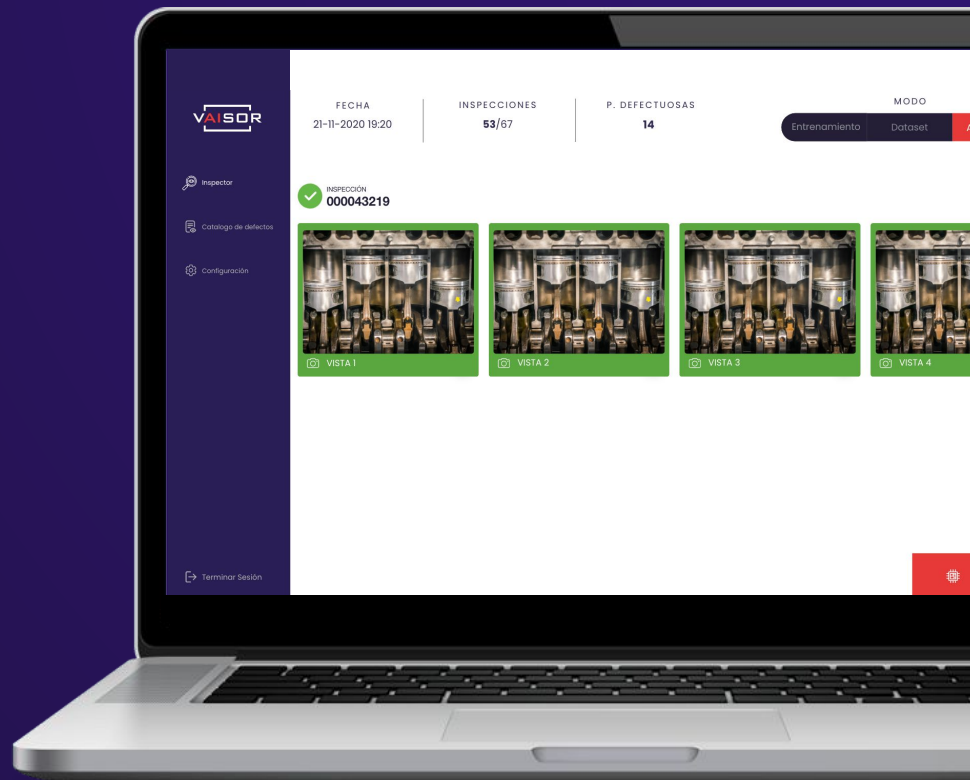




the **COMPUTER VISION**
No Code Platform for quality inspection.



