

operations¹



Checklist 4.0

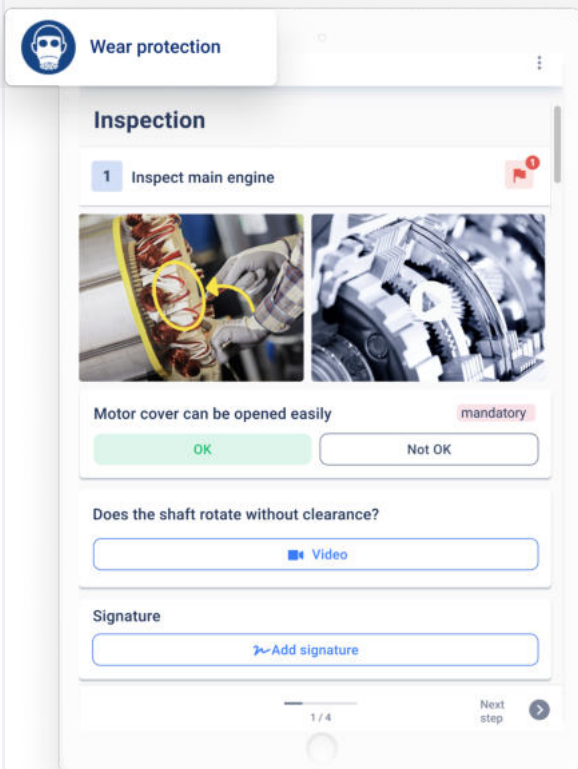
Digital, dynamic, data-driven

Why is the checklist 4.0 essential?

Whether in maintenance, quality, incoming goods, audits, or worker self-inspections in assembly: Checklists are used in a wide variety of use cases that pursue the goal of checking standards such as product quality, process conformity, or machine conditions. In the paper-based version, however, these documents represent an information silo, decoupled from analysis tools and with little traceability. In addition, other reference documents such as instructions are often needed to illustrate inspection processes.

In order to be able to evaluate the on-site insights on the basis of checkpoints, an immense manual transfer effort into software tools is necessary. In this way, the "checklist" document, which is actually intended as a guideline, becomes a real effort driver or, by bypassing the effort, creates blind spots in production that prevent one thing above all: continuous improvement.

Checkliste Kupplungs Zahnrad und Kupplungs Grundplatte montieren					
Artikelnummer / Version / Part No.:		1066780413			
Artikelbezeichnung / Description:		K-coupl			
Serial No. / Serial No.:		2-6103304			
Charge No. / Charge No.:		1002			
Pos.	Arbeitsgang / Production Step	Arbeitsanweisung / Working instruction	Hilfsmittel / Aid	Zeichen / Sign	Datum / Date
1	Kupplungs Zahnrad und Kupplungs Grundplatte auflegen / Place clutch gear and clutch base plate	AA43251		FK	08.08
2	Reibungslöse Rotation des Kupplungs Zahnrads möglich / Smooth rotation of the clutch gear wheel possible	AA43252		FK	08.08
3	Montagescheibe und Kupplungs Zahnrad zentral auflegen / Place the mounting plate and clutch gear centrally	AA43253		FK	08.08
4	Kupplungs Zahnrad zentral aufgesetzt / Clutch gear wheel mounted centrally			FK	08.08
5	Mutter festgezogen mit ca. 100 Nm / Nut tightened with approx. 100 Nm		5-6734124	FK	08.08
6	Korrekte Positionierung der Einbungen der Kupplungs Grundplatte mit Kupplungs Zahnrad / Correct positioning of the indents of the clutch base plate with clutch gear			FK	08.08
7	Bilder aufgenommen und archiviert / Capturing and archiving images			FK	11.08
8	Prüfung erfolgreich durchgeführt / Test successfully performed			FK	11.08
Kommentar / Comment					
Montage wurde erzeugt über mobile Beschleunigung an Satellit, ca. 2 km Länge. Bitte vor AV prüfen					

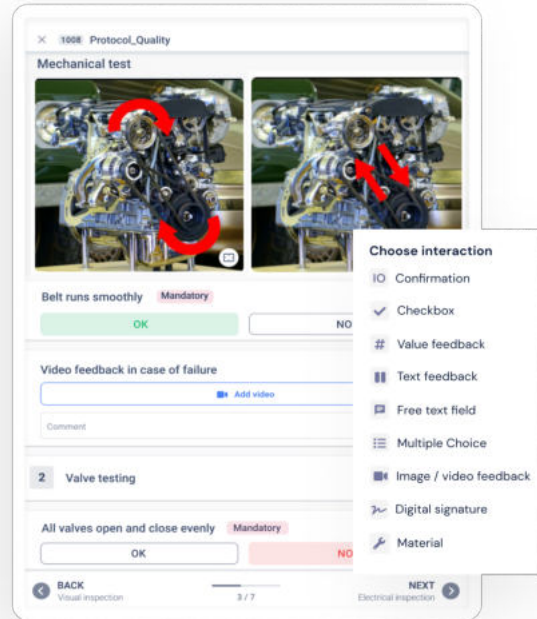


The visual and interactive Checklist 4.0 revolutionizes the way of working on the shop floor. The document chaos of checklists and reference documents is a thing of the past.

With the image- and video-supported checklists, employees easily navigate through the inspection processes, record findings via interactive input, sensor integration or through integrated image feedback. The task management module and live monitoring functionality make Checklist 4.0 a digital collaboration tool for manufacturing companies.

