

# Integrated Global Services



**Integrated plant support**

## Ansaldo Energia Group

*Ansaldo Energia is a leading provider of services and equipment for power plants, offering expertise at all levels of complexity for our own and third party machinery for heavy-duty Steam and Gas turbines, Generators, Nuclear, Micro turbines and Shaft Line. We provide global services including Repairs and Spare Parts, Field Service work including overhauls and upgrades, Plant Support with Remote Monitoring and Diagnostics, with transactional as well as comprehensive Long Term Service Agreements.*

*We are a global supplier of turn-key power plants, with a broad offering of the most reliable and best performing solutions available today, backed up by a dedicated Research and Development group and a global Service organization that assists customers with continuous product improvements, combined with the traditional reliability and robustness of Ansaldo Energia products.*

*The result is a unique and balanced value package based on innovation and reliability. Ansaldo Energia's solutions combine the company's proven designs, manufacturing capabilities and commissioning skills with its well-known flexibility in matching customer needs with tailored solutions.*

*At Ansaldo Energia, we recognize that the power market continues to be dynamic and challenging to our Customers. To remain profitable, operators expect global service organizations to offer solutions that improve the efficiency, operational flexibility, emissions, reliability and life-cycle maintenance costs of their power production assets.*

*Today, 160 years of Ansaldo Energia history are combined with a strategic assemblage of complementary service acquisitions. Not only can our Team provide advanced technology service solutions for your installed Ansaldo equipment, but our uniquely positioned Multi-OEM Platform technologies enable value-based offerings for any large frame GE, Siemens and Mitsubishi gas turbine, steam turbine or generator. This industry-first combination result? A flexible, multi-platform, full-scope service provider that can deliver competitive and proven answers to improve your equipment's life cycle maintenance costs.*

*With major operations in Genoa, Italy; Rheden, Netherlands; Jupiter, Florida, USA; Abu Dhabi, UAE; and field offices throughout Europe, Asia/Pacific, the Middle East, South and Central America, and the US, Ansaldo Energia offers customers localized service and global capacity to bring the highest level of value and capability to your plant.*

*We look forward to working with you as we create Power Together!*





## Ansaldo Energia integrated plant support

Integrated Plant Support (IPS) increases reliability and availability of your power plant, while improving plant efficiency and flexibility. Ansaldo Energia makes sure that your valuable machinery is monitored constantly with remote monitoring capabilities and diagnostics.

The Remote Monitoring & Diagnostics Center offers:

- 24/7 Front End Customer Support allowing you to contact the Center at any time through direct phone and email contacts
- An Extended Engineering team that works to give you the full support of our discipline experts community.

Every issue is immediately taken up and either directly solved by our experienced RM&D technicians, or classified and forwarded to an expert within the IPS engineering division.

Our team helps you to make the right decision

quickly in case of any unexpected events or accidental trips; we also answer any questions related to the operation and maintenance of your equipment.

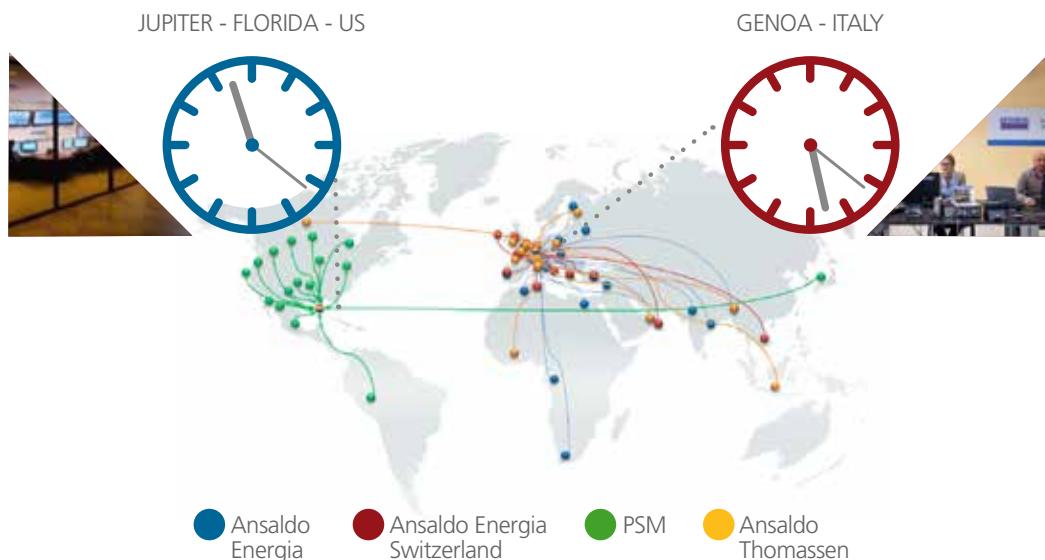
Daily checks of health parameters and periodic reports are carried out as well as feedback for maintenance optimization.