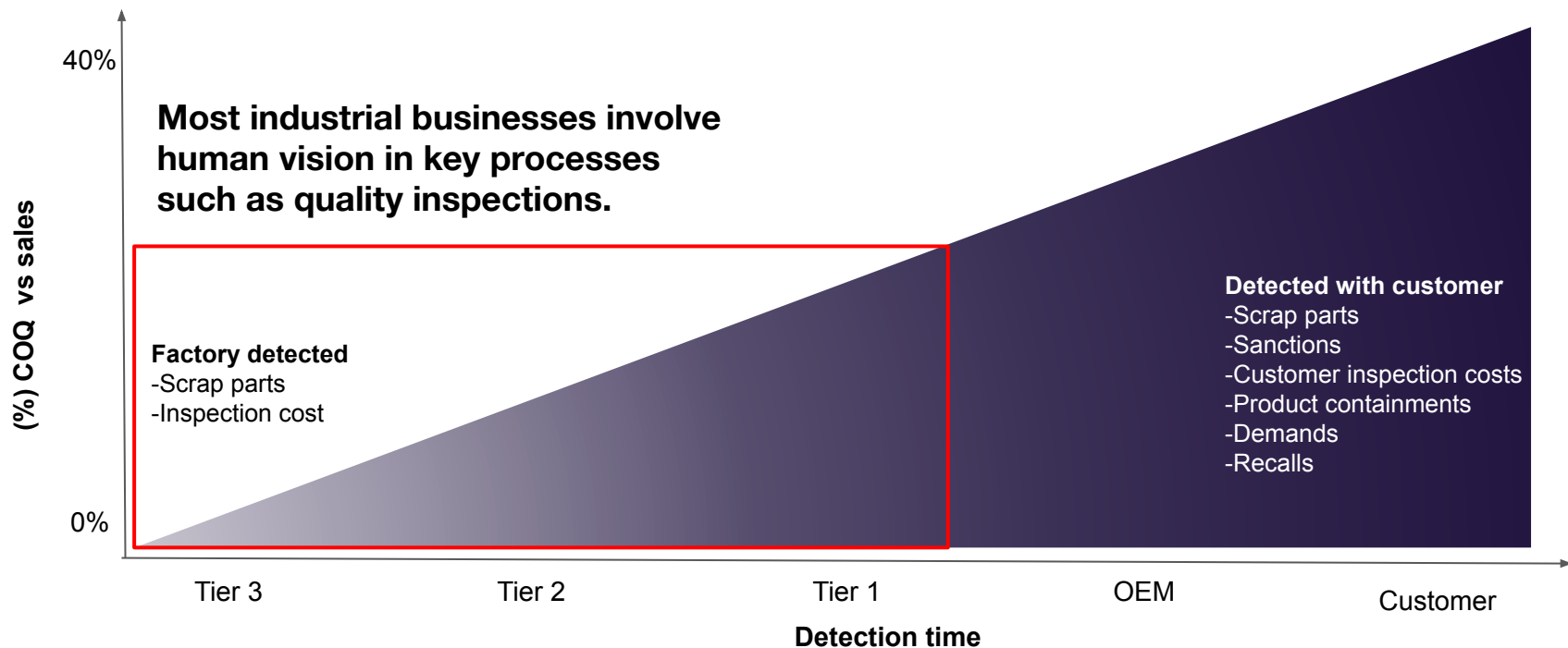
The background is a dark blue gradient with various technical and business-related icons and graphics. On the left, there are icons for a person, a gear, a mail, and a clock. Below these are icons for a cloud, a shield, and a play button. In the center, there are several circular gauges and a large clock face with numbers from 00 to 18. There are also some bar charts and line graphs. The text is overlaid on this background.

Cost of Poor Quality
represents up to 40% of
Cost of Good Sold.

PROBLEMS GROW OVER TIME

The costs of quality (COQ) and non-quality are positively or negatively affected by the moment of detection of the error.

Most industrial businesses involve human vision in key processes such as quality inspections, material handling, safety and many others.



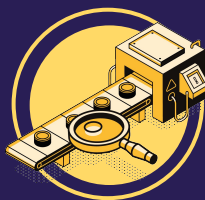
WE TURN **QUALITY INSPECTION** INTO A RELIABLE AND SCALABLE PROCESS.

We leverage emerging technologies to digitize your operations and guarantee ROI by increasing efficiency.



We automate any visual inspection by using Computer Vision models in a Hardware + platform.

Along your Supply Chain & Manufacturing processes



THE MAIN PROBLEMS WE HAVE HEARD OF LEATHER COMPANIES

These are some of the main challenges to solve that we have heard from the best companies in the sector.



The products have a unique process in its style and the defects are not repeated in the same place.



The lack of traceability of defects is a problem when it comes to customer containment.



High staff turnover makes it difficult to have trained people to do reliable inspections.



Current sensors do not detect the various types of faults and require vendor support for changes.



They do not have inspection records that are reliable for audits.



SOLUTION

Our solution is composed of 3 key components where we are capable to make a reliable and scalable solution.



