

INDUSTRIAL VIDEOSCOPE WITH 3D MEASUREMENT

COBB V3D

VISUAL INSPECTION + 3D MEASUREMENT

Binocular imaging technology to observe, reconstruct and measure the inspected surface in three dimensions. Analysis and documentation tools integrated into a single platform.

INSPECTION + 3D + REPORT



7" IPS

DISPLAY 1920 X 1200

360°

MOTORIZED
CONTROL

Ø 4 / 6 mm

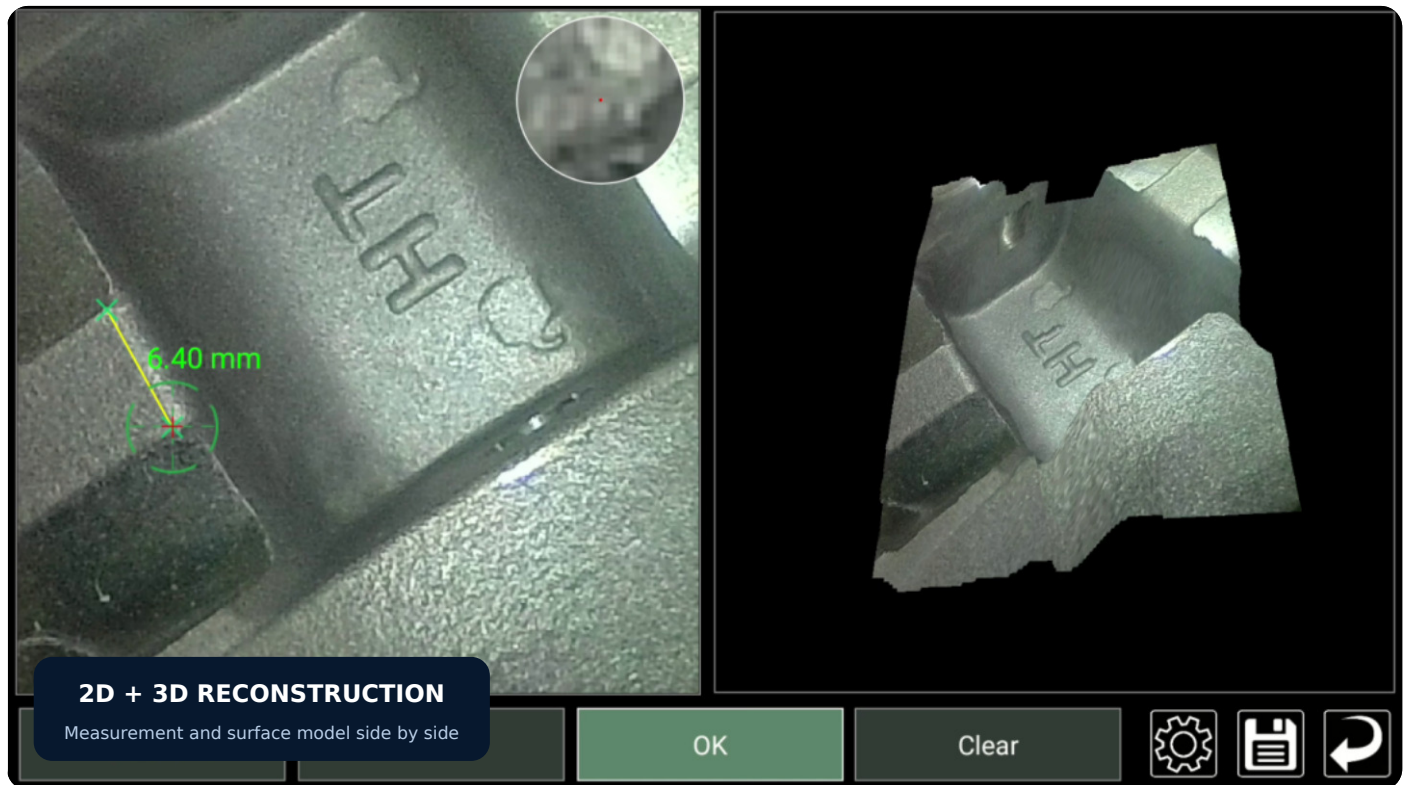
PROBE DIAMETERS

PDF

INSPECTION REPORT

From Image to 3D Surface

COBB V3D captures the scene using a binocular configuration and processes it to generate a three-dimensional surface model. Measurements are applied directly to the reconstructed data.

