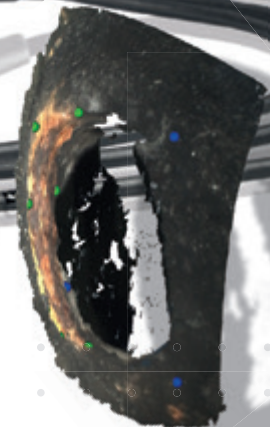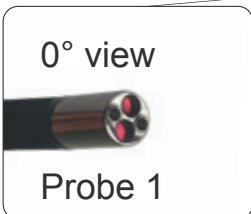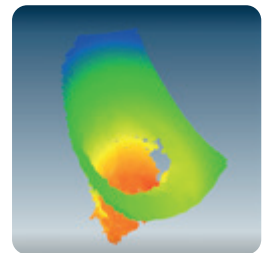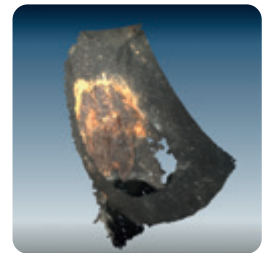**iT** CONCEPTS
IMAGING SOLUTIONS

iX3D

Flexibel Scope Measurement System

Professional 3D measurement

3D point cloud

Extremly easy to use

Just a few steps to result

0° view	90° view
Probe 1	Probe 2

EFFICIENT BORESCOPY WITH STEREO VISION

iX3D is a precise videoendoscope system for the execution of punctual and three-dimensional surface inspection in hard-to-reach areas.

The system offers different probes, partly equipped with a stereo vision camera generating 3D data. The simple and user-friendly interface is intuitive. The monitor unit can be positioned independently of the probe, making it easy to read the data in any environment.
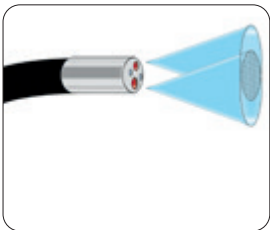
Customers' own ideas such as a specific design, various additional functions or integration into a desired system can be implemented as required.
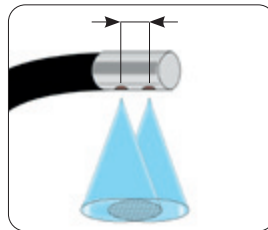
0°   **90°**
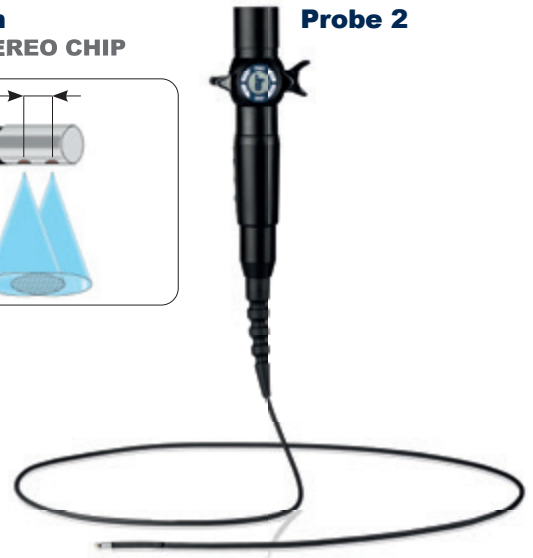
6.0mm
0° STEREO CHIP   Probe 1

6.0mm
90° STEREO CHIP   Probe 2

HIGH MEASURING ACCURACY

• Stereo video probe calculates 3D data and ensures a powerful inspection including measurements

• Separate probes for 0° and 90° vision, each with two optical channels with its own camera chip

FLEXIBLE MONITOR UNIT

- The monitor unit can be placed and used independently of the handheld probe, depending on the location
- Robust rugged tablet for industrial use with ultra bright display
- 10.1 inch touch screen for optimal visual inspection, can be operated with gloves
- Good performance in direct sun light

