Hydro Generators

INDUCTION by Gamesa

Photo by: Spetals Verk & Julian Calverley

We provide comprehensive and flexible solutions tailored to the needs of our customers around the world. We are also positioned as a trusted partner in the markets where they operate, addressing challenges such as:

- Production of **hydroelectric generators** for submerged river operation.
- Production of **wind generators with high-strength permanent magnets.**

With our proven concepts and technological background, we design and manufacture generators **up to 45 MW and 15 kV.**

As a global company, we deliver, install and provide global **after-sales service** with the most demanding schedules and complexities.

Generators & Motors *Driven by Nature*

Gamesa Induction has extensive experience (>4,000 MW) in synchronous generators for small hydropower plants, including submerged units.

- All cooling types available
- Roller or sleeve bearings
- Design adapted to site constraints
- Custom terminal boxes and mounting anchors
- Wide range of customized accessories
- Inertia values tailored to installation requirements

Our commitment to a quality product, with a high return on investment, is backed by over **95 years of experience** in electrical machinery and the implementation of manufacturing systems based on best-in-class industrial practices.

In addition, the development of cutting-edge technologies, proprietary and patented technologies, ensures optimal equipment availability and an extended service life of the installation.

All speed ranges

Up to 45 MW

Complete solutions for hydroelectric power generation

Gamesa Induction´s synchronous generators provide comprehensive solutions for small hydroelectric plants. These generators are designed according to the specific parameters of each turbine and the requirements of the plant.

Critical data is considered during the design process to ensure maximum performance at low loads, while maintaining reliability throughout the service life of the equipment.

Design

Customer inputs + Proven technologies + Patented own technologies + State-of-the-art concepts = Customized products

Versatile

Both horizontal and vertical assembly.
Can be adapted to any number of poles or different speeds.

Robust

VPI (Vacuum Pressure Impregnation) and resin-rich insulation systems.

Electrical generators

Long track record of projects installed worldwide, currently exceeding 4 GW, demonstrating strong market recognition and product competitiveness.

