



Contents

About Gan Ind. Co.

- CEO Massage
- Management Team
- Mission, Vision, Values
- Introduction
- Fields of activities
- Awards
- Certificates, Memberships
- Global Presence
- Research & Development
- Green World for Future
- Health, Safety & Environment (HSE)



Activities

- Design and Engineering
- Production
- Quality Control, Laboratory
- PC & EPC Power Transmission Contracting
- Remarkable Projects
- Other Steel Structures
- Solar Farms
- Distributed Generation Projects





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CEO Message

About 30 years ago, we established Gam Company based on "Effectiveness", and from the beginning this vision was applied, at all company levels and in terms of practical applications.

At the national level, our mission is to be committed to professional and ethical responsibility, in order to help a better tomorrow for the country's next generations, so that we would affect its history of industry and would therefore be a source of pride in the minds of future generations.

In the global arena, Gam is, alongside other actors in the Iranian industry area, stepping up the progress steps one after another. And this has been materialized only through delivering the highest quality design, engineering, production, supply and implementation of our international projects.

At the organizational level, improving living standards and reinforcing cultural resources of every staff member, has always been the top priority of our human resource development plans. Observing the highest standards of safety and occupational health in the workplace, holding regular cultural/sports events, as well as educational courses for the staff members have only been part of our efforts to empower Gam family.

We are committed to full implementation of environmental standards, establishment of green industry and incorporating innovation and technology to contribute to the growth of the power and telecommunications industry.

Nasrollah Rahnama

CEO





Gam Arak Industrial Company



Where Innovation — & — Technology Meet



mission
vision
values

Our Mission

Playing an important role in improving the quality of living, by delivering high quality products and services in electricity and telecommunication fields

Our Vision

To be a World class supplier of premium quality products and services to West Asia and the World

Our Values

Respecting people's dignity, assuring customer satisfaction, promoting environmental sustainability, optimization of resources and promoting work safety



Gam Industrial Company was established in 1991, aiming to manufacture steel structures for power transmission and telecommunication projects. In a short while, we could successfully become a major supplier of Iran's power and telecommunication industry, thanks to our compliance with international standards, devoted skilled workforce and state of the art machinery.

Today, after a quarter of century of persistent efforts, we are proud having gained our desired position amongst the main industry actors in the national level. Having constructed more than 4,000 Kilometers of high voltage overhead transmission lines ranging from 63 to 500kV is only a part of our rich reference in national and international arenas, a token of our keen participation in development of power and telecom industries.

Field of Activities

- Designing and engineering high voltage power Transmission lines
- Designing and manufacturing of lattice and tubular towers for Transmission and Telecommunication
- Designing and manufacturing of steel structures for High Voltage Substations
- Management and execution of EPC projects of power transmission lines
- Management and execution of EPC projects of Telecommunication Towers
- Installation, operation and maintenance of photovoltaic power stations solar farms in full package based on PV and CPV technologies
- Installation, operation and maintenance of complete package of distributed power generation plants (D.G.) and combined heat and power production (C.H.P)
- Designing and manufacturing of lattice and tubular low voltage (LV) and medium voltage (MV) towers and lightening poles

Awards & Honors



- 2014,2015,2016 • International EPC Contractor of the year, Markazi Province
- 2015,2016 • EPC Contractor of the year, Markazi Province
- 2014 • Nation Wide Green Industry Unit of the Year
- 2015 • Industrial Unit of the year by Standard Institutio, Markazi Province
- 2009,2010 • Green Industry Unit of the year, Markazi Province
- 2009,2011 • Industrial Unit of the year, Markazi Province
- 2002 • Entrepreneur of the year