SOFTWARE FEATURES

- Modern and intuitive user interface in the style of a smartphone app

- Enhance and filter camera images (e.g. brighten, sharpen, contrast adjustment, white balance, invert)

- Simple file management including quickly accessible display of the last recordings

- Integration of various endoscope probes as well as the high-resolution tablet camera for further documentation
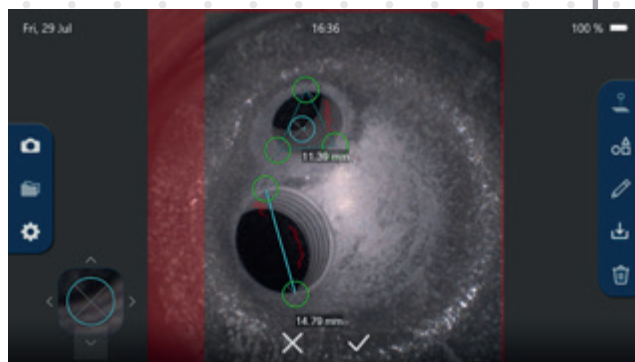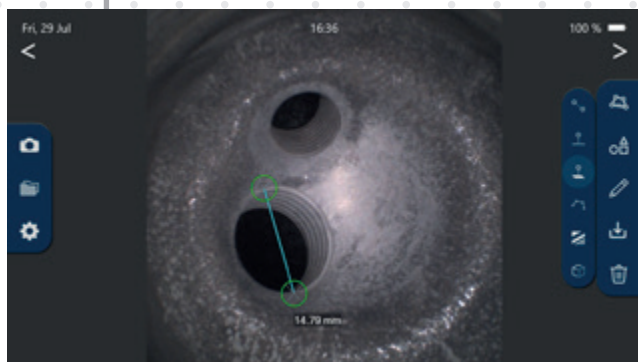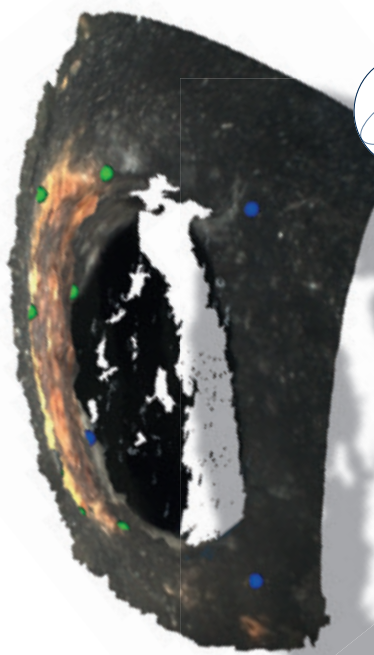
MEASURING FEATURES AND REPORTING

- Add comments, label and measurement results to stored images

- Precise setting of the measuring points through permanent calculation of the measuring results

