

First Laureate Applied Research

- **Research Work Title:** Research, design and development of knowledge & production technology of Iranian Gas Turbine 25MW
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- **Collaborators:** Middle East Industrial Gas Turbine, Middle East Turbo Compressor Tech. Co., Yazd Ghadir Industrial Turbines Co., National Iranian Gas Company (NIGC)



Abstract:

OTC IGT- 25 heavy duty gas turbine is designed and built to satisfy the need for heavy-duty equipment able to meet the requirements for low life-cycle cost, i.e. low first cost, low fuel costs and low costs for operation and maintenance.

The IGT25- was initially designed as a mechanical drive in compressor and pumping applications, and was later adapted for power generation because of its robust design and its operating economy.

The turbine is delivered with a Dry Low Emission (DLE) combustion system as standard. A gas turbine with this system offers an additional advantage in maintaining low specific fuel consumption in all applications. The uncomplicated DLE-system does not add to the already low service costs for the IGT25-. The combination of using less fuel and generating fewer emissions makes the IGT25- arguably the most environmentally friendly gas turbine in its power range. Industrial gas turbines from OTC holding offer long lifetime on oil platforms, in hot deserts, in arctic cold and in aggressive industrial environments. In other words, wherever the operating conditions are particularly tough. The IGT25- has had a long history of successful operation in such environments and has already achieved some six million operating hours, with field experience constantly being fed back into the design for continuous improvement. OTC holding offers flexible maintenance solutions, enabling significant contribution to the plant operational profit arising from the optimization of preventive Maintenance planning.

