

ASIAN MARKETS — SECURITIES —

INSTITUTIONAL EQUITIES

INITIATING COVERAGE REPORT
25 | November | 2024

Voltamp Transformers Ltd

Mayank Bhandari
mayank.bhandari@amsec.in
+91 9945758662

Suraj Sonulkar
suraj.sonulkar@amsec.in
+91 889834381



| Asian Markets Rating | BUY |
|----------------------|--------|
| CMP (Rs) | 9,561 |
| Target Price (Rs) | 12,436 |
| Upside (%) | 30% |

Nifty: 23,907 Sensex: 79,117

Key Stock Data

| | |
|--------------------------|------------|
| Bloomberg | VAMP IN |
| Shares O/s Mn (FV INR10) | 10.1 |
| Mkt Cap (USD Bn/INR Bn) | 1.1/96.7 |
| 52-week high/low | 14800/4951 |
| 6m daily avg vol(INR Mn) | 399 |
| Free Float % | 62 |

Price Performance

| (%) | 3m | 1yr | 3yr |
|------------|--------|------|-------|
| VAMP | (33.9) | 88.7 | 742.0 |
| Nifty | (3.4) | 22.3 | 44.4 |
| NSE500 | (5.0) | 27.5 | 57.5 |
| BSE Midcap | (7.3) | 35.7 | 90.9 |

Shareholding Pattern

| (%) | Dec-23 | Mar-24 | Jun-24 |
|----------|--------|--------|--------|
| Promoter | 38.0 | 38.0 | 38.0 |
| FII | 23.2 | 24.8 | 27.3 |
| DII | 28.5 | 26.7 | 24.2 |
| Others | 10.3 | 10.4 | 10.6 |

Mayank Bhandari

mayank.bhandari@amsec.in
+91 9945758662

Suraj Sonulkar

suraj.sonulkar@amsec.in
+91 8898343819

| FY24-27E Earnings CAGR | CF & Return Profile | Valuations |
|------------------------|---------------------|------------|
| 11% | High | Reasonable |

Key beneficiary of industrial capex revival, valuation attractive....

Voltamp Transformers Ltd (Voltamp), a key beneficiary of the Power T&D and industrial capex revival, has corrected by ~34% from its all-time high. At the current valuation of 23x FY27E earnings, we find the stock attractively priced in. From FY19 to FY24, Voltamp reported sales CAGR of ~14%, outpacing industry growth of 13%, and expanded its EBITDA margin by 900bps. With asset turns of ~10x, Voltamp is one of the most asset-light players in the sector, and holds 15% organized market share in industrial application transformers. The company had benefited from government schemes like IPDS, Saubhagya, and DDUGJY, which aimed to strengthen sub-220kV T&D infrastructure. Over the past two decades, Voltamp has maintained a debt-free balance sheet, led by disciplined working capital management. To address rising demand, the company announced a capacity expansion of 6,000 MVA, boosting total capacity to 20,000 MVA. With a strong order book of Rs10.2 bn (8,730 MVA), Voltamp enjoys solid revenue visibility. While margins may normalize in the medium term due to rising competitive pressures, the long-term growth outlook remains promising. We initiate coverage with a BUY rating and a target price of Rs12,436, based on a 30x FY27E EPS.

Revival in industrial & power T&D capex to charge Voltamp

Voltamp's diversified revenue streams include power transformers (40%), distribution transformers (37%), dry-type transformers (14%), and services/RMU/USS (9%). Market leader in dry-type transformers with 35–40% share & 15% share in industrial transformers, its volumes have grown at 7% CAGR over the last decade and are expected to accelerate to 15% CAGR between FY24–27E. This will be driven by: Data center expansions, renewable energy projects (including rooftop solar), and IT campuses; brownfield manufacturing expansions across sectors; and increased government spending.

Transformer industry at ~90% utilization, Voltamp's realization highest among peers

Our assessment of Indian transformer industry (Size Rs290bn in FY24) suggest that rising export has led to near ~90% utilization for the industry. We also understand that Utilities focused demand could grow near 11% as per government's targeted power demand growth. We cannot rule out industry facing FY15 like situation where transformer industry saw overcapacity addition with slower than expected power generation. Export could be a key growth factor going forward. Among peers like TRIL, Shilchar, and Indo Tech, Voltamp leads in realization per MVA at Rs1.2mn (vs industry avg 0.9mn) metrics due to higher proportion of distribution transformer. Although, Voltamp's profitability in not best in industry, we believe company's asset-light business model is a key competitive advantage. Balance sheet is healthy due to nil debt/creditor days below five/Competitive pricing from vendors.

Firm capex plan; Service revenue may be amped up, but margins could normalise

The management has outlined a Rs1.5 bn capex plan to expand capacity to 20,000 MVA from 16,000 MVA amid strong demand. Service revenue, which reached Rs757 mn in FY24, we expects to double to Rs1.6 bn by FY27E, and support profitability since this segment sees margins of over 40%. However, with multiple players expanding capacity, increased pricing pressures could weigh on growth and margins. Management believes that current margin of ~19% is not sustainable and it expects it to normalize it in medium term.

Valuations attractive; Initiate coverage with a BUY rating

We expect revenue and PAT to grow at a CAGR of 16% and 11%, respectively, over FY24–27E, driven by healthy volume growth and strong demand. Voltamp's RoE and RoCE are estimated to reach 21.1% and 27.6%, respectively, by FY27E. The stock is currently trading at 23.1x FY27E earnings. Given its diversified business portfolio, leadership in industrial transformers, demand tailwinds, and a debt-free balance sheet, Voltamp remains a compelling long-term investment. Hence, we initiate coverage with a BUY rating and a target price of Rs12,436 (30x FY27E EPS).

Exhibit 1: Key Financials

| Y/E Mar | FY23 | FY24 | FY25E | FY26E | FY27E |
|--------------|--------|--------|--------|--------|--------|
| Sales | 13,851 | 16,162 | 18,561 | 21,360 | 25,219 |
| yoy (%) | 22.9 | 16.7 | 14.8 | 15.1 | 18.1 |
| EBITDA | 2,309 | 3,223 | 3,381 | 3,506 | 4,165 |
| yoy (%) | 66.1 | 39.6 | 4.9 | 3.7 | 18.8 |
| Adjusted PAT | 1,999 | 3,074 | 3,309 | 3,492 | 4,194 |
| yoy (%) | 50.5 | 53.7 | 7.7 | 5.5 | 20.1 |
| EBITDAM (%) | 16.7 | 19.9 | 18.2 | 16.4 | 16.5 |
| Equity | 101 | 101 | 101 | 101 | 101 |
| EPS | 197.6 | 303.8 | 327.1 | 345.1 | 414.5 |

Source: Company, AMSEC Research

Exhibit 2: Key Indicators

| Y/E Mar | FY23 | FY24 | FY25E | FY26E | FY27E |
|---------------|-------|-------|-------|-------|-------|
| ROE (%) | 19.5 | 25.0 | 22.5 | 20.4 | 21.1 |
| ROCE (%) | 23.8 | 30.4 | 28.5 | 26.7 | 27.6 |
| ROIC (%) | 19.6 | 25.1 | 22.6 | 20.5 | 21.2 |
| D:E (x) | (0.1) | (0.0) | (0.1) | (0.1) | (0.2) |
| PER (x) | 20.7 | 30.1 | 29.2 | 27.7 | 23.1 |
| P/BV (x) | 3.7 | 6.8 | 6.1 | 5.3 | 4.5 |
| EV/Sales (x) | 2.9 | 5.7 | 5.2 | 4.5 | 3.7 |
| EV/EBITDA (x) | 17.5 | 28.5 | 28.2 | 27.0 | 22.3 |
| Div Yield % | 1.5 | 1.0 | 1.0 | 1.0 | 1.2 |



