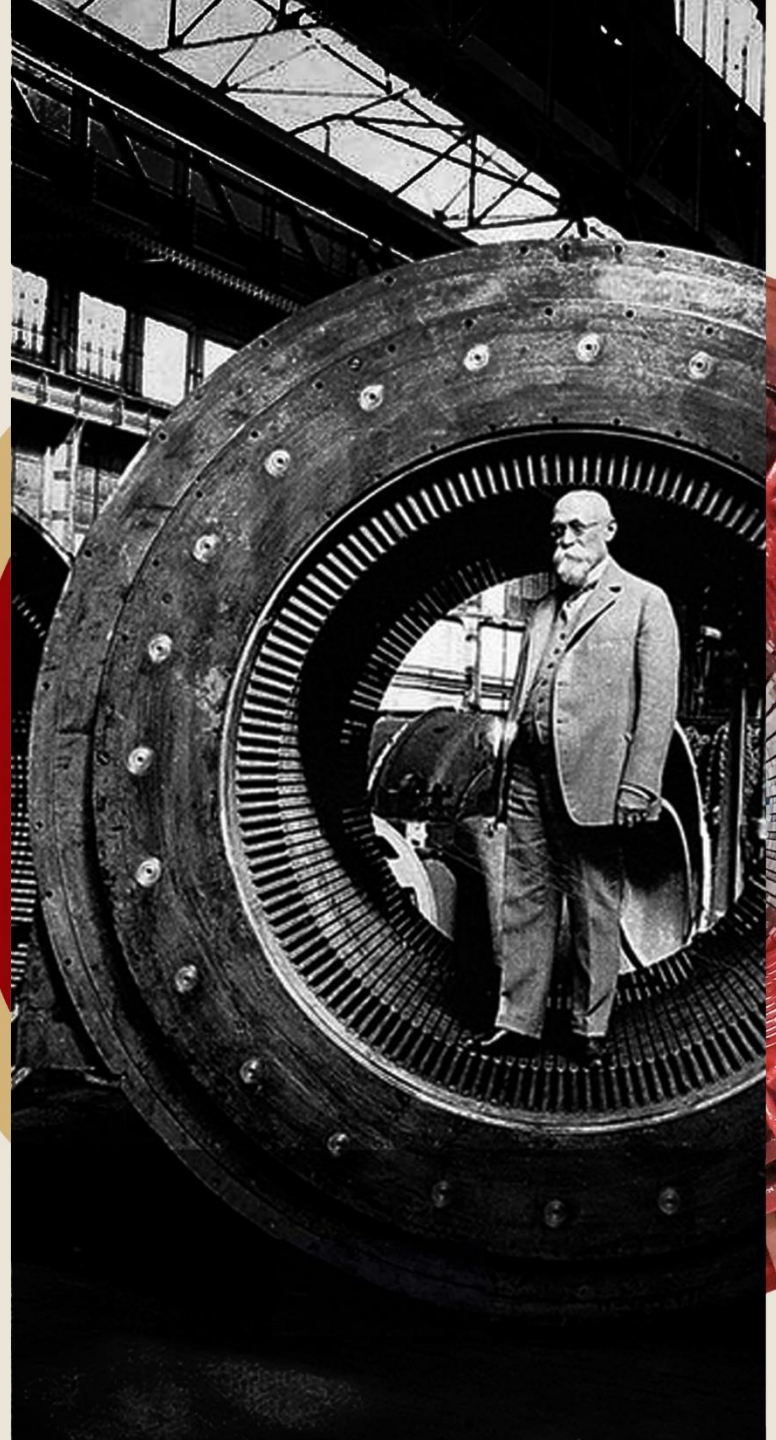
GANZ

SINCE 1878



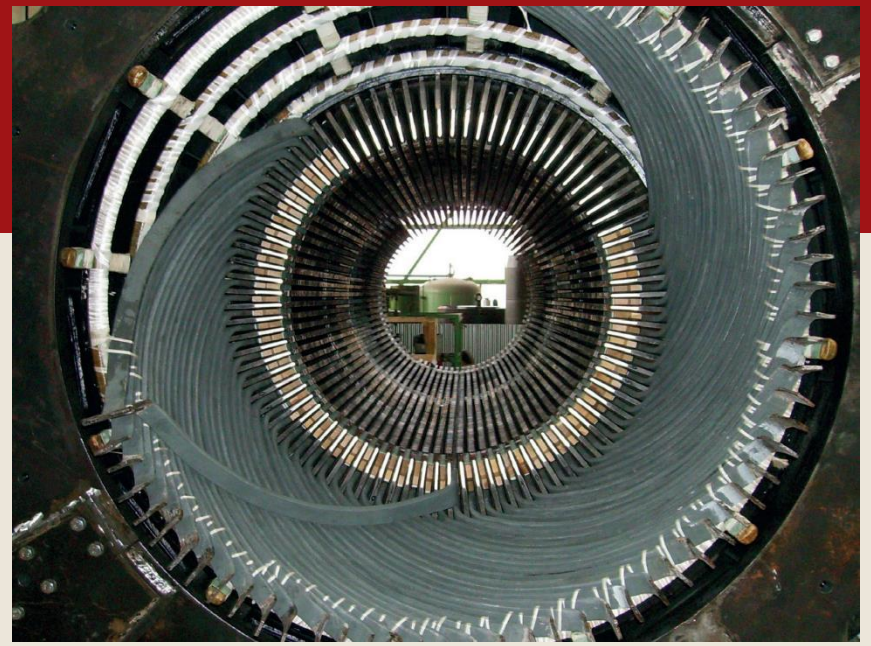
GANZ

ROTATING MACHINES

SINCE 1878

ELECTRIC MOTORS AND GENERATORS

Ganz Transformers and Electric Rotating Machines Ltd.



GANZ today

Renowned European manufacturing company

GANZ is a 100% Hungarian traditional brand, providing high engineered electrical products and solutions since 1878.

State of the Art technology provides standardized and custom based solutions

helping its customers with strong engineering, production and service capability

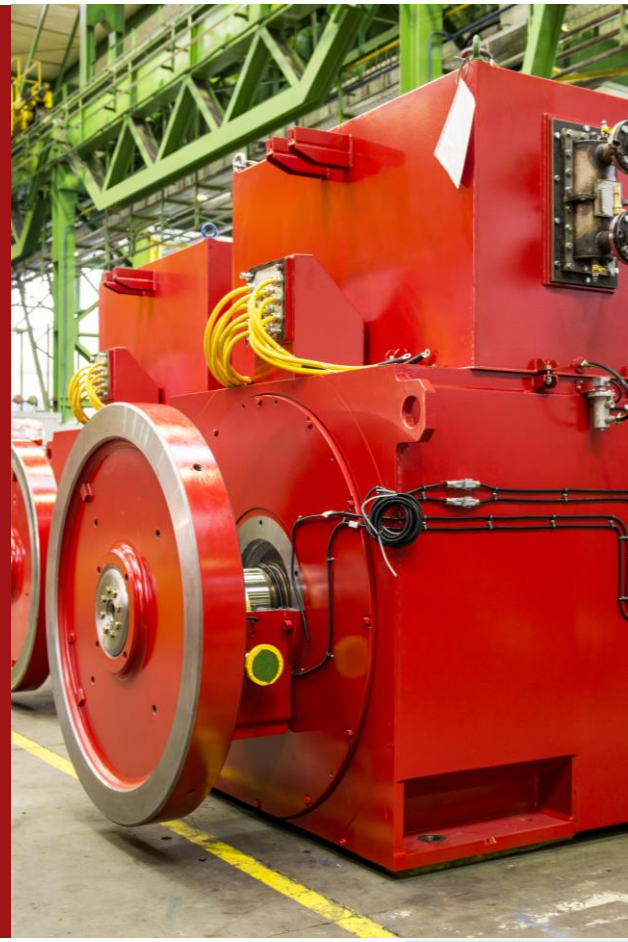
Unique & diverse portfolio

- Transformers
- MV Induction Motors
- Synchronous Generators
- Services

GANZ achievements

- 145 > Years of powerful tradition
- 50 > Countries of GANZ Machines supplies
- 8000 > Large Rotating Machines supplied globally
- 100000 > Power Transformers supplied globally

- High Engineered Product lines
- 100% Own Hungarian Company
- Best Industry Standards and Practices
- A strong Quality mission
- Emphasis on R&D and new products
- Green & renewable initiatives
- Increasing cost efficiency



GANZ History:
The glorious past Inventions

GANZ SINCE 1878

145 YEARS ANNIVERSARY

1844 — Abraham Ganz established GANZ factory

1878 — Electrical Department was established

1885 — Creation of the 1st transformer in the world

1892 — Electric public transport by Kálmán Kandó

1896 — Production of 3ph induction motor (3HP)

1903 — Production of turbo-generators in GANZ by Ottó Bláthy

1991 — Ganz Ansaldo was formed

2000 — Transelektro group acquired Ganz Ansaldo

2006 — Ganz as part of CG Group

2020 — GANZ Transformers and Electric Rotating Machines Ltd. established

GANZ TRANSELEKTRO

GANZ TRANSFORMERS

GANZ ROTATING MACHINES

GANZ SERVICE

GANZ INTELLIGENT SOLUTIONS

GANZ METAL

Smart solutions. Strong relationships

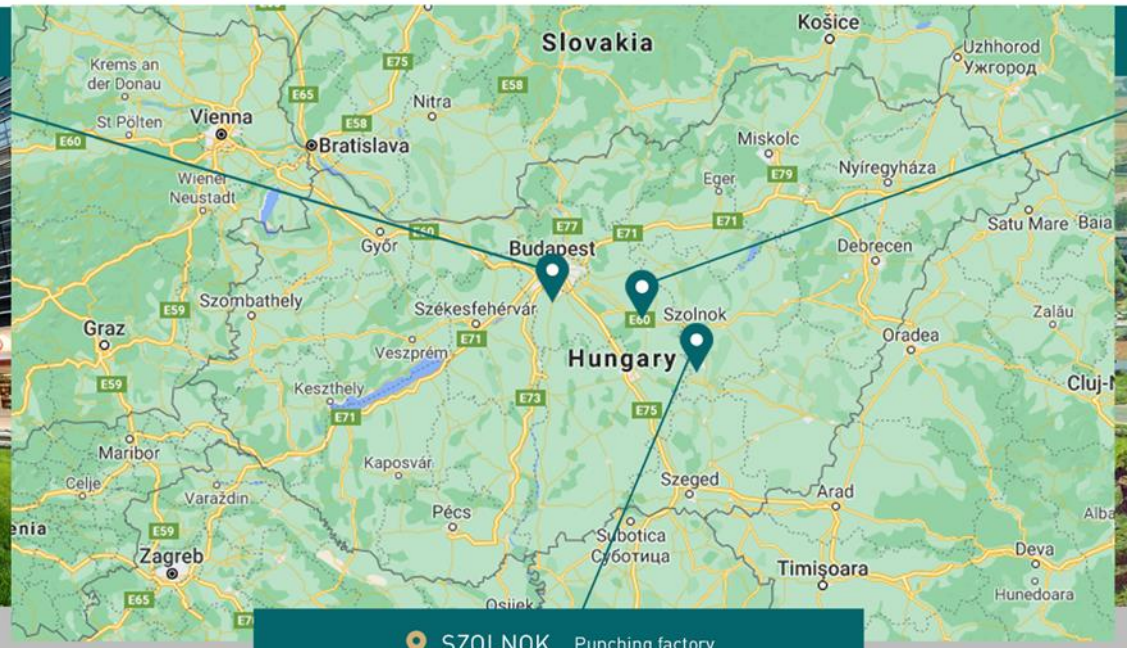
GANZ ANSALDO

ANSALDO ENERGIA

TRADITION FOR INNOVATION

GANZ locations

The base of production remains at Tápiószele site, as one of the most modern heavy machinery facilities in Europe. (41000 m² factory)