**01****OBSERVE**

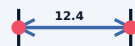
Endoscopic image acquisition

**02****RECONSTRUCT**

3D processing and point cloud

**03****MEASURE**

Points, lines, planes, areas and profiles

**04****DOCUMENT**

Images, video and PDF reports

**TECHNICAL SURFACE ANALYSIS**

A single inspection workflow

From the live view to 3D reconstruction, then measurement and inspection documentation. Actual instrument screens keep references, values and the three-dimensional model visible.

**3D RECONSTRUCTION**

The processed surface becomes the geometric basis for the different measurement modes.



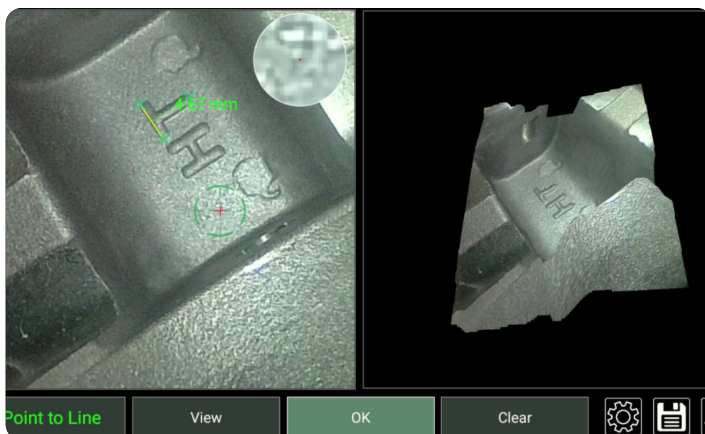
Distance

DISTANCE

Measures the distance between two selected points on the reconstructed surface.

RECOMMENDED APPLICATIONS

Cracks, lengths and similar dimensional checks.



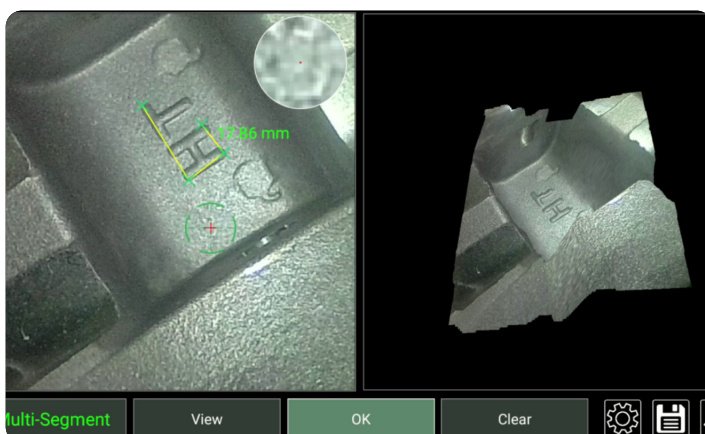
Point-to-Line

POINT TO LINE

Calculates the perpendicular distance from a point to a line defined by the operator.

RECOMMENDED APPLICATIONS

Gaps, impact or defect positions and similar checks.