Panel PC

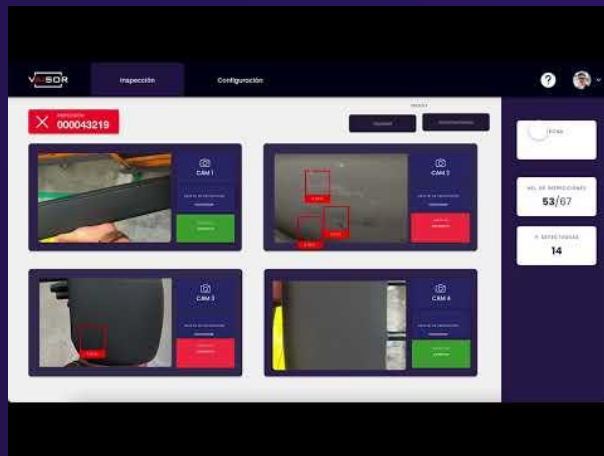


Cameras

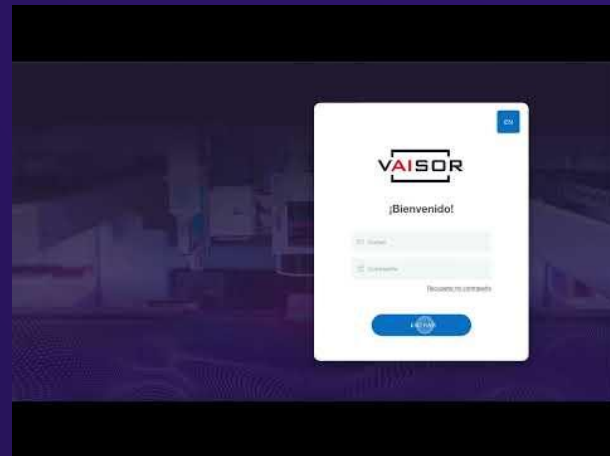


Iot Box

HARDWARE



COMPUTER VISION MODELS

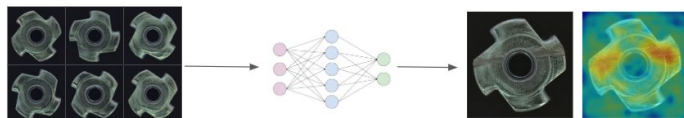


PLATFORM READY TO USE

Click on videos to learn more

DIFFERENCES BETWEEN MODELS. PROS VS CONS

ANOMALY DETECTION MODEL



Imágenes de piezas
en buen estado

Modelos AI

Detección anomalía

PRO's

- A model can detect multiple defects starting from a good part.
- Minor dataset required average 50 images.

CONS

- The model takes more time to generate an effectiveness in detecting problems. (It has many flaws to detect).
- It fails to classify the different types of defects, it only says if it is good or bad.
- The piece needs to be controlled and not move, moving it reduces its effectiveness percentage but it still detects.

DEFECT-BASED MODEL



PRO's

- The models have an effectiveness greater than 90% from the start of the project.
- The models are flexible to the detection processes, it is not necessary to control the parts.
- Defects can be classified to keep track of recurrence.

