# Interact Vision : automate and deploy your quality control in production.

A smart industrial software to automate your visual inspection tasks. Interact Vision can connect to your vision sensors (Genicam compatible) and allows you to deploy machine learning algorithms inside your production process.

Rapid production deployment.
 Repeatable performances.
 Compatible with many sensors.
 Complete quality traceability.
 Offline first.

#### **Production module**

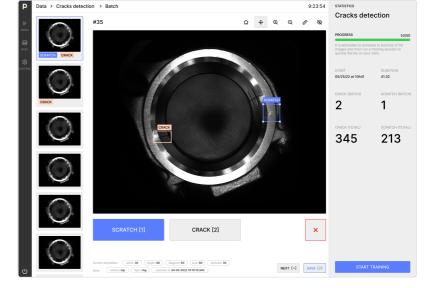
- Setup your vision sensors: modify in real time the gain, exposition and the crop of one or many vision sensors.
- **Configure your data collection:** quickly collect labelled data from your production line. Add metadata or pre-label your data. Multiple modes available: manual, fixed timer, electrical trigger.
- Track the quality of your production: visualize in real time the quality of your products. Number of rejected products, total number of products for multiple time scales: 1 second / 1 minute / 1 hour / 1 day. Check the last seen or rejected products and save them to improve your algorithm.



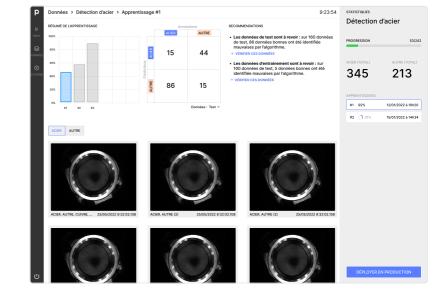
#### Data module

• Filter & search: quickly find the relevant data amongst your database thanks to quick filtering rules or advanced search. You can put together your search with an easy to use UI.

• Label your data: follow your progression and label your data in batches.



• Manage your analyses: create and modify your analyses with multiple types available (object detection & segmentation, classification). Create a test set to compare the performances of your trainings.



• **Train:** train your algorithm and keep track of its performances via key results.



### System module

- Configure your sensors: add, modify cameras, digital I/O converter, conveyor encoder, detection cell, etc...
- Logs & system health: application logs and system informations

| P             | Système > MATÉREL CONFIGURATION            | INFORMATIONS        |  | 9:23:54 |
|---------------|--|---------------------|--|---------|
| ⊳             | Machine                                    | PARAMÈTRES GÉNÉRAUX |  |         |
| PR00          | Caméras                                    | Туре                |  |         |
| 8             | TOP (Baumer)                               | Baumer 🗸            |  |         |
| DONNÉES       | <ul> <li>Modules E/S numériques</li> </ul> | UUID                |  |         |
| ()<br>SVSTÉME | <ul> <li>Cellules de détection</li> </ul>  | 70000012345         | Numéro de série unique inscrit sur la caméra.  |         |
|               | Codeurs convoyeurs                         | Nom                 |  |         |
|               | + Nouvel équipement                        | тор                 |  |         |
|               |  |                     |  |         |
|               |  | CONFIGURATION       |  |         |
|               |  | Exposition<br>100   | Le paramètre d'exposition correspond au temps d'ouverture du capteur.<br>Plus il est haut, plus l'image sera claire. Les valeurs sont généralement                               |         |
|               |  |                     | Plus il est haut, plus ilmage sera clare. Les valeurs sont generalement<br>comprises entre 100 et 20000. Il s'exprime en micro-secondes.   |         |
|               |  | Gain 1              | La paramètre de gain correspond à l'amplification numérique faite sur<br>l'image prise par le capteur. Les valeurs sont généralement comprises                                   |         |
|               |  |                     | innage prise par le capteur. Les valeurs sont generalement comprises<br>en 1 et 20.  |         |
|               |  | Largeur             |  |         |
|               |  | 1172                |  |         |
|               |  | Hauteur             |  |         |
|               |  | 389                 |  |         |
|               |  | Décalage en X       |  |         |
|               |  | 447                 |  |         |
|               |  | Décalage en Y       |  |         |
|               |  | 913                 | Coefficient de réduction de l'image avant affichage. 1.0 signifie pas de<br>retouche, 0.25 division par 4 de la taille: Plus la valeur est basse, moins<br>de latence il y aura. |         |
|               |  | Couleur             |  |         |
|               |  | Non                 |  |         |
| Ċ             |  |                     |  |         |

## **Specifications**

|                           | Interact Vision + industrial computer                         |
|---------------------------|---|
| Vision sensors            | Baumer, Genicam standard, up to 4                             |
| Minimum size of defects   | 5mm   |
| Processing speed          | Production cycle : 30 fps with 1 camera, 5 fps with 4 cameras |
| Maximum number of cameras | 4   |
| OS                        | Linux   |
| Communication protocols   | EtherNet/IP, FTP, Socket messaging                            |
| Model types               | Classification, Object detection & segmentation               |
| Provided hardware         | Intel Core i7-10700, 16 Go RAM, NVIDIA RTX 3070 8 Go          |

\* The number of images processed per seconds is dependant on many things : number of cameras, model types used, number of operations.