

# Independent Professional Witness Testing

Independent Professional Witness Testing is a frequent requirement for manufacturers of electrical and power systems equipment to demonstrate to their customers and user groups that the equipment has been independently tested and verified to exacting international standards, and certified for deployment in extreme, often hazardous environments. It provides a smart, cost effective alternative to shipping large or bulky items to a test laboratory.

## Background

Narec's Electrical Networks business has within its portfolio the UHV Clothier Laboratory, which has a 40 year reputation of testing excellence with experience of testing all major primary equipment associated with transmission and distribution networks in the UK and internationally.

## Services

Narec has available an Asta accredited Testing Authority Observer with over 20 years experience of managing type test programmes and witnessing tests conducted in third part laboratories and compiling type test reports. Much of the work we do is repeat business for



global blue chip customers who return to Narec for the confidence provided through our facilities, expertise, quality service and competitive pricing. We have the capability to perform temperature rise, dielectric, impulse, mechanical and short circuit tests at low, medium and high voltages.

Through this service Narec is able to support customers through the product development cycle from R&D, through design to market testing, and also post launch with innovation and continuous improvement, helping bring products to market faster and more efficiently.

## Methodology

Much of our witness testing service is performed in customers' laboratory facilities. Our independent Testing Authority Observer works with customers in advance to develop a tailored test programme. The beginning of the test comprises a number of verification stages including an audit of environmental conditions, verification of equipment calibration status, and the voltage outputs. Test data is methodically recorded, analysed and fed directly into the test report. The report documents the test data, the relevant standards, test procedure and all relevant drawings. In the event we are not able to complete the test or the equipment does not yet meet the standards, Narec provides customers with a preliminary data report to support the next phase of development, and works with customers post-test to help resolve problems and issues.

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## Witness Testing Experience

Customer	Nature of Test
ABB	LV SWITCHBOARDS - TYPE TESTS
ALCATEL	HV - DIELECTRIC TESTS
ALSTOM T&D	MV TYPE TESTS
AREVA T&D	HV – TYPE TESTS
BABCOCK NETWORKS	HV - DIELECTRIC TESTS
BALFOUR BEATTY UTILITIES	HV - DIELECTRIC TESTS
JACOBSEN	HV – TYPE TESTS
LARGE NUMBER OF INTERNATIONAL CUSTOMERS FROM ASIA AND THE MIDDLE EAST	LV SWITCHBOARDS - TYPE TESTS
LOUNSEDALE	LV SWITCHBOARDS - TYPE TESTS
LUCY SWITCHGEAR	LV / MV - TYPE TESTS
MARDIX	LV SWITCHBOARDS - FULL TYPE TESTS
MOSDORFER	HV - DIELECTRIC TYPE TESTS
PDT	MV - DIELECTRIC TESTS
S & I LTD. (POWELLS)	LV / MV TYPE TESTS
SCHNEIDER ELECTRIC	MV - DIELECTRIC TESTS
SIEMENS (REYROLLE) T&D	MV / HV – TYPE TESTS
TDI	MV - TEMPERATURE-RISE & DIELECTRIC TESTS
TERASAKI	LV SWITCHBOARDS - TYPE TESTS
TRANSFORMERS & RECTIFIERS	MV - DIELECTRIC TESTS
TRENCH	HV - DIELECTRIC TYPE TESTS
TYCO / DORMAN SMITH	LV/ MV / HV – FULL TESTS
WHIPP & BOURNE / FK1	MV TYPE TESTS
WINDER ELECTRICAL	MV - DIELECTRIC TESTS

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