

# Introducing ultimate solution for Power Plants monitoring and diagnostic

TECHIMP  
www.techimp.com  
sales@techimp.com



## BENEFITS

- **Reduction** of overall **Maintenance costs** with better diagnostic coverage and increased reliability
- Ti-SCADA solutions allows to achieve the **greatest return** in the electrical assets management
- **Future proof** on diagnostic capabilities and asset re-shaping and changed customer needs



## TI-SCADA for POWER PLANT

After years of advanced Research, laboratory and on-field tests, Techimp has developed powerful and effective tools which can help asset managers to take critical decisions and manage power plants in a cost saving ways.

Ti-SCADA implements a Real Time condition control of your asset, through a powerful Human Machine Interface (HMI) fully configurable, web based, displaying graphs, charts, trends, KPI, historical data, alarms and customizable reports.

👍	HVAC CABLE	MVAC CABLE	HVDC CABLE	MOTOR	GENERATOR	PWM VSD	GIS GIL GIB	SWITCH BOARDS	OUTDO OR INSULATOR	HV TRAF0	MV TRAF0	TA/TV
	MARINE	SUBSTATION	POWER PLANTS	SMART GRID	WIND FARMS	PV PLANTS	RAILWAYS	SPACE				



IT

The innovative concept of asset management through Global Monitoring pillar of the Techimp approach, is based on a general purpose platforms, supporting different sensors (PD, DGA, DTS, Tan-delta and Vibrations) through a unique system integrating diagnostic algorithms upon data coming from these sensors.

# Ti-SCADA at a glance



Techimp offers Global Monitoring systems for online condition assessment of power plants, from sensors to general purpose platforms.

**Power Plant Ti-SCADA** is a fundamental component of the new generation of Techimp on line condition monitoring systems.

Ti-SCADA is designed as a Service Oriented Architecture (SOA) based on interoperability standard for industrial automation - OPC-UA - allowing high performance asset management solutions, tailored on customer needs, to be implemented.

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Single projects can be created, managed and modified by means of the in-built WEB designer module, based on customizable graphical objects. Projects can then be run in simulation or as 24/7 monitoring system.

Ti-SCADA is able to extract, manage, combine and derive data from a wide set of sources, from detection and analysis of the properties associated with most harmful failure processes of MV/HV assets (like partial discharges, flux sensors, vibration sensors, analog and digital sensors, and many other according to the customer requirements, including real-time acquisition of the main plant parameters (environmental data, third party diagnostic systems).

Each business domain (alarms, monitoring, data analysis, etc.) is covered by a visual domain specific language - DSL - allowing the generation of new application features and the changes of the existing one.

Multi Standard Protocol bridging (IEC62541/IEC61850/IEC60870/DNP3/MODBUS/...) is implemented in order to guarantee data availability and the maximum in system/devices interoperability.

Through Ti-SCADA customers can take advantage of a wider and integrated vision of the asset and of the deep correlation between reliability and efficiency parameters.

## VALUE ADDED MODULES PARTIAL DISCHARGE

Techimp technology (patented) allows real time noise rejection and classification of PD phenomena, on the basis of their pulse shape analysis. This enhances the likelihood of PD source identification, even in the absence of a skilled operator, increasing dramatically the signal to noise ratio.

## VIBRATION MONITORING

Techimp technology allows the integration of vibration sensors and vibration monitoring platforms. State-of-the-art diagnostic algorithms and strategies provide for the top level of protection degree against harmful mechanical failures of vital components in a power plant rotating machines (motor, generator etc.).

## DIAGNOSTIC & OPERATION QUANTITY

Any diagnostic quantity, such as magnetic flux, temperature hot spots and operation quantities, such as power factor, cooling flow etc., can be implemented in order to achieve extensive information on apparatus condition.