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Story in Charts

Exhibit 3: Powerful mix: Diversified business segments

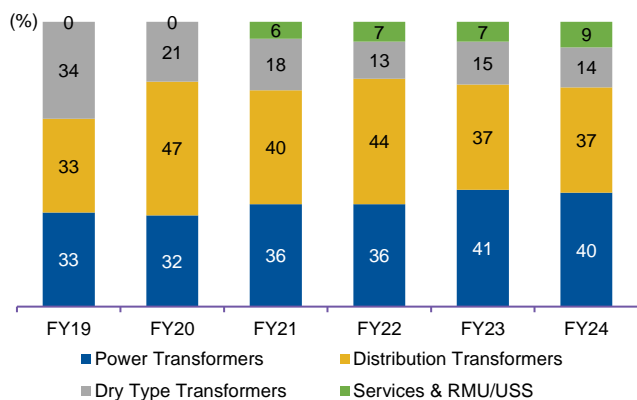


Exhibit 4: Diversified revenue mix in FY24

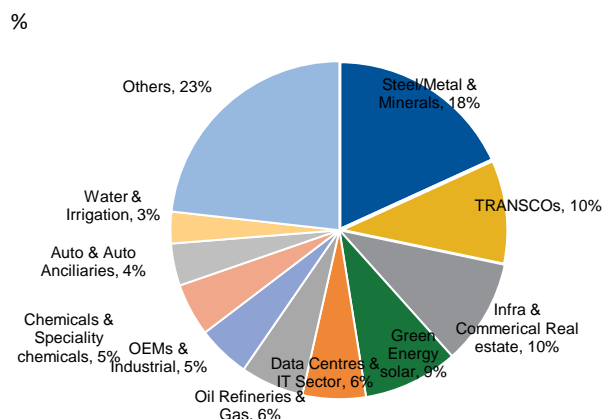


Exhibit 5: Spreading the load: Top 10 clients' contribution

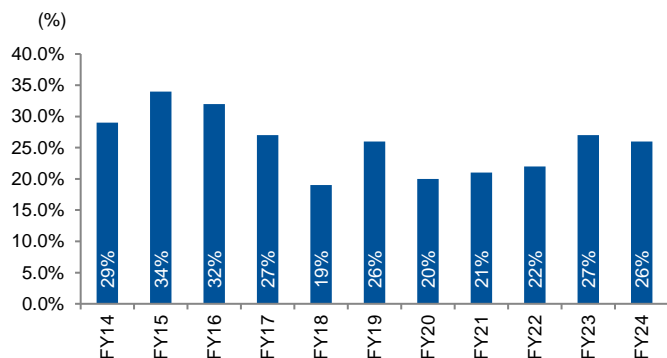


Exhibit 6: Revival in PGCIL's capex

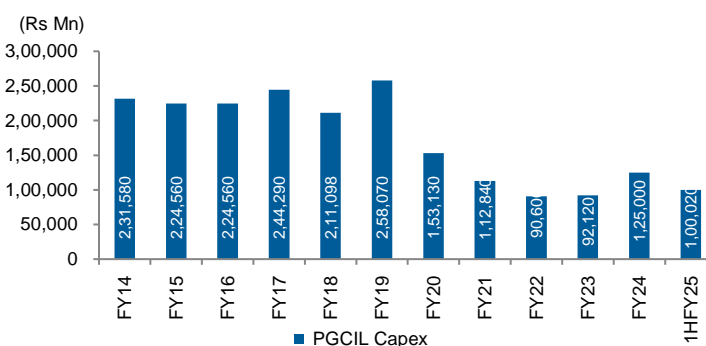


Exhibit 7: Net cash company

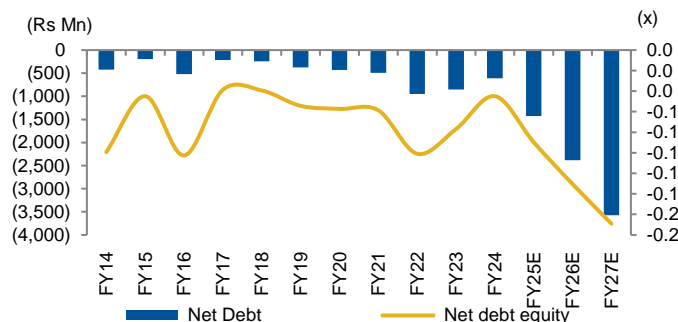


Exhibit 8: Improvement in ROE and ROCE

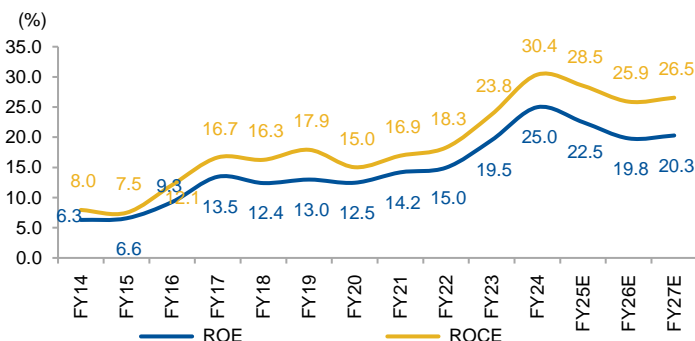


Exhibit 9: Healthy order book trend

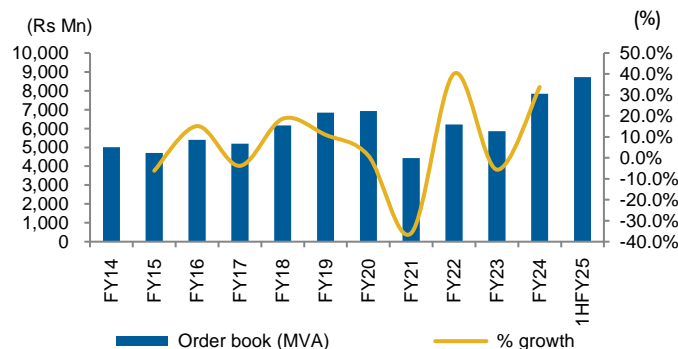
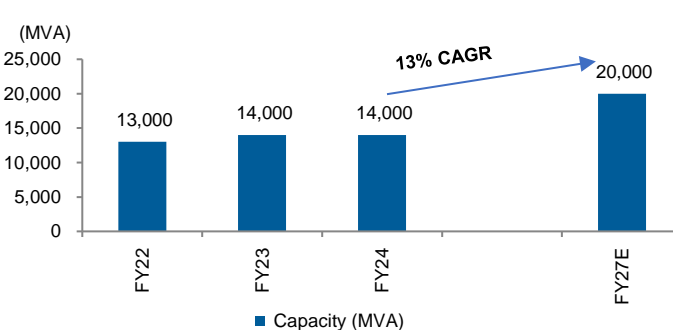


Exhibit 10: Capacity expansion on the cards



Source: Company, AMSEC Research

Investment rational

Wired for success with a well-diversified business model

With over 61 years of expertise, Voltamp Transformers is a leading manufacturer of customized transformers for industrial, building, and power applications. Its diversified revenue streams include power transformers (40% of revenue), distribution transformers (37%), dry-type transformers (14%), and services/RMU/USS (9%). Oil-filled transformers dominate the product mix at 77% of sales, with dry-type transformers contributing 17%.

