

# Iris Power Stator Wedge Analyzer



## INSTRUMENT TO IDENTIFY LOOSE STATOR WINDING WEDGES

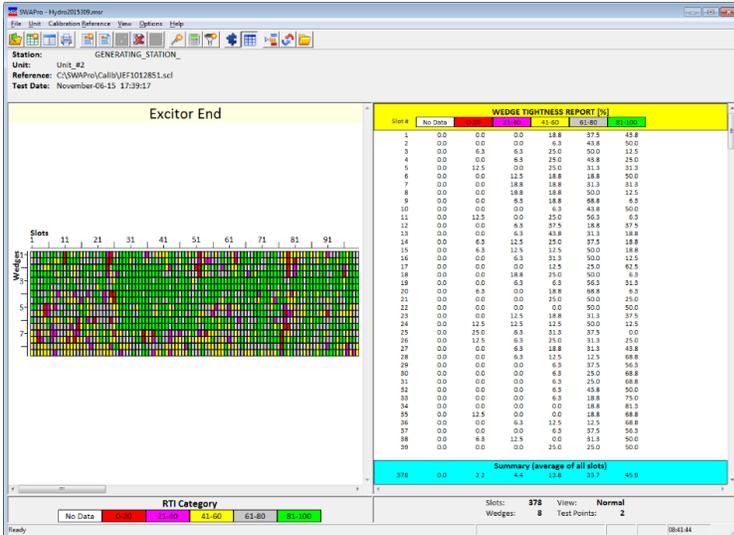
The Iris Power SWA™ instrument allows maintenance personnel to easily and effectively assess the tightness of stator wedges in motors or generators. If the wedges are loose, this may allow stator coils or bars to vibrate in the slot, leading to insulation abrasion and a ground fault. Electronic measurement and storage enables easy and consistent testing and accurate trending of wedge tightness data.

Stator wedges are traditionally tested for tightness by tapping them with a hammer and listening to the sound produced. This method is slow and prone to inconsistency. Electronic wedge tightness evaluation is faster, more accurate and provides more consistent results. The Iris Power SWA instrument can be used to test most types of generator and motor stator slot wedges, including those with ripple springs.

A hand-held probe automatically taps each wedge approximately 30 times in three seconds. An accelerometer gathers the data and transmits it to the Iris Power SWA instrument. Results are presented on a computer in the form of numeric values and a color-coded tightness map.

## A MODERN AND OBJECTIVE TEST OF STATOR CORE WEDGES

- Make well-informed maintenance decisions based upon reliable and consistent SWA data.
- Use for all rotating machinery, including wedging systems with ripple springs.
- In Standard test mode, tightness of each wedge is compared to predefined values while in Advanced mode, the tightness of each wedge can be compared to all other wedges in the winding, the wedges of another winding or any user selected references.
- Repeatable, objective, numeric test data removes subjectivity of manual hand tapping methods.
- Fast, easy wedge tightness testing and analysis
- Permanent record of test data.
- Easy report generation
- Option to install on a robotic vehicle to further automate the testing



## THE ADVANCED WAY TO TEST WEDGES

The color-coded map makes it easy to identify suspect areas. Details are provided in a numeric tightness report. Operator may choose up to five ranking categories to classify wedge tightness.

## FEATURES

- Great flexibility in test set-up
- Two operational modes: Standard and Advanced
- Printing of results
- Ability to export test data to spreadsheets, databases, or word processors

## SPECIFICATIONS

|                                      |   |
|--------------------------------------|---|
| <b>Power Supply</b>                  | 90-132/180-264 V, 50/60 Hz                                      |
| <b>Hand-held Probe Dimensions</b>    | W- 25 mm (1") H – 160 mm (6-1/4")<br>L- 145 mm (5-3/4")         |
| <b>Minimum Wedge Width</b>           | 10 mm (0.4")  |
| <b>Minimum Wedge Length</b>          | 50 mm (2.0")  |
| <b>Slot Depth Adjustment</b>         | 0 mm - 20 mm (10 mm - 25 mm wide)<br>0 mm - 60 mm (>25 mm wide) |
| <b>Connection Cable Length</b>       | 15 m (50')  |
| <b>Analyzer Dimensions</b>           | 28 x 18 x 25 cm (11" x 7" x 10")                                |
| <b>Verification Block Dimensions</b> | 10 x 2.5 x 15 cm (4" x 1" x 6")                                 |
| <b>Carrying Case Dimensions</b>      | 63 x 30 x 51 (25" x 12" x 20")                                  |
| <b>Weight (Entire Kit)</b>           | 25 kg (55 lb)   |
| <b>Operating Temperature</b>         | +10° to +40 °C (+50° to +104 °F)                                |

## KIT CONTENTS

- Hand-held Probe
- Extension bars 3", 6", 9" (7.6 cm, 15.2 cm, 22.8 cm)
- Control Unit
- Software
  - Operating
  - Data Processing
  - Analysis
- Calibration Board
- Connection Cables
- 3 mm Allen Key
- Operating Manual
- Rugged Carrying Case

## GET IN TOUCH

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