

Main Features:

- ✓ Inline Electrical Conductivity measurements
- ✓ 10mm diameter measuring area
- ✓ Non-contact measurement possible
- ✓ Automatic temperature compensation
- ✓ Pass/Fail output
- ✓ User adjustable Pass/Fail band
- ✓ Less than 500ms measurement time
- ✓ High resolution LCD display
- ✓ Context sensitive control buttons



Zappitec is introducing the model **12A** Eddy Current Electrical Conductivity Meter for automated production lines which makes it possible to sort metal parts in the production line without operator intervention.

The automation output consists of two open collector outputs: **F** and **DOK**. The output **F** is active when the part has failed the test, and the output **DOK** is active when the part is within measurement distance. In this way the automation designer can supply a non-contact conductivity measurement system by first moving the part towards the sensor and simultaneously checking if **DOK** becomes active. As soon as **DOK** is active it may check output **F** to verify if the part passed or failed the test.

Applications:

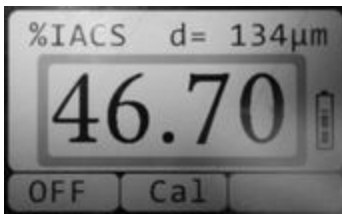
- ✓ Automated alloy sorting
- ✓ Heat treatment verification
- ✓ 100% testing of mass-produced parts



Physical contact with the specimen is not necessary, allowing to design systems capable of performing millions of measurements. This feature prevents sensor damage and abrasion. The automation has to ensure the part comes close to the sensor until the output **DOK** is high, then check if the part failed the test by monitoring the output **F**.



The core of the Zappitec 12A is a high performance microcontroller, allowing to generate a interactive fast responding user interface. User settings are accessible via a menu which enables the user to readily adjust the Pass/Fail conductivity ranges.



A high resolution display ensures clear visibility of conductivity values while still displaying additional information about the measurement. Calibration is simple and achieved using a "one point" calibration method to facilitate use. Certifiable standards are supplied with the unit.

Specifications:

Measurement Range:	5 - 110 %IACS
Resolution:	0.1% IACS (65-110 %IACS) 0.05 %IACS (30-65 %IACS) 0.02%IACS (10-30 %IACS) 0.01%IACS (5-10 %IACS)
Measuring distance:	0.5 mm max (1.5% precision) 0 - 0.4 mm (1 % precision)
Outputs (open collector) 1A 12 V max	DOK - Distance OK F - Failed Test
Power supply	5V DC stabilized 100mA max