## Advanced Diagnostic Analysis System ADA™

Our integrated Remote Monitoring & Diagnostic network connects to every monitored machine across the globe. Fast data processing by means of Advanced Diagnostic Analysis System (ADATM) provides support for troubleshooting and detailed analysis such as:

- Power train vibration analysis
- Gas Turbine combustion analysis
- Gas Turbine and Steam Turbine performance monitoring
- Generator diagnostics

### Two Time Zone Front End



#### 24/7 Plant Support

- Root cause analysis, recommendations and solutions to troubleshooting requests
- Expert know-how from a single source
- Inspection & recommissioning support to Ansaldo personnel

#### Monitoring & Diagnostic (M&D)

- Calculation and supervision of health parameters
- Early warning messages, assessments & recommendations
- Predictive Diagnostics
- Daily check of machinery parameters
- Periodic Report

#### Specialized M&D packages

- Remote vibration assessment of GT/CC powertrains
- Generators condition monitoring
- GT control tuning
- GT combustion tuning
- GT restart assistance

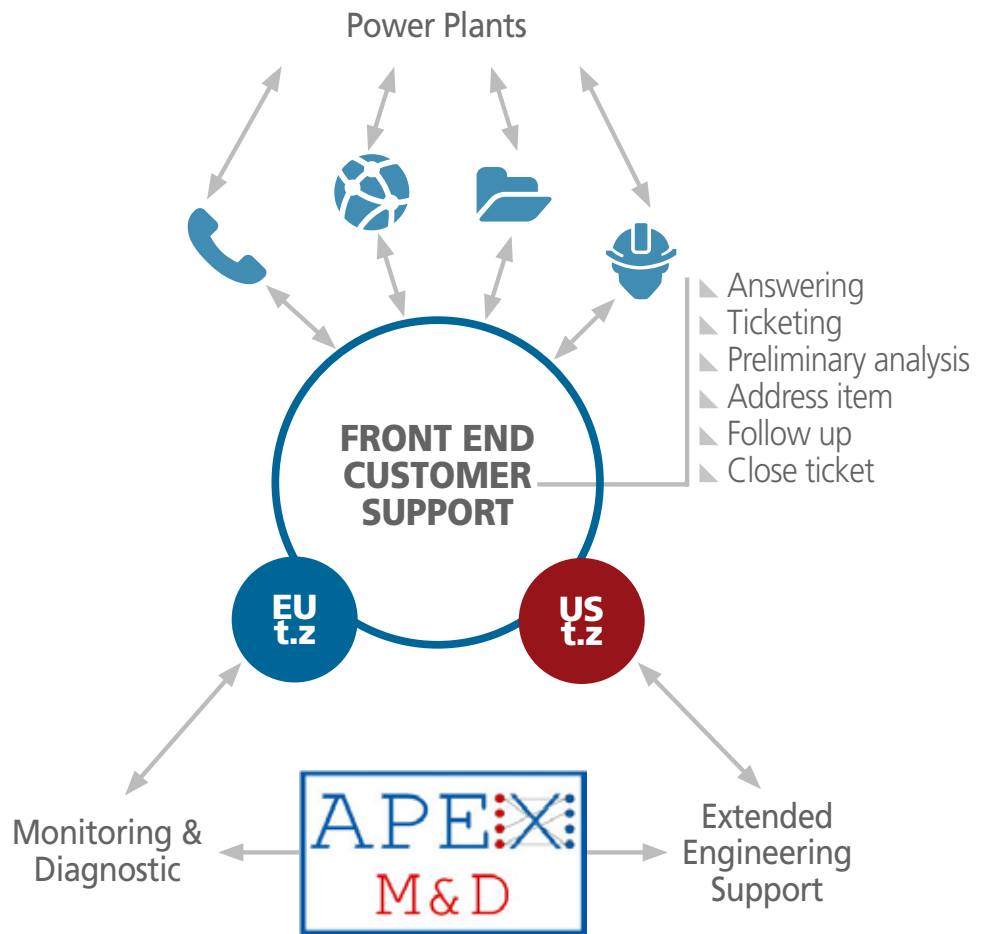
**Highest reliability and highest availability at optimum performance**

## Ansaldo Predictive Expert System (APEX M&D)

Ansaldo Predictive Expert System (APEX M&D), based on Neural Networks, provides Real Time Predictive Diagnostic and Early Warning

notifications. This system combines the vast and deep diagnostic experience of our engineers with advanced machine learning techniques. It makes available, in real time, the knowledge existing in our data base to identify potential failures and gain time to react and plan corrective activities.

### Integrated Plant Support



For more information and to reach our sales Team, please go to [www.ansaldoenergia.com](http://www.ansaldoenergia.com)

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