Certificates


- ISO 9001: 2015 Quality Management Systems
- ISO 14001: 2004 Environmental Management Systems
- OHSAS 18001:2007 Occupational Health & Safety Management Systems
- Standard Certificate in Hot dip Galvanizing by Institute of Standards and Industrial Research of Iran
- Certificate of Qualified Contractors by Management and Planning Organization of Iran
- Technical and Engineering License by Iranian Bureau of Industries and Mines
- Operation License by Iranian Bureau of Industries and Mines
- Certificate of Accreditation of the Affiliated Lab, by Institute of Standards and Industrial Research of Iran
- Health and Safety Compliance Certificate

Memberships

- International Council on Large Electric Systems (CIGRE)
- Science and Technology Park
- Iranian Electrical Industry Syndicate
- Association of Engineering and Technical Services Exporters
- Iranian Telecommunications Industry Syndicate
- Iranian Association of Power Transmission Line Contractors
- Iranian Quality Management Association
- Iranian Chamber of Commerce, Industries and Mines
- Iranian Galvanization Industries Association
- Iran - Iraq Chamber of Commerce, Industries and Mines
- Iran - Italy Chamber of Commerce, Industries and Mines
- Iran-China Chamber of Commerce, Industries and Mines
- Iran -Oman Chamber of Commerce, Industries and Mines
- Markazi Province House of Industries and Mines

Global Presence





Delivering high quality products, complying with international standards, and flexibility in design and engineering to meet every project's conditions and requirements, all have made us a successful and reputable EPC contractor in Power Transmission and Telecommunication industries.

During years of overseas activities, we have established our affiliated companies and branches in several countries and have signed numerous protocols and partnerships around the world.

A great advantage for us, is our mutual interaction between Gam and our affiliated companies -namely "Gam International FZC" in the U.A.E, "Gam and Partners LLC" in Sultanate of Oman and "Gam Industries" in Uganda- in order to facilitate smooth international cooperation. In addition, the presence of our branches and our team of technical experts located in the target markets, contribute a great role in improvement of our services.

Gam International FZC as one of Gam Ind. Co. affiliated companies, established in 2005 in United Arab Emirates for handling all international trading affairs.

Gam and Partners LLC as one of Gam Ind. Co. affiliated companies, established in 2010 in Sultanate of Oman for international EPC contracting in power transmission projects including HV/MV substations and transmission lines.

Gam Industries Ltd. as one of Gam Ind. Co. affiliated companies, established in 2016 in Uganda for handling Gam contracting and trading local affairs in Uganda as well as East Africa region.

Research & Development



Our R&D team (consisting members of every division of company) defines new horizons (in production, services and commerce), and improves our scientific and innovative capacities.

R & D Activities :

- Acquisition of technologies
- Designing new products
- Improvement of quality
- Process / resource optimization
- Identification of future market needs
- Diversifying our products/services options
- Improvement of our scientific capabilities for more invention and innovation

Green World for Future





Health, Safety & Environment



Like every active enterprise, our company runs on the expertise of our employees, and therefore, their safety and healthiness has always been one of our highest priorities.

Moreover, as a member of the society, we always take concrete measures to ensure the preservation of our environment. Based on this effort, we have proudly been awarded as green industry in different occasions.



By HSE management, we seek to:

- Ensure the safety of our staff and the whole society, and protect our environment, our assets and reputation
- Make a safe, healthy and incident-free workplace, and thorough assessment of risks and ways to reduce them
- Reduce the pollutants
- Reduce our staff exposure to risks
- Ensure the full implementation of our HSE values by our subcontractors





