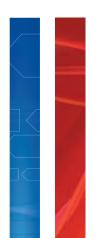


Product Range























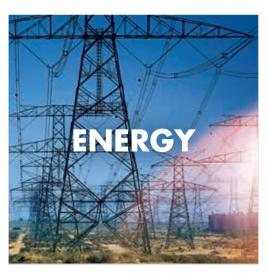








THE WORLD OF KNILL GRUPPE







We supply products and production systems for the energy, communication and mobility infrastructure worldwide.

The Knill Gruppe is a family owned group of companies led in twelfth generation by Georg Knill and Christian Knill. Our companies provide product solutions in the areas of:

- energy transmission & distribution
- substation equipment
- cabinet systems

and production systems in the areas of:

- battery machines
- cable & wire
- fiber optics



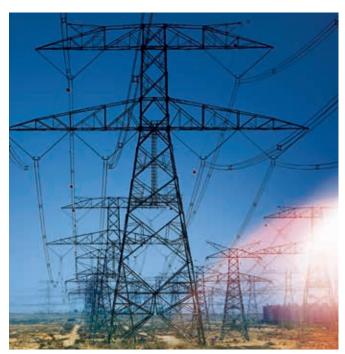












OVERHEAD LINE FITTINGS

We supply high-quality fittings for overhead transmission lines up to 1,200 kV. Our portfolio includes string fittings, fittings for OPGW, OPPC and ADSS, insulators and end fittings as well as fittings for high temperature conductors.











DAMPING SYSTEMS

Our vibration control products enable safe and trouble free energy supply, by protecting system conductors from fatigue failure caused by wind induced motions. They include spacers, spacer and vibration dampers for high voltage overhead



























LOW & MEDIUM-VOLTAGE FITTINGS

We manufacture fittings, terminations, insulation and protection for bare conductor overhead lines as well as for ABC / ISO LV overhead lines and solutions for MV covered conductor overhead lines.

Our solutions ensure the reliable energy distribution up to 45 kV.























CABLE ACCESSORIES

Ikebana manufactures a complete range of heat shrinkable cable accessories for XLPE and PILC cables up to 36 kV. These are used in termination systems such as breakouts, sheds, boots, heat shrinkable tubes and end caps.





















SUBSTATION EQUIPMENT

We are specialized in the manufacturing of components for high voltage outdoor substations. Our product range includes connectors, clamps and conductors for outdoor switch-

gear lines between 132 to 1,000 kV.





POLYESTER CABINET SYSTEMS

Our cabinet systems made of glass fibre reinforced polyester are characterised by their long lifetime due to their special weather and UV resistance as well as their high safety due to the double insulation. They are applied in energy, telecommunication, traffic and control systems.

















ALUMINUM CABINET SYSTEMS

Manufactured in profile technology our aluminum enclosures are modular and can easily be produced in various dimensions. The cabinets convince with their small space and highest flexibility.

Moreover they are stackable.



































ENCLOSURE CLIMATE CONTROL SYSTEMS

Our patented cooling systems ensure the right climate in the enclosure and therefore perfectly protect the integrated applications from temperature changes.

These include heat exchanger, head fan roofs, air conditioning units and filter systems.



INNOVATIVE SOLUTIONS

Our innovative solutions ensure the worldwide trouble free energy supply:

- Insulated crossarm for upgrading at unchanged line width
- Compression fittings for ACCC overhead conductors (central support element made of carbon fiber)
- Modular composite utility poles for the sustainable line construction
- Reflective aircraft warning marker
- Fuse switch disconnector 400 A
- Product and project management for HVDC stations
- Solutions for the individual supply of e-charging stations





















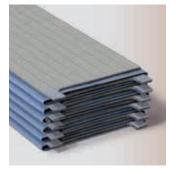




BATTERY MACHINES

We provide most advanced manufacturing equipment for automotive, motorcycle and industrial lead acid batteries. Our core competences are enveloping and stacking, sleeving and stacking, cast-on-strap technology and battery assembly.





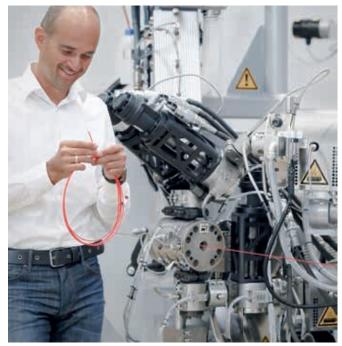










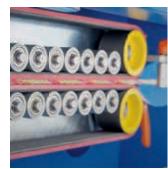


CABLE & WIRE MANUFACTURING SOLUTIONS

Our portfolio covers a broad range of solutions for manufacturers in the fields of power cables, automotive cables, fiber optic cables, metal communication cables, steel ropes and shock tubes. We are experts in extrusion, metal tape forming, welding, corrugation and SZ-stranding technologies.







OPTICAL FIBER MANUFACTURING SOLUTIONS

We supply turnkey manufacturing solutions for telecom as well as for specialty preforms and fibers. Our core competences are technologies for fiber preform making, fiber drawing, fiber UV-coating, ribbon making, proof testing and fiber optic cable production.













