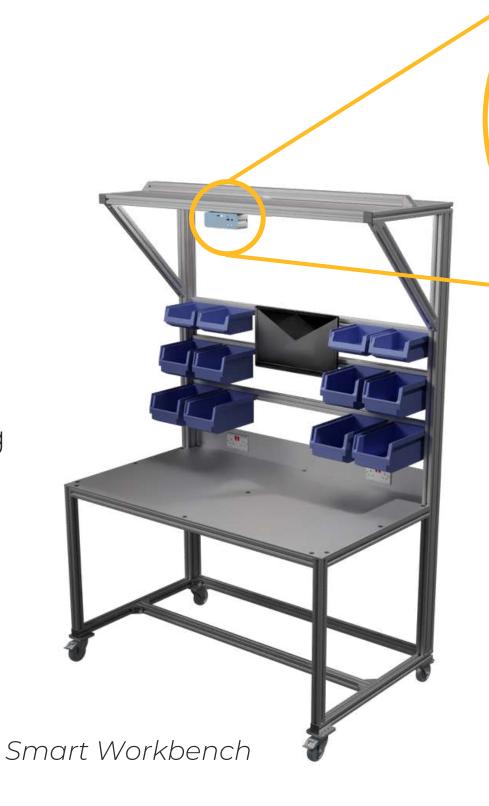


# What is DAFO?

The Digital Assistant for Optimisation (DAFO) uses computer vision to provide operators with context-relevant information. It is a side-to-side digital coworker offering real-time step-by-step guidance and optical inspection.

DAFO is agnostic, and you can use your existing IT infrastructure, if suitable, or our industrial computer for better performance and to speed up the setup process. DAFO is a powerful, modular, and flexible solution that helps manufacturers to boost their productivity, increase quality assurance, and optimise their production processes with AI supervision.



DAFO Industrial Computer + Camera

# If you say yes

to any of these questions:



Do you need to train your staff?

Do you need traceability of assembled products?

Do you need to supervise the assembly quality?

Do you need to measure productivity?

Do you want to improve the well-being of your employees in critical assembly processes?

Do you have blind robots that continue the operations, even with missing parts?

then we are going to help you

## DAFO so utions 4 Key productivity enablers

## **Training**

Our platform speeds up the training process for new operators thanks to its Computer Vision capabilities. Like an interactive tutorial, DAFO guides the workers in their tasks using images and synthesised voices in their language.

## **Guidance**

The DAFO's guidance system gives operators step-by-step knowledge to assemble multiple products and its variants. As a result, it speeds up processes and reduces costs.

## **Optical Inspection**

The platform can be connected to a workbench or included in a conveyor for quality control or product counting. You can verify the quality of the product throughout the process.

## **Traceability**

DAFO stores product images before their last stage to ensure everything is in place correctly. Avoid assembly mistakes and missing parts.

# Modular Operator Guidance Suite

- Automated assembly guidance
- Predictive maintenance
- Quality assurance & Product quality inspection
- Monitoring
- Tracking
- Safety

## **Products and Process Setup:**

Al Learning Tool Model building

Guidance System:
Training module
Monitoring
Quality Assurance

Other Computer Vision
Modules:
Computer Vision Solutions
for Manufacturers

# A staff-centred approach to digitalisation

DAFO reduces stress and burnout by guiding operators with clear instructions. Our platform creates smarter and user-friendly workstations and allows you to train operators without strict supervision.

It also provides flexible work areas and favours operator's mobility between production lines.



# Modules & Features

## **Robot Assembly Verification**



Verify that all parts are correctly placed in an assembled product. Human or robot operators.

## **Pick to Light**

Project instructions at a workstation to accurately assist personnel in assembling complex parts and subsets.

## **Object Detection**

Recognise properties to identify products.

#### **QR & Barcode Reader**

Complex scenarios like manufacturing or warehouses can use this module for different use cases.

#### **OCR**

The Optical Character Recognition (OCR) module can quickly recognise and label text and symbol characters.

### **Defect Inspection**

A non-destructive testing solution (NDT) to determine if a trained object has imperfections.

#### Classification

This module can classify objects using various parameters such as color, shape, and size.

### **Locating and Counting**

In complex scenarios, this module recognizes, classifies, and counts inspected objects.

# How does assembly verification work?

Dafo AI can perform many computer vision tasks. But our key tool is the guidance operator system, specifically the pick-and-place module.

1

**Pick** 

Take the piece to be assembled.

2

**Validate** 

The system checks if it's the correct part.