1095 Budapest, Soroksári út. 30-34.

- Central administrative functions (Head Office)
- Finance, PM
- Sales
- Design

Szolnok – Metal Works

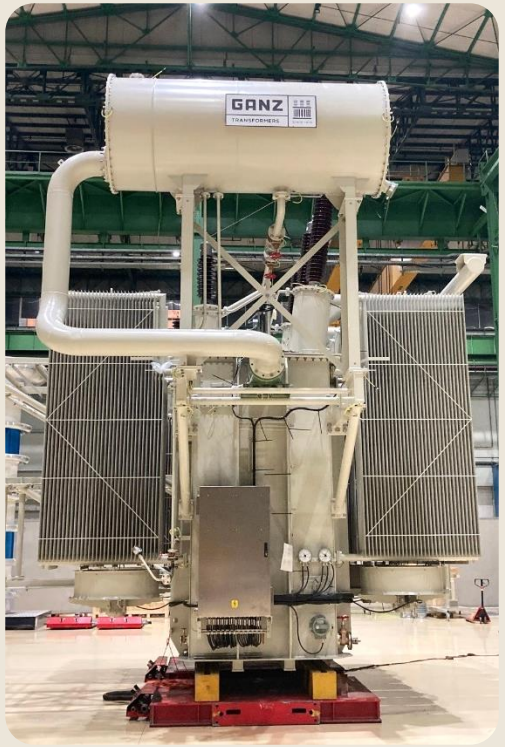
- Metal factory
- Steel structure manufacturing

2766 Tápiószele, Györgyei út 14.

- Transformer, Electric Rotating Machine manufacturing
- Purchasing
- Service
- Logistics

Product scope

GANZ TRANSFORMERS SINCE 1878



MVA : 63 - 600
kV : 72,5 - 800

GANZ ROTATING MACHINES SINCE 1878

Asynchronous Motor
500 kW - 20 MW
Synchronous Generator
1 - 70 MVA

GANZ SERVICE SINCE 1878

Services of
Transformers,
Rotating Machines,
GIS

GANZ INTELLIGENT SOLUTIONS

GANZ
Intelligent Solutions
monitoring system

GANZ Transformers

Production range:	63 - 600 MVA
Voltage:	72,5 - 800 kV
Frequency:	16,7 - 60Hz
Annual capacity:	10 000 MVA

Equipment limits:

Core Stacking:	200 t
Winding diameter:	3000 mm
height:	3000 mm
weight:	20 t
Crane capacity:	240 t

(limit for active part only)

High engineered Transformer solutions

1. Tailor made designs
2. TCO optimizing
3. Low noise power transformers
4. Biofluid immersed transformers
5. Hybrid insulation systems
6. Short-circuit withstand ability
7. Special applications
   - › Trackside transformers
   - › Transformers for mobile substation

Total Cost of Ownership

Examples to reduce TCO

- **Purchase price**
  Consult the customer to understand the real needs together and offering the most economical solution
- **Cost of no load and load losses**
  New core materials with maximum 0.7 W/kg
  Stray and load losses analysis with 3D model
- **Cost of commissioning**
  Supervisor from factory
  Fully or semi-assembled transport
  Own oil treatment machinery on site
- **Lifetime and reliability**
  Controlled PD level
  IEC req. < 250pC, usual req. < 100pC
  We’ve met German req. < 50pC
  Dust and humidity controlled winding shop
  Hot Spot temperature calculations
  VPD and drying process
  Quality materials: TUP, Aramid, Biofluid
- **Maintenance cost**
  Maintenance free breathers
  MR Vacutap OLTC
  RIP-RIS and plug in type bushings
  Various monitoring systems
  Guaranteed surface protection even upto 7 years

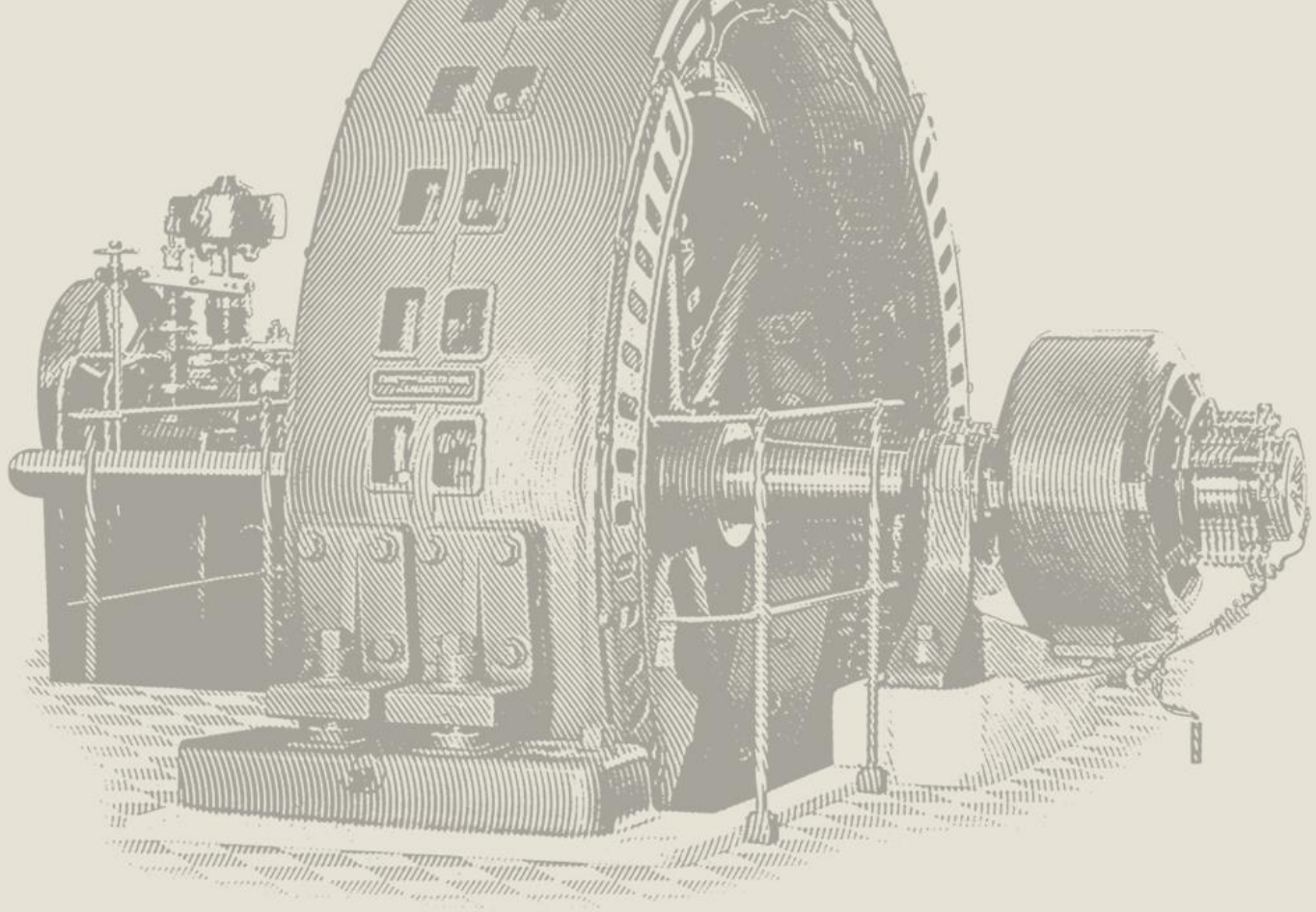
GANZ SERVICE

Service Business Unit performs both factory based and on-site work for the company's products as well as products from other manufacturers in the form of

- **maintenance,**
- **inspection,**
- **renovation, and**
- **upgrading.**

Thanks to our advanced instrumentation and trained workforce, we can also perform **preventive and fault-finding and measurements on site**, thus reducing maintenance / downtime, keeping the interests of the service provider in mind.

In addition to the on-site service, spare parts manufacturing is also offered.



GANZ
ROTATING MACHINES
SINCE 1878

GANZ ROTATING MACHINES

Product portfolio

GANZ ROTATING MACHINES SINCE 1878

ELECTRIC MOTORS

500 kW - 20 MW
Induction Motors

GENERATORS

1 - 70 MVA
Synchronous Generators

SERVICES

Motor & Generator
Refurbishments

GANZ factory

- Manufacturing capacity for **Hydro-Generators from 0.5 MVA up to 70 MVA**
- Located in Tápiószele, Hungary (90 km from Budapest)
- 120 tons crane capacity in RM (+200 tons in PT)
- 12 500 m^2 shopfloor
- Technology, Supply Chain, Quality

PRODUCTION FACILITIES

SHOP FLOOR

- 12500 m^2 area
- Own facility for laminations
- Up-to-date technology (Design, Own manufacturing system, Insulation system, Testing)

INHOUSE MACHINE AND WINDING AREA

- Diameter 5 m and Height 3 m machining
- Area ideal to accommodate large capacity machines

COIL SHOP

- Own Coil shop - employs resin rich & VPI insulation process
- Looping, forming, stretching and coil heat treatment machines

PRODUCTION FACILITIES

VPI

- The VPI insulation system (Micasystem)
- Machines up to 2 m outer core diameter

ROTOR SHAFT MACHINING AND BALANCING

- Inhouse shaft machining
- Inhouse balancing machine for 50 tons Rotor, capable at 3600 rpm

ASSEMBLY

- Crane capacity of 100 tons
- Testing in horizontal / vertical configuration possible

Test facility

Type test of 1500 kVA, 6.6 kV, 600 rpm, IM B3, IC 01 Hydro generator

Type test of 3500 kVA, 11 kV,1500 rpm, IM B3, IC 31 Steam turbine generator

Type test (heat run test) of 4500 kW, 10 kV,500 rpm, IM B3, IC 01 Cement mill asynchronous motor

Routine Test / Type Test for Electrical and Mechanical Performance.