No single sector contributes more than 20% to its revenue: Steel, Metal & Minerals: 18.3%; GETCO: 10%; Infrastructure & Commercial Real Estate: 9.9%; Green Energy (Solar): 8.5%; Data Centers & IT: 6.5%; Oil Refineries & Gas: 6.3%; OEMs & Industrial Applications: 5.5%; and Chemicals & Specialty Chemicals: 5.08%.

The company's strong pan-India presence is supported by 16 marketing offices and regional service centers. A team of 60+ marketing professionals and 30 service engineers ensures robust client support across major industrial hubs and metros.

Voltamp has also cultivated long-standing relationships with marquee clients across industries, including EPC giants like L&T, Technip, ThyssenKrupp, Toyo, Petrofac, Engineers India, Tata Projects, Thermax, Siemens, ABB, GE, and Hitachi. These partnerships ensure a steady stream of repeat orders, with 60% of sales generated directly from corporates and 40% from Class A/EPC players with strong payment records.

The company continues to reduce client concentration through aggressive marketing and new client acquisitions. Revenue contribution from the top 10 clients declined to 26% in FY24 from 27% in FY23, reflecting its efforts to diversify.

Voltamp is equipped to manufacture highly customized transformers for diverse applications, with capabilities extending to 150 MVA and 220kV.

Exhibit 11: Powerful mix: Diversified segment revenue

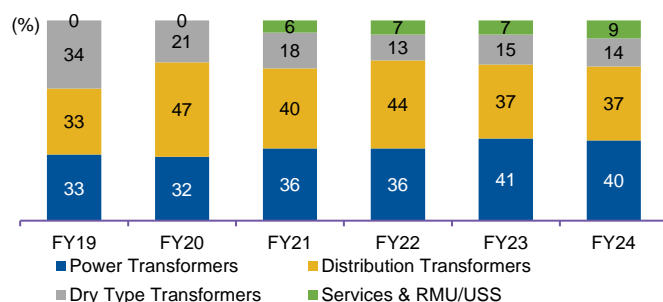


Exhibit 12: 'Oil-filled' dominates Voltamp's transformer category

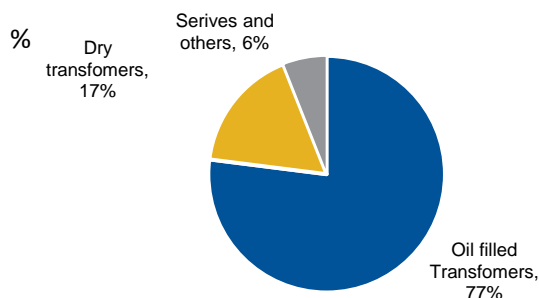


Exhibit 13: Plugged across sectors: Revenue mix in FY24

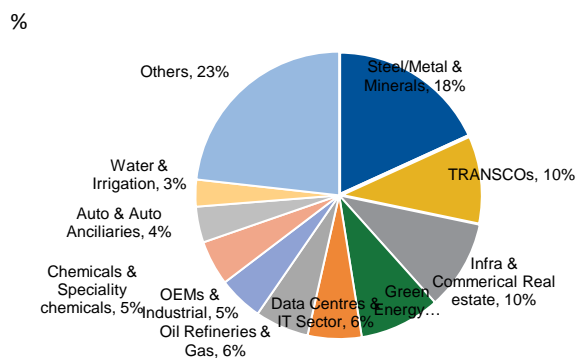
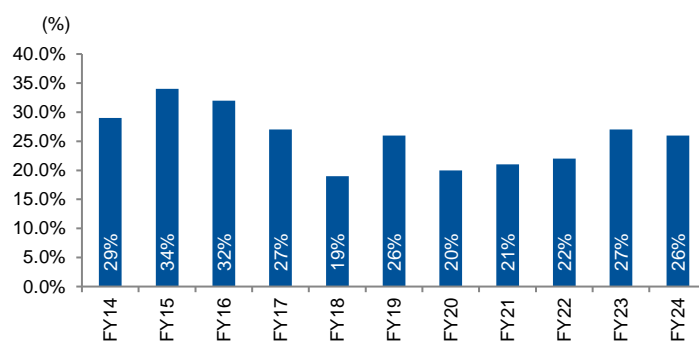


Exhibit 14: Top 10 clients' contribution



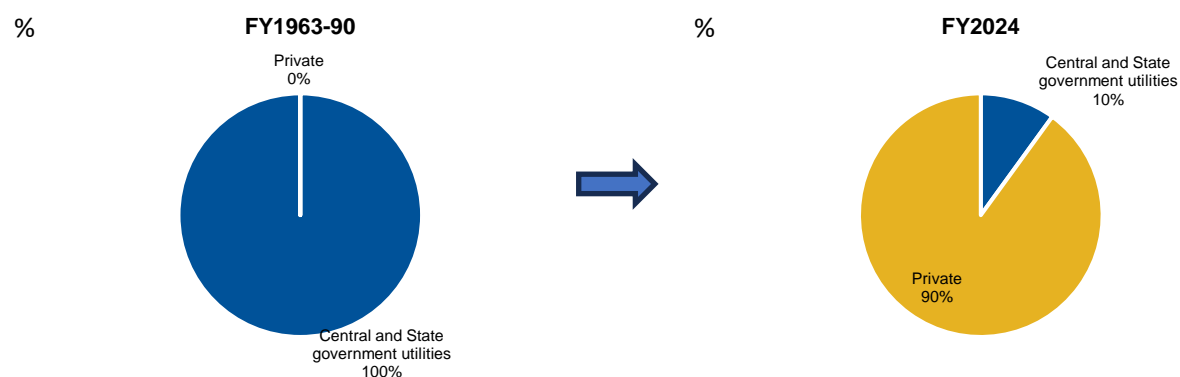
Source: Company, AMSEC Research

Exhibit 15: Voltamp's range: Ringing in reliability across products & services

| Power Transformer | Distribution transformer | Dry type transformer | Services business Units | Compact Sub station and Ring main units |
|--|--|---|---|--|
| <ul style="list-style-type: none"> 10 MVA to 150 MVA 33 KV to 220 KV | <ul style="list-style-type: none"> 315 KVA to 10,000 KVA Up to 33 KV | <ul style="list-style-type: none"> 63 KVA to 10,000 KVA Up to 33KV | <ul style="list-style-type: none"> Any make and rating transformers repair, servicing, overhauling, maintenance etc. | <ul style="list-style-type: none"> Substation: 2.5 MVA and 33kv Class Ring Main units: 12kv and 630 Amps |
| Strategic Tie Ups | | State of art facilities | Strong marketing setup | |
| <ul style="list-style-type: none"> Technical collaborations for dry type transformers with MORA, Germany and HTT GMBH, Germany (No royalty payment) | | <ul style="list-style-type: none"> 5 Manufacturing units Manufacturing capacity of 14,000 MVA PA Fully equipped state-of-the-art test facilities | <ul style="list-style-type: none"> Nationwide network of 16 marketing offices Strong team with 60 sales & marketing professionals 30 service professionals backed by dedicated equipped service centers. | |

Source: Company, AMSEC Research

In FY1963 to 1990, Voltamp run its business solely focusing on central and state government utilities and remain perpetually working capital starved company. After 1991, the company started rebuilding its business by scaling up business by focusing on Non utilities business.