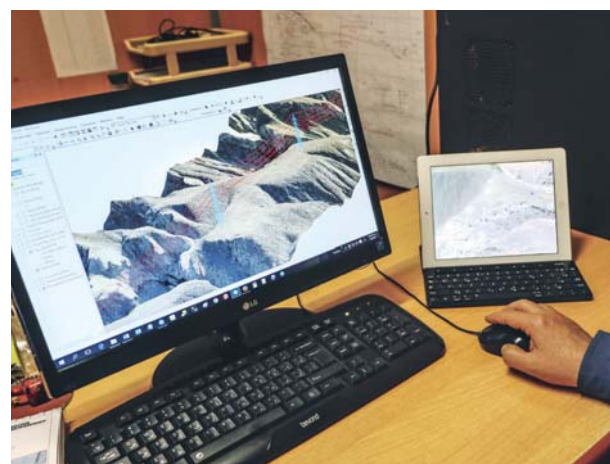
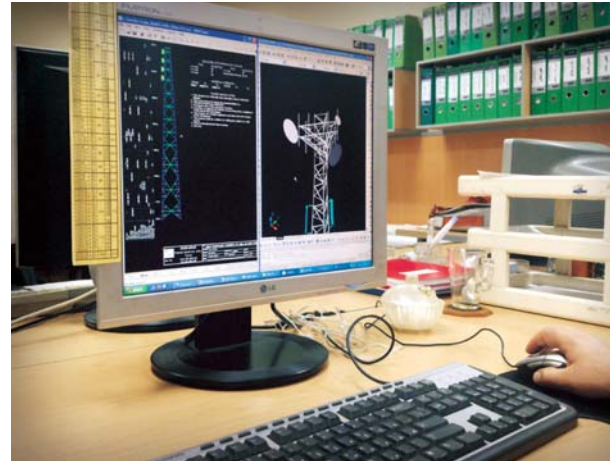
Design & Engineering

Our design and engineering department is a strong backbone for our services to customers. This is achieved by innovative and highly experienced experts who enjoy from scientific studies, up to date international standards and state of the art computer software.



Overhead Transmission Line Engineering Activities:

- Our line design activities not only include preliminary line studies, climate, route, survey, clearances, loading tables, spotting, BOQ, technical specification requirements and stringing charts, but also we perform civil, installation and final line commissioning supervision works
- Technical evaluation and reverse engineering of present overhead lines to troubleshoot operation stage issues, increase their capacities, and optimize the losses
- Preparation of instructions for designed products, for correct and safe installation and operation





Design and Engineering of Power Transmission & Telecom Towers

- Structural design of power transmission towers including single line design, stress calculation tables & detail design
- Design review/revision of present towers, aiming to comply with the latest standards and optimize the structure weights
- Design of steel structures and gantries used in substations, power plants and telecom sites
- Condition assessment of under-operation power and telecom towers
- Supervision over various phases of prototype production and testing

Foundation Design

- Design of foundations for power transmission/telecommunication towers, including soil class investigation, load on foundation calculations up to detail foundation drawing X-Pole & V- Pole
- Design of foundations for various steel structures used in substations, power plants and telecommunication sites

Telecommunication Equipment Design

Design of Antenna mountings, grounding equipment, ladders, cable trays and rest platforms

Designed / Certified Telecommunication Towers

Tower type		Tower Name	Height	Loads		
				Wind Speed	FPA	EPA
LATTICE	3-Leg-Angular	LTC9_54-9	54m	130	9	-
		LTC9_48-9	48m	130	9	-
		LTC9_42-9	42m	130	9	-
		LTC9_36-9	36m	130	9	-
		LTC13_54-9	54m	130	13.5	-
		LTC13_48-9	48m	130	13.5	-
		LTC13_42-9	42m	130	13.5	-
		LTC13_36-9	36m	130	13.5	-
		LCSA60	60m	140	6.2	-
		LCSA40	40m	140	6.2	-
		LCSA30	30m	140	6.2	-
		LCSA20	20m	140	7	-
		LMC12	54, 48, 42, 36	120	12	-
		LCSA48	48m	110	-	2
		LMC13	60, 54, 48, 42, 36	130	13.4	-
		SANA30	30m	130	5	-
		SANA60	60m	130	5	-
		SANA45	45m	130	5	-
		LCSA60A	60m	-	-	-
		HAV100	100m	140	4	-
		GG50	30m	130	1	-
		SMW	42m	130	2	-
	4-Leg-Angular	LSC42N	42m	160	5.8	-
		LSB10	48m	120	-	10
		LSB14	60m	120	-	14
		SRQ75	75m	130	-	-
		FAV42	42m	160	-	-
		CRA36	36m	130	4.5	-
		HVS100	100m	160	6	-
		LSC66	66, 42	160	5.8	-
		LSE70	70m	140	3.5	-
		DYN70	70m	160	-	4
	3-Leg-Tubular	LTAR30	30m	-	-	-
		TBSSA	36m	120	-	5