GANZ ASYNCHRONOUS MOTORS

General applications & markets of induction motors

- Oil & Gas Industry
- Cement Industry
- Steel Industry
- Mining
- Nuclear Power Stations
- Desalination Plants
- Pumping Stations
- Thermal Power Stations
- Steam/Gas Power Plants

2015

EGI Hamitabat Power Plant, Turkey
FTC 710L14 (5 x1260 kW, 6.3 kV, 425 rpm)

2018

Kilo 57 Pumping Station,
Ministry of Water Resources, Egypt
FVM 630Kz4 (6x 2000 kW, 11 kV, 1500 rpm)

2022

Kudankulam NPP, India
FVRZ 1006V20 (12x 3200 kW, 6 kV, 298 rpm)
Cage motor

2016

SWCC Saudi Arabia, IP65
FOC 710Ls6 (6x 1950 kW, 6.6 kV 1000 rpm)

2014

Konkola Copper Mines, Zambia
FTC Type MV Motors (6x 4500 kW,
6x 2500 kW, 6x 1500rpm, 11kV, 1500 rpm)

2015

Polysius Germany Cement line
FTA Type MV Motors (9x 315 kW-5000 kW)

2009

Mobarakeh Steel Co., Iran
FRA 710Hm8 (8300 kW, 6.6 kV, 744 rpm)

2020

SATORP, KSA
FTCp 710G4 (4000 kW, 13800 V 1791 rpm)
Compressor drive

GANZ SYNCHRONOUS MACHINES

APPLICATIONS

GANZ in Hydro-Electric Projects

GANZ Type	SHG, ON Types
Capacity	500 kVA-70,000 kVA
Rating	Up to 15 kV
Pole	4 pole & above
Frequency	50-60 Hz
Construction	B3 & V1

FEATURES

- Construction: Salient & Round Rotor
- Brushless & Static Excitation types
- Compact design and lower weight
- Sturdy mechanical construction
- High efficiency maximizing power generation
- Minimum vibration, noise and longer bearing life through precise balancing the machine
- Well established Insulation System which ensures long life

GANZ Hydro competencies

More than 100 years experience in hydro-power generation

More than 200 units delivered around the globe

In house design, manufacturing and testing capability

Tailor-made design for Kaplan-, Francis- and Pelton-turbines

DESIGN

SOFTWARE resource of Ganz RM design team

3 pcs different own developed electrical calculation software:

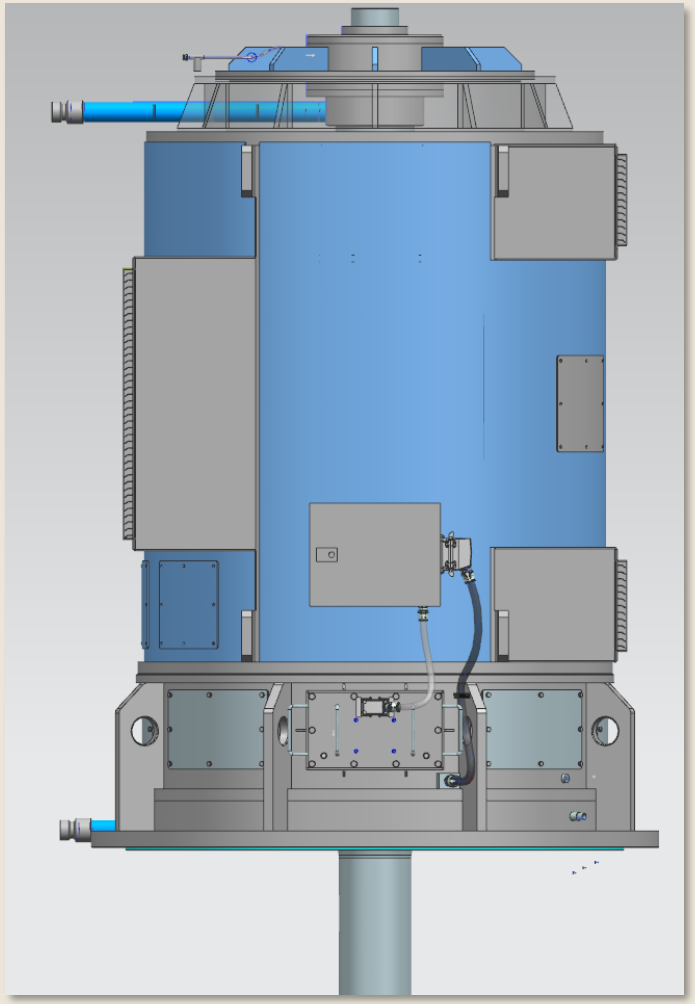
- 1 pc for asynchronous machines
- 1 pc for salient pole synchronous machines
- 1 pc for cylindrical synchronous machines

Software for FEM calculations:

- MAXWELL 2D for electromagnetic calculations
- ANSYS for structural and airflow calculations

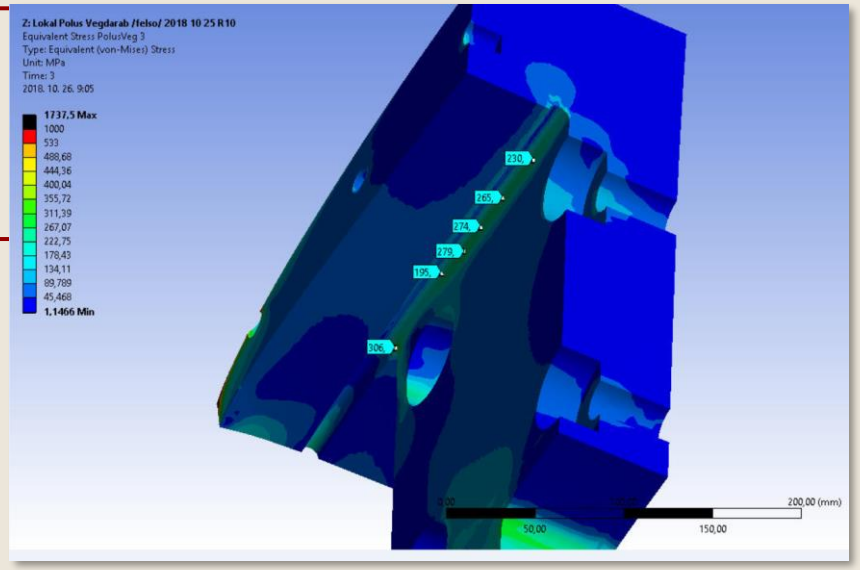
CAD softwares for mechanical design:

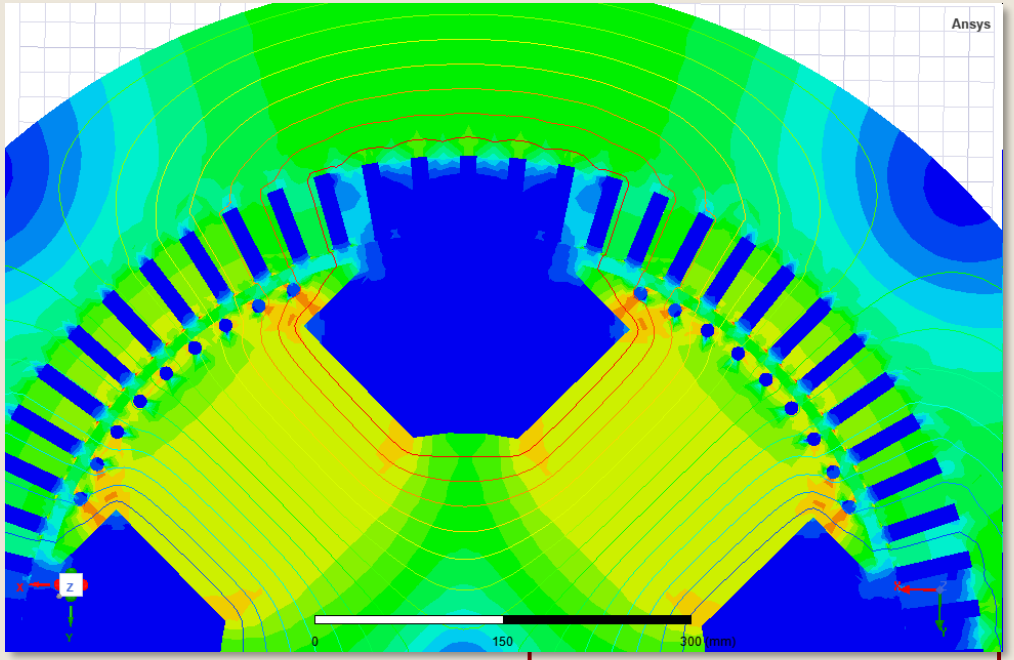
- Siemens NX for 3D modeling and design
- AutoCAD for some of the 2D documentation
- KeyCreator (CADkey) for 2D design



