Investorstack Research Report

TD Power Systems Limited

What TD Power Systems Limited does

TD Power Systems Limited manufactures AC generators and motors for power generation. The company has been in business since 1999, employs 1,919 people, and has supplied 7,096 generators and 66 motors to over 110 countries. It operates two manufacturing units in Bengaluru (one dedicated to large-format generators), a third facility that was declared operational in December 2025, and an additional factory in Istanbul, Turkey. It maintains 57 plus service centres worldwide.

The company designs and builds customised generators for every major type of prime mover steam turbines, gas turbines, gas engines, hydro turbines, and diesel engines. It also makes induction, synchronous, and traction motors. Historically, TDPS manufactured 2-pole generators under a licence from Siemens. That licence has ended, and the company is now developing its own designs through a new Design and Engineering Centre in the UK, targeting generators in the 50-150 MW range. The core capability that took years to build is the ability to match the quality and delivery reliability of European and Japanese competitors at a lower cost. As the Managing Director put it in November 2025:

> *"We have been building up our TDPS brand name in the international market since 2012, '13. And it's been a long road, a long hard road for the company to establish its product into international markets."*

The company sells mainly to Original Equipment Manufacturers (OEMs) who package TDPS generators with their turbines or engines and then sell the complete power plant to end users. A smaller portion goes directly to end users like data centre developers, oil and gas companies, and utilities. Exports account for about 76% of the order book, excluding railway business.

Business segments

Steam Turbine Generators

This segment covers AC generators driven by steam turbines for captive power plants, biomass, waste heat recovery, and combined cycle applications. End markets include steel plants, sugar and ethanol mills, pulp and paper mills, refineries, and industrial co-generation projects. The segment contributes roughly 25% of total revenue, as stated by management in the May 2026 concall. Growth is steady at 10-12% per year, driven by domestic industrial expansion and export demand. Machine sizes are shifting upward from 30 MW to 60 MW range.

Gas Turbine and Gas Engine Generators

This is the fastest-growing segment and the highest growth potential for the company. It includes generators for gas turbines (up to 250 MVA) and gas engines (up to 25 MVA). The primary end markets are AI data centres, oil and gas fracking and pipelines, grid stabilisation, and distributed power. The Managing Director in February 2026 called this segment "completely turbocharged" and said demand has increased dramatically. The company is delivering large volume orders and has a capacity agreement signed with INNIO that runs up to 2030. A specific revenue-mix percentage is not disclosed because it varies quarter to quarter, but management says this segment dominates order inflow.

Hydro Generators

TDPS makes generators for hydroelectric projects up to 75 MVA, including refurbishment of existing machines from any manufacturer. The company is active in India and export markets like Nepal and Vietnam. Management expects fiscal year 2027 to be one of the highest years for hydro in the company's history. The refurbishment business is a growing sub-segment, with large orders already won.

Motors

The motor business covers induction motors up to 20 MW, synchronous motors up to 50 MW, and traction motors up to 1,250 kW. End markets include oil and gas, steel plants, cement plants, railways, nuclear power (NPCIL), and marine applications. Revenue in fiscal 2026 was around INR 150 crores. The company has a separate team and dedicated production line for motors and targets INR 500 crores in 5-6 years. However, management has prioritised generator production given the explosive demand, so motor growth has been slower.

Railway

TDPS supplies traction motors and alternators for locomotives. Current orders come from Indian Railways (Alstom e-Loco project) and export markets in the US, Europe, and Russia. The Indian Railways contract runs through fiscal 2028, and export orders are replacing it. The company is producing trial units for US and European customers and expects volume production to start in fiscal 2027. A five-year contract with an Indian company (parent in Russia) for traction motors and alternators for dumper applications has an initial order of INR 18 crores and a projected total of INR 300 crores over the contract duration.

Spares and Aftermarket

This segment provides replacement parts, refurbishment services, and comprehensive after-sales support including commissioning, diagnostics, repairs, and overhauls. It serves all existing generator and motor installations worldwide, including competitor machines. The contribution is consistently 6-7% of sales. The company recently won a large hydro refurbishment order in India.

Products and business detail

Generator products

Steam Turbine Generators (up to 250 MVA) form the historical core, with sizes now trending to 30-60 MW for domestic captive power and export. Gas Turbine Generators (up to 250 MVA) include 2-pole designs for larger gas turbines. The company has developed a 40-45 MW 2-pole generator prototype for larger gas turbines, which was offered to a customer in late 2025 / early 2026. Qualification is expected to lead to multi-hundred crore orders from the second half of 2026 onward. Gas Engine Generators (up to 25 MVA) are a high-volume product line, with recent orders including 95 units of 4.5 MW generators for a UK data centre project. Hydro Turbine Generators (up to 75 MVA) cover small hydro up to 50 MW and include refurbishment of old machines. Diesel Engine Generators (up to 25 MVA) serve backup power, marine, and industrial standby, including an order from the Indian Navy for fleet-support ships.

