3D.aero

PRODUCT DATASHEET
AI2Go

AI2Go

Product Line - Mobile Systems

Introduction

AI2Go is a mobile assistant using the power of Artificial Intelligence to support manual inspection processes. The system is able to perform automated object identification, text recognition, anomaly detection and photo reporting. It is easy to configure and supports many different fields of industrial application."

Characteristics

Our **AI2Go** system generally functions as a mobile inspection device to support the worker in his tasks on the shop floor. The system has different functions to support inspection tasks:
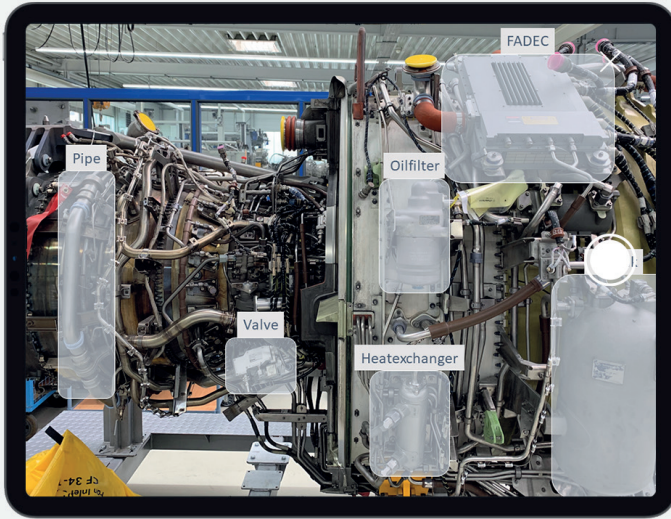

> **Photo Report for incoming inspection**
> To make the reporting process more efficient, the system provides a structured guidance to ensure capture of all relevant photos during incoming inspection or goods receiving.
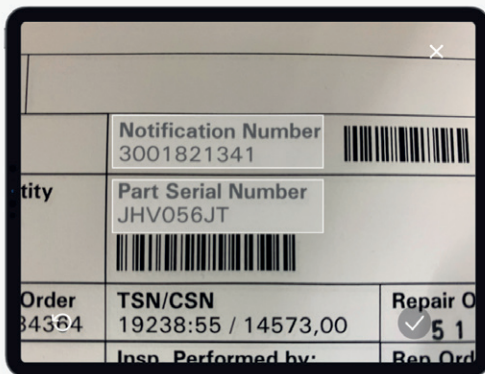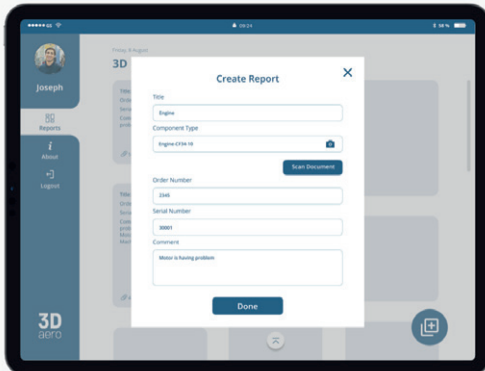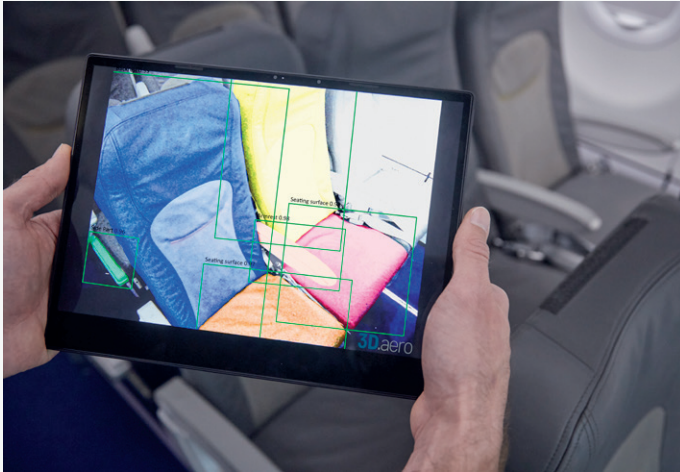
> Object Identification

AI2Go is able to automatically identify objects in previously taken images. Identified objects are correctly labelled and highlighted to allow a quick and easy presence or completeness inspection.

> Text Recognition

The integration of a text recognition feature in the AI allows for an easy digitalization of text, product labels or other important inspection information connected to the process.

