

**North America Steam Turbine Service Market By Service (Maintenance, Repair, Overhaul, Others), By Design (Reaction, Impulse), By End Use (Utility, Industrial), By Country, By Competition, Forecast and Opportunities 2020-2030F**

Market Report | 2025-05-16 | 120 pages | TechSci Research

**AVAILABLE LICENSES:**

- Single User License \$4000.00
- Multi-User License \$5000.00
- Custom Research License \$7500.00

**Report description:**

Market Overview

The North America Steam Turbine Service Market was valued at USD 6.89 billion in 2024 and is projected to reach USD 9.52 billion by 2030, growing at a CAGR of 5.54% during the forecast period. This market encompasses the maintenance, repair, overhaul, and optimization services of steam turbines used in power generation, industrial manufacturing, and petrochemical sectors. These turbines are essential components of thermal power plants, converting heat into mechanical energy for electricity production. Due to prolonged exposure to high pressure and temperatures, regular servicing is essential to maintain efficiency and prevent unexpected failures. A significant number of turbines in the U.S. and Canada have been in operation for over two decades, leading to rising demand for services such as blade and seal replacements, rotor balancing, and control system upgrades. Additionally, energy efficiency regulations and decarbonization efforts are encouraging refurbishment over new installations. The market is also benefiting from the adoption of predictive maintenance and condition monitoring tools, which enable early fault detection and improved service planning.

Key Market Drivers

Aging Fleet of Steam Turbines Driving Demand for Long-Term Service Contracts

The primary driver of the North America Steam Turbine Service Market is the extensive fleet of aging steam turbines in operation, particularly in the United States and Canada. Many of these turbines, installed during infrastructure expansions between the 1970s and 1990s, have exceeded their intended operational lifespans. These older systems face growing challenges, including mechanical degradation, erosion, and outdated control components, prompting a surge in specialized maintenance and repair needs. To ensure operational reliability and avoid significant capital expenditure on new systems, operators are investing in comprehensive service programs that extend turbine life. Services such as rotor and casing inspections, seal replacements, and software upgrades are increasingly common. Consequently, long-term service contracts have become a preferred solution,

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scott-international.com](mailto:support@scott-international.com)

[www.scott-international.com](http://www.scott-international.com)

offering routine maintenance, condition-based monitoring, and shared-risk models that align service providers' performance with asset owners' objectives.

#### Key Market Challenges

##### Declining Investment in Thermal Power Generation Reducing Service Opportunities

A critical challenge for the North America Steam Turbine Service Market is the continuous reduction in investment in new thermal power infrastructure. The energy sector's pivot towards renewables-driven by regulatory changes, environmental concerns, and financial incentives-has curtailed the development of new coal, oil, and gas-fired plants, thereby reducing the future pool of steam turbine assets requiring service. Additionally, many existing thermal plants, particularly coal-based ones, are being decommissioned ahead of schedule due to high costs and emissions penalties. This trend diminishes opportunities for retrofits, upgrades, and late-stage servicing. With fewer installations and early plant retirements, service providers face intensified competition for a shrinking client base, putting downward pressure on pricing and margins. Moreover, some industrial users are shifting towards electrification, further contracting steam turbine usage. This shift reflects a long-term structural challenge, as national policies increasingly favor low-carbon technologies, limiting growth prospects in the steam turbine servicing sector.

#### Key Market Trends

##### Increasing Adoption of Predictive Maintenance and Condition Monitoring Technologies

One prominent trend in the North America Steam Turbine Service Market is the expanding use of predictive maintenance and condition monitoring tools. These technologies enable operators to identify wear and performance issues before they lead to critical failures, thus minimizing downtime and improving operational efficiency. Moving away from time-based maintenance schedules, plant operators now rely on real-time data, vibration analytics, thermal imaging, and advanced sensors to assess turbine health. This shift is supported by the availability of cost-effective, high-precision diagnostic equipment that can be integrated with existing and legacy turbine systems. Service companies are also deploying centralized platforms to collect and analyze performance data across multiple facilities, enabling remote diagnostics and tailored maintenance strategies. The growing demand for reliability, especially in aging infrastructure, is accelerating the adoption of these technologies, positioning service providers with advanced diagnostic capabilities for long-term success.

#### Key Market Players

- General Electric Company
- Siemens Energy, Inc.
- Mitsubishi Power, Ltd.
- Schneider Electric SE
- Cummins Inc.
- ABB Ltd.
- Vestas Wind Systems A/S
- Doosan Heavy Industries & Construction Co., Ltd.