Motor products

Induction Motors (up to 20 MW) include API-compliant designs for oil and gas. Synchronous Motors (up to 50 MW) serve compressors, pumps, and industrial drives. Traction Motors (up to 1,250 kW) are supplied for electric locomotives and dumper applications. Notable wins include an NPCIL order for replacement of imported motors and supply of API-compliant motors to oil and gas customers.

Manufacturing and certifications

The company's two Bengaluru facilities include high-precision infrastructure with robotic stacking, dynamic balancing, and coil winding. The third facility at Tumkur, 45 km from existing plants, was progressively commissioned from Q2 FY2026 and fully operational by mid-January 2026. It adds capacity to reach approximately INR 2,300-2,400 crores peak revenue with incremental debottlenecking. The Turkey facility handles small machines primarily for the Turkish market and as a backup for US-bound production if tariffs persist.

Certifications include ISO 9001, ISO 14001, ISO 45001, ISO 3834-2 (welding), DNV (wind), ATEX/IECEx (hazardous), Class NK (marine), AAR (railway), and product certifications for CE, UKCA, GOST-R, CSA, UL, and TSE. The company holds API compliance for oil and gas motors and PESO certification for refinery applications.

Buying relationship and switching costs

Customers are primarily turbine and engine OEMs who have rigorous qualification processes. A new generator supplier must undergo prototype testing, field trials, and years of reliability demonstration before being approved. Once approved, switching costs are high because the generator is designed to integrate with specific turbine or engine platforms. Orders are placed based on long-term capacity agreements or project-specific contracts. The INNIO agreement is a capacity commitment up to 2030. Payment terms typically do not exceed 180 days. The company also sells directly to end users for hydro, motors, and aftermarket.

Customer concentration is moderate. No single customer dominates, though INNIO is a significant partner. The company works with all major prime mover OEMs except one, as of November 2025. The aftermarket business is less concentrated and includes servicing competitor machines.

Customers

Key OEM customers

The company's largest customer relationships are with prime mover manufacturers. INNIO has a capacity agreement signed up to 2030. Siemens is both a competitor and a potential customer (the company has supplied generators to Siemens in the past). Baker Hughes (after acquiring Brush) is a major global player that also buys generators. General Electric (GE) is another important customer. Mitsubishi, Fuji Electric, and Toshiba are Japanese OEMs that are both competitors and customers. The company has a new customer acquisition in the US gas turbine market, currently at the engineering order stage, expected to convert to machine orders.

Other notable customers

Alstom is a customer for the e-Loco project in India. NPCIL (Nuclear Power Corporation of India) placed an order for induction motors. ADNOC approved the company as a supplier, with the first machine tested and cleared for dispatch. Energy Dome (CO2 battery storage) uses TDPS generators and motors for its long-duration energy storage plants. The Indian Navy ordered diesel engine generators for fleet-support ships. SpaceX is a project reference for gas turbine generators, indicating the company's supply into high-profile data centre or backup power projects.

Competitive landscape

Industry structure

The global market for AC generators is dominated by a handful of large multinational companies. Siemens is the global leader by far. Baker Hughes (after its acquisition of Brush) is the second-largest Western player. Mitsubishi, Fuji

Electric, and Toshiba are the major Japanese competitors. In India, BHEL and Crompton compete primarily in the domestic steam turbine and motors segments, respectively. The market is highly concentrated on the prime mover side; there are only four or five companies that dominate the worldwide market for gas engines and gas turbines.

TDPS's position

TDPS has a single-digit global market share, as stated by management in November 2025. The company competes on cost, quality, delivery, and service. Its products are approximately 25% cheaper than European or Japanese alternatives before tariffs, as estimated by management in August 2025. This cost advantage comes from lower manufacturing costs in India, a lean cost structure, and investments in automation. Even after US tariffs of 50% on direct exports, the company can still offer a price advantage because European competitors face 15% tariffs and higher base costs.

However, TDPS is not yet a player in the very large generator segment (above 200 MW) where Siemens and Baker Hughes dominate. The company is investing in large machining capabilities for rotors up to 200 MW, but the ramp-up will take until calendar 2028. In the 50-150 MW range, TDPS is developing its own designs through the UK centre and expects to compete more directly.