+40
countries

Albania: 121 MW
Argentina: 6 MW
Austria: 16 MW
Azerbaijan: 24 MW
Belgium: 6 MW

Canada: 84 MW
Cameroon: 5 MW
Chile: 112 MW
Colombia: 79 MW
Costa Rica 29 MW

Denmark: 5 MW
D. R. Congo: 42 MW
Ecuador: 12 MW
France: 6 MW
Georgia: 61 MW

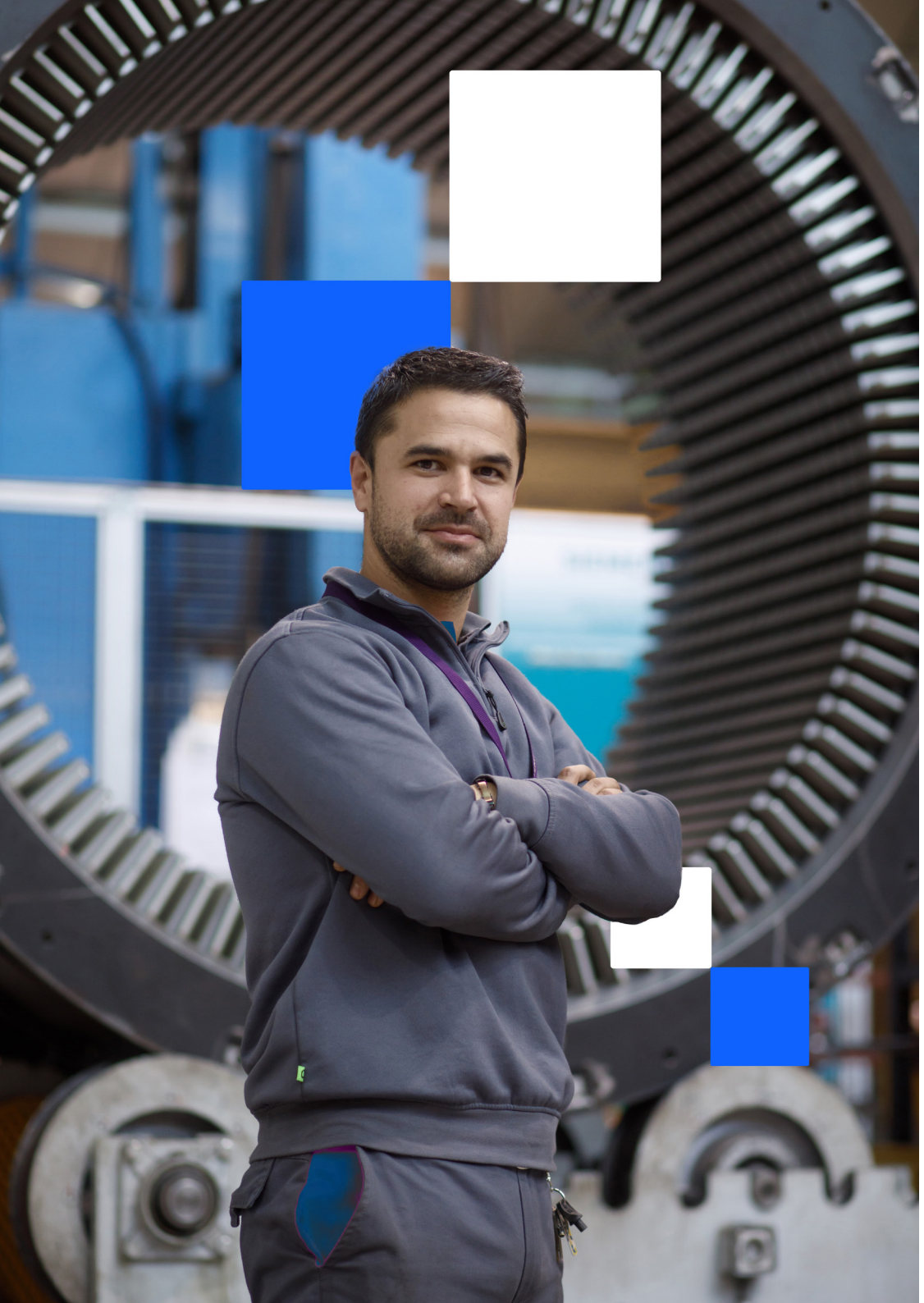
Germany: 9 MW
Guatemala: 114 MW
Iceland: 2 MW
India: 87 MW
Indonesia: 48 MW

Italy: 39 MW
Japan: 14 MW
Kenya: 12 MW
Kyrgyzstan: 195 MW
Laos: 73 MW

Mexico: 92 MW
Nepal: 243 MW
New Zealand: 11 MW
Nigeria: 48 MW
Norway: 368 MW
Panama: 47 MW

Peru: 32 MW
Philippines: 254 MW
Portugal: 38 MW
Rwanda: 11 MW
Spain: 49 MW
Sri Lanka: 33 MW

Sweden: 3 MW
Switzerland: 57 MW
Thailand: 3 MW
Turkey: 589 MW
USA: 26 MW
Vietnam: 352 MW



Why Gamesa Induction?

People

We are people driven by nature. We are deeply proud to be part of something truly significant. Together, we are not just building a more sustainable world; we are creating a brighter future for generations to come. As part of an international family united by a shared vision, we strive for one powerful goal: a better world for all.

Competitiveness

Gamesa Induction guarantees that it will meet the technical requirements of every project at an attractive price.

Flexibility

Full product customisation, allowing us to adapt to each customer's needs. This means that each and every project becomes a tailor-made solution with high added value.

Decades of expertise

Gamesa Induction has more than 95 years of experience in the manufacture of electric generators and motors and 25 years of expertise in the development of its own power electronics technologies.

Technological innovation

For projects where reliability and performance under low-load conditions, we offer permanent magnet generators. By combining these generators with suitable power electronics systems, we can offer an integrated power generation system that does not require speed control. This significantly increases the return on investment from limited hydraulic resources.