Tower type		Tower Name	Height	Loads		
				Wind Speed	FPA	EPA
NB	4-Leg-Angular	LCRM15_36	36m	130	11.4	-
		LCRM15_30	30m	130	11.4	-
		LCRM15_24	24m	130	11.4	-
		NBR12B	42, 36	130	-	16
		NBR12A	42, 36	110	-	12
		NBR8A	36, 30	110	-	8
		LCR8A	54, 48	130	-	8
		LCR12B	54m	130	-	12
		RTGM	12, 15m	130	6	-
Rooftop	Guyed mast	GG50N	30m	130	1	-
Hybrid Tower	Pole-Tubular	HPL15	30m	140	-	6
Free Stand	4-Leg-Angular	FRT9	9m	110	6	-
		FRT12	12m	110	6	-
Lightning Tower	3-Leg-Angular	NTSB	36m	130	-	-
Railcom	Polygon Tower	CB & LB	7 & 6 m	-	-	-
Full - Cover	Pole-Angular	FCF36	36m	110	Full Cover	-
	4-Leg-Angular	FCN36	36m	110		-
MICRO	Pole	MCR6	6 m	110	6	-

Standards	Software
ASCE 10-97	RISA TOWERS
TIA/EIA-222-F	MSTOWER
EN 10025	MECHANICAL DESKTOP
EN 10056	AUTO CAD
EN 10048	SAP2000
DIN 614,615,616,617	BOCAD
BS 8100	SAFE
ICAO	
DIN 7990	

Designed / Certified Power Transmission Towers

Tower Type	Voltage	Circuit	Country of Test Station	Test Date
2 S	66 kV	2	IRAN	2016
D9/DT	132 kV	2	IRAN	
K4T30	132 kV	4	IRAN	
2T	66 kV	2	IRAN	2015
D5	132 kV	2	IRAN	
GMSL	132 kV	2	IRAN	
LAG	400 kV	1	IRAN	2014
MAG	400 kV	1	IRAN	
MS03	110 kV	1	IRAN	2013
T60	110 kV	1	IRAN	
S4DL	63 kV	4	IRAN	
T4D60	63 kV	4	IRAN	2011
LSD3P	400 kV	2	IRAN	2010
D2	132 kV	2	IRAN	
D6	132 kV	2	IRAN	
LTG	400 kV	1	IRAN	
LS3G	400 kV	1	IRAN	2008
M4S03	63/230 kV	4	INDIA	
M4T10	63/230 kV	4	IRAN	
M4T30	63/230 kV	4	IRAN	
M4T60	63/230 kV	4	IRAN	
TD30	400 kV	2	INDIA	2007
LS03T	400 kV	1	IRAN	
LS03	400 kV	1	INDIA	
HS10	400 kV	1	INDIA	
T30	400 kV	1	INDIA	
T60	400 kV	1	IRAN	
LSD03	400 kV	2	SPAIN	
TD60	400 kV	2	INDIA	
SLA30	400 kV	1	INDIA	

Tower Type	Voltage	Circuit	Country of Test Station	Test Date
GMSZ	132 kV	2	BOSNIA & HERZEGOVINA	2006
SMA60	400 kV	1	IRAN	
SMA60	400 kV	1	IRAN	
SLA10	400 kV	1	SPAIN	
SMA30	400 kV	1	IRAN	
SMA60	400 kV	1	IRAN	
GMS	132 kV	2	ROMANIA	2005
GT60	132 kV	2	BOSNIA & HERZEGOVINA	
LAH30	400 kV	1	INDIA	
GLS03	400 kV	1	SPAIN	
HS	132 kV	2	ROMANIA	2004
LSH03	400 kV	1	ROMANIA	
SCS03	400 kV	1	ROMANIA	
GNN(Self Support)	63 kV	2	ROMANIA	2003
MS(Suspension)	132 kV	2	ROMANIA	