Eliminate paper on the shop floor

With Checklist 4.0, employees no longer have to jump between different static documents: The Operations1 software for Adaptive Process Execution seamlessly combines checklists and work instructions in the digital world. Added to this are sophisticated functionalities. A range of interactions can be used in the inspection to collect on-site data and make it evaluable in real time: from multiple choice to simple checkpoints and target/actual value comparisons to images and videos. The automatic transfer of sensor data into the checklist also completes the multi-faceted feedback options directly from the process.



- ✓ Image and video based digital checklists
- ✓ Simultaneous collaboration in one document
- ✓ Separate task management for incidents

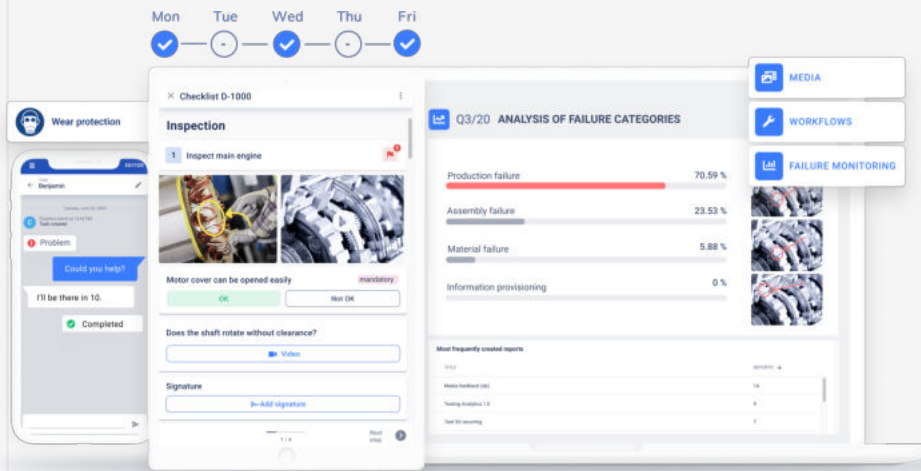
On the shop floor, workers can access the multilingual checklists by using their tablet to scan a QR code located directly at the machine, by using the search function in the software or by receiving it directly via order. The current version of the checklist is available in the cloud at any time. During the execution of work steps, separate tasks can be created, assigned and tracked in case of unforeseen incidents. After completion of the activity, the report is created with one click only.

-100%

EFFORT FOR ARCHIVING,
REPORTING
AND DATA TRANSFER

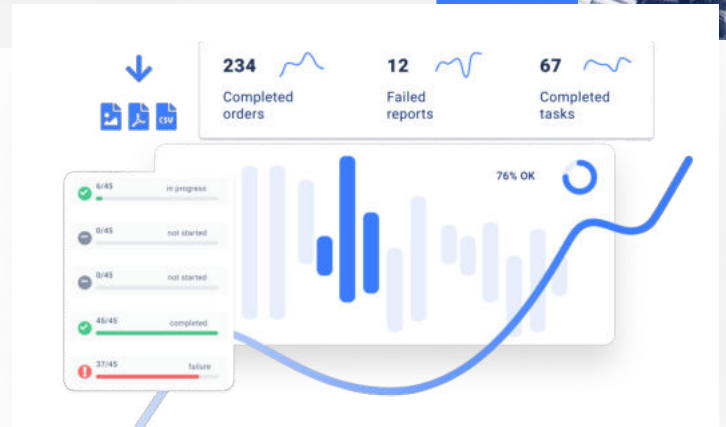
- ✓ Multilingual checklists and software
- ✓ Centrally stored modules and media
- ✓ Transfer of data from and to various systems

The checklist 4.0 as a central building block of the Smart Factory



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REWORK, SCRAP AND
CUSTOMER COMPLAINTS



The checklist 4.0 is an essential building block for connected work on the shop floor. Instructions and checklists can be linked directly to orders from different systems.

In the next step, the diverse interactions such as value inputs can be evaluated directly in the software or in third-party systems such as Power BI, and blind spots such as failure rates or even process times thus become visible. The gained insights pave the way for company-wide benchmarking across locations, machines, products and any individual structure.



Paper-based checklists are no longer up to date. They simply do not fit into the 21st century.

Dr. Alfons Hätscher
Chief Financial Officer, Hirschvogel Holding GmbH

Easy start, maximum scalability

The Operations1 software for digital work instructions and checklists can be implemented within 6–8 weeks. Due to the technical basis and hosting via Microsoft Azure, digital checklists are easily integratable into your IT landscape. Data can be analyzed in Operations1 as well as forwarded from Operations1 to third-party systems.

In addition to the modular structure of instructions and limitless language selection, the Operations1 software is designed to scale limitlessly in your company and systematically handle the complexity of locations, departments, machines, and much more through further sophisticated functionalities such as the use of structural classes from your ERP as well as interaction tags and much more.



Excerpt of our customers



The checklist 4.0 not only simplifies the provision of information on the shop floor, but also simultaneously enables the return of on-site findings, across documents and in real time. An enormous step towards fast reaction times and end-to-end transparency.



Benjamin Brockmann
CEO, cioplenu GmbH

operations¹

Rethinking inspections, SOPs and checks in the digital age

Empower your workforce to conduct processes in a safe, reliable and efficient manner.