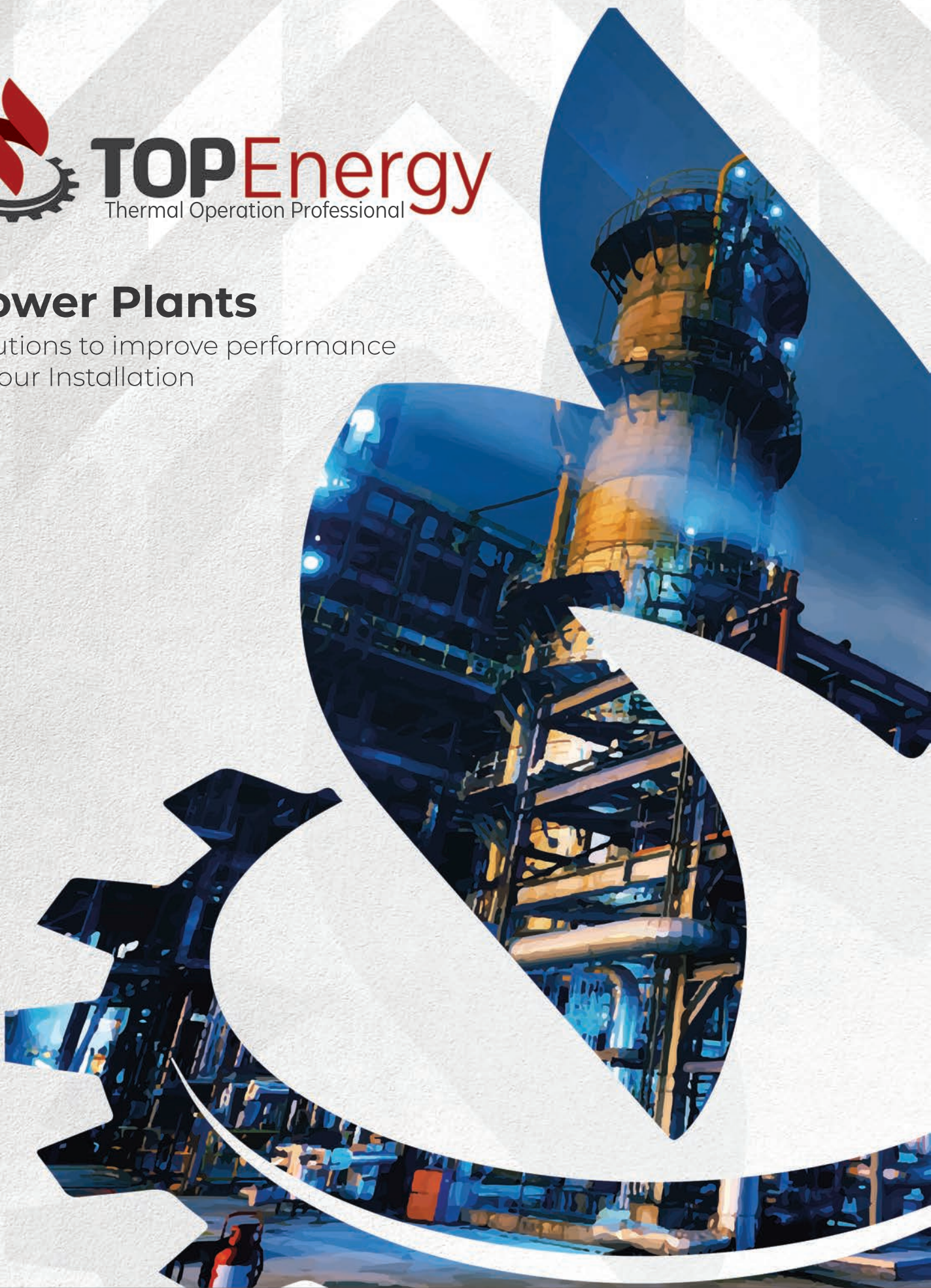




TOPEnergy
Thermal Operation Professional

Power Plants

Solutions to improve performance
of your Installation



Engineering Gas and Steam Performance

His value Added

TOP Energy has over 60 years of experience in commissioning, startup, onshore and offshore O&M.