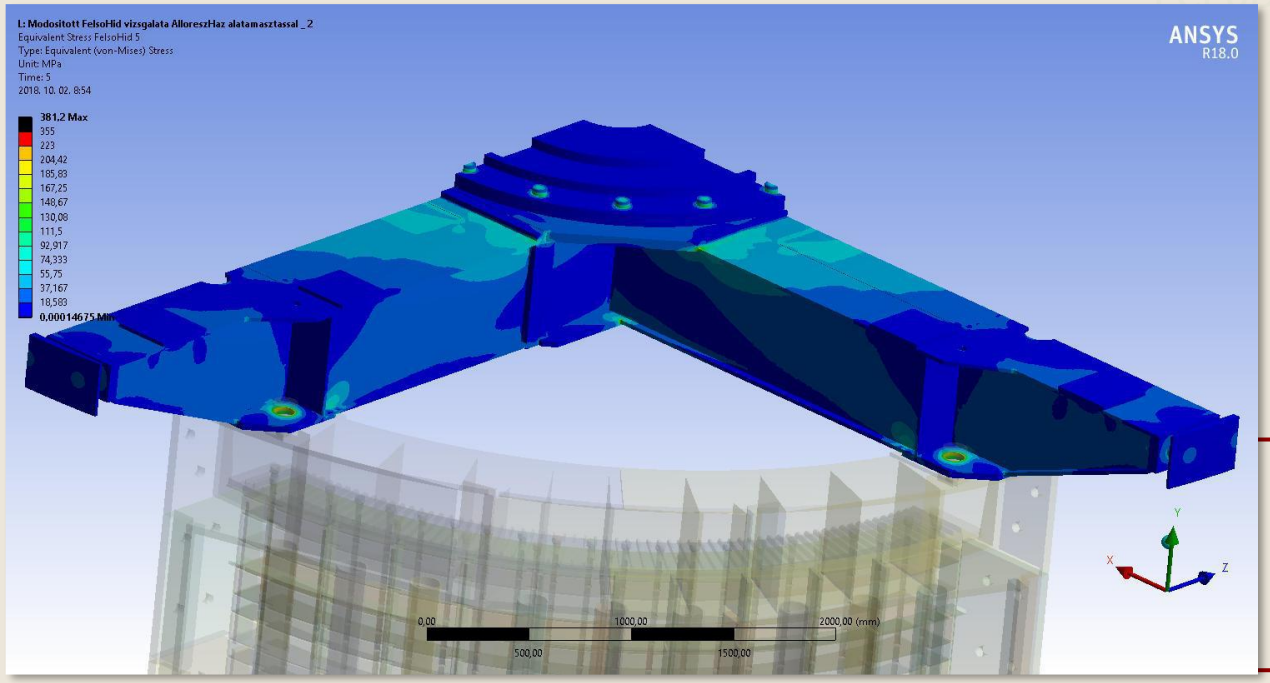
DESIGN

Pole end-plate check of a 16 pole vertical machine



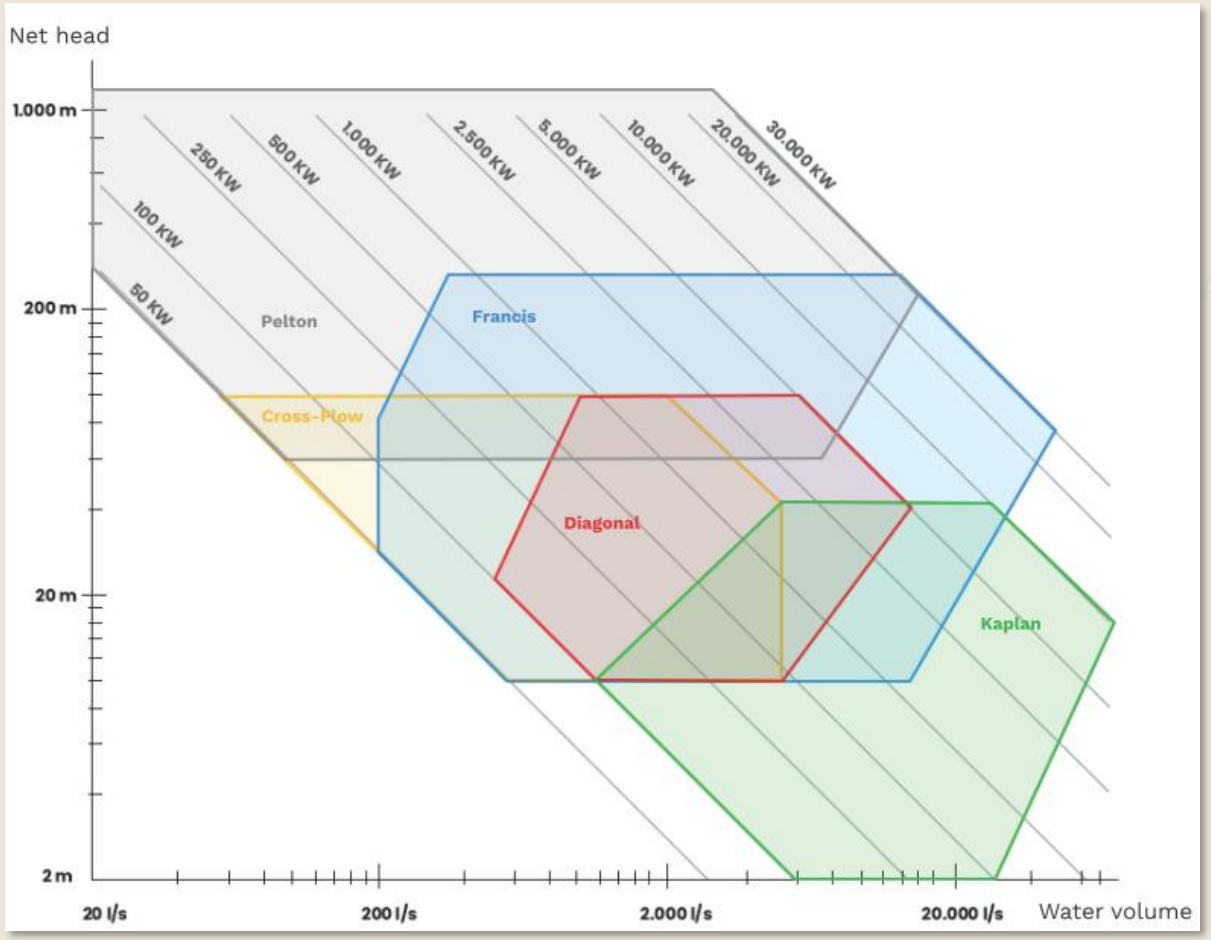


Electromagnetic check of a 4 pole generator



Upper bridge stress calculation of a 63 MVA vertical generator

HYDRO TURBINE APPLICABILITY IN HYDRO-ELECTRIC POWER STATIONS



MAIN HYDRO TURBINE TYPES

- KAPLAN TURBINE: Heads up to 40 m
- FRANCIS TURBINE: Heads from 10 to 250 m
- PELTON TURBINE: Heads from 40 to 1,100 m

KAPLAN TURBINE

Heads up to 40 m

- Small head
- Runaway speed : 2.5 - 2.8
- High axial force

Generator construction

Usually vertical, low speed, high number of poles, large diameter (except in the case of gearboxes applied), usually high inertia required, to incorporate this into the rotor

KAPLAN TURBINE HYDRO GENERATORS

2016

HPP South Maris Canal, Philippines
2 x 5000 kVA, 10P - 720 rpm - Pit Kaplan Turbines

2009

HPP Zho Tuwei, Taiwan
4000 kVA, 30 pole, V1 ONv2600L30
Kaplan Turbine

2012

HPP Tanfallet, Sweden
2.4 MVA, 750 rpm
Kaplan Turbine

2013

HPP CREMA
1200 kVA, 40P, 150 rpm, V1 –
Onv 2660x275/40 Kaplan Turbine

2016

HPP San Bartolo, Panama
2 x 12000 kVA, 11000 V, 300 rpm
ONv 3450x670/24 Kaplan Turbine

FRANCIS TURBINE

Heads from 10 to 250 m

- Medium head
- Runaway speed : 2.0 - 2.2
- High axial force (+ -)

<u>Generator construction</u>

Usually horizontal, most often 6-10 poles, due to high axial force large bearing may be needed, often flywheel needed to increase the rotor inertia

FRANCIS TURBINE HYDRO GENERATORS

2015

HPP Song Quang, Vietnam
2x 7 781 kVA, 6.3 kV, 750 rpm, IM B3, IC 81W7
Francis Turbine

2012

HPP Temu, Italy
2x 2 900 kVA, 6.3 kV, 750 rpm, IM B3, IC 21
Francis Turbine

2013

Compact container unit
610 kVA, 0.4 kV, 1000 rpm, IM B3, IC 01
Francis Turbine

2015

HPP Mini Toachi, Ecuador
1 942 kVA, 13.8 kV, 600 rpm, IM V1, IC 01
Francis Turbine

2016

HPP Skhalta, Georgia
3 530 kVA, 6.3 kV, 600 rpm, IM B3, IC 01
Francis Turbine

PELTON TURBINE

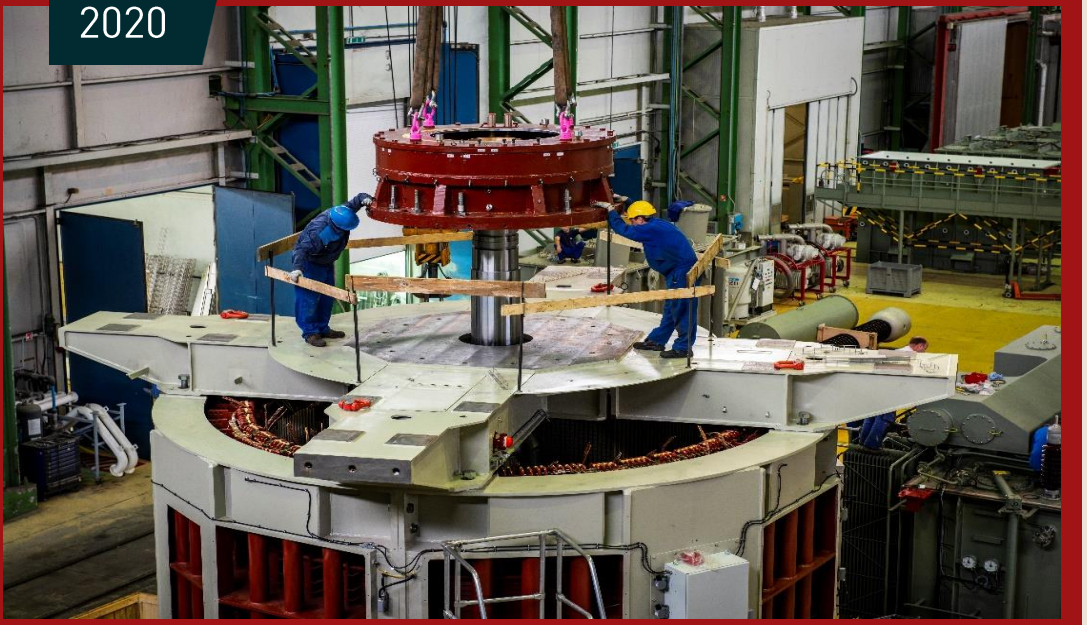
Heads from 40 to 1100 m

- high head
- runaway speed : 1.8
- Radial force

- Generator construction
- In horizontal case high radial force, usually no need of high inertia

PELTON TURBINE HYDRO GENERATORS

2020



HPP RONGNICHU, Sikkim India
2 x 62766 kVA 16P 375 rpm, ONv 4250x1500/16
Pelton Turbine

2010

HPP Albano, Italy
19000 kVA, 6300 V, 500 rpm
Double Pelton Turbine

2012

HPP COGNO, Italy
3x 2400 kVA, 6P - SRGb 636Ks6
Pelton Turbine

2013

HPP FLS Bakun, Philippines, Pelton T.
2x 2 620 kVA, 2.4 kV, 720 rpm, IM V1, IC 01

2020

HPP Xeset, Lao PDR
2x 5765 kVA, 12P, 11 kV, 500 rpm
Pelton Turbine

MANUFACTURING

In house **MACHINING**

- Up to 12 m horizontal lathe
- Up to 4 m diameter & 3 m height vertical lathe
- Horizontal & vertical milling machines
- For bigger size sub-contracting network

MANUFACTURING

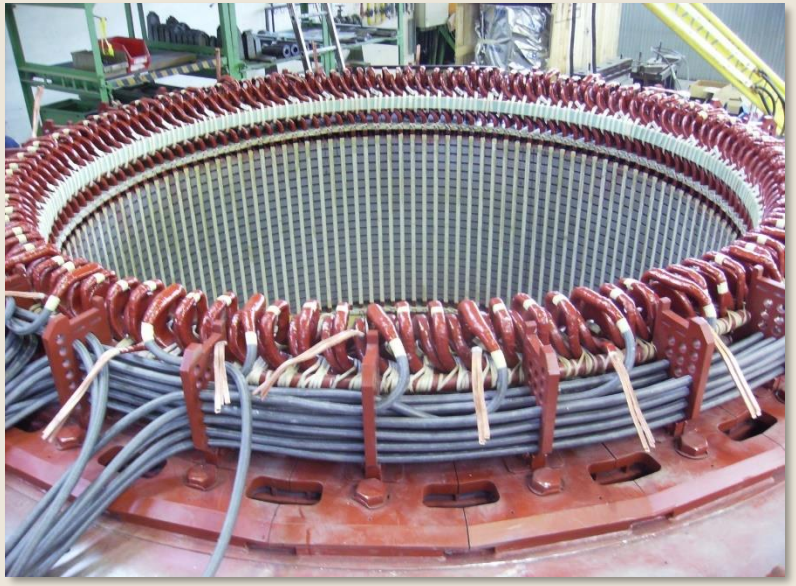
In house **LAMINATION**

- Punching facility in Szolnok, Hungary
(40 km from factory)

