

# Transformer Factory Start-Up

## MV Transformer and Distribution Transformer (11kV to 66kV)

KIGG Ltd core business is factory Start-ups. KIGG Started out in Electricity Meters and one of our first clients for metering was a multinational transformer manufacturer. Through this relationship and at the requests of our clients we expanded and gained specialist knowledge to in providing a complete factory start-up solution to MV Distribution transformer ranging from 11kV to 66kV. This includes the facilities and training to transfer technology, knowledge and expertise to allow existing manufacturers to upgrade their factory or allow investors and businesses to enter the transformer market and establish their own factory.

### Company Info

KIGG is a leading British ISO 9001:2008 certified company engaged in the design, development, manufacture and supply. Our Core business is factory start-ups; these include kWh/electricity meters, water, distribution transformers and MCCBs. Other products include smart equipment for environment monitoring, ideal for monitoring Greenhouses, AC etc... via Smart Devices. KIGG also offers transformer/relay maintenance and partial discharge testing services.

### Smart Grid Technology

Transformers are the hub for the collection and distribution of energy; this makes them a vital component for the successful transition to a smart grid. We provide system automation technology linked to interfaces to various systems following IEC 61850.

Transformers within the smart grid will need to have two way, real time communications, remote monitoring, comprehensive power flow control and sensing and monitoring technology that supports remote monitoring. They will need to be able to deal with the demand within the grid and as such have to decide where to allocate power from, i.e. power station, wind farm or solar panels within the grid.

### Distribution Transformers

Transformers have a vital role in electrical systems as they are a means of "stepping down" the current/voltage in a system to measurable values. We would enable you to manufacture transformers from 11kV up to 66kV. Countries in the Middle East, Asia, Africa and South America are shifting from consuming products to manufacturing their own products. Governments are providing a lot of incentives and support for companies who create local Jobs.

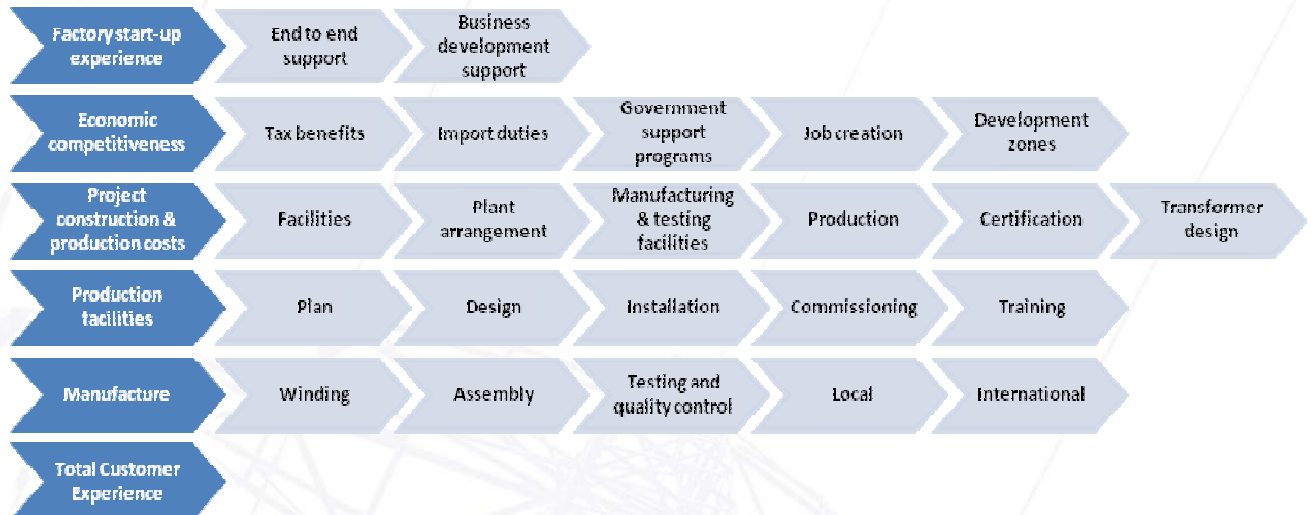
You could be investors with an opportunity opening up in the market or an existing company in a related field, wishing to break into a new market, by utilising both your and our expertise you can be successful. The transformer is vital for infrastructure development and is a critical part of the power network as it provides an efficient transfer of electrical energy. The transformer needs to be highly efficient, rugged and reliable as they are in constant use over decades at a time. As such the effects of both ageing and wear are unavoidable.

Our team of engineers will help you reduce the costs and risks and supervise the process. One of the challenges involved with transformers is type testing KIGG will oversee this process via the certification laboratory of your choice.



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## Complete Solution provider



**Factory start-up experience** – Start with a feasibility study used to assess the viability of a project. It aims to uncover any potential problems/issues. Both technical and commercial feasibility are considered.

**Economic competitiveness** – Project success is not just limited to quality and price and there are many benefits to take advantage of when starting your factory, these vary between countries. These incentives range from Government Funding & Grants, support in economic zones, government regulations etc...

**Project construction & production costs** – The space and equipment necessary will depend on the desired production capacity and the scope of the manufacturing processes required for your factory. The more that is produced/the more manufacturing processes completed, the larger the space and the greater the amount of equipment that will be required.

**Production Facilities** – The design of the factory will depend on the capabilities of your factory and the volume of production required. We will maximise the efficiency of space and production. We will design and provide extensive drawings for both the product and the factory. The design of the product will be constructed based on your requirements. There are many internationally recognized certification laboratories such as KEMA, CESI etc. We will support you through the whole certification process.

**Manufacturing** – Our team of expert engineers can provide onsite support from procurement, installation, commissioning, calibration and training.

### Basic (procurement) Components

Core – Electrical Steel

Windings – Copper – Precision is vital as testing can only be performed once transformer is complete.  
(There could be between 1,000 and 3,000 windings)

Insulation – Cellulose-based paper

**Total Customer experience program** – Once the factory is set-up we can support you in a number of ways.

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## Transformer Factory Flow

