

TABSURE 150

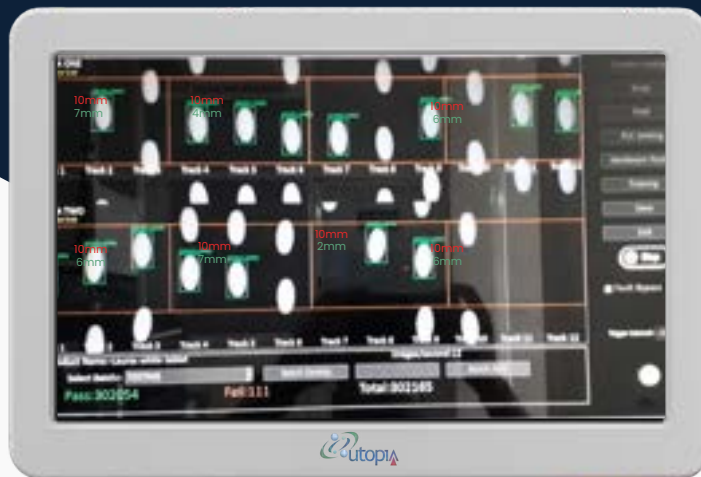
TABLET & CAPSULE VISUAL INSPECTION SYSTEM



Utopia Optovision develops machine vision solutions for the pharmaceuticals sector for dedicated applications. Stringent quality management and innovative technology are the cornerstones of all our operations.

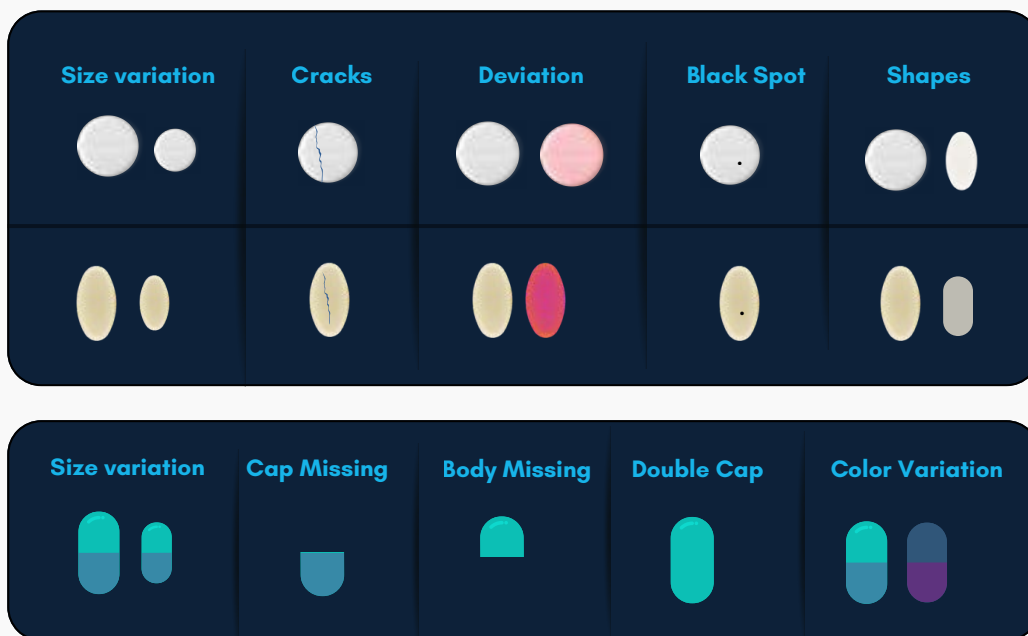
KEY HIGHLIGHTS

- Dual-side inspection (Top & Bottom)
- High-precision vision system
- Vacuum-based automatic rejection
- Uniform spacing for accurate inspection
- Real-time counting with HMI display
- Fully automated tablet handling and collection
- Biometric Access
- 21 CFR Part 11 Compliance



HIGHEST QUALITY INSPECTION

DEFECTS



Tablets are loaded into the hopper, from where they are transferred onto a vibratory feeder plate. The vibration ensures a controlled and continuous flow of tablets. From the feeder, tablets are guided onto a precision-designed track plate with 12 parallel Tracks, where they align uniformly in a single line per track.

From the guide tracks, tablets move onto a flat belt conveyor system. Each of the 12 tracks maintains consistent spacing between tablets, ensuring accurate inspection and smooth downstream handling.

As tablets travel on the conveyor, the Utopia Vision System (Camera 1) inspects the First Side surface of each tablet for defects such as cracks, chips, discoloration.

- Defective tablets are automatically rejected via a high-speed vacuum-based pick-and-reject system, and transferred to a rejection bin.
- Accepted tablets continue forward on the conveyor.

All accepted tablets pass through a precision flipping mechanism that rotates each tablet on the conveyor for bottom-side inspection.

After flipping, the Utopia Vision System (Camera 2) inspects the bottom surface of each tablet.

- Any defective tablet is again removed via vacuum rejection.
- Only defect-free tablets proceed further in the process.

A sensor-based counting system accurately counts each accepted tablet. The real-time count is displayed on the HMI touchscreen interface.

All accepted tablets are automatically directed into a collection container, ensuring efficient and contamination-free handling.



The TABSURE 150 series consists of fully automatic, high-speed, customisable inspection machines. They are capable of high-volume inspection of tablets and capsules, and the accurate detection of even the smallest visual defects.



BUILD

Tabsure 150 is built to conform to global regulations in pharmaceutical industry, and last long.

The body and all the non-contact parts are made of SS 304 , Food Grade TPU flat belt, with product contact parts in S.S.316/ FDA-approved food-grade material.

SPECIFICATION

Application	Tablets & Capsules
Speed	Up to 1,50,000
Electrical Connection	230V AC 50Hz
Compressed Air	Up to ~ 6 Bar
Dimensions L × W × H	L = 2157 mm W = 858 mm H = 1867 mm
Construction	CE, GMP, FDA Acceptable Materials
Weight	~ 600 kg

01

Processing Capacity

High processing capacity with new control flow system.

02

Double layer Inspection

Both side tablet inspection with high resolution colour camera.

03

User- Friendly

Easy Machine Operations



- Two belt conveyor system
- Stable and smooth handling



- High precision defect detection
- Shape detection
- Top & bottom surfaces and
- Chip, Pimple & Hole Detection



- Two rejection stations
- Rejection control



Teaching

Set-up and ready to use in 5 minutes TABSURE 150 system automatically collects data to detect product.



Analysis

Calibrate and analyze colour & size data based on teaching process.



Tracking

Each product is tracked based on colour & size analysis data.



Inspection

Colour score/Colour defect /
Size difference inspection



Decision

Makes final decision by comparing tracking data with analysis data.



THANK YOU