Multi-segment

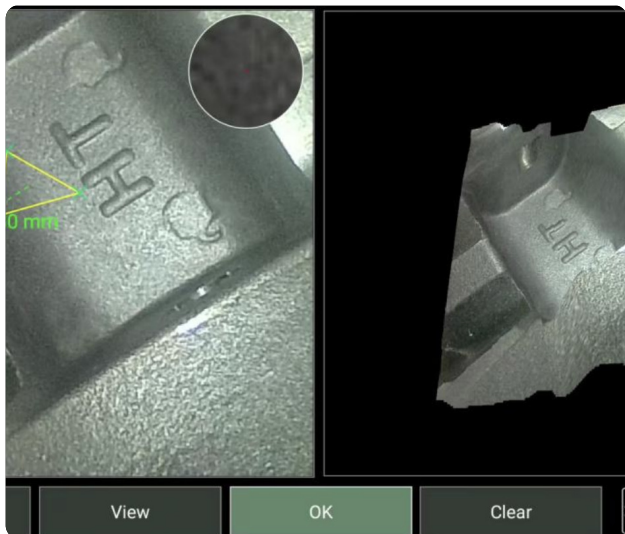
MULTI-SEGMENT

Adds a sequence of segments to follow a geometry that cannot be represented by a single linear measurement.

RECOMMENDED APPLICATIONS

Cracks and defect paths.

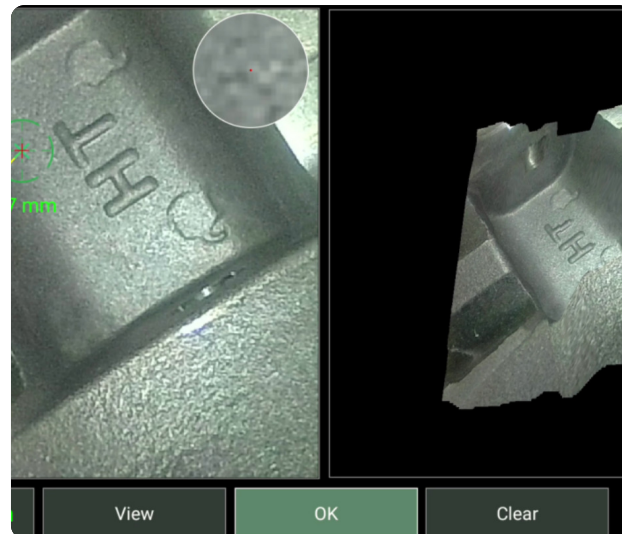
Depth, Area and Profile



Depth

DEPTH

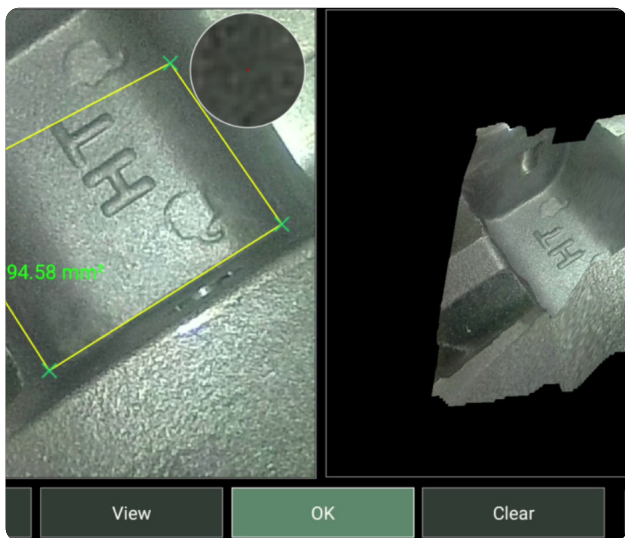
Distance from a reference plane defined on the surface.