- Self-supporting laminated core up to 2250 mm stator outer diameter

- „In frame” lamination over 2250 mm stator outer diameter

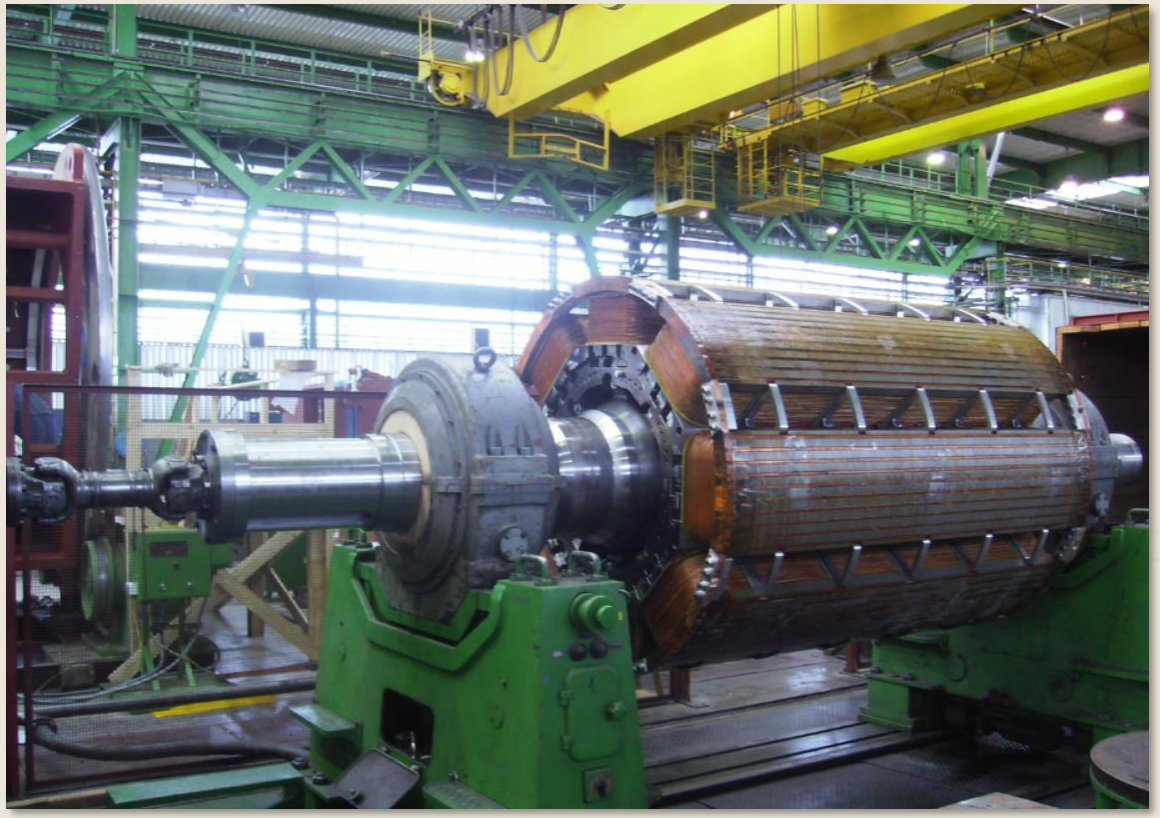
MANUFACTURING



In house **COIL PRODUCTION & WINDIG SHOP**

- GANZ Micasystem for Vacuum Pressure Impregnation up to 1800 mm stator diameter
- Individually heat treated coils (Resin Rich) above 1800 mm stator outer diameter
- Insulation system up to 15 kV

MANUFACTURING

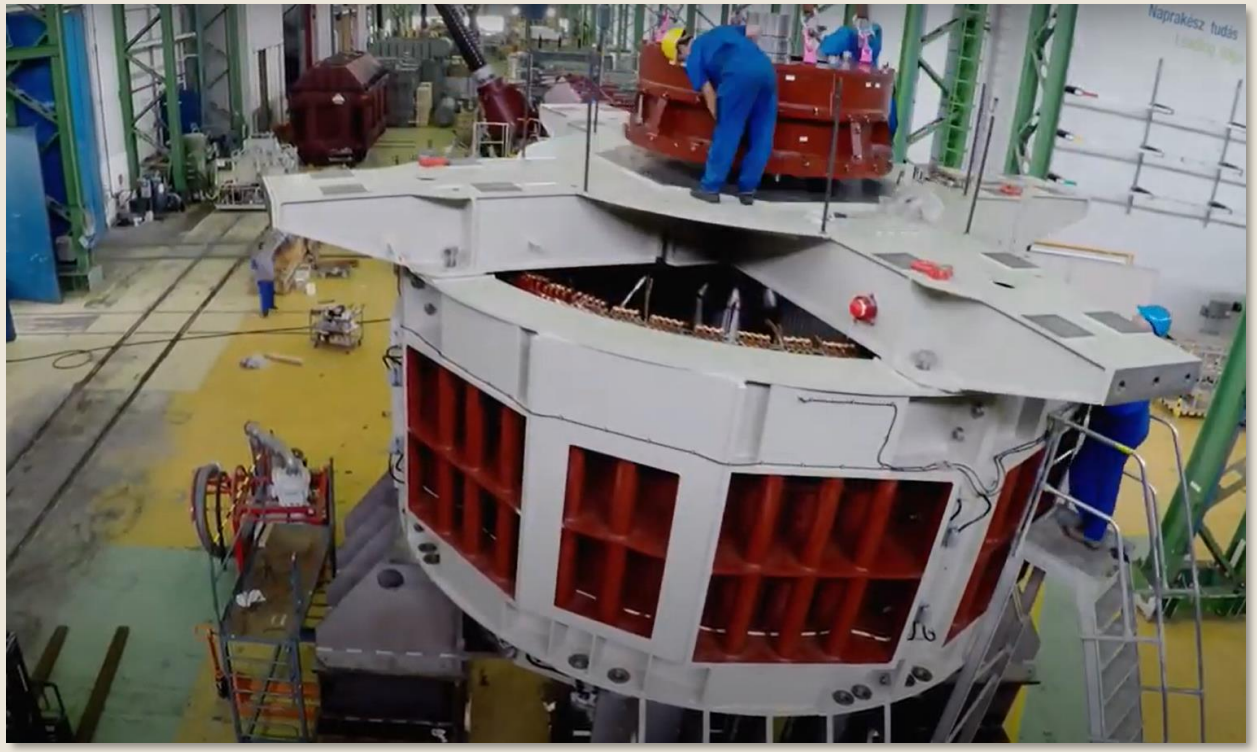


In house **DYNAMIC BALANCE FOR ROTOR**

- Both salient- and cylindrical pole rotor constructions are available

- Dynamic balancing capability up to 50 tons

MANUFACTURING



In house **ASSEMBLING & TESTING**

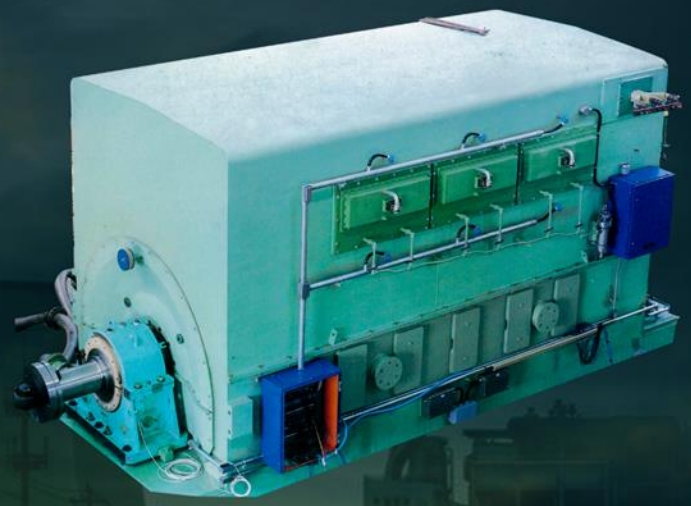
- Up to 120 tons crane capacity for assembly (200+ tons available in transformer factory)

- Possibility for testing of horizontal as well as vertical shaft generators

APPLICATIONS

GANZ in Steam / Gas Power Plants

GANZ Type	GTG Type
Capacity	10 MVA - 60 MVA
Rating	Up to 15 kV
Pole	2 pole
Frequency	50-60 Hz
Cooling	Water/Air cooled



- Standardized series until 60 MVA
- Construction: Turbo Smooth Round Rotor
- Brushless & Static Excitation types
- Compact design and lower weight
- Sturdy mechanical construction
- High efficiency maximizing power generation
- Minimum vibration, noise and longer bearing life through precise balancing the machine
- Well established Insulation System which ensures long life

APPLICATIONS

GANZ / Diesel Engine Generators

2021

MVM Paks NPP, Hungary
1 x 4000 kVA 6300 V 4P 1500 rpm
OBM 636L4

APPLICATIONS

GANZ / Test Bed Generators

2011

CG Powers System, Belgium
ON 2200x1600/8 36000 (3~)/20780 (2~)kVA
6600 V 3149 A 50/60 Hz 750/900 rpm

Test Bed Generator:

- up to 200 Hz
- up to 50 MVA (depending on pole number)
- power factor 0.1
- water cooled or self ventilated
- salient pole or cylindrical design
- brushless or static excitation
- driving motor included

2010

CG Powers System, India
SHGB 1261 Z8 31000 (3~)/17800 (2~)kVA
11000 V 1627 A 50/60 Hz 750/900 rpm

APPLICATIONS GANZ / Test Bed Generators

2016

ABB Sache, Italy
SRgs 1006X4 10500 kVAr
7500 V 808 A 50/60 Hz 1500/1800 rpm

APPLICATIONS

GANZ / Synchronous Condensers

Kazincbarcika TPP, Hungary
ON 1300x1250/6 11500 kVAr
6300 V 1055 A 50 Hz 1000 rpm

