Carno Eng. Group, as a Knowledge-based Company, was established in 2008 to focus on the Turbomachinery services especially Gas Turbine, Steam Turbine, Turbocharger and Compressor for Engineering, Designing, Manufacturing, Repairing and Overhauling.

Today, after 10 years of our attempt, Carno is distinguished as one of the leading companies in the supplying of high quality non-OEM parts for Rotating Equipment in Iran.

Carno has a wide range of customers in Oil, Gas, Energy and Rail way Sectors which enables Carno to be flexible in these fields.

Currently, we employ over than 50 professional staff working in Carno’s workshops and headquarters to deliver best services for both customers and sub-contractors.
T U R B O MACHINERIES

- Gas Turbines
- Steam Turbines
- Turbochargers
- Compressors
T U R B O
MACHINERY SERVICES:

- Design & Engineering
- Re-engineering & Reverse-engineering
- Know-how creating for Manufacturing & Repairing
- Turbomachinery Parts Manufacturing
- Hot & Cold Section Blades Coating
- Rejuvenation Heat Treatments
- Reconditioning, Repair and Overhaul
- Assembling and Performance Tests
CARNO PRODUCTS

- Turbine Rotors
- Turbine Blades
- Combustion Chamber Parts
- Turbocharger “CARNO 3400”
- Tri-metal & Babbitt Bearings
- Auxiliary Equipment
- Compressor Rotors
- Overhaul of Turbines
Solar Saturn Gas Turbine Specifications:
- Output Power: ~ 1200 hp
- Rotation speed: ~22000 RPM
- Thermal efficiency: ~ 24%
- Turbine Inlet Temperature: ~780 °C

Carno performs the following activities for Solar Saturn Gas Turbines as ongoing work:
- Rotor Overhaul
- Rotor Manufacturing
- Hot and Cold Section Blades Manufacturing
- Fuel Manifolds Manufacturing and Testing
- Turbines Overhaul
- Auxiliary Parts and Equipment
GEC POWER TURBINE

Carno Knowledge-based Company fulfills Reverse-engineering on GEC Power Turbine as follow:
• GEC Power Turbine Rotor, Engineering and Manufacturing
• Buckets Manufacturing
• Shaft and Disk
• Thrust Pads and Bearings Manufacturing
• Rejuvenation of Blades

“GEC- EAS-1” Power Turbine Specifications:
• Output Power: ~15 MW
• Rotation speed: ~6500 RPM
• Thermal efficiency: ~29%
• Turbine Inlet Temperature: ~600 °C
NOUVO PINGNONE

MS 1002 GAS TURBINE

For several years, Carno has prevailed as a leading company for this type of Turbine repair:
- LP and HP Rotors Overhaul
- Compressor Section Blades Manufacturing
- Engineering and Supplying of Hot Section Parts
- Buckets Rejuvenation and Recoating

“MS 1002” Gas Turbine Specifications:
- Output Power: ~ 6000 hp
- HP Rotation speed: ~11000 RPM
- LP Rotation speed: ~10000 RPM
- Thermal efficiency: ~ 25%
- Turbine Inlet Temperature: ~950 °C
Considering the diversity and quantity of Ruston Gas Turbines in Iran (TA, TB and TD), Carno has focused on production of this brand parts to extremely support the market:

- Hot and Cold Section Blades
- Rotor Repair and Overhaul
- Air Compressor Rotor Manufacturing
- Power Turbine Stator Manufacturing
- Stator Manufacturing (for TA and TB)
- Auxiliary Valves and Pumps Manufacturing
- Bearing and Thrust Pads Manufacturing
- Combustion Chamber Manufacturing
- Hot Section Blades Rejuvenation and Diffusion Coating
‘Carno 3400’ Turbocharger was launched Railway Market by Carno. It is Iranian the first local manufactured turbocharger.

"Carno 3400" Turbocharger Specifications:
- Rotation Speed: 27,500 RPM
- Service Temp.: ~ 600°C
- Appropriate Diesels: Up to 3400 KW
- Output Pressure: 2.4 Bar
- Developed year: 2015
Thanks to the critical situation of turbomachinery bearings, Carno worked on Tri-metal and Babbitt Bearings casting and machining.

- Turbocharger Tri-metal Bearings
- Ruston TA Gas Turbine Bearings
- Ruston TB Thrust Pads
- Michell Bearings
- Broomwade Compressor Bearings
HOT SECTION TURBINE BLADES

Carno has a lot of experiences in Hot Sections’ Blades production by Reverse-engineering, Designing, Repair, Casting and Machining.

- Hot Section Blades Casting
- Solar Saturn GP, PT Blades
- TB 4000 CT2 Segments
- TB5000 first stg. CT Nozzles
- TB4000 first stg. CT Nozzles
- "GEC-ESA-1" Power Turbine Blades
- Blisks for Turbocharger
- Hot section Blades Diffusion Coating
- Hot section Blades Reconditioning
- Hot section Blades Repair Welding

Carno | Rotary Equipment
CARNO

EMPLOYERS & CLIENTS:

High quality, competitive price and acceptable after-sales services have resulted that Carno to be placed in the vendor lists of relevant companies:

- National Iranian South Oil Company (NISOC)
- Iranian Oil Pipelines and Telecommunications Company (IOPTC)
- West Oil and Gas Production Company (WOGPC)
- Iranian Offshore Oil Company (IOOC)
- National Iranian Gas Company (NIGC)
- Azerbaijan Regional Electric Company (AZREC)
- Supplying Parts, Equipment and Chemicals Eng. Co (SPEC)
- National Iranian Oil Refining and Distribution Company (NIORDC)
- Oil and Gas Refineries
- Petrochemical Companies
- Railways of Islamic Republic of Iran

CERTIFICATES & HONORS:

- Certified for “Knowledge-based Company” by Presidential Deputy for Science and Technology
- Selected as “Top Knowledge-based Company” of Sharif University of Technology Advanced Technologies Incubator
- Renowned for “Top Thirty Entrepreneurs in 2012” by the Sharif University of Technology
- Approval for “Rating and Qualified Contractor” from Ministry of Oil
- “Engineering license” granted by the Ministry of Industry
- ‘ISO 9001’ and ‘ISO 14000’ Standards
WE EMPOWER YOU TO ROTATE