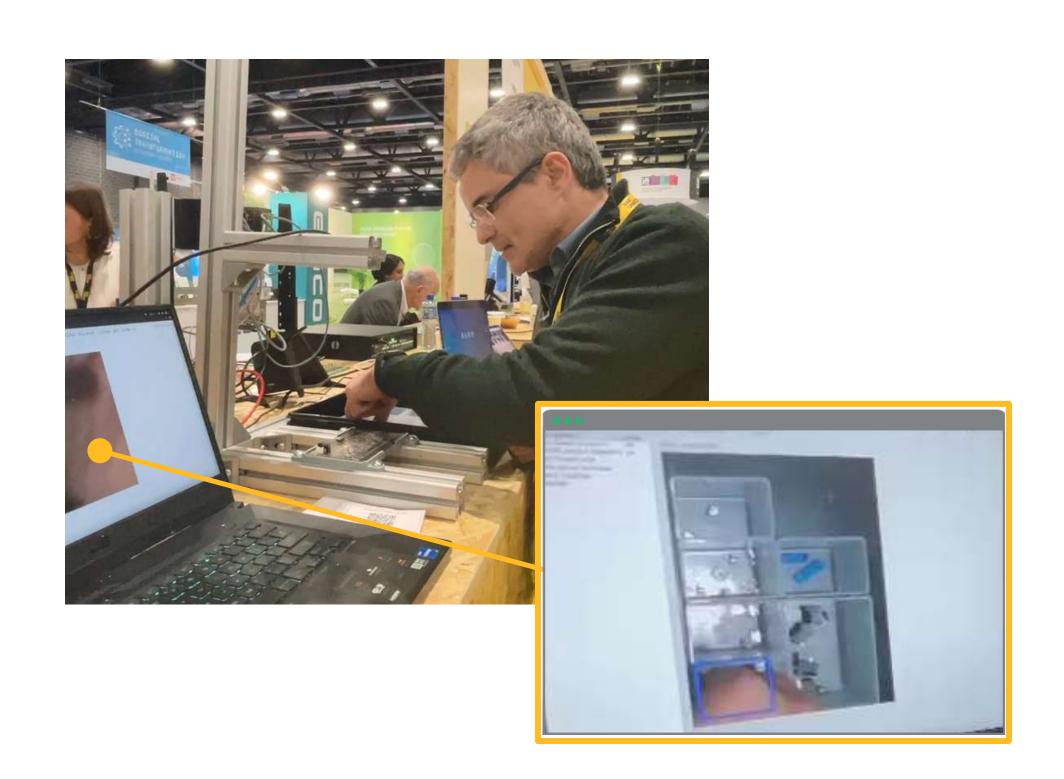
3

**Place** 

Put the piece where the system tells you.

# 1. Pick

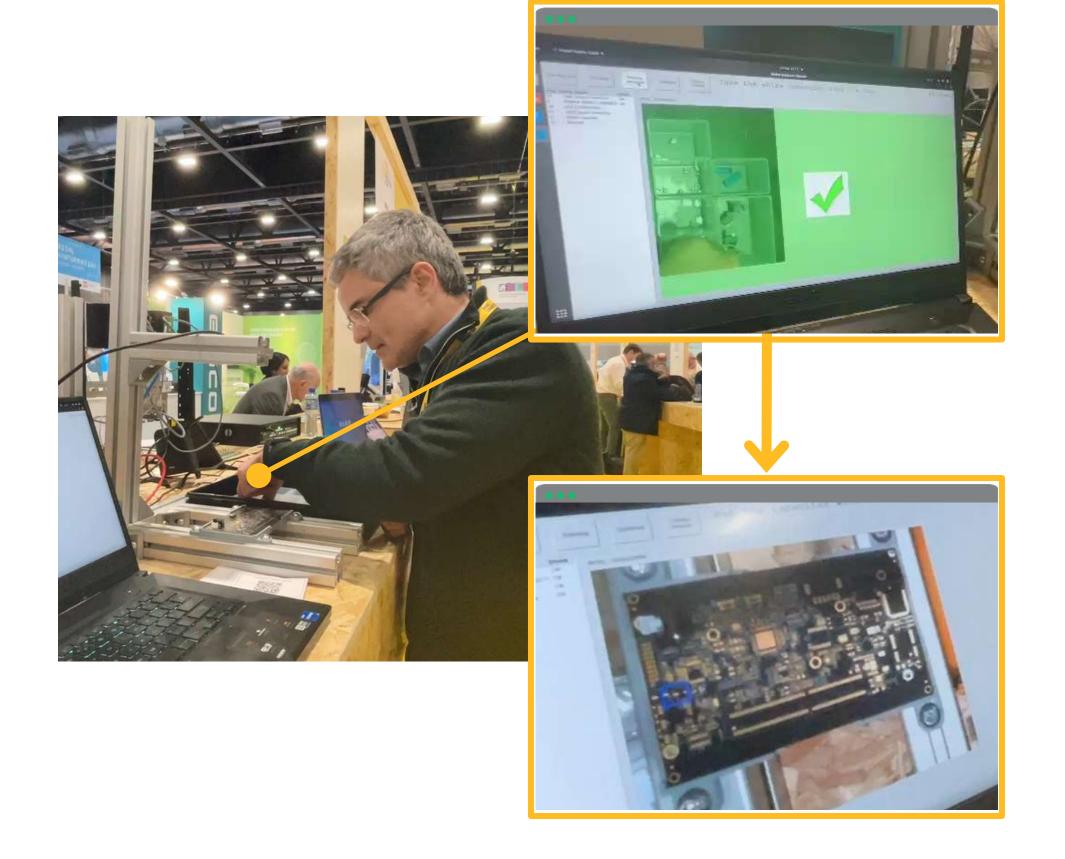
Through the HMI, the system indicates where to take the piece to be assembled. With computer vision, the system can see where the operator put his hand to remove the part and validate if it is correct.