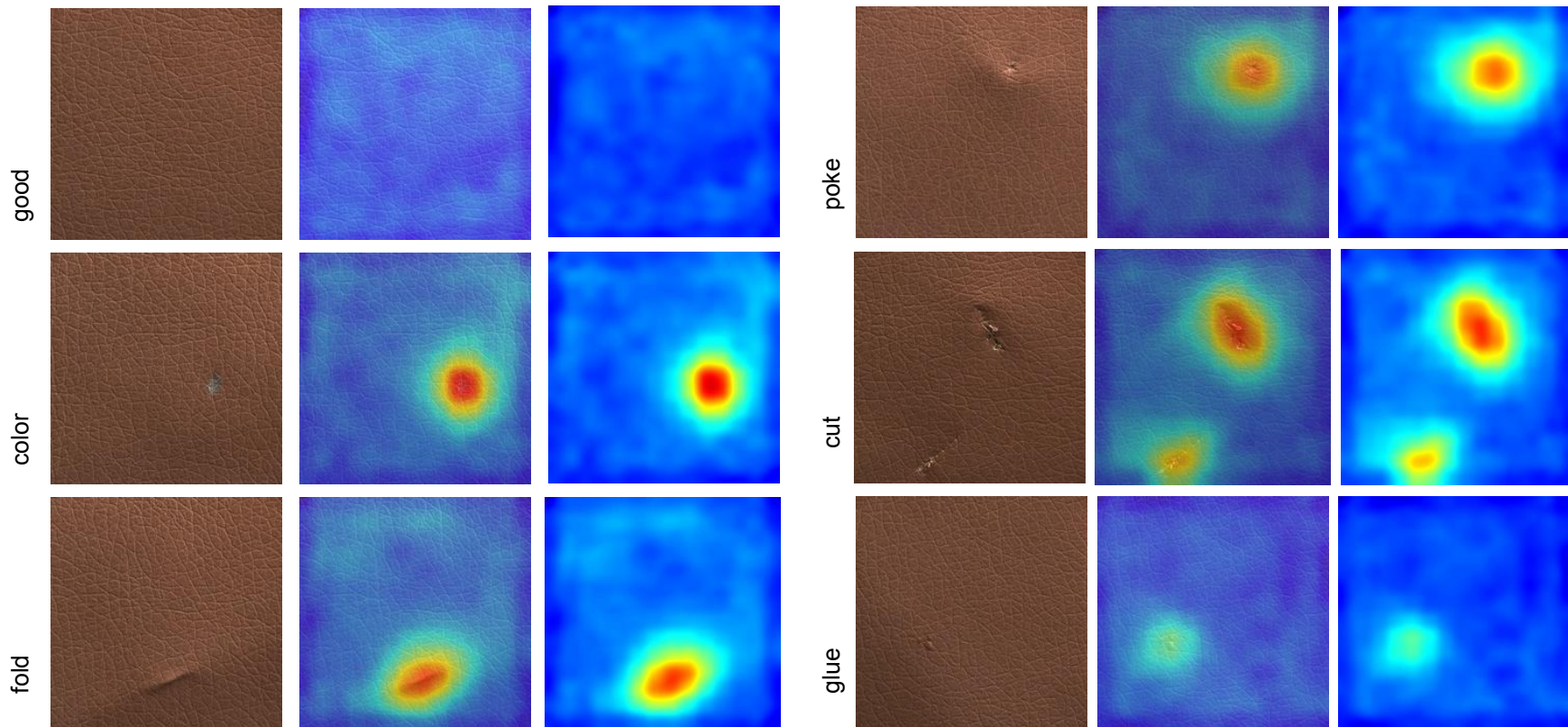
CONS

- A model for each defect.
- A much larger image dataset is needed, on average 100 images.

In both models, a set of images must be provided for training.
Both models can be re-trained to improve their performance.