Production

With more than 4,500 sq.m area, our production department consists of 18,000 sq.m of storage facilities and more than 4,500 sq.m of indoor production facilities, including:

Steel Structure Workshops

- With annual capacity of more than 40,000 MT
- Using state of the art CNC machines
- Well equipped to handle extra heavy steel profiles

Hot Dip Galvanization Plant

- With annual capacity of more than 70,000 MT
- Delivery of galvanized products based on ASTM A123, or other internationally recognized standards
- Galvanization of any steel products regardless of their shape and size
- Well equipped with a modern chemistry laboratory for maintaining the quality of used chemicals





Quality Control



We assure the quality of products through:

Quality Assurance Procedures

- Quality monitoring of main organizational operations (such as Marketing, Designing, Procurement of goods and services, Production and Performing Projects) through Q.C.P Quality Control Plan
- Ensuring the quality of products and compliance with regulatory requirements and contractual obligations
- Providing quality certificate with each shipment of products
- Evaluating customer feedback

Quality Control Procedures

- Strict observance of standards and adaptation of standards based on the customers' requirements
- Precise control over all operational processes based on quality factors as per the international standards
- Using statistical techniques to forecast quality trends

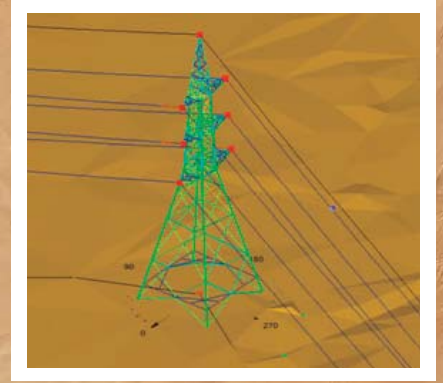


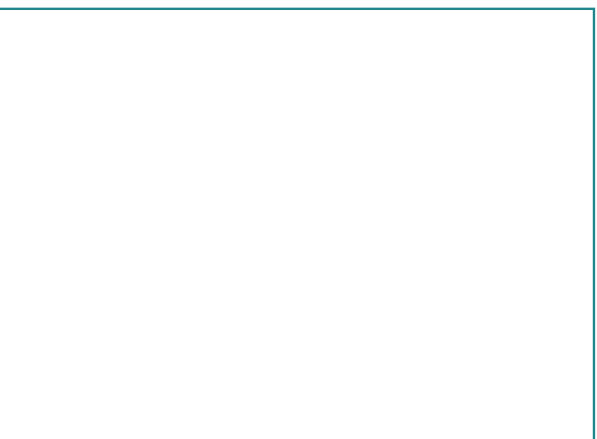
Laboratory

- Certified by Institute of Standards and Industrial Research of Iran
- Performing tensile test on steel samples including angles, plates, bars, bolts and nuts
- Performing coating tests on galvanized products
- Performing quality control and tracking from raw material to final products
- Well equipped with chemical measurement tools to control galvanization process
- Providing of services to other companies

↑
**QUALITY
LEVEL**

PC & EPC Power Transmission Contracting





Inside Iran, Gam is a “Grade A” certified EPC contractor by Management & Planning Organization of Iran. Utilizing the knowledge & experience of our engineers as well as a variety of specialized machinery, we have been able to successfully deliver satisfactory services to our local & international clients. Based on our clients’ requirements, we perform PC & EPC projects full compliance with international technical & safety standards.