Camber Depth

CAMBER DEPTH

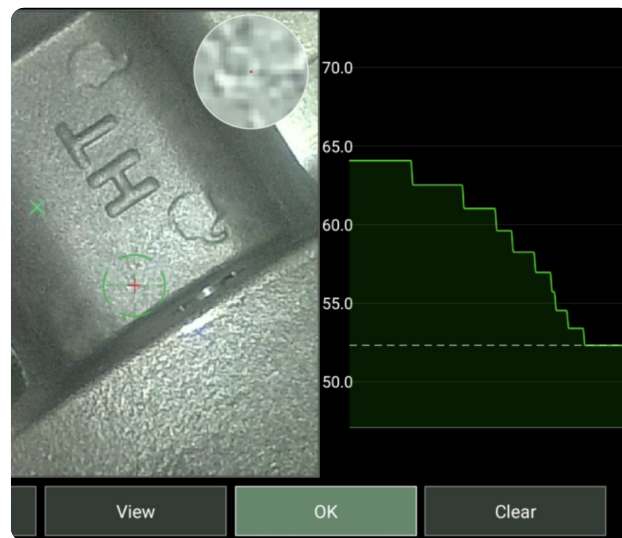
Height difference obtained by comparing two points on curved geometries.



Area

AREA

Calculates the area enclosed by multiple points along the selected perimeter.



Depth Profile

DEPTH PROFILE

Cross-section along the selected path showing the depth trend.

ACTUAL INSTRUMENT SCREENS

Points, lines, values and 3D reconstruction remain visible to demonstrate each function.

Display, Controls and Optical Head

PROCESSING PLATFORM

Display IPS LCD 7"

1920 x 1200 | ≥ 450 cd/m²

Brightness adjustable over 10 levels. RK3588 processor with A76 cores up to 2.4 GHz and A55 cores up to 1.8 GHz for image processing and 3D functions.

INTERACTION

- Touchscreen
- Main joystick
- Navigation joystick



Ergonomic control

Motorized joystick with 360° control and direct commands arranged for efficient operation.



Ports and connections

2 USB ports, Type-C charging interface and optional RJ45, Wi-Fi / 4G depending on configuration.



Optical head

CONSTRUCTION FOR INDUSTRIAL USE

The exploded view highlights the camera assembly, optical components and lens protection. Technical documentation specifies sapphire glass for optical protection.

ARTICULATING PROBE

Optical assembly and articulation section

Two Diameters, Application-Specific Setup

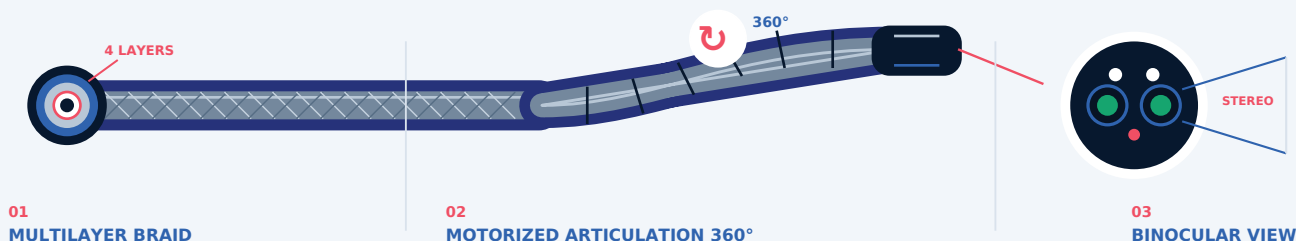
AVAILABLE DIAMETERS FOR COBB V3D

Ø 4.0 mm

Ø 6.0 mm

No other diameters are included in this datasheet.

STRUCTURE AND ARTICULATION



Probe System Data

Diameter	Ø 4.0 mm / Ø 6.0 mm
Camera technology	CMOS
View direction	Front-view binocular / side-view binocular
Tube length	1 - 10 m, customizable by configuration
Tube construction	4-layer tungsten-alloy steel wire braid
Articulation	360° motorized control
Articulation angle	80° - 170°
Field of view	70° - 120°
Operating temperature	-20 / +80 °C
Probe protection	IP67

CONFIGURATION DEFINED BY APPLICATION

Length, view direction and optics are selected according to the inspection.