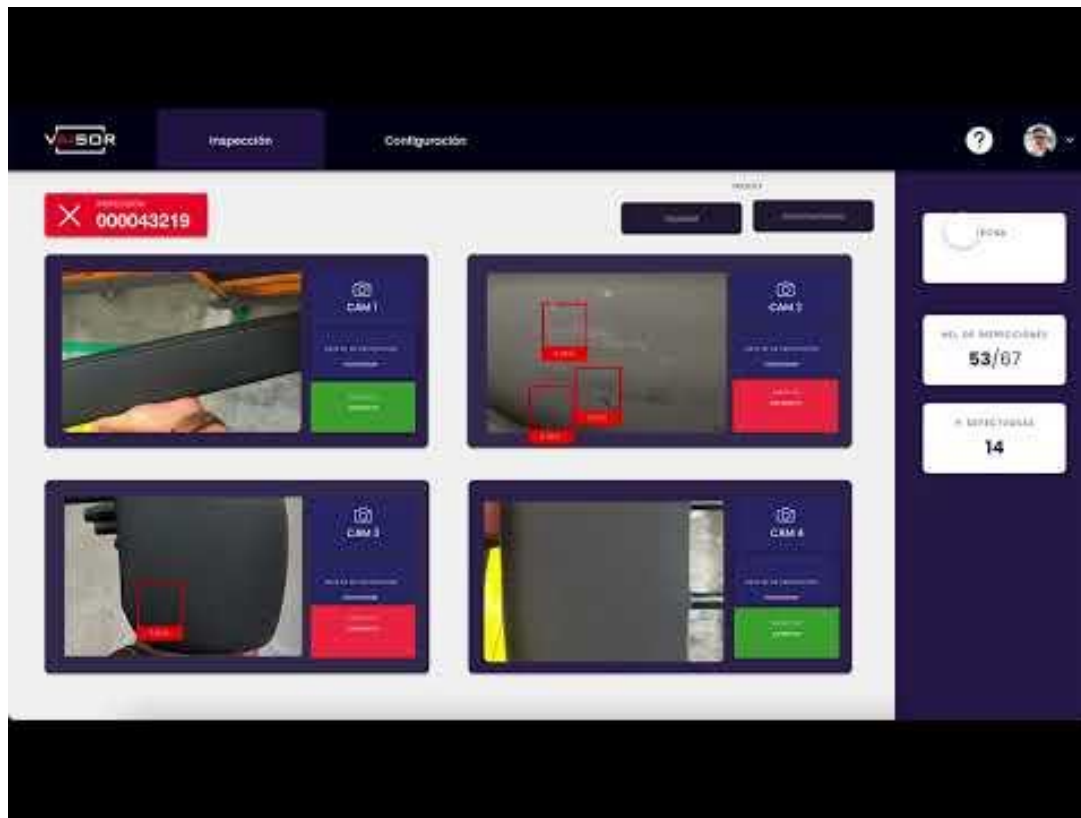
IDENTIFICACIÓN DE ANOMALÍAS EN PIEL

Los modelos de identificación de anomalías funcionan por medio de piezas buenas, generando un mapa de calor en las zonas en donde el modelo detecta una anomalía. La clasificación de las fallas aún no es posible generarla en estos modelos.



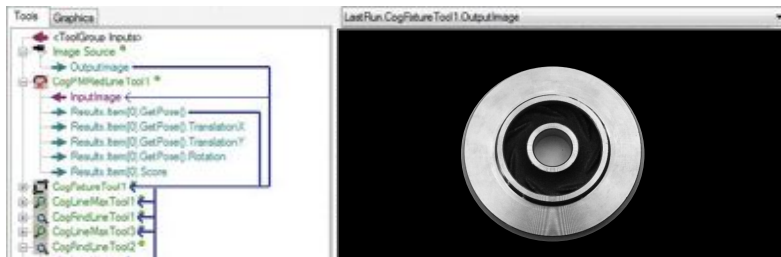
MÓDULO DETECCIÓN DE DEFECTOS

- Módulo de entrenamiento.
- Detección de falsos positivos y falsos negativos.
- Módulo de dataset. (Imágenes externas)
- Módulo de detección automática.