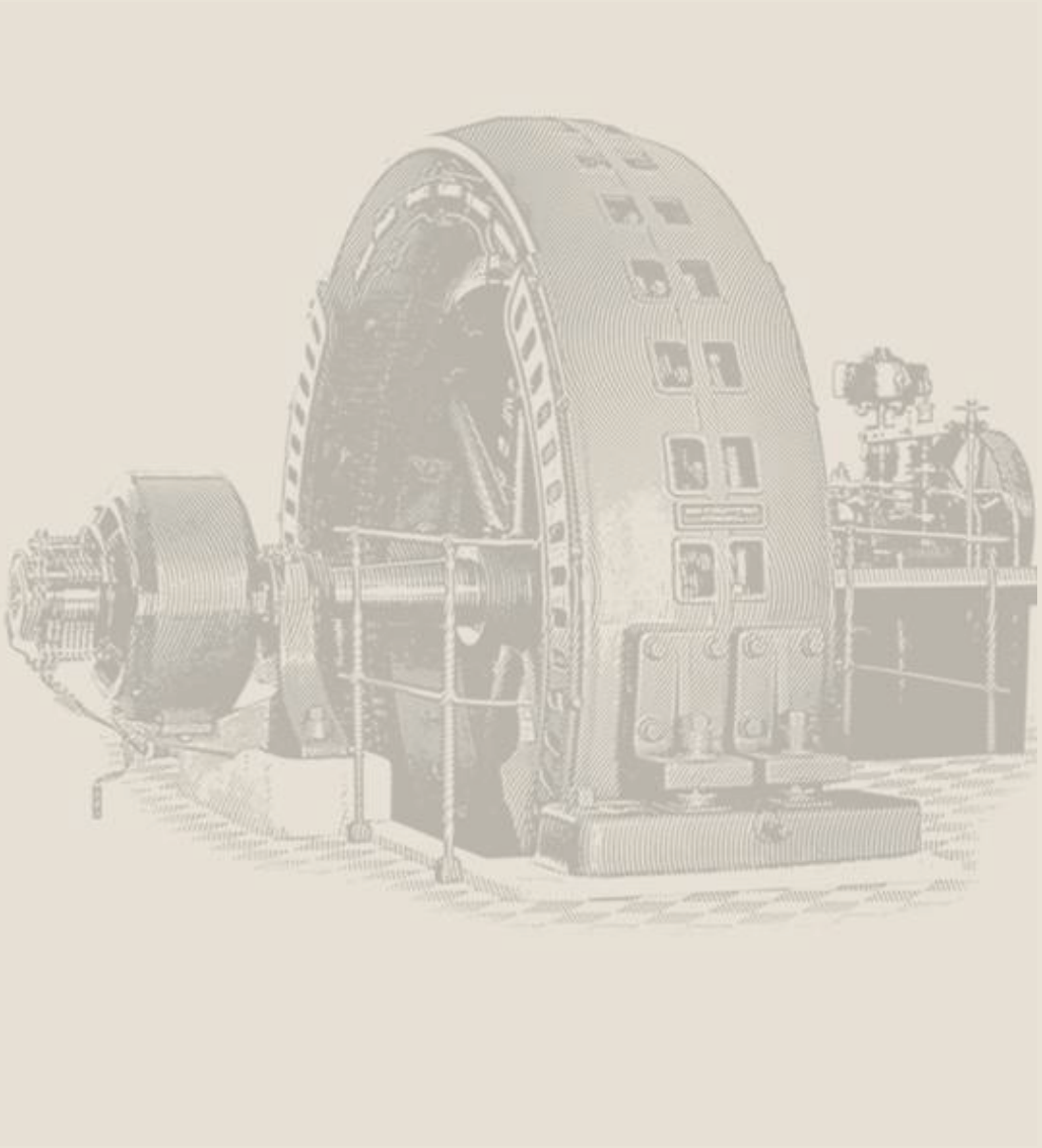
Synchronous Condenser:

- 50 MVAr modular units
- 500 MWs stored energy (modular flywheel)
- 350 MVA short circuit power / unit
- power factor 0
- water cooled (IC81W7, IP44) or weather protected (IC01, IPW24)
- pony motor starting
- brushless or static excitation

GANZ SERVICE SINCE 1878

GANZ ROTATING MACHINES SINCE 1878

SERVICES OF ROTATING MACHINES



SERVICES CAPABILITIES

TURBO GENERATORS

- Until 250 MVA 2 pole or 4 pole types
- Performed at Site as well at Factory
- Works mainly include
  Removing old windings, Renewing the old stator bars, rewinding, core re-lamination, rotor works

HYDRO GENERATORS

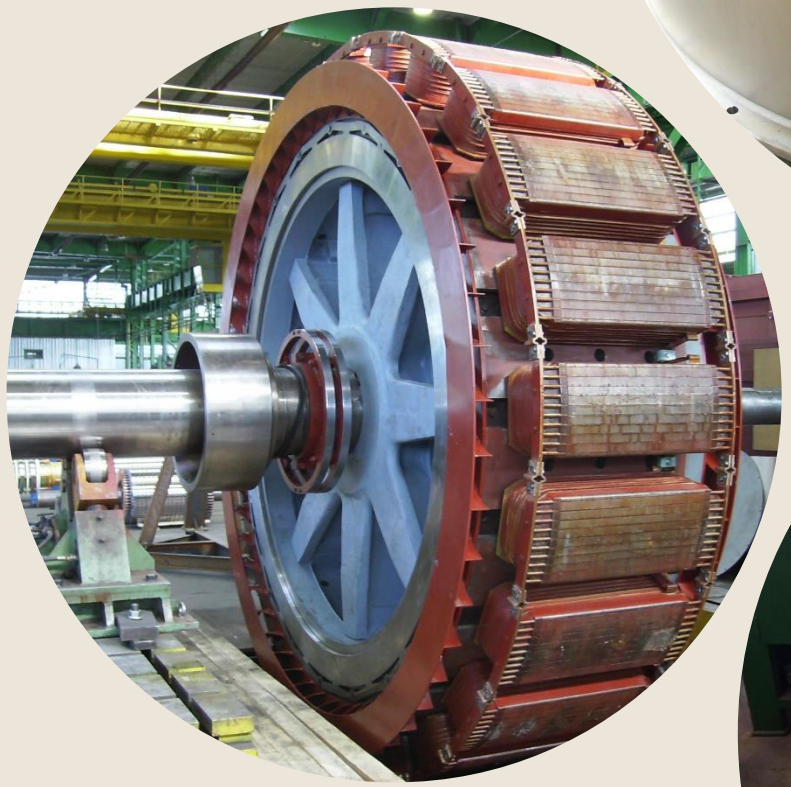
- Small and large generators until 100 tons
- Performed at Site as well at Factory
- Works mainly include
  Stator rehabilitations (core, windings),
  Rotor rehabilitations

AC & DC MOTORS

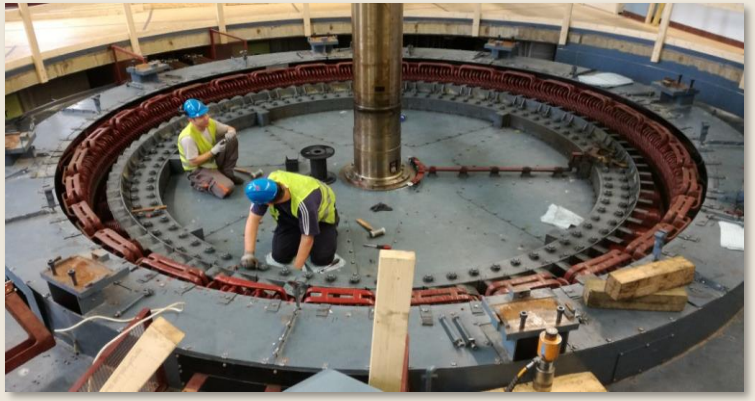
- Large Motors for special applications
- Performed at Factory
- Works mainly include
  Stator rehabilitations
  Rotor works

RM Service

- Refurbishment/overhauling for motors and generators
  - in factory
  - at site
- 3rd party testing
- Main component parts (stator, rotor)
- Spare parts (slipring assembly, coils, other components etc.)



RM Service References



Bearings' refurbishment, stator windings' wedges change, brush system refurbishment of ASEA GS 2910 type 25 MVA, 150 rpm hydro generator.
Granfors HPP, Sweden

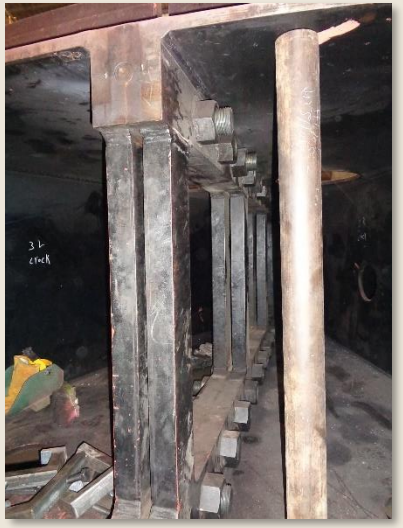
48,9 MVA 10,5 kV 250 rpm
Hydro generator new stator laminated core manufacturing, rewinding Lajanuri HPP, Georgia

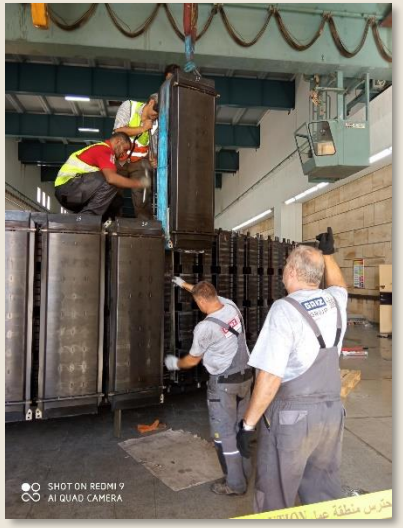
9,0 MVA 6,6 kV 250 rpm Hydro generator new stator housing & laminated core manufacturing, rewinding Rotor poles, bearings, brush system, brake refurbishment
Gavünda, Sweden

RM Service References

16,8 MVA 11 kV 68,2 rpm
Bulb hydro generator stator rewinding
Hydro Power Plant, Egypt

Rotor refurbishment by total rotor disassembly and changing
broken spoke ribs
of 75 MVA 11 kV 100 rpm hydro generator.
Hydro Power Plant, Egypt