Some of main stages on execution of EPC Projects:

Engineering

Full engineering of the power transmission lines including route studies, survey, spotting tower and foundation design, equipment quantities and specifications, installation manuals, and as-built documentation

Procurement

Manufacturing of Power Transmission Towers, and supplying transmission line equipment such as conductor, shield wire, OPGW, insulators and hardware & fittings

Construction

- Construction of access roads
- Foundation construction
- Tower installation: sorting, assembly and erection
- Conductor & OPGW stringing

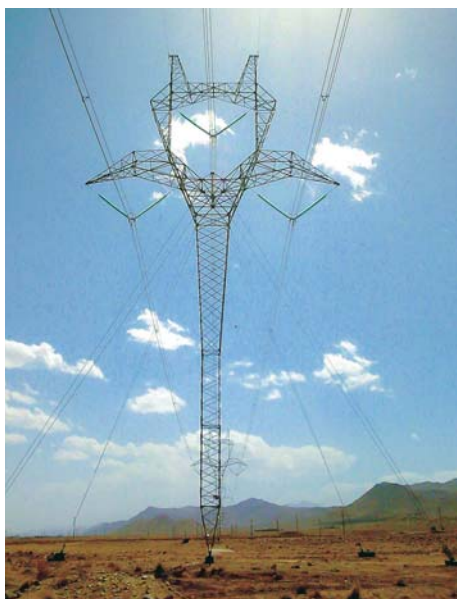
Completed Projects during the past 10 years

Voltage (kV)	Length (Km- Circuit)
400	6500
230	3300
132	5600
63	4500

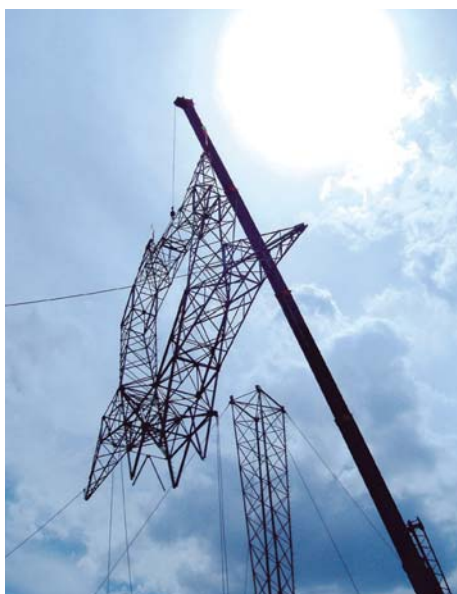
Iran

1.

Project: 132 kV,
Quatro circuit, south
of Mashhad – Zakaria
Substation
Employer: Khorasan
Regional Electric
Company
Consultant: P N P Co.
Main contractor:
Gam Arak Ind. Co.
Scope of work: EPC



Project: 400 kV South Isfahan
power plant - Sormegh Line
Employer: Esfahan Regional
Electric Company (EREC)
Consultant: Moshanir Co.
Main contractor: Gam Arak Ind.
Co.
Scope of work: Design and
Tower Fabrication of self support
and guyed towers
Length (km): 200



Iran

3.

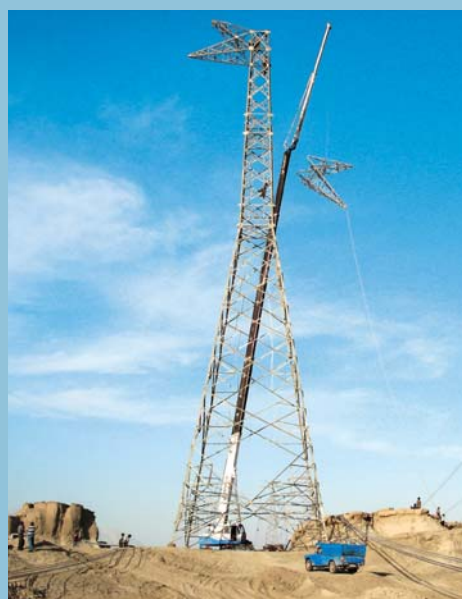
Project: 400 kV Double Circuit, Twin Boundle
Geno Substation - Nema Power Plant

Employer: Hormozgan Regional Electric Com-
pany (HREC)

Consultant: Ghods Niroo Engineering Co.