How do DAFO works?

# 2. Validation

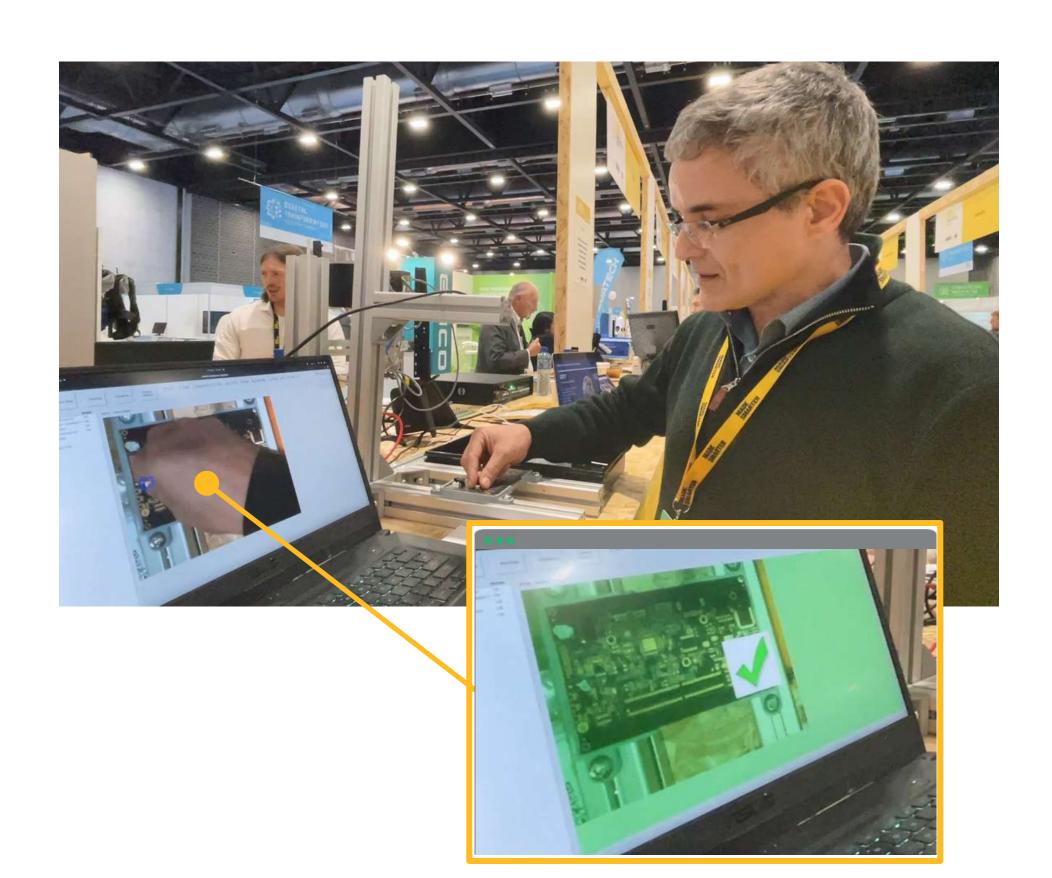
The system validates that the operator has taken the correct part and indicates where it should be placed.



How do DAFO works?

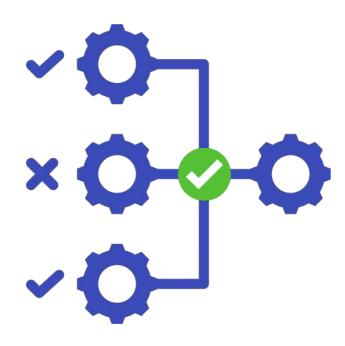
# 3. Place

Once the piece is placed, the system validates that it is in the correct position.



How do DAFO works?

# Value Proposition







Future Skills
Development
with
Train-the-trainer
methodology



Reduces v50%
waste rates
with
Quality
Assurance and
NDT



Improve A20% profitability with Automated Assembly Guidance

# Operator Guidance USP









# Lightning-fast object recognition speed

- Easy to use
- •FaaS

## **Proprietary Tech**

- Software suite
- Core algorithms
- Industrial DeepLearning tool
- •API development for integration

## **Proprietary Data**

•GDPR compliance and Optimised Libraries Cloud Agnostic
Option

 We are guiding manufacturing excellence with Al while enhancing workforce diversity@ through guided pathways

**Contact us** 

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