- Highlighting of the measurable range facilitates image evaluation

- Different measuring functions available:
  - Point-Point
  - Point-Line
  - Point-Level
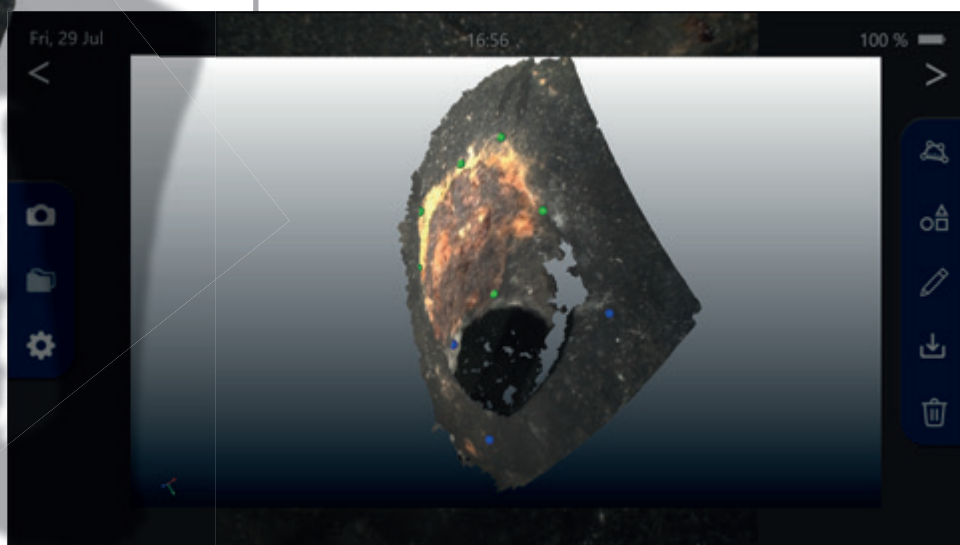 - Circumference and area measurement
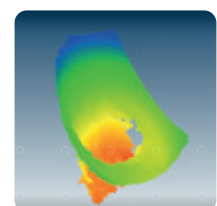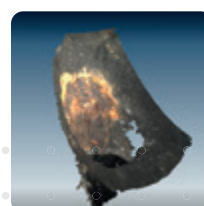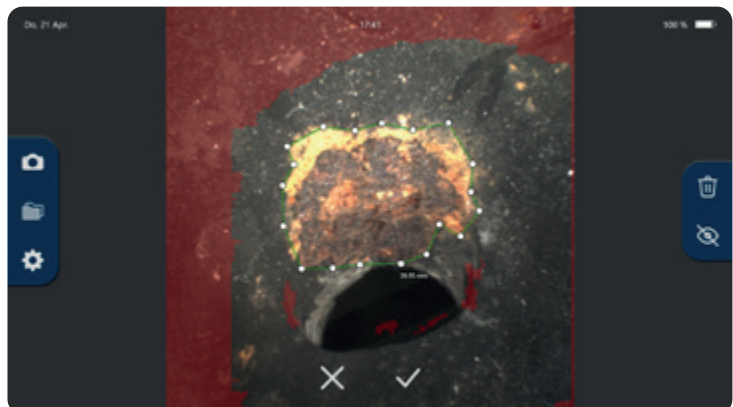
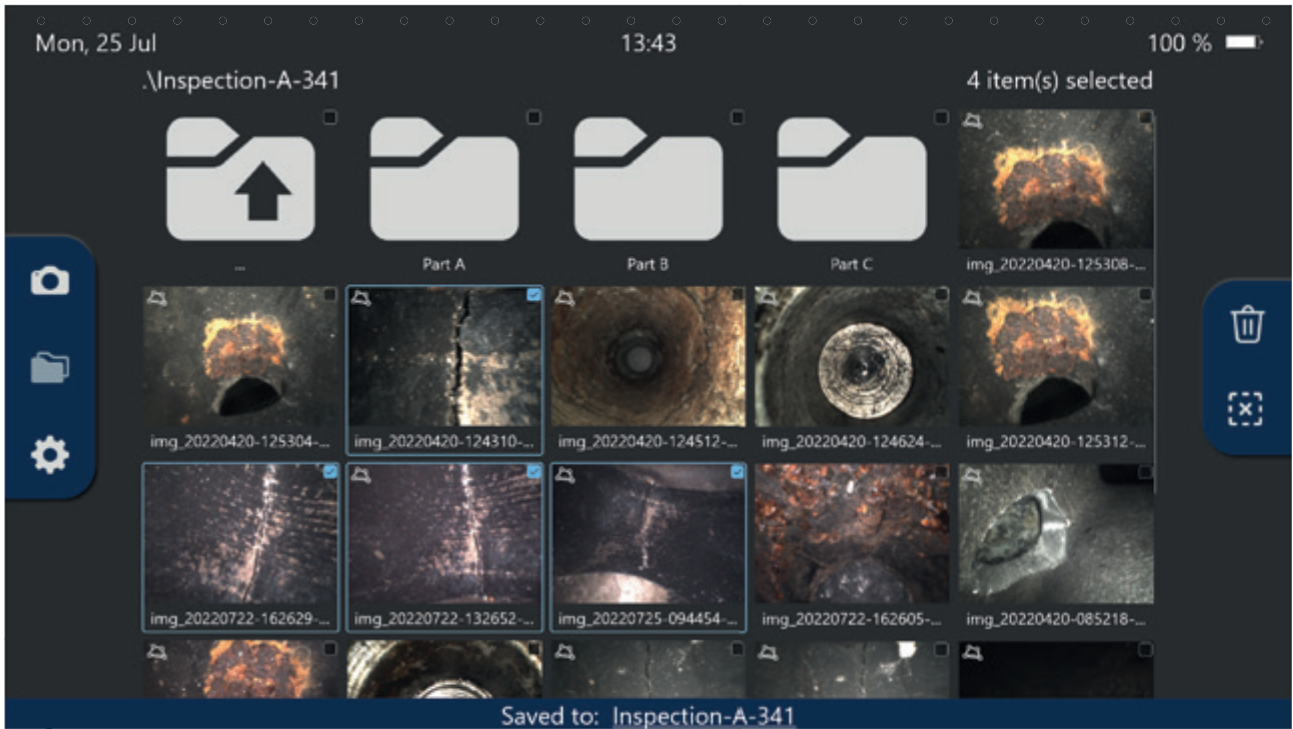**Get professional measurement results in seconds and just in a few steps**