Exhibit 16: Revenue mix change towards private sector


Source: Company, AMSEC Research



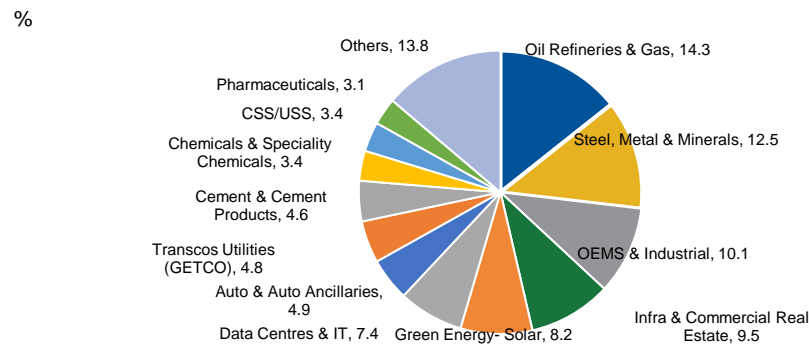
Strong revenue visibility with a healthy order book

Order inflow during FY24 grew 35% yoy to Rs18.5bn. This led to all time highest order backlog of Rs8.4bn for transformers totalling of 7,839 MVA, which provide near term revenue visibility. Out of total order inflow, Steel, metal and minerals contribute 18.3%, followed by Transcos Utilities (GENCO) of 10%, Infra & Commercial real estate of 9.9%, Green Energy -solar of 8.5%, Data centres & IT of 6.5% and Oil refineries & Gas of 6.3%.

From April'24 onwards, new orders received worth Rs.10,087Mn (8014 MVA). As of Oct,'24 unexecuted orders in hand Rs. 10,220Mn (8730 MVA). After Oct'24, the company has received order from GETCO for 66kv and 220kv power transformer worth Rs2.9bn (3095 MVA).

Voltamp's growth trajectory is supported by robust opportunities across manufacturing, industrial capacity expansions, and energy transitions. The inquiry pipeline remains active, with demand from sectors such as: Data Centers, Metals & Steel, Cement, Commercial Real Estate, Green Energy, and Oil & Gas. The company's ability to capitalize on these opportunities is driven by its short-cycle, cost-plus business model, which ensures flexibility and minimal order exposure beyond eight months. Order book realization has grown at a CAGR of 6% over the past decade and 8% over the last five years. Similarly, order inflow realization has grown at 5% and 10% over the same periods, respectively. However, a slight decline in order inflow realization was observed in 1HFY25, reflecting short-term pricing adjustments.

Exhibit 17: Well, diversify order book mix in Oct'23

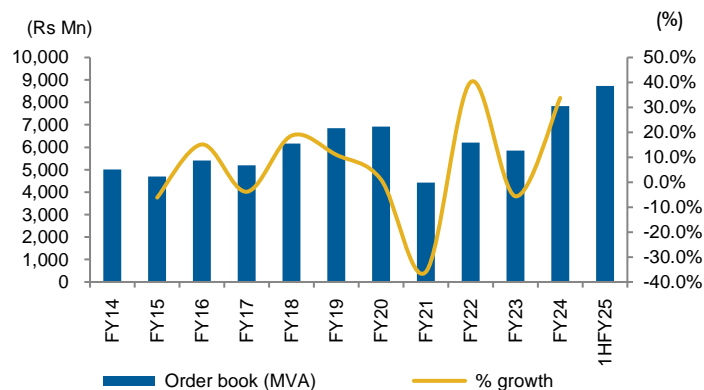
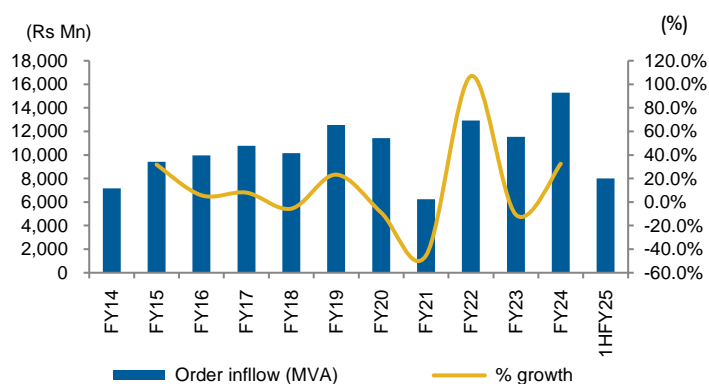
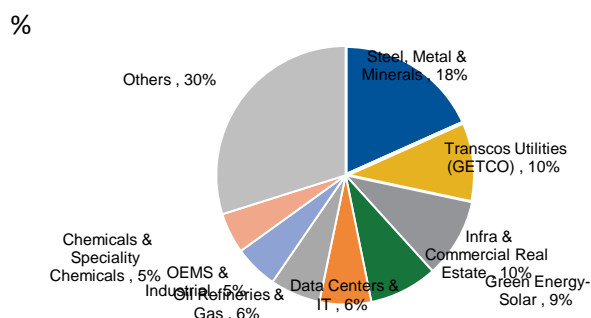
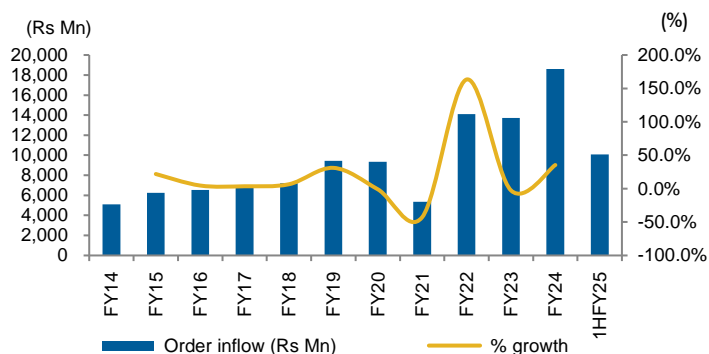
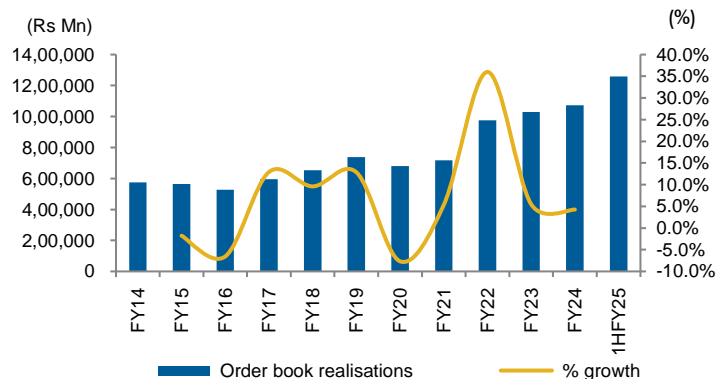
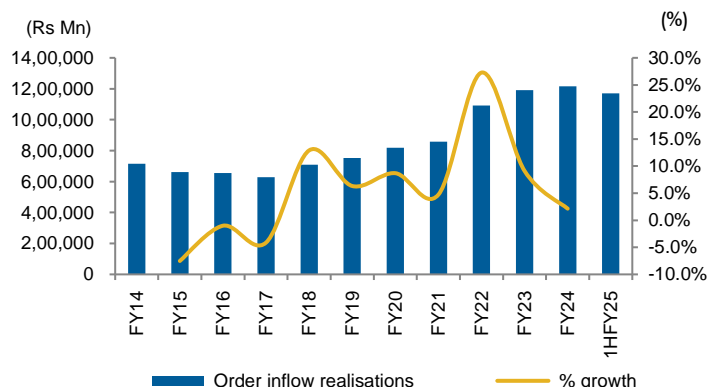


