

G&Z Civil and Industrial Engineering Advisory Company

Legal Office : Via Manin, 49 - 20047 Brugherio (Mi) . Italy

Operational Office: Via Goffredo Mameli,2 – 26833 Comazzo (Lo) Italy

Tel +39.(0)2 90716014 - Fax +39.(0)2 90617014 Mobile +39.335.83.66.480
info@gandzsas.com

Website: www.gandzsas.com

PEC mail address
tullia.zucca@ingpec.eu

cancelleria del tribunale di Monza n° 57859
c.c.i.a.a. di Milano nO 1476917
partita iva n° 02521090965

G&Z SaS was born as civil and consulting engineering office and became an engineering company in 1995.

G&Z SaS main target is client satisfaction, upgrading the quality procedures in order to obtain the excellence in the service offered.

Particularly in industrial field, we wish to attest ourselves at the maximum level of specialization about feasibility studies in order to reduce environmental impact and industrial risks of production plants.

G&Z sas main fields are:

Industrial field

- **CHEMICALS AND PETROCHEMICALS**
- **PHARMACEUTICAL BULK INDUSTRY**
- **OIL & GAS TREATMENT PLANTS ((Industrial Patent N. 0001367865 Title: “Natural gas dewpointing by new dynamic process ” , commercial name is “DAFNE PLANT”)**
- **INDUSTRIAL AND CIVIL EFFLUENTS TREATMENT**
- **GAS POLLUTION TREATING SYSTEMS**

- UTILITIES

Renewable Energy Resources – Green Economy

- SOLAR PANELS (Photovoltaic Installations)
- GEOTHERMIC PLANTS – HEAT PUMPS
- BIOMASS SYSTEMS
- ENERGETIC GENERATION WITH INNOVATIVE TECHNOLOGY - **PLASM TORCH**
- TECHNOLOGICAL INSTALLATIONS IN AGRICULTURE FIELD

Civil field

- ENGINEERING
- CONCRETE AND STEEL STRUCTURES CALCULATIONS
- DIFFERENT FLUIDS DISTRIBUTION NETS DESIGN
- SUPERVISION , ACCOUNTING AND CONTRACTS PLANNING
- WORKING YARDS SAFETY
- ENERGY SAVING
- WORKS TESTINGS

Technological Investment Advisory:

- INDUSTRIAL PLANS DEVELOPMENT
- AMORTIZATION PLAN OPTIMIZATION OF TECHNOLOGICAL PROJECTS
- FEASIBILITY STUDIES THROUGH MARKET INQUIRIES

- **ENERGETIC TRADING**
- **KYOTO TRADE**

G&Z SaS main services are:

Industrial field

- HYSYS simulations concerning Oil&Gas field, chemical plants, factories utilities etc, developed by Hyprotech, ASPEN Group ,the best Processor, containing also dynamic de-pressuring utility, to simulate fire or adiabatic overpressure emergencies. Thus permits a correct design of blow-down headers and blow-down tanks and a rigorous calculation of pick flow-rates to flares.
- Pipelines / sea lines simulations, with rigorous design of piping profile, pressure drops and other involved base properties determination.
- Rigorous design of Flares, according to updated API 521 , with thermal and acoustic impacts evaluation; basic outline studies to push down flares dimensions, modifying process units and control philosophy upstream the flares.
- Environmental impact analysis of plants, suggesting the best low impact process technologies (e.g. we are Italian Agent for Twister, an updated technology in natural gas upgrading), and evaluating its investment costs, both on shore than off-shore installations (in the last case by use of OCD5 software by EPA, U.S. Environmental Agency).
- DESALTERS design, calculations of diameters-volumes and water flow-rates necessary to desalt oil, by our own software, developed together Enviroware.
- Process design (process flow diagrams - P&ID - material and heat balances - calculation of characteristics and preparation of equipment data sheets, including of measurement and control instruments, control and safety valves sizing(by EPCON INTERNATIONAL software), process and sketches drawings etc.)
- Utilities consumptions
- Equipment and materials procurement
- Waste disposal and total recovery of polluted soil through plasm torch installations
- Our Society follows Mr. Olah, Nobel Prize Winner way of thinking, which implies a future economy based on Methanol, not hydrogen
- Planning of capture and transformation of CO2 in Methanol, which is an excellent way of reducing environmental impact
- Design of Solar Plants with CIGS/CIS/ **Cadmium telluride / silicium** technology (with the possibility of semi-transparent panels suitable for agriculture greenhouses)
- Industrial, Chemical, ATEX Risk Management; Mathematical simulations of gas and powders explosions including damage quantification.
- Judicial Examination (CTU and CTP) regarding industrial plants/safety/pollution.

Civil Field and related safety

- Civil buildings design, private and public, for residential and industrial use, also for seismic sites;
Concrete and steel structures calculations
- Drinkable water and heating plants design
- Natural gas, drinkable water, civil nets design
- Sewers systems and treatment plants design of civil waste water
- Fire protection systems design (new fire extinguishing device installations)
- Contracts preparation for execution of works, construction management and supervisory in working yards; final testings
- Civil and industrial electrical equipment design
- Consulting, supervision of construction and field works accounting for civil works
- Hazard and risk analysis (ex 626) , safety engineering planning (ex 494).