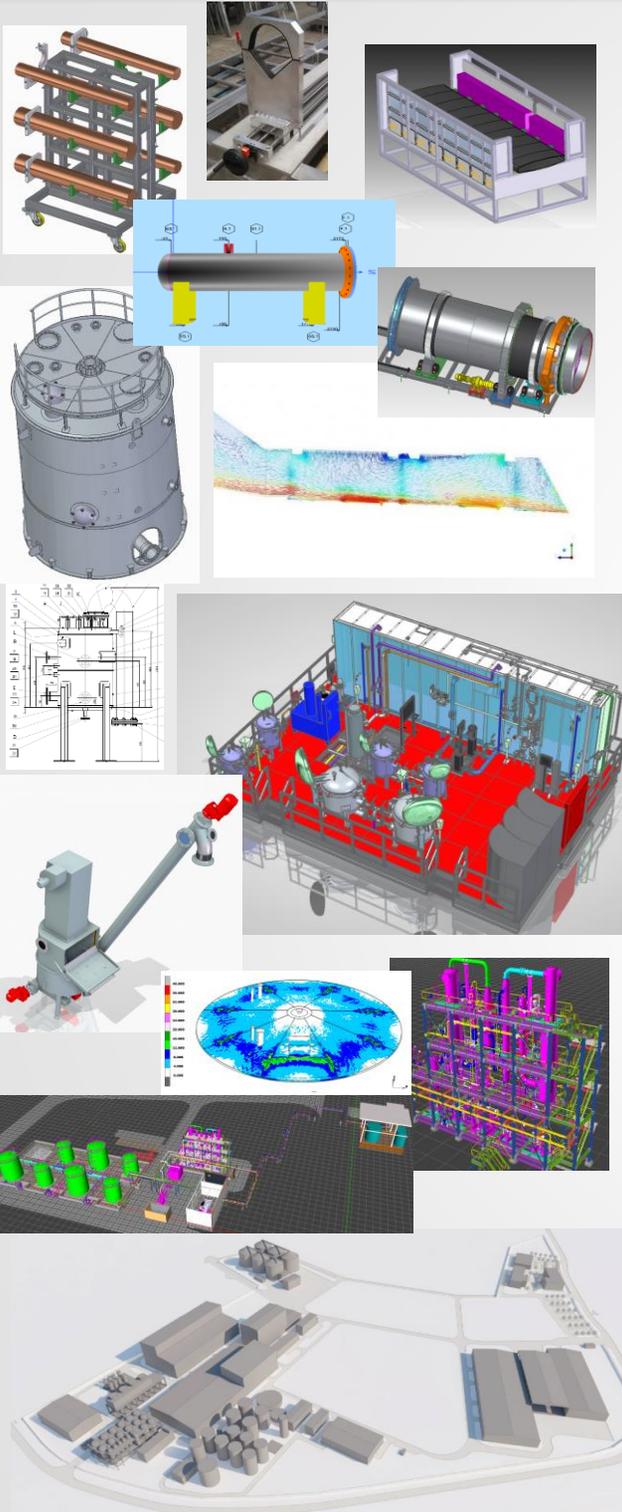


References

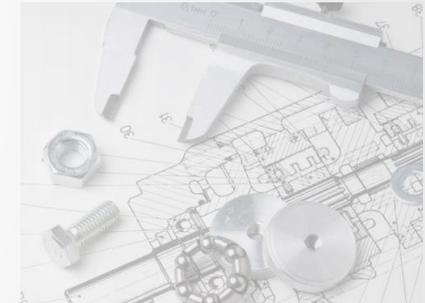


References



S&G Solution Kft.

High-quality, reliable,
fast, cost-effective
Engineering
Solutions



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WELCOME

Goal of our company to provide fast, reliable and cost-effective solutions to our Customers in a wide range of Engineering Services. We provide services through own stable, highly skilled workforce and our reliable, long-standing partners. This also ensures that our customers receive the most cost-effective solutions.

Activities

➤ Mechanical Engineering Solutions

Our company provides services covering the full spectrum of mechanical engineering design to our Customers with the help of modern 3-dimensional softwares and engineering tools. Using state-of-the-art design tools, our company offers fast, precise, cost-effective solutions.

- Plant design
- R&D tasks
- Design of target machines, individual machines, equipment, structures
- Solving complex tasks in the field of mechanical engineering
- Computer aided simulations (FMEA) (flow, thermal, strength, kinematic analysis)
- Reverse engineering
- Redraw 2-dimensional drawings to 3-dimensional
- Sizing of various machines, equipment and structures
- Preparation of technical documentation
- Preparing of feasibility studies
- Conceptual design, fault mapping using advanced techniques (dFMEA, HOQ, FAST, value analysis, conceptual design methods, function analysis, QFD, 5why, Ishikawa, etc.)
- Expertise solving innovation research and development tasks
- Chemical, pharmaceutical design
- Sizing&design of chemical equipment, tanks, heat exchangers, columns etc.
- Safety Risk Analysis
- Technology Consulting
- License documentation for technologies

➤ Production development, production optimization

We assess your production capacity, processes, and perform production process analysis. We identify production bottlenecks and develop solution proposals to increase production capacity.

