

User Manual:



Product Description

Automated Defect Detection Software for early, fast, accurate and automated detection of defects present in mold using two computer vision based techniques, Deep Learning and OpenCV in manufacturing industries. Our software ensures that the production efficiency is as much as possible.

Intended use

This application is mainly intended for the use of manufacturing industries where supervisors no longer have to wait for the long quality checking process of the mold in order to do further processing.

Features / Accessories

- Fast analysis of defects in the product
- Save amount of labour required for the quality checking process
- Increased efficiency in manufacturing
- Increased pace in manufacturing
- Store Manufacturing detailed summary for CEO on our reliable server
- 24/7 Technical Support, Free Installation

Description of user-interface

After logging in the software you will be able to see your user id on the top right of the interface. In the top panel, you will see Home, About Us, Result/Report, Collaborate, Blog and Contact Us.

- Home: Your main page just after login
- About Us: Our startup journey and product information
- Results: Contains past results and reports of their production efficiency
- Collaborate: Details if you or your organization would like to collaborate with us for supplying data so that we can develop our model with new products
- Blog: Connect with our and our partner organization's consultants to discuss the new market of manufacturing and get notified about our model dataset update.
- Contact Us: Details of our contact for technical support or other help.
- Images: Upload images of products at every checkpoint
- Defect-status: Predict if the image is defected or not
- What-to-do: Tell if the product is discarded or not

Just below the box, there is an option for next to navigate. Further below you will see our different links to connect with us and other things regarding policy, copyright, permissions etc

Safety warning

Our model accepts images of products. We need high quality cameras making 360o in order to provide a continuous set of images to our server and must be present at a fixed position at every checkpoint of manufacturing.

Installation instruction

Since we partner with industries, so supervisors need to install the software from your organization link to connect to your industry server systems.

Steps to use app

- 1.Login with the credentials assigned to you by your industry.
- 2.Once you have logged in you will be able to see the 'Results' button in the top right corner. Click on it to view the progress and efficiency of your manufacturing.
- 3.Choose a previously existing badge input image or enter a new image for a new badge in the 'center' box. Use 'Next' and 'Previous' buttons to navigate across the tabs.
- 4.After processing the image, our model will give you the details of which product to keep and which product to discard.
- 5.Based on your accuracy and total final products you may see how much extra new products you have to make in order to complete your desired target.

Maintenance information

- Do check server status from your side daily to avoid overloads.

Technical details

- Once you upload the product image under the 'Image' tab, the image will be uploaded to our computation server for analysis where we will first predict if the product is defected or not and if it's defected then we capture the defect area from the casting image using a bounding box model. After that further analysis is done using OpenCV by estimating the defect size and to check if this defect size is avoidable or not. Once the process is done, the input image is deleted from the server.

NOTE: If you give us permission from the 'Collaboration' tab above, we save the image and also save the final data of whether image is defected or not and if defected then where is defect present and what are its dimensions. This helps to develop our model further and provide better result

Repair information:

If you face any problem, try restarting the app. If it doesn't help try to contact your industry technical team for any server related problems or check out our self-help videos. If the problem stays, do contact our technical team for assistance.

Disposal of the product and packaging:

Once you are out of the organization, inform the technical team to remove your access to the system.

Data Privacy Concerns:

- Privacy is our most important concern. So, server spaces are specific for each subsystem and industry can buy more spaces based on their need. Once a supervisor from a specific organization signs in, (s)he will be able to see only those data that comes to his/her supervision.

Contact details:

For technical assistance contact us at techsupport@bosstechnology.com or reach out to our team



techsupport@bosstechnology.com