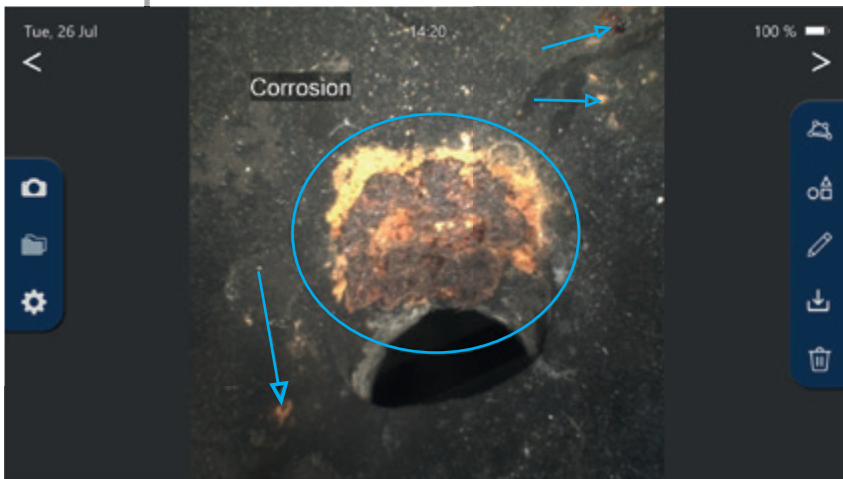Different measurement types:

Point to point
Point to line

Measuring point control in the 3D view for optimal results

Simple file and folder management incl. various reporting features:
Add annotations (marked by arrow, line, circle/ellipse, rectangle)
to images. Annotations can be changed or removed at any time.

