

Product Information

LeakTEC - Electronic Leak Detection



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Leak Detection of Non-Conductive Parts

LeakTEC is a powerful electronic tool for non-destructive leak detection of non-conductive single layer materials. The LeakTEC measures a leak between a high-voltage electrode (DC) and counter electrode which can either be grounded or running opposed polarity. The LeakTEC ensures full process control and traceability.

It is typical in field applications to surface test moulded and welded joints in medical devices like medical tubes, containers, pipettes, cannulas and extruded film for medical bags etc.

This fully automatic test is capable of detecting pin holes even smaller than 3 microns by introducing an electrical potential between a detecting electrode and an electrical ground, (i.e. metal jig or mandrel holding the part) while the plastic part itself acts as the insulator. In the event of detecting a crack or pin hole in the plastic material, an electrical contact is established between electrode and ground. This pass/fail contact is

processed via the integral generator module interfaced with the main machine control. The machine control can either enable a downstream 'part-reject' function or track trends in the manufacturing process, which can be fed back for early process adjustment or maintenance. Counter electrodes measurement is to ensure that all electrodes are fully working. Each counter electrode will then give out individual signal to be processed by the machine PLC unit.

To limit the high-voltage and minimize generation of static electricity Tantec offers its dual polarity system (patented).

TECHNICAL DATA

Features:

Easy to install and use

Fast detection times

Dual polarity detection (patented)

Full integration

High precision test electrodes

Non-destructive testing

Single or multiple part detection

No corona discharge

TechnicalData

Plasma & Corona Treaters

gluing bonding coating
adhesion adhesion
coating bonding
gluing bonding

Features:

Easy to install and use

Uncomplicated operation into the production line.

Fast detection times

Pin hole detection is done either in-line or during stop at index movement. Typical test times from 0.03 seconds.

Dual polarity detection (patented)

Limits high-voltage and minimizes generation of static electricity.

Full integration

Must be fully integrated into existing production lines.

High precision test electrodes

For testing small fragile parts.

Non-destructive testing

Tested parts remain undamaged allowing for zero waste.

Single or multiple part detection

Adding counter electrode measurement allows for testing of multiple parts.

No corona discharge

Use of DC voltage eliminates corona discharge.

Technical Specifications	LeakTEC Plasma Treater
Mains voltage and frequency	230 VAC 50/60 Hz
Output voltage/test power	Max. 40 kv/max. 2000 Watt
Power supply	HV-X plasma generator series
Detection times	From 0.03 sec. (other on request)
Number parts per batch	Customised
Electrode design	Cusomised to application
Treatable materials	Non-conductive only
Part thickness	From 0.1-5.0 mm others on request
Control and connectivity	Complete with touch panel (Standard-Proface)
Regulation compliance	CE - RoHs - WEEE

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