We focus daily on our customers' requirements, providing the highest level of expert technical support.

We offer a wide range of solutions and reliable products to optimize the efficiency and performance of your installation.

Our solutions must optimize profitability and competitiveness of its resources, through optimization in the following areas:

> Flexibility

State-of-the-art solutions allow Facilities to be adapted to changing and fluctuating conditions.

> Productivity

Extremely reliable solutions that will reduce asset downtime.

> Sustainable Energy Efficiency

Highly developed solutions that contribute to the reduction of operating costs and CO2 emissions.

> Reduced maintenance effort and improved serviceability

Extremely robust and reliable products reduce maintenance effort.



Coal



Gas



Energy Nuclear



Bioenergy



Biomass



Energy Renewable

Extensive experience in mitigating failures in operational applications demanding on steam and water circuits.

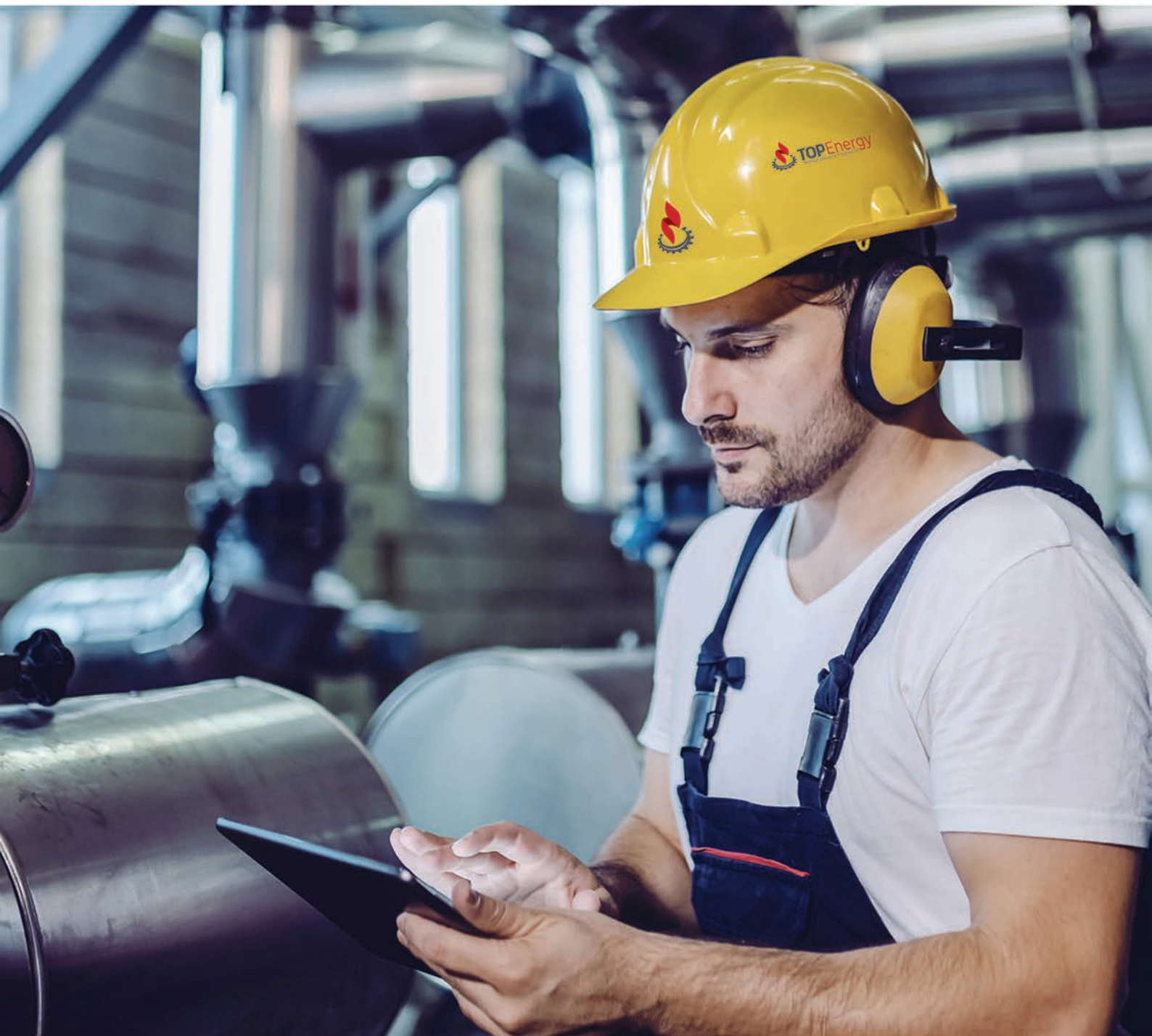
We comply with ISO 9001, ISO 14001 and OHSAS standards and can supply products that comply with the following standards:

- ASME | EAC | CRN | KTA1401 | AD2000-HP0
- ATEX/IECEX management systems
- SIL functional safety management system
- Directive on PED pressure equipment

His value Added

Availability of solutions

Our highly qualified sales engineers support you throughout the process of improving your water, steam and condensate circuit, selecting the ideal products for your installation requirements and specifications.



Excellent quality, reliability, ease of maintenance

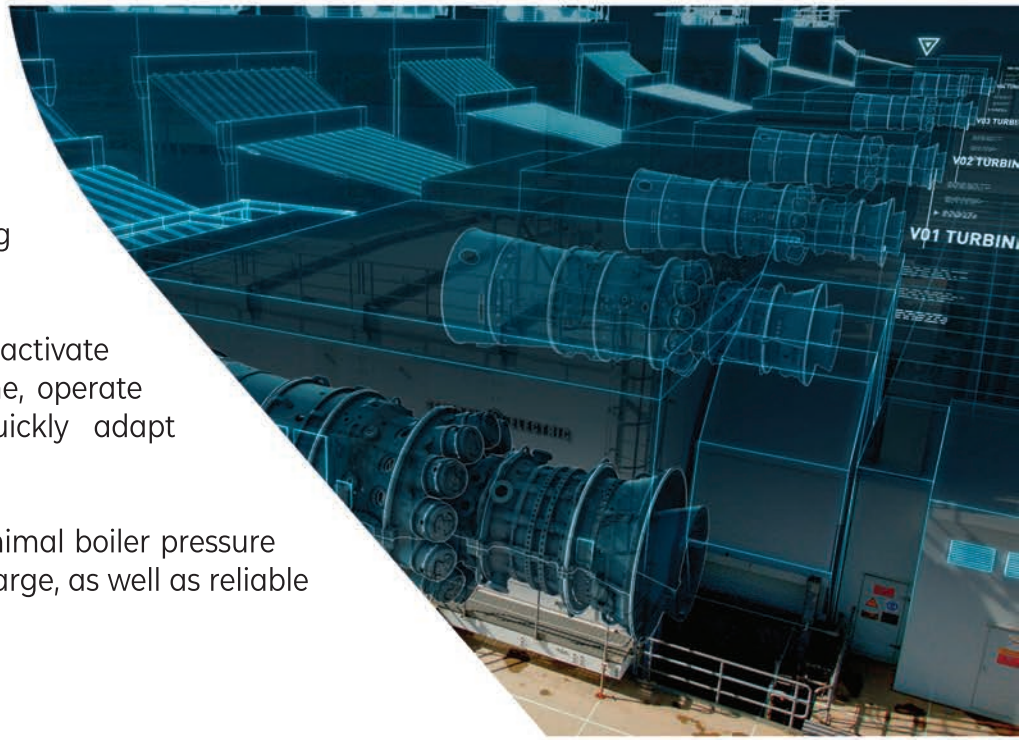
State-of-the-art solutions improve installation performance, but also reduce downtime and maintenance effort.