#### Report Scope:

In this report, the North America Steam Turbine Service Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

- North America Steam Turbine Service Market, By Service:
  - o Maintenance
  - o Repair
  - o Overhaul
  - o Others
- North America Steam Turbine Service Market, By Design:
  - o Reaction
  - o Impulse
- North America Steam Turbine Service Market, By End Use:
  - o Utility
  - o Industrial

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- North America Steam Turbine Service Market, By Country:

o United States

o Canada

o Mexico

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the North America Steam Turbine Service Market.

Available Customizations:

North America Steam Turbine Service Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

- Detailed analysis and profiling of additional market players (up to five).

## **Table of Contents:**

1. Service Overview
  - 1.1. Market Definition
  - 1.2. Scope of the Market
    - 1.2.1. Markets Covered
    - 1.2.2. Years Considered for Study
  - 1.3. Key Market Segmentations
2. Research Methodology
  - 2.1. Objective of the Study
  - 2.2. Baseline Methodology
  - 2.3. Formulation of the Scope
  - 2.4. Assumptions and Limitations
  - 2.5. Sources of Research
    - 2.5.1. Secondary Research
    - 2.5.2. Primary Research
  - 2.6. Approach for the Market Study
    - 2.6.1. The Bottom-Up Approach
    - 2.6.2. The Top-Down Approach
  - 2.7. Methodology Followed for Calculation of Market Size & Market Shares
  - 2.8. Forecasting Methodology
    - 2.8.1. Data Triangulation & Validation
3. Executive Summary
  - 3.1. Overview of the Market
  - 3.2. Overview of Key Market Segmentations
  - 3.3. Overview of Key Market Players
  - 3.4. Overview of Key Regions/Countries
  - 3.5. Overview of Market Drivers, Challenges, and Trends
4. Voice of Customer
5. North America Steam Turbine Service Market Outlook
  - 5.1. Market Size & Forecast
    - 5.1.1. By Value
  - 5.2. Market Share & Forecast
    - 5.2.1. By Service (Maintenance, Repair, Overhaul, Others)
    - 5.2.2. By Design (Reaction, Impulse)
    - 5.2.3. By End Use (Utility, Industrial)

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.2.4. By Country (United States, Canada, Mexico)
- 5.2.5. By Company (2024)
- 5.3. Market Map
- 6. United States Steam Turbine Service Market Outlook
  - 6.1. Market Size & Forecast
    - 6.1.1. By Value
  - 6.2. Market Share & Forecast
    - 6.2.1. By Service
    - 6.2.2. By Design
    - 6.2.3. By End Use
- 7. Canada Steam Turbine Service Market Outlook
  - 7.1. Market Size & Forecast
    - 7.1.1. By Value
  - 7.2. Market Share & Forecast
    - 7.2.1. By Service
    - 7.2.2. By Design
    - 7.2.3. By End Use
- 8. Mexico Steam Turbine Service Market Outlook
  - 8.1. Market Size & Forecast
    - 8.1.1. By Value
  - 8.2. Market Share & Forecast
    - 8.2.1. By Service
    - 8.2.2. By Design
    - 8.2.3. By End Use
- 9. Market Dynamics
  - 9.1. Drivers
  - 9.2. Challenges
- 10. Market Trends & Developments
  - 10.1. Merger & Acquisition (If Any)
  - 10.2. Product Launches (If Any)
  - 10.3. Recent Developments
- 11. Company Profiles
  - 11.1. General Electric Company
    - 11.1.1. Business Overview
    - 11.1.2. Key Revenue and Financials
    - 11.1.3. Recent Developments
    - 11.1.4. Key Personnel/Key Contact Person
    - 11.1.5. Key Product/Services Offered
  - 11.2. Siemens Energy, Inc.
  - 11.3. Mitsubishi Power, Ltd.
  - 11.4. Schneider Electric SE
  - 11.5. Cummins Inc.
  - 11.6. ABB Ltd.
  - 11.7. Vestas Wind Systems A/S
  - 11.8. Doosan Heavy Industries & Construction Co., Ltd.
- 12. Strategic Recommendations
- 13. About Us & Disclaimer

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**North America Steam Turbine Service Market By Service (Maintenance, Repair, Overhaul, Others), By Design (Reaction, Impulse), By End Use (Utility, Industrial), By Country, By Competition, Forecast and Opportunities 2020-2030F**

Market Report | 2025-05-16 | 120 pages | TechSci Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User License	\$4000.00
	Multi-User License	\$5000.00
	Custom Research License	\$7500.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-06-23"/>

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Signature

An empty rectangular box with a thin black border, intended for a signature.