Add multiple measurements
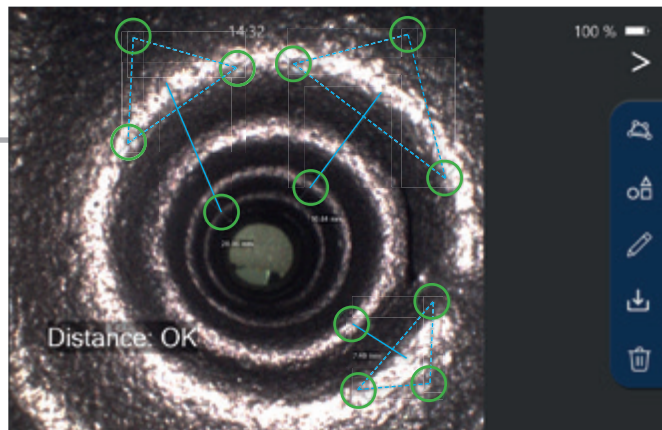
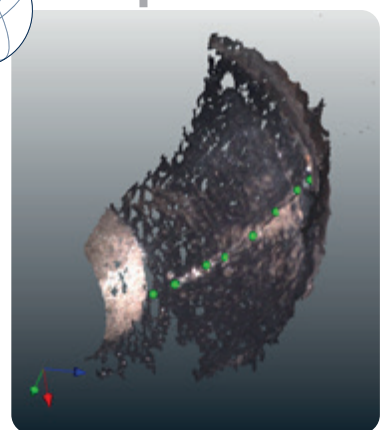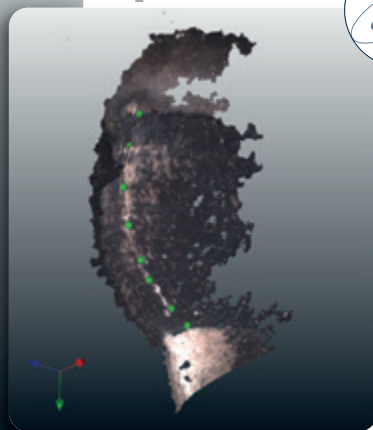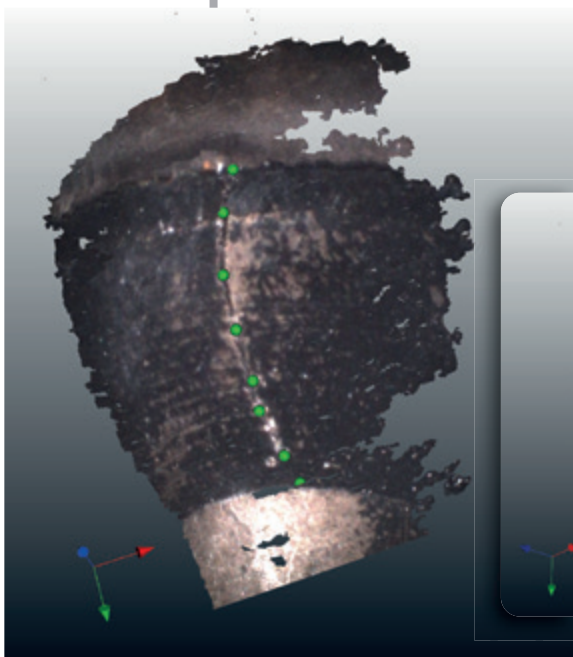**Easy and quick measurement in images**
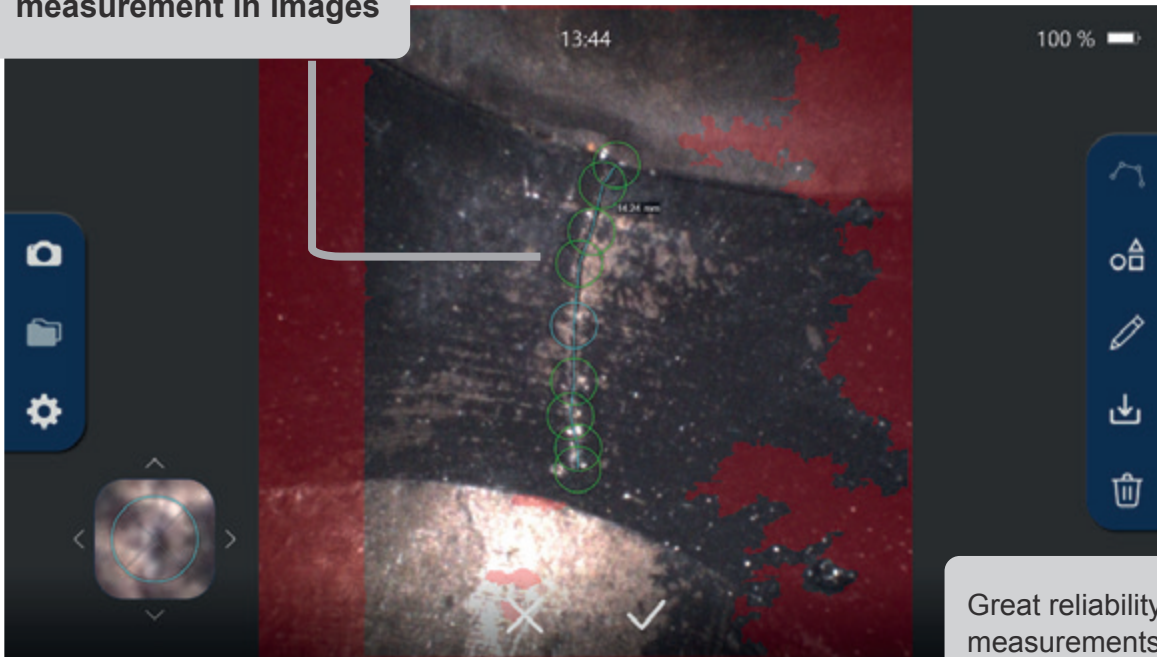