Flexibility

Power plants designed to operate at base load must nowadays adapt their energy production to varying loads and considerable fluctuations.

It is necessary to activate and deactivate power plants in short periods of time, operate them with minimal load and quickly adapt production capacity.

Faster start-up processes require minimal boiler pressure reduction, efficient condensate discharge, as well as reliable injection water control valves.

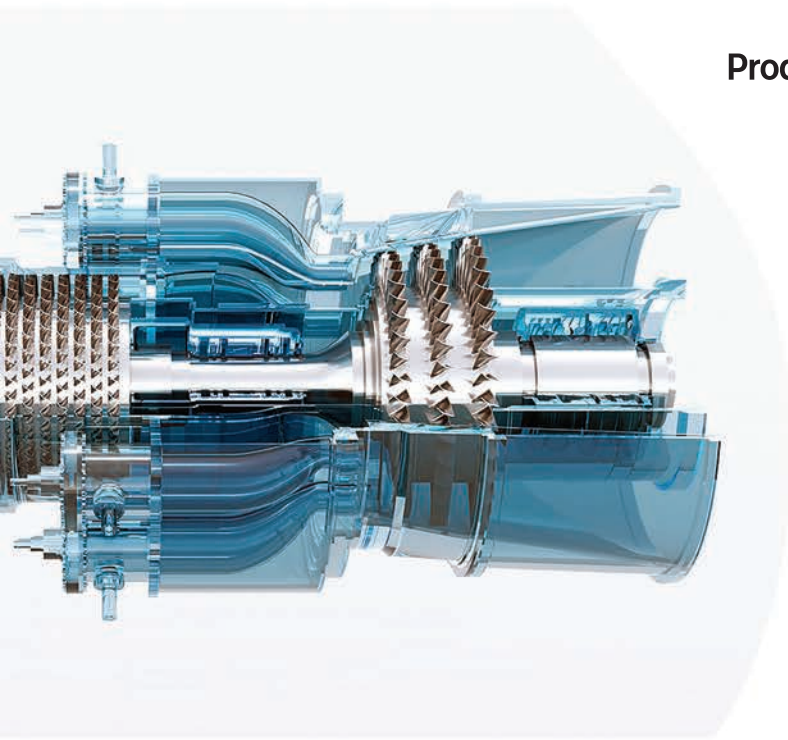


Productivity

The growing importance of renewable energies requires conventional power plants to be relatively variable.

Power plants powered by fossil fuels start and stop more frequently, in order to reduce operating hours, making equipment subject to greater stress situations.

Power plants must be as productive as possible during operation, without reducing downtime due to equipment failures becoming a critical factor.



Cyber Security

The increasing integration of industrial automation systems with other tools brings not only an increase in productivity but also a potential risk if they become unavailable.

Thus, the industrial automation community increasingly seeks to establish good practices, norms and standards, bringing greater reliability and prompt response in the face of a cyber attack.

TOP Energy helps in assessing the risk of cyber attacks on automation assets, establishing practices and actions that ensure greater robustness and adherence to regulatory requirements such as ONS RO-CB.BR.01 and ISA-62443.



Gestão de Ativos

Having the right amount of information is crucial for wise managerial decision-making, identifying opportunities for improvement and avoiding financial losses. However, many industrial assets do not have a collection, processing, history and reporting structure that can extract the full potential of the information generated by the system.

TOP Energy has tools that can assist in the management of assets in an intelligent and effective way, collecting data from existing automation systems, processing in order to extract valuable information and presenting it in customizable and intuitive reports.