Source: Company, AMSEC Research

Exhibit 18: Well diversify Order book Break up Industry Segment wise on 31st Oct 2024

| Sr No | End User Segment | Units (Numbers) | Volume (MVA) | Value In Mn | % Contributions | Realization (Rs/MVA) |
|-------|----------------------------------|-----------------|--------------|---------------|-----------------|----------------------|
| 1 | Oil Refineries & Gas | 208 | 1342 | 1440 | 14.3 | 10,72,653 |
| 2 | Steel, Metal & Minerals | 230 | 1077 | 1257 | 12.5 | 11,67,502 |
| 3 | OEMS & Industrial | 215 | 673 | 1012 | 10.1 | 15,03,269 |
| 4 | Infra & Commercial Real Estate | 295 | 487 | 950 | 9.5 | 19,49,692 |
| 5 | Green Energy- Solar | 104 | 931 | 822 | 8.2 | 8,83,244 |
| 6 | Data Centres & IT | 135 | 464 | 746 | 7.4 | 16,07,543 |
| 7 | Auto & Auto Ancillaries | 118 | 349 | 492 | 4.9 | 14,08,883 |
| 8 | Transcos Utilities (GETCO) | 25 | 665 | 483 | 4.8 | 7,26,015 |
| 9 | Cement & Cement Products | 35 | 456 | 464 | 4.6 | 10,17,544 |
| 10 | Chemicals & Speciality Chemicals | 74 | 265 | 343 | 3.4 | 12,95,849 |
| 11 | CSS/USS | 144 | 142 | 340 | 3.4 | 23,94,366 |
| 12 | Pharmaceuticals | 67 | 211 | 310 | 3.1 | 14,69,194 |
| 13 | Water & Irrigation | 67 | 172 | 259 | 2.6 | 15,04,651 |
| 14 | Export | 39 | 179 | 234 | 2.3 | 13,09,497 |
| 15 | Food, Bewarages & FMCG | 45 | 125 | 165 | 1.6 | 13,20,800 |
| 16 | Thermal & Hydro Projects | 39 | 81 | 158 | 1.6 | 19,44,444 |
| 17 | Sugar & Disteleries (Ethanol) | 38 | 145 | 152 | 1.5 | 10,46,207 |
| 18 | Textile & Garments | 33 | 93 | 119 | 1.2 | 12,78,495 |
| 19 | Paper & Packaging | 27 | 70 | 89 | 0.9 | 12,72,857 |
| 20 | Rail & Metro Projects | 22 | 29 | 68 | 0.7 | 23,31,034 |
| 21 | Defence | 6 | 57 | 59 | 0.6 | 10,38,596 |
| 22 | Agriculture | 10 | 31 | 44 | 0.4 | 14,06,452 |
| 23 | Plastic | 8 | 27 | 40 | 0.4 | 14,88,889 |
| | Total | 1,984 | 8,071 | 10,044 | 100.0 | 12,44,493 |

Source: Company, AMSEC Research

Exhibit 19: Order book trend in volume terms

Exhibit 20: Order inflow trend in volume terms

Exhibit 21: Order inflow break-up in FY24

Exhibit 22: Order inflow trend in value terms

Exhibit 23: Order book realizations trend

Exhibit 24: Order inflow realizations trend


Source: Company, AMSEC Research



Revving up: Industrial capex to charge Voltamp's future

Voltamp has delivered 7% CAGR in volumes over the past decade, with growth expected to accelerate to 15% CAGR during FY24–27E. This momentum is fueled by robust investments in: data centers, renewable energy (including rooftop solar), IT services and technology campuses, brownfield manufacturing capacity, and government-led infrastructure spending, PLI schemes, private-sector capex driven by rising capacity utilization, and the China+1 strategy.

Muted Govt Capex offset by healthy private Capex in 1HFY25:

Government ordering in slow lane: The Ordering trend across government facing sectors has been muted. General Elections and resultant lag in government formation, budgetary allocation caused government getting into action only towards July 2024. To put in perspective, the government spent Rs 4.15 trillion in Apr-Sept 2024 (15% lower YoY) out of the budgeted Rs 11.1 trillion for capital Expenditure during FY25. Expectation is that the government will step up spending in the second half of the fiscal year. Going by the budgetary estimates, the government needs to spend ~68% higher than the spend during 1H Apr-Sept 2024 and ~37% higher compared to H2 last year.

Private Sector Capex (Nifty 500 companies) up 16% in 1HFY25: The silver lining is the private capex marked improvement in Apr-Sept 2024. NIFTY 500 companies total Capex during 1H FY25 stood at Rs 4.5 trillion, up 16% yoy. This was followed by Auto (+29%), Cement (+26%), Telecom (+26%), Non-Ferrous Metal (+22%). Within other small Sectors, **increased capex witnessed** in Cables, Casting and Forging, Capital goods and Engg., Consumer Durables and EMS, Realty, Retail, Textile

Sectors with Muted Capex: Among large sectors; Crude oil, Refineries, Gas, Mining, Steel, Pharma capex were sluggish. Among other sectors, low capex was seen in Infrastructure, Logistics, Healthcare, Hotels, Chemicals and Agro chemicals, Sugar, Fertilizer, Ceramics and Wood Products, Tyres and most consumer discretionary segments.