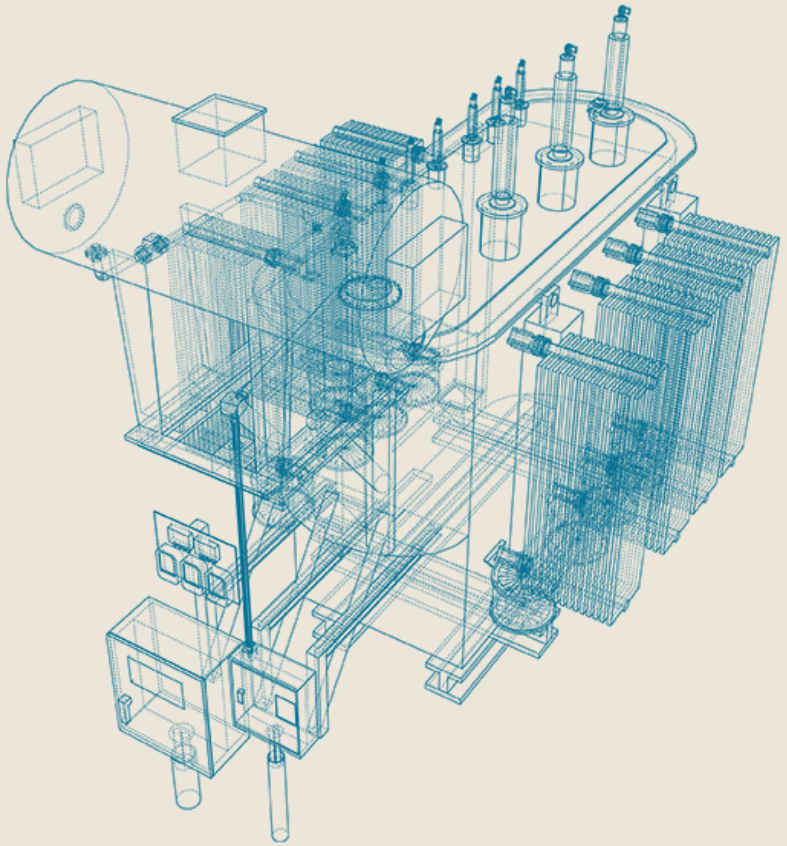
RM Spare Parts

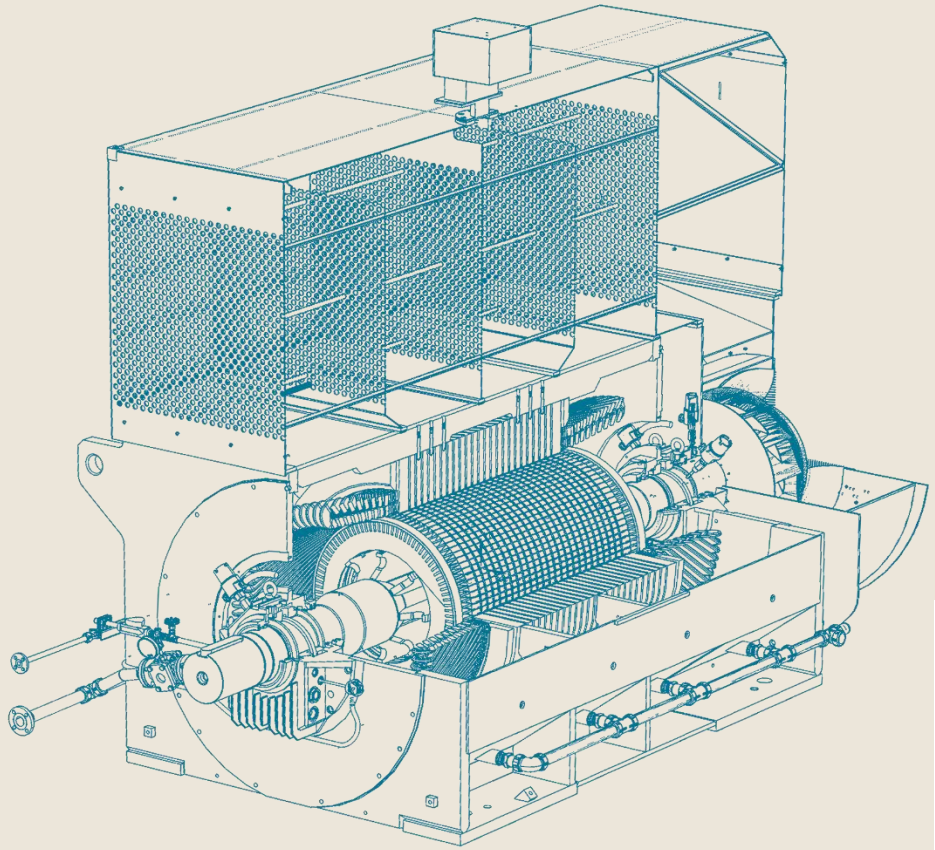
Slip ring set for rotor

Roebel bar for generator stator

Salient pole for generator rotor

Coil set for stator windings





GANZ SINCE 1878

GANZ INTELLIGENT SOLUTIONS

Monitoring and Digitalization for Power Transformers and e-Rotating Machines

NEW BRAND

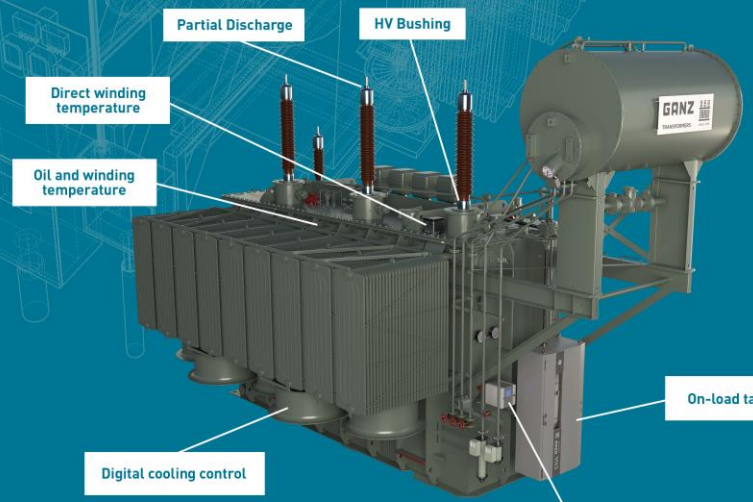
GANZ Intelligent Solutions

the new generation of transformers and electric rotating machines
equipped with digital monitoring system

GANZ INTELLIGENT SOLUTIONS BENEFITS

- **Centralized User Interface** — One screen for all information
- Condition based maintenance resulting in lowest level of operational costs
- Prevention of unscheduled downtimes, minimalization of losses related to unavailability
- **Accessibility** — Locally, remotely, through a touch screen or a computer
- **Flexibility** — Compatible with any monitoring device, regardless of brand or make
- **Applicability** — Available for new or ageing units, retrofit application is possible regardless of asset brand or make
- Detection of impending failures, preventing critical incidents
- Effective use of assets during their whole lifecycle

Monitoring in Transformers



GANZ TRANSFORMERS

Monitoring in Motors & Generators

GANZ ROTATING MACHINES

Digitalization Solution by GANZ

Main driving force behind asset digitalization

- Ever increasing demands, Energy Transition
  → OEMs with full order books
  → → Preservation of existing assets, service life extension
- Extensive financial losses due to
  - Critical failures,
  - Unplanned downtimes,
  - Inefficient maintenance strategies
- Expectation to reduce carbon footprint
  → More efficient operation, improved level of utilization

GANZ INTELLIGENT SOLUTIONS

Solutions for Power Transformers and Rotating Machines

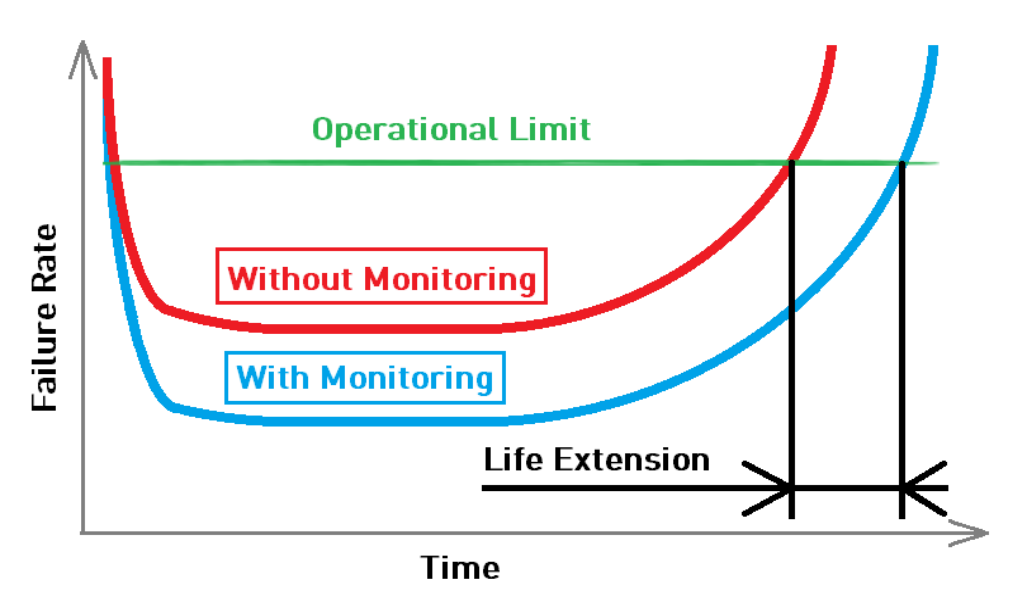
with cutting-edge technology!

Digitalization Solution by GANZ

Main advantages of use

- Avoiding Critical Failures – detection at an early stage
- Reducing the duration and frequency of unplanned downtimes
- Predictive maintenance and replacement of components
- Access to Digitalization features

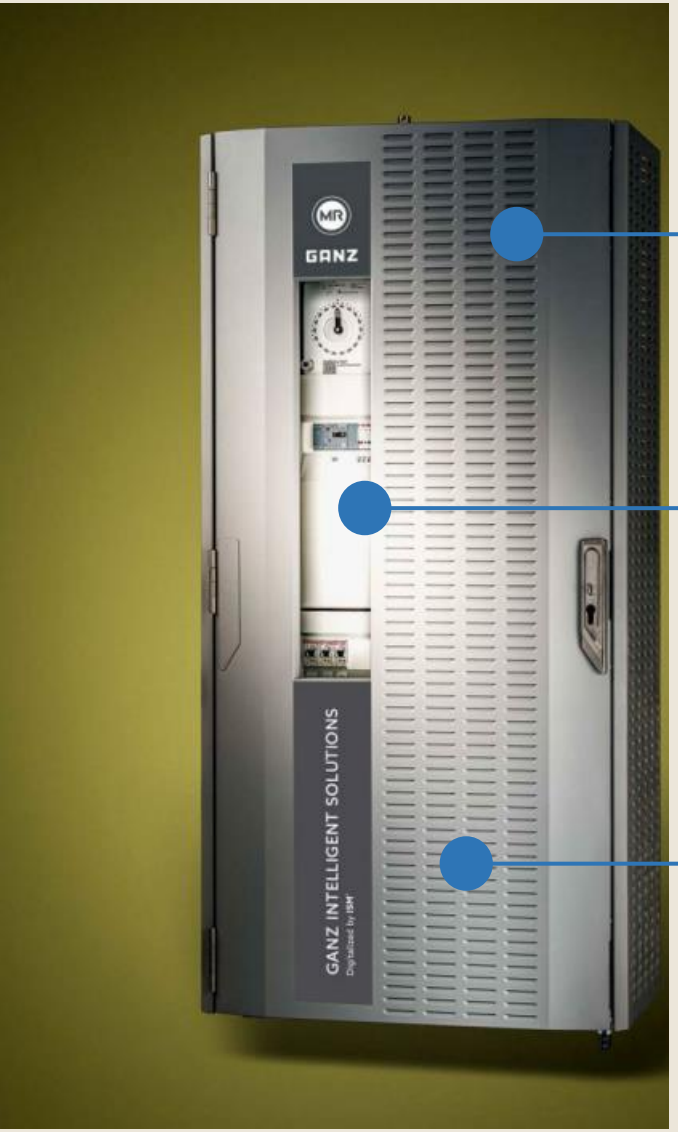
Business	Estimated cost of downtimes (USD / minute)
Automotive	**35.000**
Mining	**3.400**
Oil & Gas	**7.500**

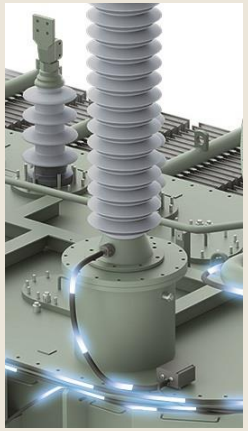


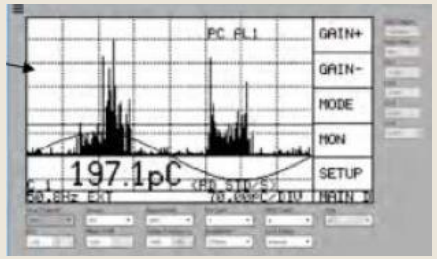
Additonal benefits through Retrofit Application

- Asset Life Extension
- Data-Based scheduling of Asset Replacement
- Digital integration of older assets
- Applicable to any Asset regardless of Brand or Make
- Can be performed during otherwise planned downtimes