Our solution can be customized according to customer needs and made available easily and secure to the participants of the process through solutions in the cloud.

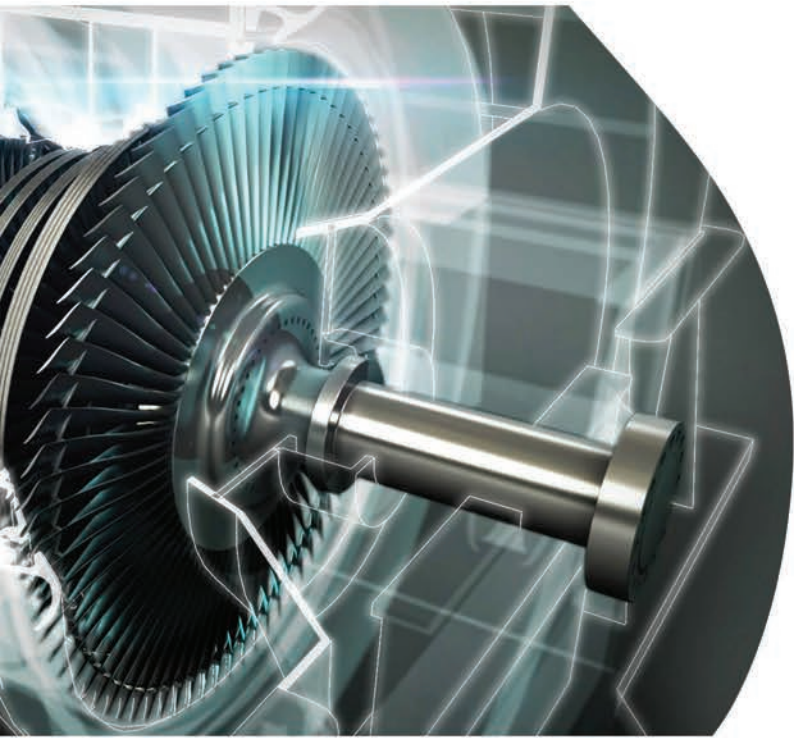
Seek to know the best solution for your process and identify optimization points that can guarantee you operational excellence and without losses.



Efficiency Sustainable Energy

The increasing number of activation processes requires strict loss control in the gas, oil and water-steam circuit.

Minimizing losses of high quality vapors, such as expansion steam, to the atmosphere not only reduces feedwater treatment costs, but also has a positive impact on CO₂ emissions. At the same time, it increases the efficiency of the installation.



Reduction and greater ease in Maintenance

The flexibility and productivity of power plants are strongly influenced by the reliability of the equipment.

A high level of reliability reduces maintenance costs and avoids unplanned downtime.

Specialized Training

TOP Energy, together with its technical staff, offers you the ability to develop training tailored to your needs, seeking specialization and technical uniformity of the workforce as well as increased productivity and safety of the teams.

Possibility of conducting face-to-face and distance learning courses, thus providing greater flexibility for training professionals.



Photovoltaic Solar Generation

Seeking greater sustainability and economic return, we provide consulting services, design and execution of photovoltaic solar generating systems.

Ability to analyze specific studies to evaluate the return on investment and definitions for greater project efficiency.

Renewable energy

Top Energy aims to balance all areas involved in clean energy projects and wind farms, seeking the lowest possible environmental impact. We work in harmony with the local society, providing benefits to the municipality in which the plant is located. This shows commitment and responsibility to the environment in conjunction with financially profitable projects.

The generation of energy from the wind is considered one of the alternatives with the least environmental impact, evaluated and monitored in an integral way, so that any interference in the flora and fauna is minimized.

Our trajectory is marked by investment in innovation, technology and customized solutions, in order to support the energy transition of consumers towards a sustainable, competitive and inclusive supply.





Contact us

+55 (17) 99646-7466 - Alexandre Mello

contato@topenergy.engineer

www.topenergy.engineer