Why TDPS wins or loses

The company wins when customers need reliable, on-time delivery at competitive prices and when competitors are fully booked. The current demand boom has left all major generator manufacturers at full capacity, and TDPS's decision to invest in the third plant gives it a capacity advantage. Long-standing relationships with OEMs and a global service network help retain customers. The company loses when customers require extremely large machines (above 200 MW) where TDPS does not yet have product, or when a customer prefers a single-source bundled supply from a turbine manufacturer that also makes generators in-house.

Competition intensity

Competition is intense in all segments, but the current market environment is favourable for TDPS. All major players are full, and demand is growing. The Managing Director noted in November 2025: "Those who have capacity, those who can deliver faster are getting more business." In the domestic market, BHEL and Crompton compete, but Chinese imports are also allowed without restriction for captive plants up to 100 MW, as confirmed in the February 2026 concall. In aftermarket, the company targets all competitor machines for refurbishment and spares.

Industry

Demand drivers

The primary demand driver currently is the power requirement for AI data centres. The US alone is projected to need around 100 GW of new power capacity over 5-7 years, according to management in May 2026. This power is primarily provided by gas turbines and gas engines, which directly drives demand for generators. The company's prime mover customers are planning to double their average capacity by 2030.

Other demand drivers include grid stabilisation (synchronous condensers, grid backup), traditional power generation (especially in emerging economies), renewables (geothermal, hydro, waste-to-energy, biomass), captive power plants for industries (steel, sugar, refineries), and oil and gas applications (fracking, pipelines, offshore). Hydro refurbishment is a growing niche as aging hydro plants require rewinding and upgrades.

Market size

The annual report cites multiple market projections:

- Global generator market: USD 51.99 billion in 2025, expanding to USD 72.66 billion by 2029.
- Gas turbine market: USD 25.26 billion in 2025, growing to USD 34.75 billion by 2032.
- Hydro generator market: set to surpass USD 301.61 billion by 2034.
- Diesel generator market: expected to reach USD 37.03 billion by 2032.
- Gas generator market: expected to reach USD 8.62 billion by 2032.
- Induction motor market: projected to reach USD 44.8 billion by 2032.
- Synchronous motor market: USD 33.24 billion by 2032.
- Traction motor market: USD 35.32 billion by 2034.

India's place in global supply chain

India has become a credible manufacturing base for power generation equipment, driven by "Make in India" incentives, a skilled engineering workforce, and cost competitiveness. TDPS is one of the few non-European or non-Japanese companies supplying generators to the US market in significant volumes, as management noted in August 2025. Indian companies are increasingly used as alternative suppliers by global OEMs seeking to diversify supply chains away from China and reduce costs.

Import substitution and regulation

In the domestic market, TDPS benefits from the preference for local suppliers in public sector projects (e.g., NPCIL, NTPC). However, there are no restrictions on Chinese equipment imports for captive power plants up to 100 MW, as confirmed in the February 2026 concall. The company competes with Chinese imports in price-sensitive segments. Regulatory requirements include PESO certification for oil and gas, AAR for rail, and various international standards for export markets.

Cyclicality and structural visibility

Capital goods businesses are typically cyclical, but the current demand environment is considered structural by management. The AI data centre buildout, grid modernisation, and energy transition are long-duration trends with visibility until 2030 from OEM forecasts. As the Managing Director said in May 2026:

> *"the basic factors that are driving growth continue to play out. AI data centers, grid stabilization, basic power generation, push towards renewables, which drives demand for geothermal, hydro and waste-to-energy, etcetera."*

The company has raised its revenue guidance from INR 1,500 crores to INR 2,400-plus crores for FY2027, reflecting confidence in sustained demand. However, risks include commodity price volatility (copper at USD 14,000 per lb), US tariffs (currently 50% on direct exports from India), execution pressure from high utilisation, and any slowdown in AI-related capital expenditure. The Turkey facility provides a mitigation route for US tariffs.

