Non reheat steam turbines are efficient, flexible and reliable machines based on a broad design platform, capable of satisfying a wide range of steam cycles, site conditions and operating modes for both 50 and 60 Hz applications. In combined cycle, they can easily be adapted for different gas turbine configurations (number and models) and steam conditions.

In cogeneration applications, these turbines (either back pressure or condensing, with or without controlled extractions) can be profitably used in industrial, desalination and district heating power plants. Each cogeneration steam turbine, because of the specific process that dictates the steam parameters and turbine design, is a unique product tailored to meet the Customer’s precise needs.

Advanced technology features

The design reflects the following distinctive advanced technology features:

- 3D stationary and rotating blades based on a robust reaction design manufactured from bar stock with the airfoil integration integral with the dovetail and shrouds.
- Single bearing per span design, with bearings sitting directly on the foundation, ensuring optimum rotor behavior and compact overall dimensions.
- Welded rotors for higher thermal flexibility and optimum material selection.
- Axial or downward exhaust for single flow configurations and side or downward exhaust for double flow configurations.
- Synchro-Self-Shifting Clutch for connection to the generator, in single-shaft application, providing better operating flexibility as a result of independent gas and steam turbines operation.
Non Reheat Steam Turbines

<table>
<thead>
<tr>
<th>Series</th>
<th>MT10</th>
<th>MT20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>Small non reheat CC,</td>
<td>Medium and Large non reheat CC</td>
</tr>
<tr>
<td></td>
<td>Condensing or backpressure, Cogeneration</td>
<td>Cogeneration</td>
</tr>
<tr>
<td>Steam parameters</td>
<td>up to 140 bar, up to 565°C</td>
<td>up to 140 bar, up to 565°C</td>
</tr>
<tr>
<td>Configuration</td>
<td>Single cylinder with single flow exhaust</td>
<td>Two or more cylinders with double flow LP section(s)</td>
</tr>
</tbody>
</table>

Worldwide references

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

Reheat: Chile; UK; Italy; Spain; France; Belgium; Denmark; Russia; Greece; Turkey; Israel; Egypt; Tunisia; Saudi Arabia; Iran; India; Australia.

Non Reheat: Chile; UK; Italy; Greece; Egypt; UAE; Saudi Arabia; Lebanon; Oman; Pakistan; India.

73 Reheat Units
20 Non Reheat Units
+ 450 units built before 1980's