Power Transformers







HV Bushing Monitoring

- ✓ Capacitance
- ✓ Sum of Currents
- ✓ Tan Delta

Partial Discharge Monitoring

- ✓ Detection
- ✓ Localization

Other possibilities

- ✓ Buchholz relays with monitoring
- ✓ High Accuracy thermometers
- ✓ Low noise EC cooling solutions

Rotating Machines

- iReady
  - ✓ Temperature Monitoring (Winding, Bearing)
  - ✓ Vibration
- iStandard
  - ✓ Accessories Digitalization
  - ✓ Cooling and Lubrication Monitoring
- iAdvanced
  - ✓ Partial Discharge Monitoring
  - ✓ Multi-Parameter configurations

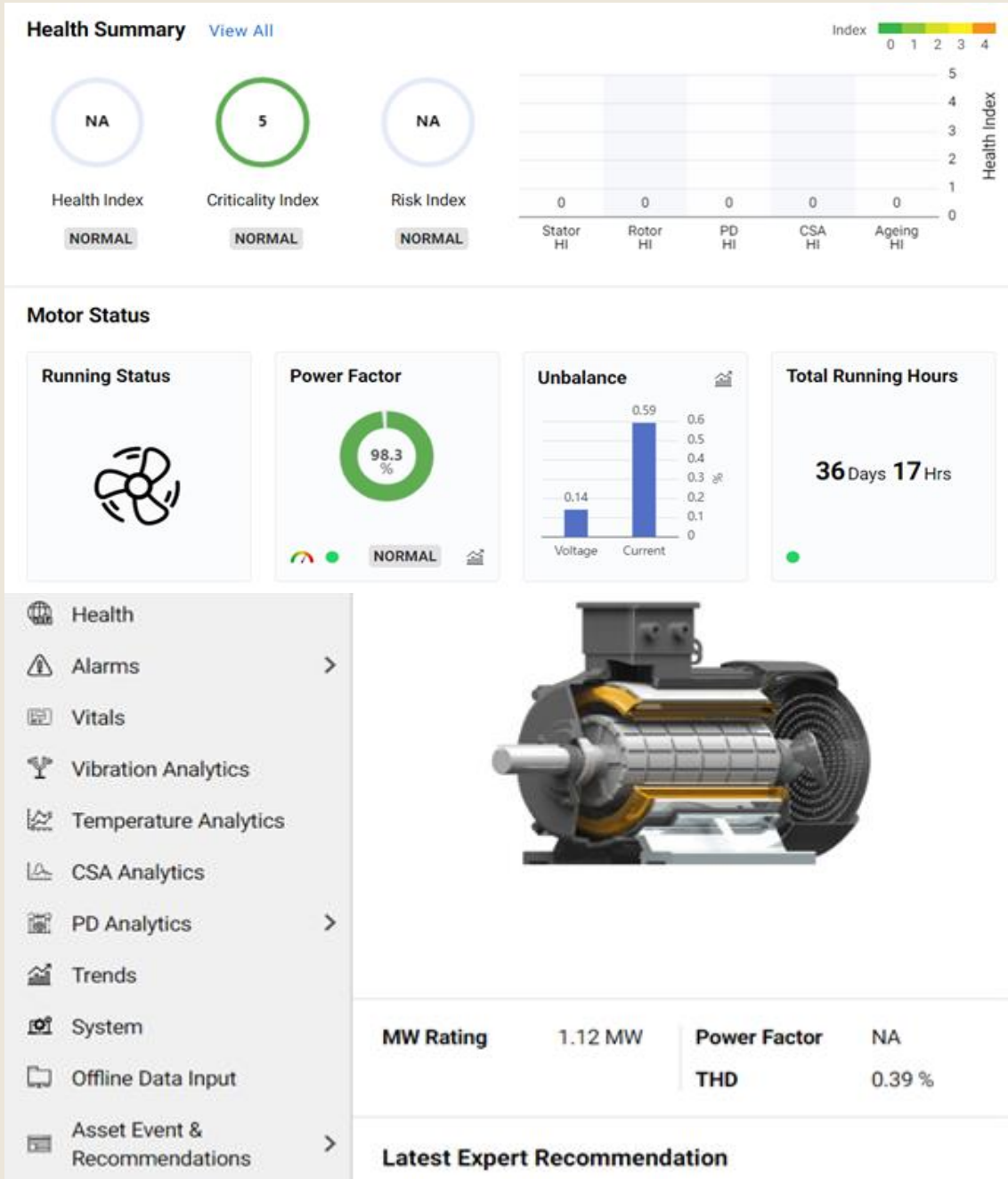
Rotating Machines

Optional features

- ✓ Brush Wear Monitoring
  - ✓ Pre-indication or Continuous Monitoring
- ✓ Current Signature Analyzer
- ✓ RPM Monitoring
- ✓ Fiber Optic Temperature Measurement

Further Intelligent Solutions

- ✓ Fleet Management Solutions
  - ✓ Combined assessment of offline and online data
  - ✓ Comparative assessments between assets
- ✓ OEM added value
  - ✓ Expert recommendations
  - ✓ Integrated Services



CERTIFICATIONS FOR

QUALITY

Certificate of Registration

nqa.

This is to certify that the Quality Management System of

Ganz Transzformátor- és Villamos Forgógépgyár
H-1095 Budapest, Soroksári út 30-34. 5. em. Hunga
H-5000 Szolnok, Kőrösi út 74. Hungary
H-2766 Tápiószele, Györgyei út 14-22. Hungary

applicable to

Design, manufacture and service of equipment
transformers, conventional and insulated switch
steel structures. Installation and main contractin

has been assessed and registered by NQA against t

ISO 9001 : 2015

This registration is subject to the company maintaini
standard, which will be monitored by NQA.

Managing Director

UKAS MANAGEMENT SYSTEMS

Certificate of Registration

nqa.

This is to certify that the Environmental Management System of

Ganz Transzformátor- és Villamos Forgógépgyártó Kf
H-1095 Budapest, Soroksári út 30-34. 5. em. Hungary
H-5000 Szolnok, Kőrösi út 74. Hungary
H-2766 Tápiószele, Györgyei út 14-22. Hungary

applicable to

Design, manufacture and service of equ
traction, transformers, conventional and ins
and welded steel structures. Installation and

has been assessed and registered by NQA aga

ISO 14001 : 2015

This registration is subject to the company main
to the above standard, which will be monitored b

Managing Director

UKAS MANAGEMENT SYSTEMS

Certificate of Registration

nqa.

This is to certify that the Occupational Health & Safety Management System of

Ganz Transzformátor- és Villamos Forgógépgyártó Kft.
H-1095 Budapest, Soroksári út 30-34. 5. em. Hungary
H-5000 Szolnok, Kőrösi út 74. Hungary
H-2766 Tápiószele, Györgyei út 14-22. Hungary

applicable to

Design, manufacture and service of equipment for power generation, distribution, traction, transformers, conventional and insulated switchgears, GIS, generators, motors and welded steel structures. Installation and main contracting of electrical substations

has been assessed and registered by NQA against the provisions of

ISO 45001 : 2018

This registration is subject to the company maintaining an occupational health & safety management system, to the above standard, which will be monitored by NQA.

Managing Director

UKAS MANAGEMENT SYSTEMS

Certificate No:	114366
Date:	19 October 2018
Reissued:	20 October 2021
Valid Until:	19 October 2024
EAC code:	18/19/28/34

CLIENT REFERENCES

Why GANZ?

GANZ
ROTATING MACHINES
SINCE 1878

Competitive delivery times

145 years market experience

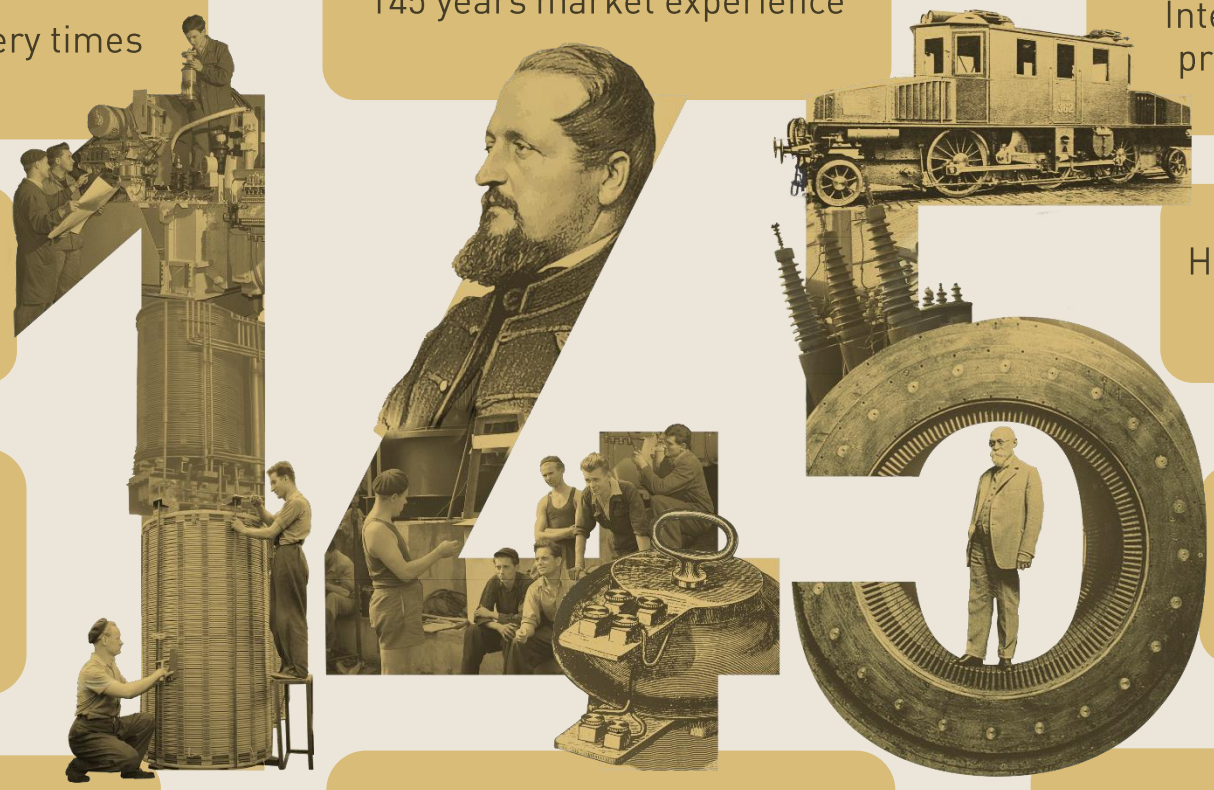
International experience, projects in 40 countries

Best value for money products

High degree flexibility in design and construction

High quality tools, equipment and skilled professionals for testing, repairing and manufacturing transformers

Tailor made solutions satisfying special requests



Excellent engineering team

Manufacturing facilities are modernized and in-line with Western European quality standards

Proven technical solutions

„TRADITION FOR INNOVATION"

Thank you for your kind attention!

Visit our website www.ganzelectric.com

Visit our Linkedin page Ganz Transformers and Electric Rotating Machines Ltd. | LinkedIn

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