Great reliability of measurements due to:
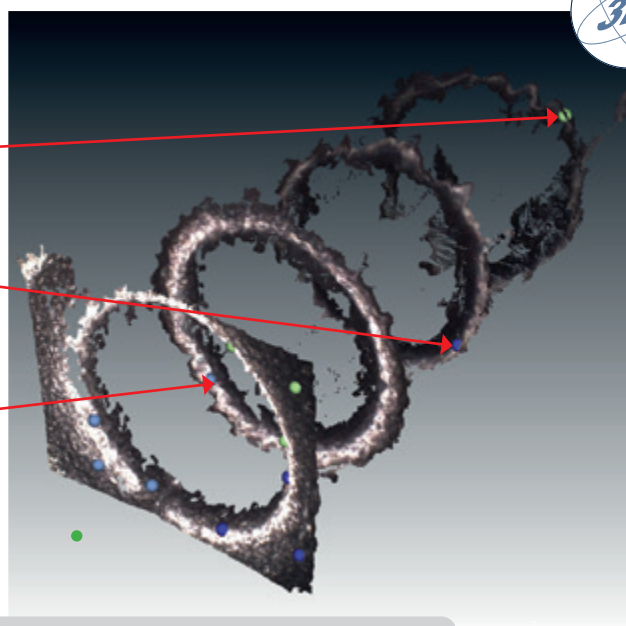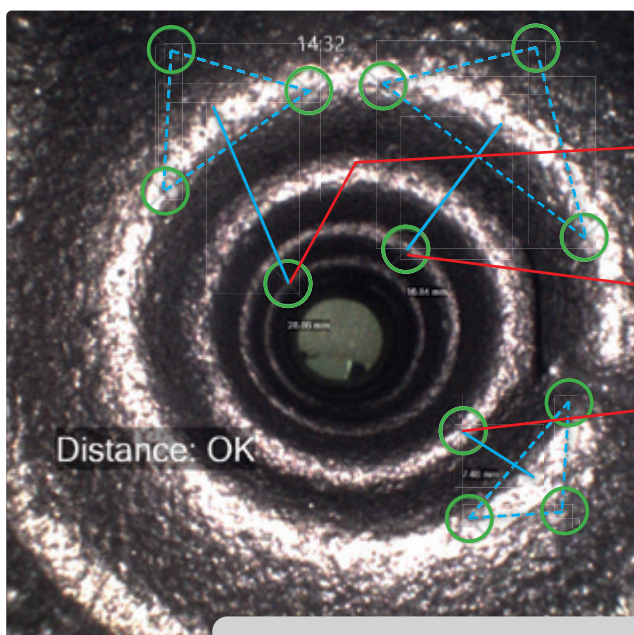
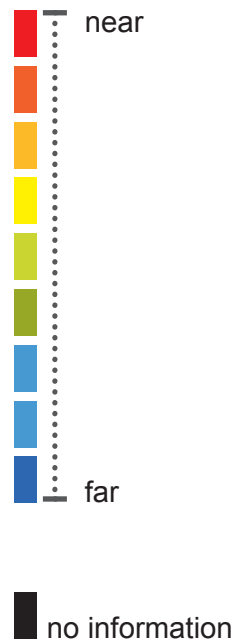• Measurement point magnification
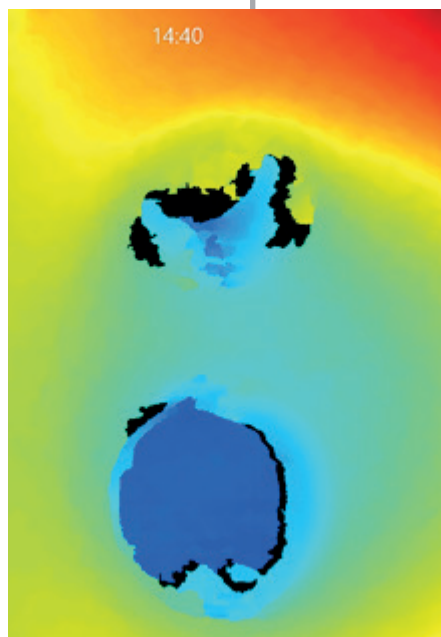
• Image enhancement, i.e., color inversion