Main contractor: Gam Arak Ind. Co.

Scope of work: PC



Sultanate of Oman 4.

Project: 132 kV OHTL from Al-Dreez to Ibri
Employer: Inabensa-Sarooj Consortium
Consultant: Mott MacDonald
End User: Oman Electricity Transmission Company (OETC)
Main Contractor: Gam and Partners LLC
Scope of work: EPC
Length (km): 29



Kurdistan Regional Government Iraq 5.



Project: 132 kV Double Circuit, Double Boundle Camchamal - Kellar

Employer: Kurdistan Regional Government Ministry of Electricity (MOE)

End User: Kurdistan Regional Government Ministry of Electricity (MOE)

Consultant: Parsons Brinckerhoff (PB)

Main contractor: Gam Arak Ind. Co. & Canaliran Co. consortium

Scope of work: EPC

Length (km): 153



Other Steel Structures

Beside manufacturing power transmission and telecommunication towers, we are also ready to design and manufacture a variety of other tailor-made steel structures as per customers' needs.

MV/LV Distribution, Lighting Poles, Surveillance Poles

- Optimized design , manufacturing, hot dip galvanization, appropriate packing and proper installation in accordance with the international standards
- Manufacturing of lattice poles in various heights of 6,7,9,11 and 14 meters and different diameters
- Manufacturing of tubular pole in various heights such as 9 and 11 meters with different diameters
- Design and production of lighting and surveillance poles

Guardrail

- We design, manufacture, and galvanize sundry guardrail types including "W" and "VW" of various thicknesses
- We supply full set of Guardrail members including Rails, Posts, U-plates, Fasteners, and Reflectors
- We are ready to provide installation services in national/international projects
- We also produce and supply all kinds of road safety furniture and related accessories

Gantries and Pedestals/Bases for Equipment

- Steel Structures used in HV substations including various types of gantries of different
- dimensions as per the layout drawings of the substations

Heavy industrial steel structures

- Marine platforms, heavy scaffolds, and steel frames
- Structures used in refineries, power plants, industrial sheds for steel industries and industrial plants

Steel Frames for buildings

- Bolts & Nuts connected steel construction
- Steel bridges





Power Generation

Solar Farms

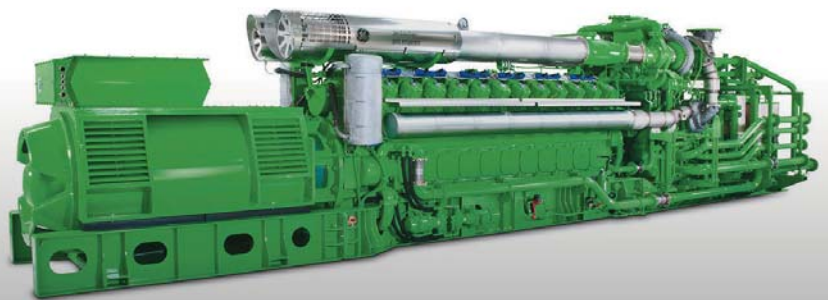
Gam is certified by Iranian Ministry of Energy to provide solar power generation services for photo-voltaic farms, in different output levels, for On-Grid or Off-Grid Plants, on EPCF construction, including :

- Designing solar farms according to characteristic of the region
- Design & production of required structures and foundations
- Suppling of equipment such as PV panels, invertors
- Testing, commissioning & operation of solar farms
- Grid connection studies
- Environmental studies
- Cooperation with national/international investors in solar power plants

Distributed Generation Projects

We are well prepared to provide our services for construction of Distributed Generation & Combined Heat & Power Plants, such as:

- Plant Design
- Installation, commissioning, operation and maintenance of complete DG & CHP plants
- Supply of DG & CHP equipment from world class suppliers
- Grid connection studies
- Environmental studies
- Design, construction and utilization of heat generators





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Where Innovation & Technology Meet