Ansaldo Energia began working in the geothermal power plant sector nearly a hundred years ago, when the first turbine-generator units driven by geothermal steam entered service in Larderello (Italy). A century of expertise in the geothermal market has enabled our Company to achieve a high level of reliability and efficiency, as well as a remarkable flexibility in terms of adaptation to different steam conditions and plant arrangements, for both 50 and 60 Hz applications.

The harsh environment these steam turbines must face, with aggressive contaminations by dissolved salts and corrosive acids, together with a high level of moisture, make it necessary to adopt specific design features based on many years’ experience.

The portfolio includes machines based on impulse technology, from one cylinder in single flow configuration up to two cylinders in double flow configuration, with different exhaust solutions to suit plant layout requirements.

**Advanced technology features**

The design reflects the following distinctive advanced technology features:

- Impulse technology with new generation of airfoil and sealing.
- Butterfly type admission steam valves.
- Special materials used for rotor and blades to minimize the impact of salt deposits and acid attack on fleet reliability.

- Broad selection of last stage blades available, ranging from 20 to 31 inches in diameter, for the best possible match with the steam characteristics of the specific geothermal field.
- Downward, upward, axial or lateral exhaust configurations to the condenser are all available to ensure maximum flexibility in response to any Customer’s needs.
**Series** | **GT**
--- | ---
Application | Geothermal cycles
Steam parameters | up to 20 bar, up to 10°C superheated
Configuration | Single cylinder up to two cylinders

**Worldwide references**

Ansaldo Energia Steam Turbine references since 1980 are shown below. Ansaldo Energia has been producing Steam Turbines since 1910's.

- **America**: USA; Mexico; Nicaragua; Costa Rica.
- **Asia**: Indonesia; Philippines.
- **Europe**: Italy; Turkey.

66 Units

+ 76 units built before 1980's