Growth triggers

- **Large generator capacity expansion (rotors for up to 200 MW).** The company announced a major investment plan to build complete rotor manufacturing capability for machines up to 200 MW. This will require large machining

centers and take 15-16 months to install due to global machine tool shortages. Ramp-up expected in calendar 2028 / FY 2029. (Q4 FY26 concall, May 2026)

- **Third manufacturing facility at Tumkur now operational.** Declared operational on December 18, 2025. Adds capacity to reach peak revenue of roughly INR 2,300-2,400 crore from the current facilities. The company is debottlenecking further with INR 50 crore capex this year and next, which should lift capacity to INR 3,000-3,200 crore by FY 2028. (Q2 FY26 concall, Nov 2025; Q4 FY26 concall, May 2026)
- **UK Design and Engineering Centre for own-design larger generators (50-150 MW range).** A wholly owned subsidiary developing TDPS's own design for larger generators, moving beyond the previous license agreement with a large company. Commercialisation expected FY 2028 onwards. (Annual Report FY25; Q1 FY26 concall, Aug 2025)
- **New customer acquisition in US gas turbine market.** A new US gas turbine OEM was at the engineering order stage in February 2026, expected to convert to machine orders with a big forecast for the next year. (Q3 FY26 concall, Feb 2026)
- **INNIO capacity agreement signed up to 2030.** A specific forecast and capacity commitment agreement with a major gas engine OEM extends to 2030, driving volume orders for TDPS generators. (Q4 FY26 concall, May 2026)
- **Five-year contract for traction motors and alternators for dumper applications.** Contract with an Indian company (parent in Russia) for dumper applications. Initial order INR 18 crore, projected total business INR 300 crore over the contract duration. (Annual Report FY25)
- **Motor business target of INR 500 crore in 5-6 years.** A separate team and dedicated production facility have been set up. The motor business is currently around INR 150 crore but expected to scale significantly. (Q2 FY26 concall, Nov 2025)
- **ADNOC qualification for oil & gas segment.** First machine successfully tested and cleared. Real ramp-up expected 6-8 months after the first units are commissioned and the customer is satisfied. (Q2 FY26 concall, Nov 2025)
- **Large 40-45 MW 2-pole generator prototype for larger gas turbines.** The prototype was offered to the customer by end-December 2025 / early January 2026. Qualification expected to lead to larger orders from second half of 2026. Multi-hundred crore opportunity. (Q2 FY26 concall, Nov 2025; Q3 FY26 concall, Feb 2026)
- **Possible US-India trade deal reducing tariffs.** If a deal brings import duty to 15-20%, the business could go further up. The Turkey plan B is ready if no deal. (Q1 FY26 concall, Aug 2025; Q2 FY26 concall, Nov 2025)

Key risks

- **High factory utilization leading to execution pressure.** The company runs near full capacity with tremendous execution pressure. Total preventive maintenance is in place but "if there are breakdowns in any of the production equipment, then you would have production delays" (Q4 FY26 concall, May 2026). With order inflow accelerating faster than capacity, any unplanned downtime could delay deliveries and trigger penalties.
- **Commodity price volatility, especially copper.** Copper prices rose drastically to around $14,000/lb. The company uses hedges and price variation clauses with customers, but a sudden spurt creates a lag before new prices kick in. Hedges are running out, requiring renegotiation of prices. (Q4 FY26 concall, May 2026; Q3 FY26 concall, Feb 2026)

- **US tariffs on direct exports from India.** The current 50% tariff on Indian-made generators exported directly to the US could impact competitiveness. Around 25% of US-bound business is direct exports and would need to be routed through Turkey to avail 15% duty. This adds cost and complexity. If no India-US trade deal, the Turkey route becomes permanent. (Q1 FY26 concall, Aug 2025; Q3 FY26 concall, Feb 2026)
- **Geopolitical/trade disruptions leading to shipping delays.** A one-off incident in Turkey – severe shipping delays of one lot of components from India to Turkey – resulted in a high LD penalty from a customer, reducing consolidated margins for Q4 FY26. (Q4 FY26 concall, May 2026)
- **Competition from large global players.** Siemens, Baker Hughes (after Brush), Mitsubishi, Fuji Electric, Toshiba, and BHEL are all competitors in various segments. These companies have advanced technology and financial resources. TDPS competes on cost, quality, delivery, and long-standing relationships with OEMs. (Q4 FY26 concall, May 2026)
- **Currency fluctuation risk (partially a tailwind).** The company has high export exposure (76%+ of orders) and imports in dollars/euros while exporting in dollars/euros, providing a natural hedge. The conscious decision to stop hedging six months ago benefited from rupee depreciation. However, if the rupee strengthens, the tailwind reverses. (Q3 FY26 concall, Feb 2026)

Walk the talk

Management has consistently raised guidance as order inflow accelerated beyond expectations. In the Q3 FY26 call (Feb 2026), the MD gave an upward guidance for FY 2027 at INR 2,200-plus crores. By the Q4 FY26 call (May 2026), that had been revised upward:

> *"We revised our guidance for FY '27 at INR2,400-plus crores with an extremely high probability to increase our guidance further to match the rate of order inflow that we saw in Q4" – MD, Q4 FY26 concall (May 2026)*

Similarly, the guidance for the current year (FY26) was originally INR 1,500 crores in the Q1 FY26 call (Aug 2025), revised to INR 1,800 crores in the Q2 FY26 call (Nov 2025), and the company actually achieved consolidated total income of INR 18.78 billion, meeting the upgraded target.

