

**Mastering**  
the transformation  
of electrical energy



# Leader by "know how" and expertise

**JST transformateurs** (Lyon, FRANCE) has been manufacturing electrical transformers for customers all over the world for over 60 years.

Specializing in the extra high voltage transformers, **JST** is proud to have engineered, manufactured, delivered and installed power transformers on 5 continents.

Mastering both core and shell form design technologies, **JST** carefully examines each project to make sure our design custom fits the technical and economic needs of every customer.

Our shell form design technology offers our custom built transformers a greater thermal capacity, higher mechanical strength and dielectric capacity.

In the late 1980's, **JST** begins delivering 800 kV class transformers in the United States, Canada and Venezuela. **JST** also realized the growing need for step-up and step-down transformers for numerous nuclear power plants, thermal and hydraulic plants in France, Switzerland, the United States and around the world.

## A solution for all your needs

All of **JST transformateurs'** products are tried and tested under the most extreme operating conditions, and are designed to withstand all climate conditions around the world. For example, short-circuit resistance has been validated through extensive tests, including: temperature extremes from -50° C in northern Canada to +50° C in desert regions, seismic resistance, resistance to saline environment, and resistance to harmonic motion and mechanical vibrations.

A partner for your projects,  
wherever in the world  
they may be...

■ **JST transformateurs** offers a comprehensive, flexible and competitive range of products that are perfectly tailored to meet our customer's needs.

At **JST transformateurs** we pride ourselves on the quality of our working relations, and strive to maintain a reputation as a reliable partner that is dedicated to respecting our commitments to our customers and suppliers alike.

A unique contact point,  
wherever you are,  
wherever you go.

[mvp@jst-transformers.com](mailto:mvp@jst-transformers.com)

A product  
for every application:

- Medium-power transformers  
20 to 100 MVA, from 63 to 220 kV
- Step-down / step-up transformer and autotransformers  
60 to 2,100 MVA, from 90 to 800 kV
- Phase shifters transformers
- Railway feeder transformers
- On-board traction transformers

# Specialists in the industrial innovation

With experience that can only come from having thousands of transformers in service all over the world, **JST transformateurs** continues to challenge its engineers and associates to always strive to enhance their skills and knowledge to offer a "never satisfied" improvement mentality.

Our research and development program is perpetually renewed to respond to our customers' needs. The program oriented around a process of rigorous prototype testing, and modeling using data validated via laboratory experiments. This process is carried out in collaboration with highly regarded French and foreign research laboratories.



## Research and development

The **JST transformateurs** Research & Development team works in two main fields:

- Modeling the physical phenomena relating to dielectric, mechanical and thermal properties, with the aim of reinforcing product reliability and durability
- Developing innovative technical solutions to meet the ever-changing needs of our customers



## New solutions for the conservation of natural resources

- **JST** continues to promote the protection of the environment in a long and lasting way and remains conscious of its environmental responsibilities and will continue to pursue programs that will benefit the environment for our customers, employees and the communities we serve.



## The sustainable development: a priority

- The conservation of the natural resources of our environment and the growth of consumption of the energy in the world is the paradox of the industrial age.

We have to protect the resources to guarantee a serene future in the next generations. **JST transformateurs**, conscious of its responsibilities of industrialist, was the first ISO 14001 certified Rhone company in 1997. Since this first one, we remained leaders in environmental subject by favoring all the preventive actions on the risks of pollution and the economy of natural resources, by the research for new recyclable materials and by the environmental objectives fixed by the executive committee.



# Towards working to increase power

The development and interconnection of extensive transport networks, together with the development of a new generation of nuclear reactors, means significant changes to the technical specifications required of power transformers.

**JST transformateurs** has always been at the cutting edge of technical developments, designing and manufacturing 800 kV devices as early as the late 1980s, as well as countless high-power step-up transformers for power plants and, more recently, phase shifters.

To ensure we keep abreast of such developments, **JST transformateurs** has a special high-performance 1,200 kV testing platform that enables us to guarantee the compliance of all the equipment we manufacture.



## Our expertise at your service

- Working with our customers, **JST transformateurs** offers a transformer maintenance program planned at proper intervals or as diagnostics results indicate.

This insures that customers equipment continue to operate perfectly via a monitoring system which uses special sensors to record all useful information relating to oil quality and the state of the protection devices and accessories.



## The services: a permanent obligation

- As part of your transformer monitoring process, **JST transformateurs** carries out technical evaluations based on oil samples, as well as a full range of others tests and diagnostic procedures. The results are then analyzed in relation to the equipment log, in order to evaluate the extent to which the device has aged and to suggest the appropriate forms of action. **JST transformateurs** also draws on its vast experience to organize training sessions on the monitoring system and preventive maintenance for shell-type transformers.

### Figures that speak for themselves

- Impulse generator: 4,000 kV / 500 kJ
- Reactive Energy: 130 MVAR
- Net active Energy: 4,000 kW





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