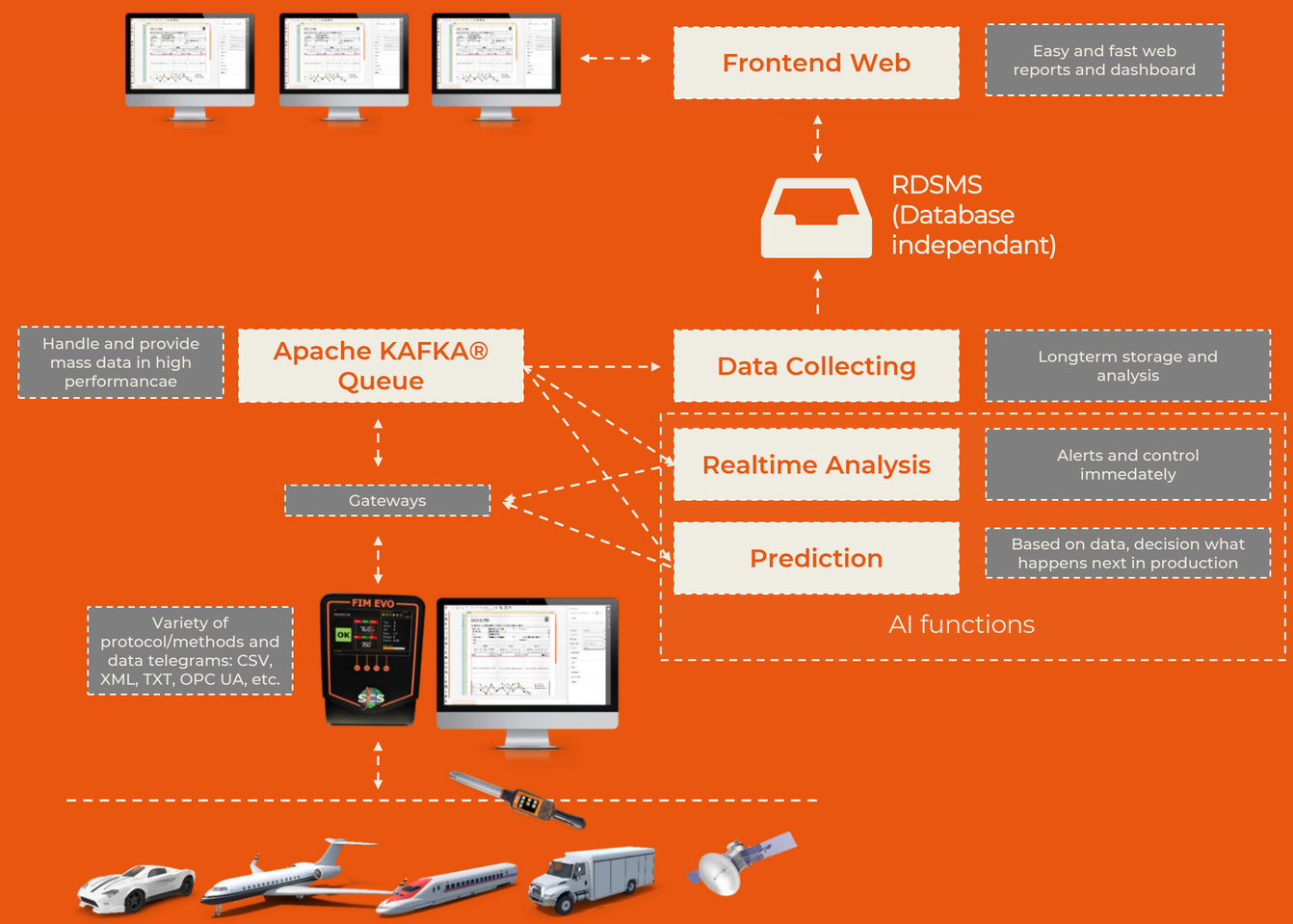
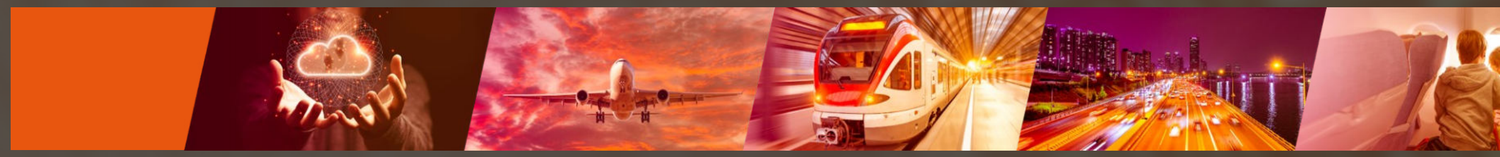
Don’t forget the IT guys!

High performance architecture



We support every industry!



- Airbus
- ArvinMeritor
- Audi
- BMW
- Bosch
- CAF
- Benteler
- CNH
- Cobo
- Comair
- Dana Arco & Como
- Dana Pregnana
- Draexlmaier
- Ducati
- Durr
- EFW
- FCA
- FIAT
- Gearbox
- HBPO
- Iveco
- Maserati
- Mercedes-Benz
- MTU
- New Holland
- Renault Trucks
- Renault
- SAF
- Safran
- Scania
- SEAT
- Smart
- SNECMA
- Sogerma
- Tesla
- Toluca
- TSA
- Volkswagen

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