> Damage Detection and Classification

AI2Go can detect different types of damages simultaneously in a captured photo. 3D.aero's advanced algorithms immediately classify the damage according to damage category from scratches to dents and even dirt on the surface, etc.
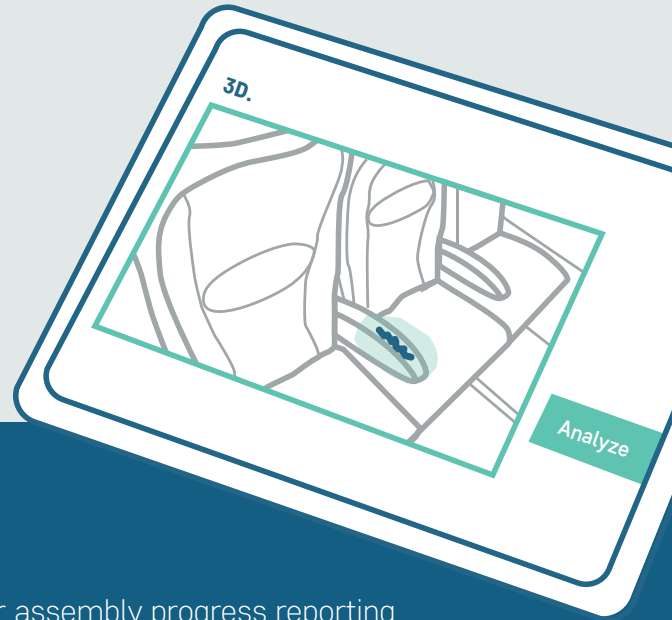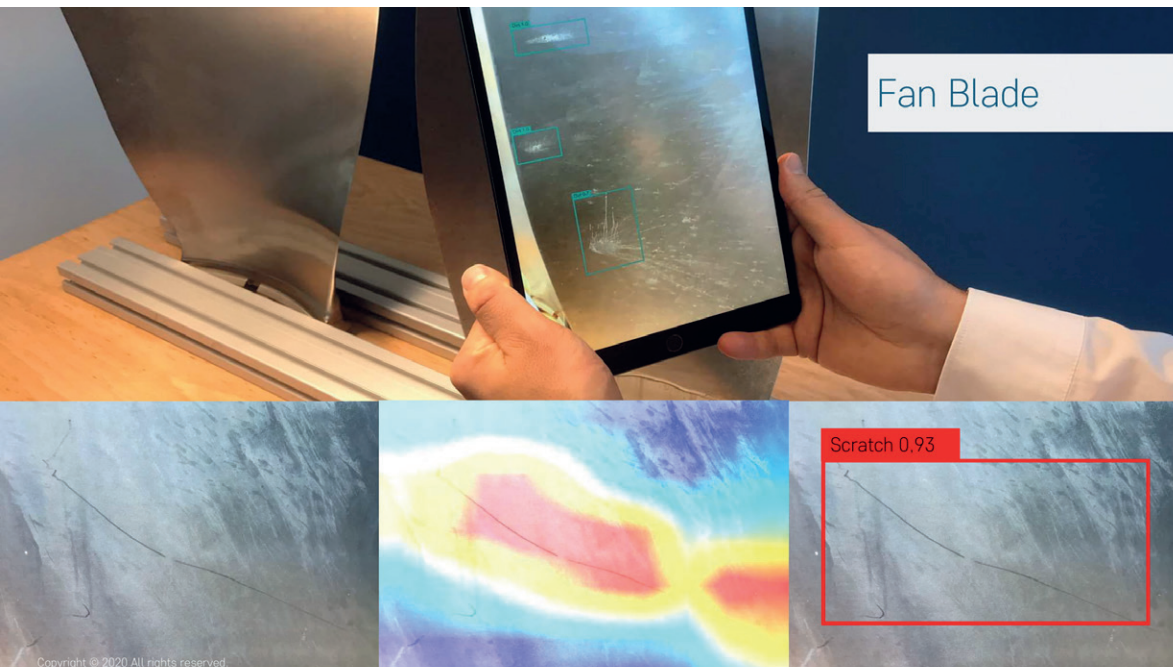

> ERP/PLM data transfer

A fully integrated system in a tablet computer allows for a completely paperless process to enhance time and effort savings in any task. The fully digital process seamlessly includes previous or following process steps, like reporting to the customer's ERP system to further improve productivity and efficiency.

Applications

- Mobile Quality Management
- Incoming inspection
- Logistics

- **Warehouse processes** ▸ goods receiving
- **MRO processes** ▸ incoming inspection
- **Production processes** ▸ In-Line inspection or assembly progress reporting
- **Logistics processes** ▸ object identification or label reading

Fan Blade

Scratch 0,93

AI2Go reliably identifies different damage types simultaneously in one picture. The process involves image processing, damage identification, classification and the output of the inspection result.