Exhibit 25: Top Sectoral Capex Spend

| Rs in Mn Sector | No of Cos | 202409 Capex | 202309 Capex | YoY% | FY24 Capex |
|---------------------------------|------------|------------------|------------------|------------|------------------|
| Refineries | 6 | 8,28,101 | 7,86,455 | 5% | 17,96,979 |
| Power Generation & Distribution | 13 | 7,03,631 | 4,30,490 | 63% | 6,51,353 |
| Telecomm-Service | 6 | 3,42,050 | 2,71,264 | 26% | 4,61,245 |
| Automobile | 10 | 3,19,521 | 2,48,200 | 29% | 5,46,321 |
| Steel | 7 | 2,50,269 | 2,33,021 | 7% | 5,01,298 |
| Crude Oil & Natural Gas | 2 | 2,39,910 | 2,10,999 | 14% | 3,79,156 |
| Diversified | 6 | 2,28,677 | 2,06,308 | 11% | 2,02,384 |
| Mining & Mineral products | 5 | 1,75,766 | 1,64,891 | 7% | 3,66,477 |
| Cement | 11 | 1,55,338 | 1,23,747 | 26% | 2,62,544 |
| Non-Ferrous Metals | 4 | 1,19,234 | 97,745 | 22% | 2,14,067 |
| Pharmaceuticals | 32 | 94,915 | 87,662 | 8% | 1,83,858 |
| Banks - Private Sector | 17 | 87,617 | 78,588 | 11% | 1,71,746 |
| Gas Distribution | 7 | 72,251 | 1,23,057 | -41% | 1,82,449 |
| Chemicals | 24 | 68,797 | 75,676 | -9% | 1,50,220 |
| Auto Ancillaries | 16 | 66,998 | 57,459 | 17% | 1,21,289 |
| Others | 323 | 7,50,408 | 6,89,593 | 9% | 14,44,069 |
| Total | 489 | 45,03,483 | 38,85,155 | 16% | 76,35,455 |

Source: Capitaline, ACE Equity, company, AMSEC Research



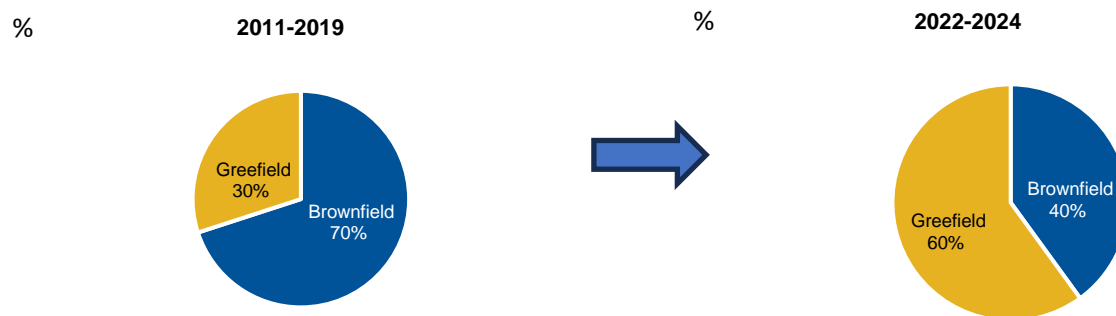
Voltamp maintains a leadership position in the dry-type transformer market, commanding over 40% market share, with 15% market share in industrial application transformers. Despite its niche, with dry-type transformers contributing 14% of revenue, the segment benefits from a technology transfer agreement with German firms MORA and HTT GmbH, ensuring access to advanced manufacturing capabilities.

The company serves a highly diversified clientele of over 1,000 customers across industries. Remarkably, ~950 of India's top 1,000 companies have Voltamp transformers installed at their facilities.

With 95% of its revenue over the last three years derived from the private sector, Voltamp has limited exposure to state-owned power sector undertakings, which are often associated with elongated receivables. Its marquee client base includes leading names such as: GETCO, BPCL, IOCL, UltraTech Cement, Reliance Industries, Torrent Power, Infosys. Additionally, Voltamp has strong partnerships with top EPC contractors, including Larsen & Toubro, ABB, Siemens, Tata Projects, ThyssenKrupp, and ISGEC.

We expect industrial capex recovery driven by PLI schemes to boost domestic manufacturing across several sector, China+1 strategy, which will drive Voltamp dry type transformers.

Exhibit 26: Large capex towards greenfield in the past two years



Source: Company, AMSEC Research

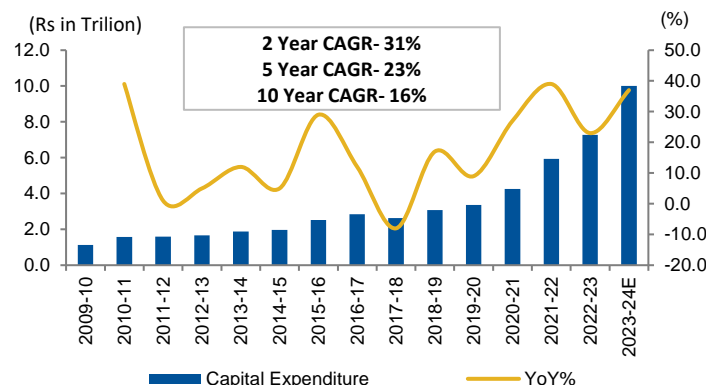
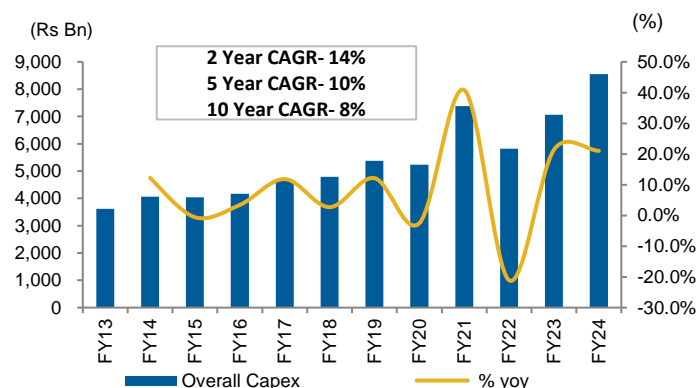
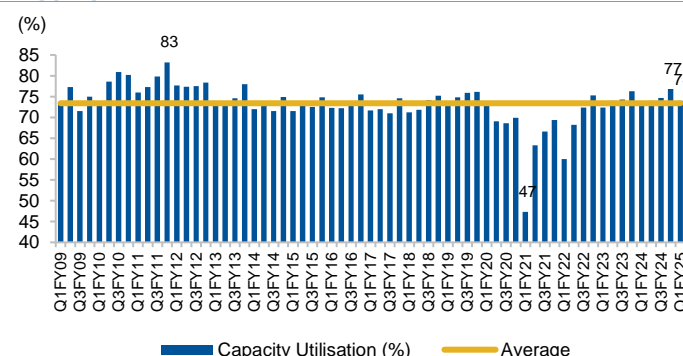
Exhibit 27: India's capex upcycle: Top 10 sectors (NIFTY 500 Companies)