The third manufacturing facility at Tumkur was promised to be progressively commissioned from Q2 FY26, with full operational capability by mid-January 2026. In the Q3 FY26 call (Feb 2026), management declared:

> *"We declared our third plant as operational on 18th December" – MD, Q3 FY26 concall (Feb 2026)*

The Q4 FY26 results showed production ramp-up to a quarterly run rate of INR 590 crore, confirming the new capacity was indeed adding volume.

The large 40-45 MW 2-pole generator prototype for larger gas turbines was promised to be offered to the customer by end-December 2025 or early January 2026. In the Q4 FY26 call, the MD declined to give a specific update but instead announced a major investment plan for large generator capacity (rotors up to 200 MW), indicating the initiative had progressed to the next phase rather than stalled.

The company's market commentary has been consistent. In Q3 FY26, the MD said:

> *"the gas turbine and gas engine business continue to be the strongest segment with the highest growth and the highest growth potential in the years to come" – MD, Q3 FY26 concall (Feb 2026)*

This was borne out by Q4 FY26 order inflow of INR 6.66 billion (+61% YoY) and full year order inflow of INR 22.38 billion (+51% YoY), with 79% of order inflow from exports.

On the foreign exchange front, management took a conscious decision to stop hedging about six months before the Q3 FY26 call, expecting rupee depreciation. In Q4 FY26, the MD noted that the currency tailwinds from devaluation of the rupee contributed to EBITDA margins of 18.14% vs 17.46% prior year, confirming the strategy worked.

One miss: the one-off shipping delay in Turkey led to a high LD penalty, which management acknowledged frankly. This was not forecast but was described as an exceptional event unlikely to recur.

Scenarios

Bull case

The AI data center buildout in the US continues at full throttle, and the prime mover OEMs double their production capacity by 2030 as planned. TDPS's new 40-45 MW generator gains rapid qualification, opening a multi-hundred crore order pipeline. The large generator capacity expansion comes online in calendar 2028, just as the market shifts toward larger, more efficient machines. The UK design centre delivers its own designs for the 50-150 MW range, positioning TDPS as a direct competitor to Siemens and Baker Hughes in that segment. The US-India trade deal reduces tariffs from 50% to 15-20%, making the Turkey backup plan unnecessary and improving competitiveness. ADNOC qualification leads to a steady stream of oil & gas orders. The motor business scales to INR 500 crore as a separate dedicated facility comes online. All segments fire together, and the company consistently exceeds its own guidance.

Base case

Demand remains strong across gas turbine and gas engine segments, driven by data centers and grid stabilization, but growth moderates after FY 2028 as the initial rush of capacity additions plateaus. The company executes well on its existing order book, gradually ramping up the new Tumkur facility. The 40-45 MW generator gets qualified and contributes modestly from FY 2027, but the big ramp-up in large generators takes until FY 2029 as machine tools are delayed. US tariffs stay at 50%, so about 4-5% of sales are routed through the Turkey plant at slightly higher cost. Commodity price volatility is managed through price variation clauses and hedges, but margins stay flat rather than expanding. The motor business grows steadily but doesn't hit the INR 500 crore target within the 5-6 year timeframe. The company delivers INR 2,400-plus crores in FY 2027 and grows 20-25% per year thereafter, but the hockey stick curve flattens into a steady upward slope.

Bear case

The US economy enters a recession, and tech companies slash AI data center spending. Prime mover OEMs slow their capacity expansion plans, and order inflows decelerate sharply. The 50% US tariff on direct Indian exports persists, and no trade deal materializes. TDPS is forced to shift more production through Turkey, adding cost and complexity. A second shipping disruption similar to the Turkey incident occurs, damaging customer relationships and margins. Copper prices spike another 20-30%, and the company's hedges run out before new prices can be renegotiated with customers, squeezing gross margins. The 40-45 MW generator prototype fails qualification, and the large generator investment is delayed. Chinese equipment begins flowing into India's captive power plant market more aggressively, pressuring the domestic steam turbine segment. The company's high capacity utilization becomes a liability when demand drops, leading to underutilization and margin erosion. The bull case assumptions reverse, and the company struggles to maintain its growth trajectory.