Process Information

AI2Go offers an AI supported, digitalized reporting process of components with connection to the customers ERP or PLM system. Thereby, individual tailored neural networks are used to support text recognition and defect detection and thus increase the quality and speed of the reporting process. With **AI2Go**, a complete report can be digitally created, edited and stored within minutes. Following functions summarize the systems capability:

1

Photo report of incoming parts

- Guided process of capturing images and adding notes
- Possible integration of customer manuals
- Structured photo report for documentation in cloud or any other drive

2

Automated text recognition

- OCR text recognition on many different surfaces
- Connect and compare OCR results with ERP/PLM database
- Recognition of letters and numbers in various forms and structures (engraved, stamped in, barcode etc.)

3

Damage detection

- Localization of damages on components in previously taken images
- AI image processing for anomalies on the surface
- Simultaneous detection and classification of different damage types

4

Digital reporting system

- Recording of various damages with live photo and video documentation
- Reporting can be sent via email and uploaded to ERP systems for further processing
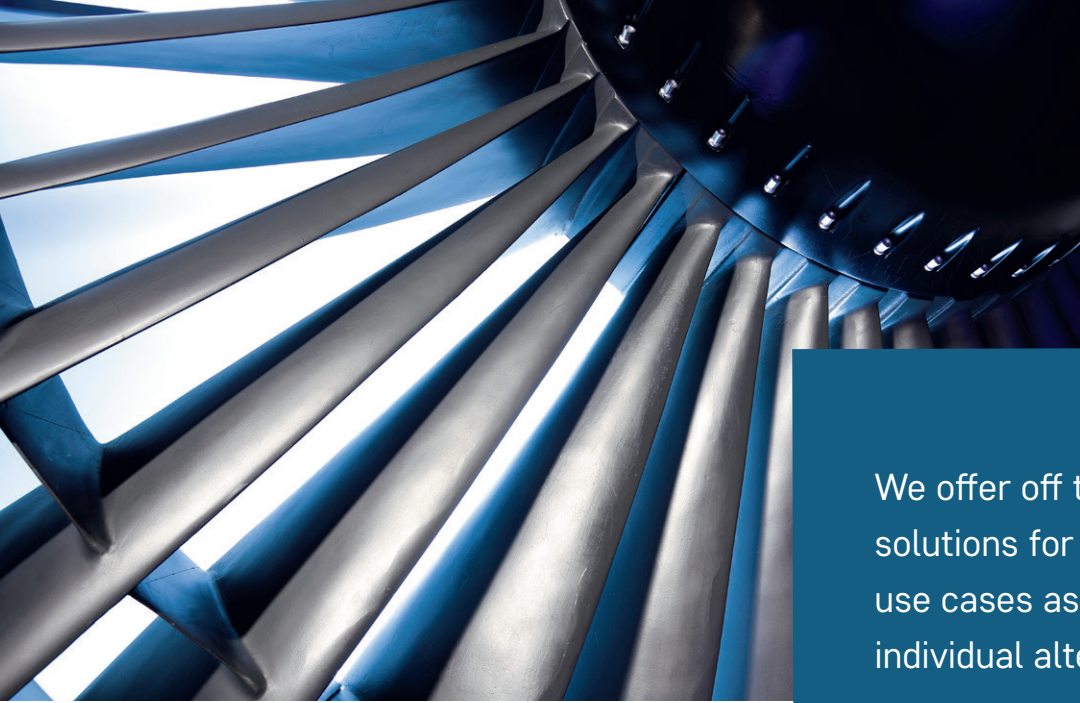- Edge computing for inspection and report anywhere

Important
Product Information

Clasification	Specification	Descriptrion
DEVICE	**from iPad Air 3. Generation or better**	Runs on iOS 14.8 or higher – implementation of further operating systems possible
DATA INTEGRATION	**Local Database**	Data is stored locally and can be synced to remote server
	Sync with remote Database (Cloud, Azure, ...)	Integration of cloud solutions possible
	ERP/MES/PLM Systems	Successive MES, PLM and ERP systems (SAP, Odoo, etc.) can be supported
FEATURES	**Photo Reporting**	Guided photo capturing process
	Text Recognition	Text processing (printed, handwritten, engraved, etc.)
	Damage Detection and Classification	· Scratches · Dents · Nicks · Dirt
	Object Identification	Comparison of components with „golden sample"

We offer off the shelf solutions for various use cases as well as individual alterations.

Available Configurations

For **AI2Go** there are a range of optional features that can be added to the system, if necessary for your process. It is for example possible to create a remote connection to other, similar devices to collaborate with a colleague. Also a guided inspection process can be included in the system, which gives a step-by-step instruction and displays comparison images to simplify the inspection process. If needed, a connection to the customer manual (e.g. ESM, AMM) can also be integrated, to give a comparison to deviation limits for example. For DSGVO compliance, the application can also anonymize people that are shown in the pictures of the inspected parts.

The application runs on nearly every mobile device, which makes it optional to also use existing tablet computers, the worker is already equipped with and upgrade the device with the **AI2Go** application.

Contact information

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