• 3D view of image and measurement points

• Depth map display

High resolution 3D- view of color image and measurements, making part inspection and measurement verification very easy.

Colour depiction of the depth

near

far

no information

PROBE AND PROBE CONTROL

Light control   4way-Articulation   Probe

Capture button

Articulation unit

Distal End
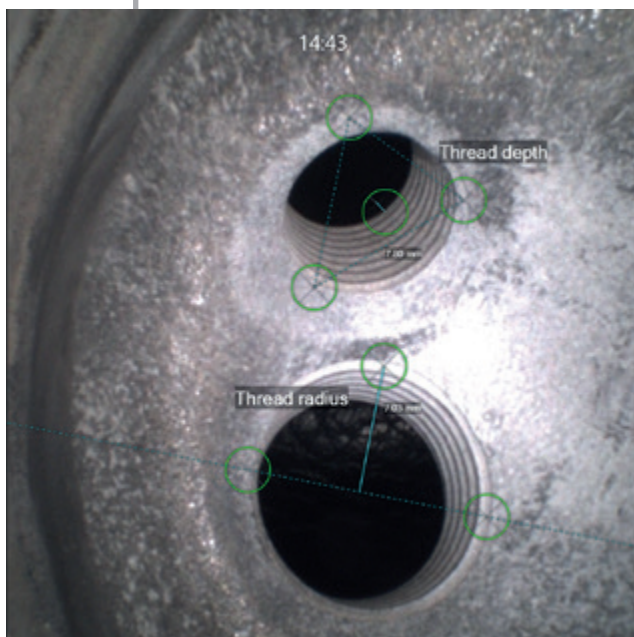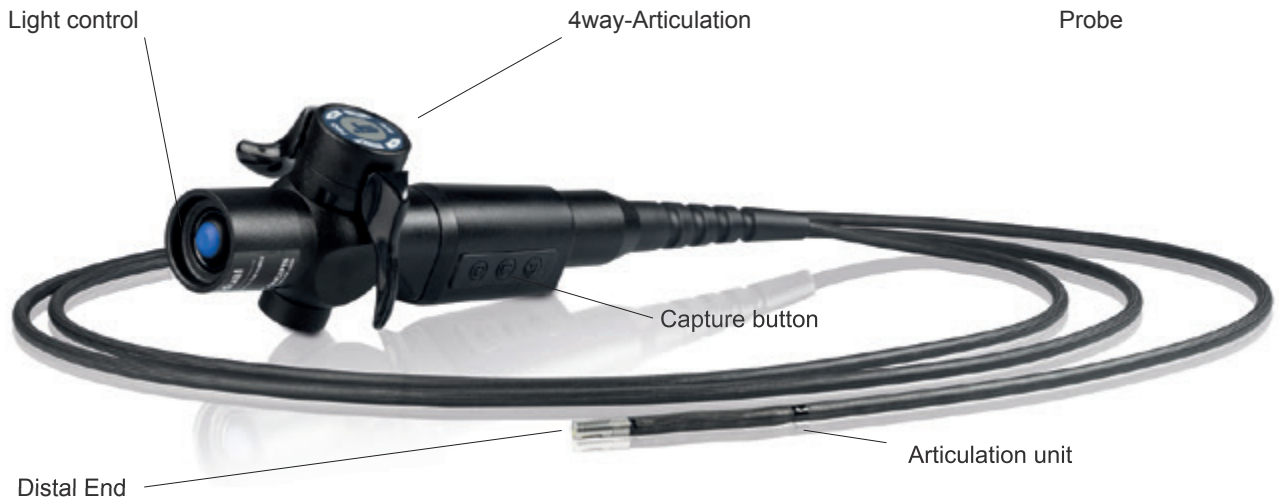
Illumination