| (Rs in Bn) | 201303 | 201403 | 201503 | 201603 | 201703 | 201803 | 201903 | 202003 | 202103 | 202203 | 202303 | 202403 | YoY% |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Automobile | 287.4 | 369.2 | 431.5 | 416.8 | 420.7 | 485.5 | 520 | 447.3 | 319 | 281.6 | 368 | 554.2 | 51% |
| Cement | 84.8 | 89.6 | 92.1 | 68.9 | 63.6 | 85.6 | 98.9 | 122.6 | 111.5 | 185.8 | 242.2 | 267.5 | 10% |
| Crude Oil & Natural Gas | 190 | 172.7 | 193.1 | 170.2 | 226.8 | 298.1 | 279.3 | 445.4 | 343.4 | 355.9 | 395.8 | 467.5 | 18% |
| Mining & Mineral products | 34.7 | 118.1 | 159.2 | 150.6 | 170.1 | 181.7 | 175.5 | 158.8 | 194.2 | 239.5 | 306.3 | 361.8 | 18% |
| Pharmaceuticals | 76.8 | 87.7 | 117.5 | 195 | 230.4 | 162.8 | 175 | 155.3 | 158.5 | 218.3 | 226.7 | 218.2 | -4% |
| Power Generation & Distribution | 451.4 | 410.2 | 344.4 | 594.1 | 653.2 | 647 | 643.7 | 534 | 588.4 | 760.9 | 728.5 | 1089.2 | 50% |
| Refineries | 504.1 | 836.7 | 869.7 | 688.1 | 1010.7 | 1010.1 | 1283.4 | 1173.9 | 1335.4 | 1276.1 | 1657.1 | 1794.8 | 8% |
| Non-Ferrous Metals | 143.2 | 118.8 | 80.5 | 66.8 | 58.2 | 70.9 | 106.8 | 116.6 | 94.7 | 99.3 | 150.4 | 214.6 | 43% |
| Steel | 327.3 | 463 | 349.7 | 268.5 | 203.8 | 220.8 | 255.6 | 305.1 | 230.2 | 318.2 | 454.2 | 482 | 6% |
| Telecomm-Service | 189.2 | 238.3 | 294.4 | 375.5 | 473.5 | 367.7 | 390.9 | 305.4 | 335.3 | 352.9 | 322.6 | 440.7 | 37% |

Source: Cline, AMSEC research

| (% of Total Capex) | 201303 | 201403 | 201503 | 201603 | 201703 | 201803 | 201903 | 202003 | 202103 | 202203 | 202303 | 202403 |
|--|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Automobile | 8.2 | 9.4 | 11.2 | 10.5 | 9.4 | 10.4 | 10.1 | 8.9 | 6.7 | 5.1 | 5.5 | 6.8 |
| Cement | 2.4 | 2.3 | 2.4 | 1.7 | 1.4 | 1.8 | 1.9 | 2.4 | 2.3 | 3.4 | 3.6 | 3.3 |
| Crude Oil & Natural Gas | 5.4 | 4.4 | 5 | 4.3 | 5.1 | 6.4 | 5.4 | 8.9 | 7.2 | 6.4 | 5.9 | 5.7 |
| Mining & Mineral products | 1 | 3 | 4.1 | 3.8 | 3.8 | 3.9 | 3.4 | 3.2 | 4.1 | 4.3 | 4.6 | 4.4 |
| Pharmaceuticals | 2.2 | 2.2 | 3 | 4.9 | 5.2 | 3.5 | 3.4 | 3.1 | 3.3 | 3.9 | 3.4 | 2.7 |
| Power Generation & Distribution | 12.9 | 10.4 | 8.9 | 15 | 14.6 | 13.9 | 12.5 | 10.7 | 12.3 | 13.7 | 10.8 | 13.4 |
| Refineries | 14.4 | 21.3 | 22.5 | 17.4 | 22.6 | 21.6 | 24.9 | 23.4 | 28 | 23 | 24.7 | 22.1 |
| Non-Ferrous Metals | 4.1 | 3 | 2.1 | 1.7 | 1.3 | 1.5 | 2.1 | 2.3 | 2 | 1.8 | 2.2 | 2.6 |
| Steel | 9.4 | 11.8 | 9 | 6.8 | 4.6 | 4.7 | 5 | 6.1 | 4.8 | 5.7 | 6.8 | 5.9 |
| Telecomm-Service | 5.4 | 6.1 | 7.6 | 9.5 | 10.6 | 7.9 | 7.6 | 6.1 | 7 | 6.4 | 4.8 | 5.4 |
| Top 10 Sectors Capex as% of total Capex | 65.6 | 74 | 75.8 | 75.7 | 78.6 | 75.6 | 76.3 | 75.1 | 77.7 | 73.7 | 72.2 | 72.4 |

Source: Cline, AMSEC research

Exhibit 28: Centre's budgeted capital outlay

Exhibit 29: Private sector capex

Exhibit 30: Capacity utilization in the manufacturing sector (Aggregate level) improvement

Exhibit 31: Sector-wise capacity utilization

| Sectors | Average Capacity Utilization |
|--|------------------------------|
| Capital Goods & Construction Equipment | 77 |
| Chemicals, Fertilizers & Pharmaceuticals | 73 |
| Electronics & Electricals | 65 |
| FMCG | 70 |
| Machine Tools | 66 |
| Metal & Metal Products | 75 |
| Miscellaneous | 74 |
| Paper & Paper Products | 90 |
| Textiles, Apparels & Technical Textiles | 75 |
| Automotive and components | 75 |
| Grand Total | 73 |

Source: Cline, Budget documents RBI, FICCI, AMSEC Research

Exhibit 32: PLI boost - Sector-wise capex announcements

| Sectors | Rs Mn |
|------------------------------|------------------|
| Auto & Auto components | 5,70,420 |
| Large scale electronics | 4,09,510 |
| Solar PV Modules | 2,40,000 |
| ACC | 1,81,000 |
| Pharmaceuticals | 1,50,000 |
| Telecom, Networking products | 1,21,950 |
| Food processing | 1,09,000 |
| Textile | 1,06,830 |
| Bulk drugs | 69,500 |
| Specialty steel | 63,220 |
| White goods | 62,280 |
| IT Hardware | 50,000 |
| Medical devices | 34,200 |
| Drones and components | 1,200 |
| Total | 21,69,110 |

Source: Media, AMSEC research

Exhibit 33: Steel-ing the future: Expansion goals forged for 2030

| Major Steel Players Capacity | 2019 | 2020 | 2021 | 2022 | 2023 | 2024E | 2025E | 2030E | 2035E |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| ('000 tonne) | | | | | | | | | |
| SAIL | 19,632 | 19,632 | 20,632 | 20,632 | 20,632 | 20,632 | 20,632 | 35,650 | 50,000 |
| Rashtriya Ispat Nigam Ltd (RINL) | 6,300 | 6,300 | 6,300 | 6,300 | 7,300 | 7,300 | 16,000 | 16,000 | 16,000 |
| Tata Steel Ltd | 19,400 | 19,400 | 20,600 | 20,600 | 21,600 | 21,600 | 21,600 | 40,000 | 40,000 |
| ArcelorMittal Nippon Steel India | 10,000 | 10,000 | 9,600 | 9,600 | 9,600 | 9,600 | 9,600 | 24,000 | 40,000 |
| JINDAL STEEL AND POWER LTD | 8,600 | 8,600 | 8,100 | 8,100 | 9,600 | 12,900 | 15,900 | 15,900 | 50,000 |
| JSW Steel Ltd. | 18,000 | 18,000 | 23,000 | 23,000 | 27,700 | 27,700 | 37,000 | 50,000 | 50,000 |
| OTHER BOF | 4,077 | 4,077 | 3,177 | 3,177 | 3,177 | 3,177 | 3,177 | 3,177 | 3,177 |
| OTHER EAF | 11,794 | 11,640 | 11,614 | 11,525 | 11,525 | 11,525 | 11,525 | 11,525 | 11,525 |
| OTHER IF | 44,496 | 46,266 | 51,040 | 54,651 | 49,166 | 49,166 | 49,166 | 1,03,748 | 1,03,748 |
| Total India Capacity | 1,42,299 | 1,43,915 | 1,54,063 | 1,57,585 | 1,60,300 | 1,63,600 | 1,84,600 | 3,00,000 | 3,64,450 |