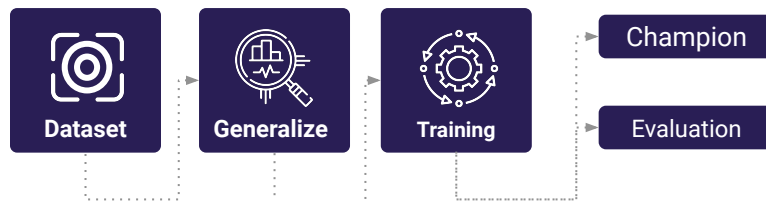
TRADITIONAL VS VAISOR VISION SOLUTIONS

Traditional vision



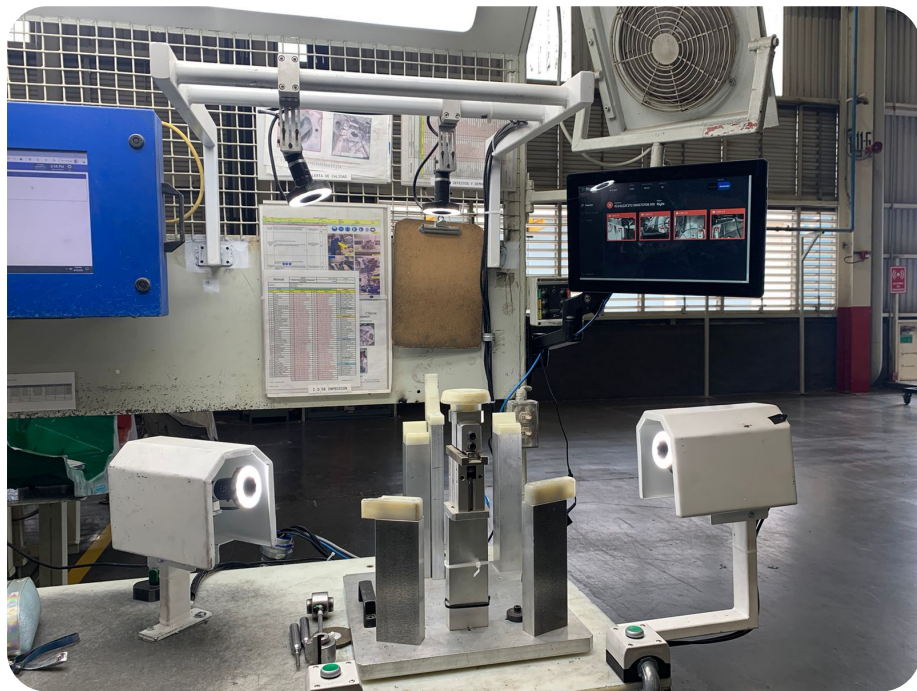
- Master of reference
- Rule Library
- 100% controlled environment
- Calibration in every movement.

VAISOR

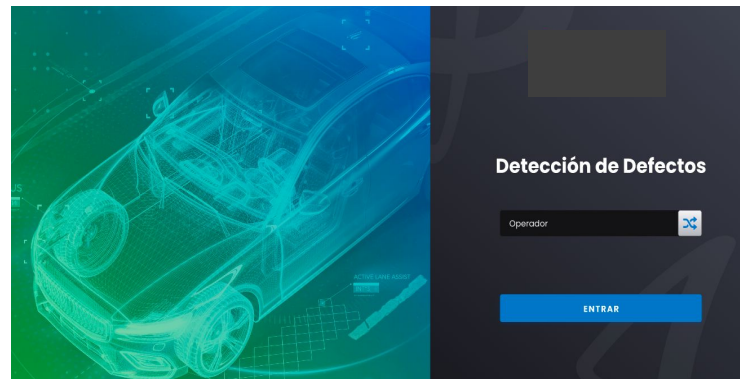


- Representative dataset (sample photos with all scenarios)
- AI architecture
- Continuous Training/Learning

How the solution looks in shop floor.



- Set of cameras integrated with the platform.
- Custom station.
- Connection with PLC's.



SOME OF OUR CURRENT CUSTOMERS and Awards

Awards



enlace+



Energy



Industrial IoT for equipment
monitoring in real time



Machine Learning for risk
analysis in Oil Wells



IoT Sensors + Computer
Vision to measure 14
dimensions of QA



Automobile



Vaisor for defect detection
3 projects in Mexico,
3 projects in the USA.



Agro



Digital Twin for Predictive
Quality Production
Optimization



Construction



Computer Vision for
Inventories in real time



Powered by



Q&A

Rafael Páez

Co-Founder & Managing Director

Contact: rafael@gestalabs.com

Marcelo de la Garza

Co-Founder & Managing Director

Contact: marcelo@gestalabs.com

Eden Cisneros

Head of Sales

Contact: eden@gestalabs.com