Typ	High-power LED with faseroptic
	High-power LED on the TIP (6mm X PRO)
Illumination control:	3 steps
Ergonomics:	± 90° rotatable display, alt. ±90° rotatable handle
Weight:	1.65Kg (+/- depence on probe diameter and working length)
Tip operating temperature:	140°C less than 5 Minutes/ -25°C to +80°C
System operating temperature:	-25°C to +46°C
Storage temperature:	-25°C to +60°C
Relative humidity:	95% less than - non condensing
Waterproof:	Probe and distal End up to 1 bar- 10.2m H2O
Resistance:	Probe and distal End to oils and saline (5%)
Sensor 0°	AIT Advanced Image Sensor
Sensor 90°	AIT Advanced Image Sensor

Probes	**6,0mm**
Working length	1,5 - 7,5
Direction of view	0°/90°
Articulation (4-way)	4-way

iX3D PAD

USB slot for Scope-connection

Processor	Intel® Core™ i5-7300U (2x 2.60 GHz up to 3.50 GHz with Intel® Turbo Boost Technology, HD 620, 3M cache)
Operating system	Windows® 10 Pro 64-bit
Optional operating system	Windows® 10 IoT
Display size	10.1" (25.65 cm)
Display Technology	Sunlight Readable Outdoor display with digitizer support
Resolution	1,920 x 1,200 pixels (WUXGA)
Brightness	1,000 cd/m²
Screen protector	Corning® Gorilla® Glass
Touchscreen	Capacitive
Touch operation	Multi-touch
RAM (permanently soldered)	8 GB DDR3 SDRAM
Hard disk	512 GB SSD M.2
WLAN	IEEE 802.11 a/b/g/n/ac
Interfaces	1x USB 3.1 Type-A™, 1x USB 3.1 Type-C™ (1,5A), 1x microHDMI, 1x LAN (1Gbs), 1x serial (RS232), 2x RF Pass-through port (for WLAN, GNSS, WWAN), Docking port
Camera front	2.0 megapixels
Rear camera	8.0 megapixels
Military standard	MIL-STD 461G, MIL-STD 810G
Degree of protection	IP 65
Battery	6-cell Li-ion battery, approx. 4,500 mAh (12-month guarantee)
Battery life up to	11 hours
Power supply	65 watts, external
Input:	100-240V AC /Output: 19V DC / 3.42A
Weight	1,360g
Dimensions (WxHxD)	280 x 195 x 23mm

IT Concepts is a developer, manufacturer and OEM-partner in industrial endoscopy and imaging technologies from prototype to serial production.

In cooperation with our customers we develop the optimal solution for the specific application.

3D.aero develops advanced automation solutions for production and MRO in the aviation industry.

They support from the feasibility study to the development of a turnkey technological solution.