Technical support

Gamesa Induction provides all the required support during the installation and commissioning to ensure the optimal machine operation, including the necessary validation, quality control and project management procedures.

Multiple communication channels

We provide our customers with multiple communication channels to respond quickly to requests for information, service and support. Direct access to our multidisciplinary teams across different countries is guaranteed, either through the usual contact methods or through our website.

INDUCTION by Gamesa

Follow us on Linkedin

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ALBANIA
Pobreg: 12 MW
Ashta I-II: 68 MW
Banja III: 7 MW
Bistrica: 34 MW
Grabova: 18 MW

ARGENTINA
Nahueve: 5 MW

AUSTRIA
Stegenwald: 16 MW

AZERBAIJAN
Yukari Veng: 9 MW
Agbulak: 15 MW

BELGIUM
Heid de Goreux: 5 MW
Sea Titan: 1 MW

CANADA
Skookum: 33 MW
Jamie Creek: 25 MW
London Street: 8 MW
Box Canyon: 18 MW

CAMEROON
Nachtigal: 5 MW

CHILE
Río Angol: 24 MW
Collil: 8 MW
Dos Valles: 8 MW
Mocho: 20 MW
Digua: 25 MW
Pulelfu: 10 MW
Correntoso: 10 MW
Caracolí: 4 MW
Collahuasi: 2 MW

COLOMBIA
Alejandría: 17 MW
San Bartolomé (G.2): 47 MW
Taraza: 11 MW
Río Aures: 34 MW
Penderisco: 22 MW

COSTA RICA
Agua Gata: 3 MW
Doña Julia: 24 MW

DENMARK (Faroe Is)
Heygaverkid: 5 MW

D. R. CONGO
Bendera: 10 MW
Rwanguba I-II: 45 MW
Lungudi II: 5 MW

ECUADOR
Victoria: 12 MW
Las Peñas I-II: 180 MW

FRANCE
Les Claux: 6 MW

GEORGIA
Kasleti: 11 MW
Bakhvi: 50 MW

GERMANY
Kriebstein: 9 MW

GUATEMALA
Renace III: 86 MW
El Manantial: 13 MW
Los Esclavos: 15 MW

ICELAND
Andakílsavirkjun: 2 MW

INDIA
Perla: 83 MW
Talakadu: 4 MW

INDONESIA
Sangir Hulu: 13 MW
Tanjung: 12 MW
Cicatih: 9 MW
Lae Ordi Hulu: 12 MW

ITALY
Torlano: 3 MW
La Lama: 2 MW
Giovi: 1 MW
Palazzolo: 7 MW
M. Cotugno: 8 MW
Savorgnana: 3 MW
Pian Sulé: 8 MW
Rombello: 2.5 MW
La Rocca: 4 MW

JAPAN
Uchiyama: 5 MW
Otsu: 2 MW
Shima: 6 MW
Kariyado: 2 MW

KENYA
North Mathioya: 7 MW
South Mara: 3 MW
Lower Nyamindi: 2 MW

KYRGYZSTAN
At-Bashi: 52 MW
Balu Saruu: 28 MW
Ortokoysuu: 9 MW
Tuyuk: 6 MW
Kulanak: 100 MW
Tuyuk Yssik Ata: 7 MW
Barskoon: 9 MW

LAOS
Houay Ka-Ouane: 23 MW
Nam Sak: 23 MW
Nam Tai: 27 MW

MEXICO
Tacotán: 6 MW
Trigomil: 8 MW
Minas: 18 MW
Encanto: 12 MW
Portezuelo I-II: 4 MW
Santa María: 32 MW
Amata: 12 MW

NEPAL
Super Dordi: 70 MW
Upper Lohore: 5 MW
Upper Hewa: 9 MW
Upper Solu Khola: 20 MW
Chameliya: 40 MW
Ingwa Khola: 10 MW
Seti Khola: 42 MW
Nyasim Khola: 42 MW
Doodhpokhari: 10 MW