Tools:

- LEAN
- MTM
- Manufacturing process analysis
- Value flow analysis
- Ergonomic analysis
- Efficient processes
- Resource demand reduction
- Production area optimization
- Reduction of downtime
- Establishing transparent processes



Technology Consultation, Design, Permit

- Chemical technology consultancy, design:
 - Risk analysis
 - HAZOP
 - Process design, Plant design (3 model)
 - Safety Calculations (Fire, PSV, etc.)
 - Technology process overview, analysis, calculation
- Strengths calculations (Storage Tanks, Pressure Vessels, Pipes, Heat exchangers, Filters, etc.)
- General Design – Manufacturing documentation calculations (Storage Tanks, Pressure Vessels, Pipes, Heat exchangers, Filters, etc.)
- Localization acc. to EN/HU standards
- PID, PFD
- FMV/ME
- Authority consultation, contact (MMBH, Fire, Environmental etc.)
- Full support for establishment and use permit
- Trial run, commissioning technology support
- ATEX and technology fire documentation
- ATEX, electrical review, TMT
- Technology electrical localization, design
- CE checking
- Incoming equipment documentation check
- Machine, equipment commissioning, HSE handover
- Technology related steel structures

Computer Aided Design & Licenses

Softwares:

- Solid Edge with VEM
- Autodesk Inventor
- AutoCad
- Autodesk Nastran In-CAD
- AutoCad Mechanical
- Rohr
- Naviswork
- Fusion 360
- Factory Design
- 3ds Max
- ReCap Pro
- MitCalc
- Visual Vessel Design
- Plant 3d
- AME Tank
- AutoCad, Inventor,
- Tekla Structures
- AxisVM X5
- Mathcad
- HazCalc

Licenses:

- G-P-T
- G-D-V-1
- G-D-V-3
- G
- GO
- M-B-12
- ME-EN
- MV-EN
- ME-GO
- MV-GO
- EN-HŐ
- EN-ME
- T
- V
- TU É
- ME-V
- EN-ME
- Lift design
- SZÉS12
- HT
- SZÉS1

References

- Grinding mud press machine
- Plastic recycling plant (DHR, MTP reactor)
- Deicing salt production equipment
- Paper concrete production equipment
- Carbonization furnace of the carbon fiber production plant
- Multi-zone furnace
- Graphitization furnace of a carbon fiber production plant:
- Muffle design for carbon fiber production furnace
- Galvanizing furnace (Ócsa)
- CPC centrifuge, Decanter centrifuge
- Briquetting, multi-position press
- Filter systems (Bosch - Nanjing, Maklár) Ford - Chonqing
- Temporary filtration systems
- Bus chassis structure analysis
- Polyfoam based ventilation spiral pipe making equipment
- Concrete kiln design, Silo design
- 6-axis CNC plasma cutting equipment, Robot work cell design
- Heat exchanger, PED Tank, Storage Tank, Column design
- Operating table design
- Hydraulic lifting table development, design
- Fluid Simulations (Channel CFD, Vacuum Filter CFD, Cavitation Equipment CFD, Absorber and Catalytic Reactor Modeling)
- Design of powder dispensing equipment
- Laboratory environment design
- Steel structure design (Technological equipment supports, podiums), Pipe rack design
- MOL Storage Tank Design
- JRL podium design
- Investigation of the failure of heat treatment covers
- Technical consultancy "Tranz-Org" Logi project
- Handling Equipment project (logistic equipment, lifting equipment, service equipment)
- Innovation consultancy related to research and development tenders
- Conveyor system design, Flow simulation of a vacuum filter
- Design of pumping stations
- Modeling of absorber and catalytic reactor
- BBKA Szolnok Consultation – Permit documentation
- BUD Airport Storage Tank License Documentation
- KisChemical Licence Documentation
- BorsodChem – FRP tank design; Alkaloida – Technology design

Battery factory:

- Dongwha Electrolyte Technology Localization, Authority Permit
- Dongwha NMP Recovery and Tank farm Technology Localization, Technology Design, Authority Permit, Test run support, Technical inspection, ATEX
- Samsung SDI Phase I – Electrolyte Plant Safety Risk Analysis, Technology Consultation
- Samsung SDI Phase II – Electrolyte Plant Safety Risk Analysis, Technology Consultation, Localization, Authority Permit, ATEX, ATEX review
- SK on Hungary Ivánca Electrolyte Plant/NMP– Technology Localization, Authority Permit, Technology consultation, Safety Risk Analysis
- VOLTA –ACF system design, equipment design
- EnChem – Storage Tank Design, Technology consultation, localization, Authority Permit
- Technology FME/ME, Supervision (Dongwha, SemCorp, EcoPro, BBKA, Samsung SDI)
- Lotte pneumatic transport tech. Calculation, Mech. Eng. design
- SemCorp – technology and engineering design – whole factory with permitting
- Sang-A technology design, new factory design
- EcoPro – Technology Localization, Authority Permit, ATEX
- SemCorp – technology and engineering design –whole plant with permitting, ATEX
- Cobalt – Technology consultation and localization, permitting
- EVE - Technology consultation, design and localization, permitting
- Chervon. Inzi - slop tank design