



OKOndt GROUP



# SMARTSCAN

Aircraft wheels inspection

Meets the requirement of ISO 15548-1

[www.oko-ndt.com](http://www.oko-ndt.com)

**SMARTSCAN Aircraft Wheel Inspection System** is intended for testing of main and nose wheels of aircrafts of various world manufacturers such as Messier - Bugatti, Goodrich, Honeywell, Maggitt and others.



The System ensures the testing of the following wheel areas:

- cylindrical surface of the wheel (tubewell);
- radial transition from cylindrical surface to the flange (bead seat);
- zone of conjugation of the radial transition into the flange (flange).

Parameters of the testing object

Outer diameters of the tested wheels:

- minimum - 15 in. (380 mm)
- maximum - 35 in. (900 mm)

Diameters of the centered holes of the tested wheels:

- minimum - from 1.57 in. (40 mm)
- maximum - up to 8 in. (200 mm)

### System Benefits:

A unique algorithm of ECP “sticking” to the inspected surface, i.e. tracking the wheel profile even in case of vertical and horizontal wheel shifts;

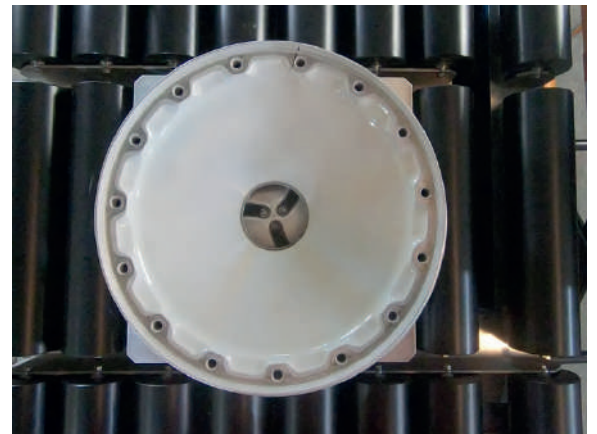
A remote “Pause” button allowing to stop testing and perform a manual confirmatory testing procedure;

Wheel inspection in the “flange up” and “flange down” positions;

Adapters for inspection of wheels without a hub with a driven nipple;

Reliable wheel centering for heavy weight wheels;

Lockups which stop excessive force used in bringing the ECP movement mechanism to prevent an operator’s injuries and mechanical damage of the ECP.



## The System is produced in two versions:

**Model SMARTSCAN** enables semi-automated inspection of wheels with portable eddy current flaw detectors of different manufacturers. The SMARTSCAN kit includes Eddycon C flaw detector.

**Model SMARTSCAN-FA** enables fully automated cycle of inspection with stop on defect mode, storage of inspection results and database creation, as well as printouts of inspection reports, etc. Eddycon D flaw detector is delivered in the SMARTSCAN-FA kit.



To watch the video, please visit our webpage <https://www.okondt.com/smartscan>



# SMARTSCAN System Specifications

Model	SmartScan - FA
<b>System type</b>	Automated
<b>Overall dimensions</b>	31 x 39 x 49 (in.)* 790 mm x 990 mm x 1250 mm*
<b>Weight</b>	No more than 771 lbs (350 kg)
<b>ECP type</b>	Pencil probe type with a cylindrical head. Frequency — 100 kHz, 200 kHz, 500 kHz, 1.5MHz ECP diameter – 15/64' (6 mm) Other standard ECP types – on request
<b>Max wheel diameter</b>	35 in. (900 mm)
<b>Max System load</b>	330 lbs (150 kg)
<b>Inspection helix</b>	Adjustable from .004 to .08 in. (from 0.1 to 2 mm)
<b>Inspection area</b>	Adaptive tracking of the wheel profile surface
<b>ECP vertical movement</b>	17 in. (430 mm)
<b>Rotation speed</b>	10-120 rpm
<b>Inspection speed</b>	up to 75 fps (23 m/s)
<b>Alarms</b>	Visual and acoustic
<b>Power supply</b>	110-240 V, 50/60 Hz
<b>Data recording and storage</b>	Yes (PC hard drive, database)
<b>Manual inspection</b>	Yes (set of ECPs for manual inspection)
<b>Remote "Pause" button</b>	Yes
<b>Wheel position</b>	Flange up/Flange down
<b>Automatic reference block calibration</b>	+
<b>Automatic stop on defect</b>	+
<b>Turntable</b>	rubber/plastic coated rolls
<b>Control panel</b>	built-in
<b>Operation modes</b>	Block, Manual (with automatic reference block calibration), Stop on defect, Automated
<b>Ports</b>	3 – USB ports, HDMI or Display port, Ethernet port
<b>PC computer set</b>	Wireless keyboard and mouse, monitor, system unit, special purpose software
<b>Adapter set</b>	For wheels without hubs (p/n C20626200 (SAFRAN), p/n 3-1674 (GOODRICH)

\*Overall dimensions can be modified upon the customer's request

SMARTSCAN automated systems of eddy-current testing enhance output and inspection reliability while minimizing the influence of the human factor.