NEW ZEALAND
Coleridge: 11 MW

NIGERIA
Kashimbila: 48 MW

NORWAY
Flatenfoss: 8 MW
Virak: 6 MW
Øvre Markvatn: 6 MW
Rootenvik: 6 MW
Haukeland: 6 MW
Usma: 6 MW
Skarg: 27 MW
Fridafors: 2 MW
Rekvatn: 20 MW
Govdesaga: 11 MW
Oldereid: 17 MW
Nivla: 6 MW
Nybuelve: 4 MW
Tverrane: 3 MW
Suvdola: 10 MW
Vassenden: 10 MW
Mork: 10 MW
Risvollelva: 8 MW
Stardalen: 20 MW
Osdalen: 5 MW
Gjuvåa: 6 MW
Hafoss A-B: 10 MW
Fenefoss: 5 MW
Rovassaaga: 8 MW
Mordola: 6 MW
Øvre Kvemma: 10 MW
Maudal: 10 MW
Godfarfoss: 10 MW
Dalana: 9 MW
Drollstolbekken: 4 MW
Gjerdeelva: 7 MW
Ervikselva: 6 MW
Småvoll: 16 MW
Feios: 30 MW
Selja: 3 MW
Litledalen: 8.5 MW
Hardeland: 12 MW
Gravdalen: 16 MW
Onarheim: 10 MW
Tosse: 5 MW
Fardalselvi: 27 MW

PANAMA
Sindigo: 20 MW
La Huaca: 13 MW
Chuspa: 14 MW

PERU
Carpapata III: 13 MW
Marañón: 19 MW

PHILIPPINES
Manolo Fortich: 85 MW
Angat I-V: 60 MW
Siguil: 16 MW
Kapangan: 67 MW
Kiangan: 18 MW

PORTUGAL
Calheta: 38 MW

RWANDA
Giciye III: 11 MW

SPAIN
Itoiz: 28 MW
Toma: 20 MW
Santiago Urumea: 1 MW

SRI LANKA
Old Laxapana: 33 MW

SWEDEN
Fridafors Nedre II: 3 MW

SWITZERLAND
Gabi: 20 MW
Luchsingen: 6 MW

THAILAND
Lam Pao: 3 MW

TURKEY
Cataldere I-II-III: 22 MW
Sarikavak: 11 MW
Ayranli I-II-III: 21 MW
Sutluce: 7 MW
Ekincik: 10 MW
Berke: 11 MW
Yannikopru: 10 MW
Niksar: 44 MW
Yeşilvadi: 11 MW
Cakmak I-II: 33 MW
Sogutlu: 22 MW
Baran I-II: 20 MW
Çiğdem: 20 MW
Güneyyaka: 8 MW
Akçakoyun: 8 MW
Dogu: 11 MW
Ova: 15 MW
Büyük Karacay: 4 MW
Adadagi: 8 MW
Kayadibi: 22 MW
Ikizdere: 31 MW
Ulkun I-II: 27 MW
Dogansar: 8 MW
Erik: 18 MW
Carikli: 10 MW
Gök: 13 MW
Derya: 18 MW
Taşköprü: 14 MW
Gelen: 8 MW
Gursogut: 65 MW
Erdemir: 7 MW
Sureyyabey: 16 MW
Guce: 16 MW

USA
Byllesby: 5 MW
Nacoochee: 6 MW
Burton: 11 MW
Pine Flat: 4 MW
Pike Island: 20 MW
New Cumberland: 20 MW
R.C. Byrd: 29 MW

VIETNAM
Nam Cau: 12 MW
Ka Tinh: 16 MW
Song Bo: 26 MW
Nam Dich: 19 MW
Phien Con: 23 MW
Bach Dang: 6 MW
Nam Tha IV: 21 MW
Rao Trang III: 16 MW
Chu Va II: 14 MW
Khe Dien: 8 MW
Dak Di I: 17 MW
Nam Cau 1: 8 MW
Nam Cuoi: 6.5 MW
Man Thang I-II:19 MW
Dak Di II: 12.5 MW
Tra Linh II: 27 MW
Nuoc Luong: 24 MW
Nam Be: 11 MW
Na An: 10 MW

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