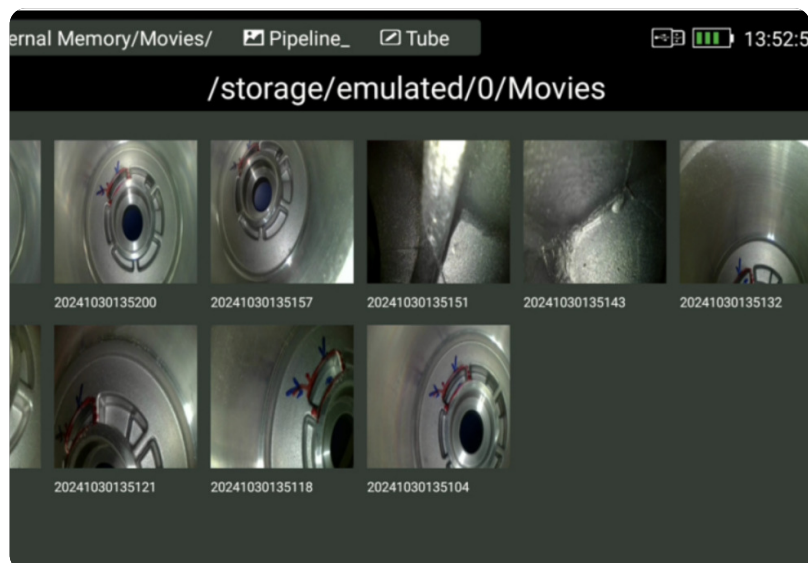


Image and recording management directly from the instrument interface.

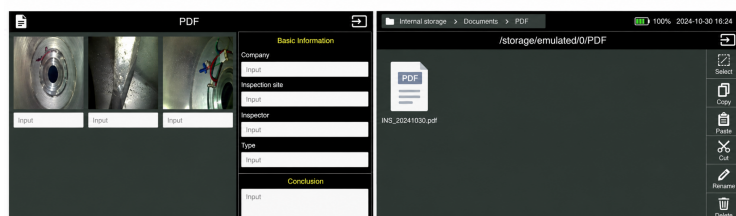
Video recording

BOOKMARKS DURING INSPECTION

Bookmarks can be added during recording and recalled during playback to quickly locate relevant segments.

CONTINUOUS RECORDING

Documentation specifies management of the last 30 minutes, with duration configurable in settings.



Inspection report

PDF

Inspection images and information can be collected in a PDF report generated by the platform.

● CAPTURE

Photos, video, freeze frame, rotation and 5-level digital zoom.



● IMAGE

Brightness, image mode, color and white balance, with automatic or manual control.



● FILE

Copy, delete, edit, rename and manage images and videos.



● FORMATS

AVI / MP4 video. JPG / PNG / BMP images. Software update via USB.



Main Unit

Display	7" IPS LCD
Resolution	1920 x 1200
Brightness	≥450 cd/m² 10 levels
Processor	RK3588 A76 2.4 GHz A55 1.8 GHz
Memory	128 GB external USB support 64 GB
Connections	2 USB Type-C charging optional RJ45
Connectivity	Wi-Fi / 4G optional
Battery	7.4 V - 7000 mAh 2 batteries
Stated operating time	3 h
Operating temperature	-10 / +50 °C
Unit protection	IP55

Probe System

Diameters	Ø 4.0 mm / Ø 6.0 mm
Camera / view	CMOS front-view or side-view binocular
Length	1 - 10 m, customizable
Tube	4-layer tungsten-alloy braid
Articulation	Motorized 360° articulation 80° - 170°
Field of view	70° - 120°
Temperature / IP	-20 / +80 °C IP67

COBB FIBRE OTTICHE SRL

Via Nelson Mandela, 20 | 24048 Treviolo (BG) | Italy

Tel. +39 035 0448601 | info@fibre-ottiche.com

www.endoscopi-industriali.it

Configurations and options are defined according to the application. Specifications subject to order confirmation.