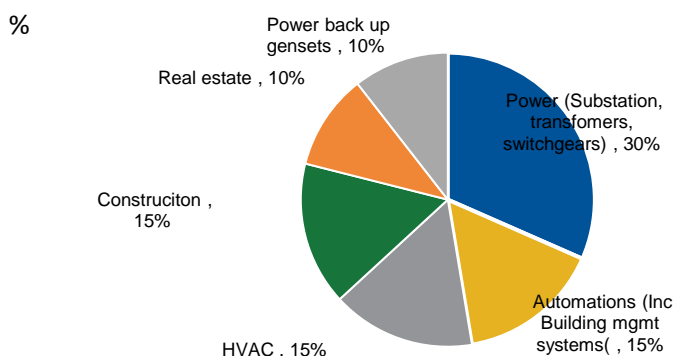
Source: MoS, AR, Media

Exhibit 34: Concrete plans: Cement giants expand for the future

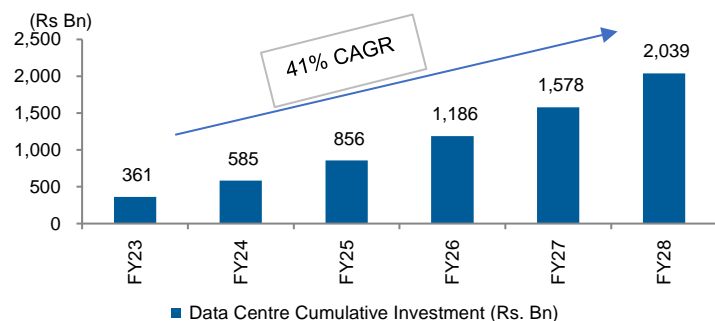
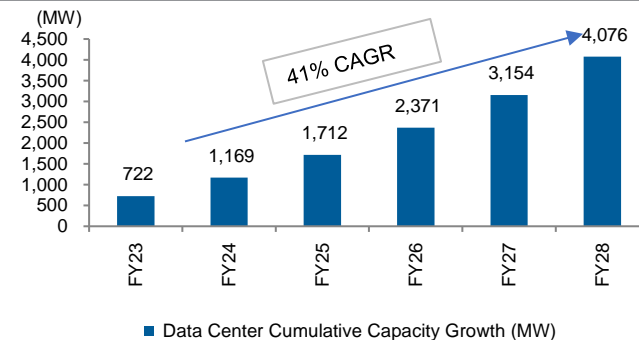
| Mn Tons | Current Capacity | Expected | Expected Year |
|---|------------------|----------|---------------|
| UltraTech Cement | 157 | 200 | FY28 |
| Adani Cement (ACC + Ambuja Cement + Sanghi) | 77 | 140 | FY28 |
| Dalmia Cement | 45 | 130 | FY31 |
| Ramco Cement | 37 | 45 | FY26 |
| Birla Corporation | 20 | 25 | FY26 |

Source: Company, Media

India's data center industry is on a high-growth trajectory, with capacity projected to double to 2,000 MW by 2026. This expansion is expected to attract capex of approximately Rs500 bn over the next three years. Of this, around 30% will be directed towards power substations, transformers, and switchgear. Voltamp estimates a Rs1 bn business opportunity from this segment over the next five years.

Exhibit 35: Powering the Cloud: Data centers' capex split


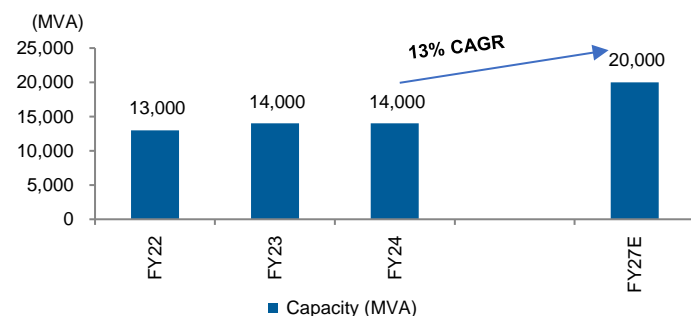
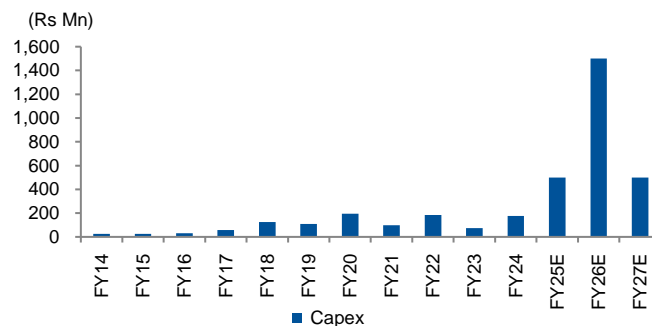
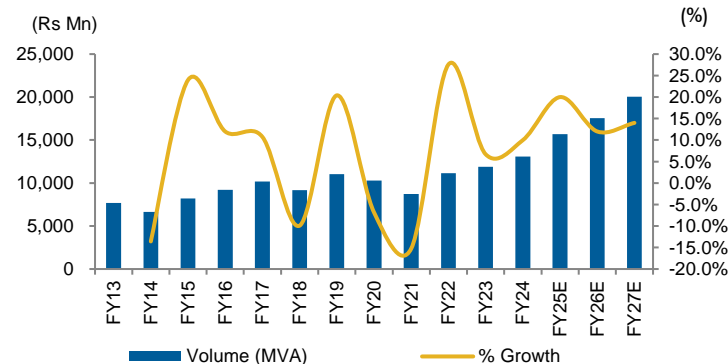
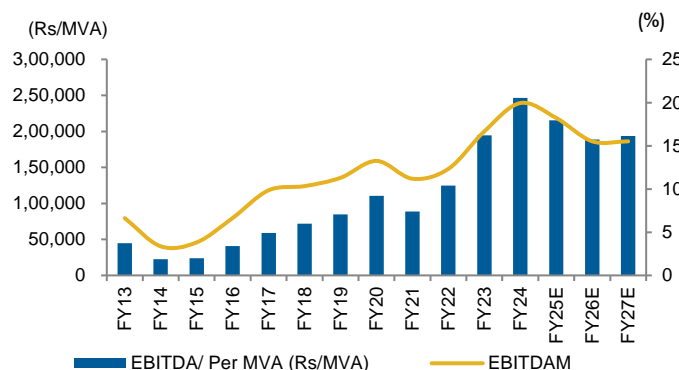
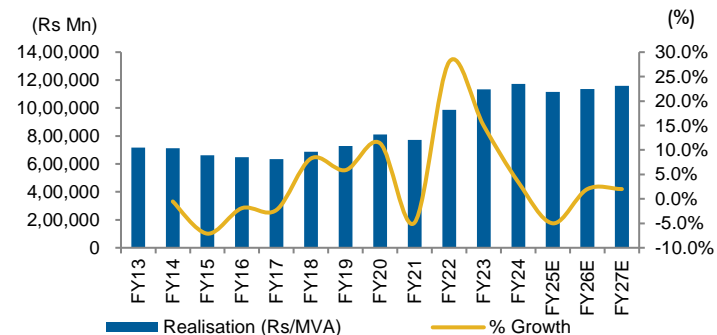
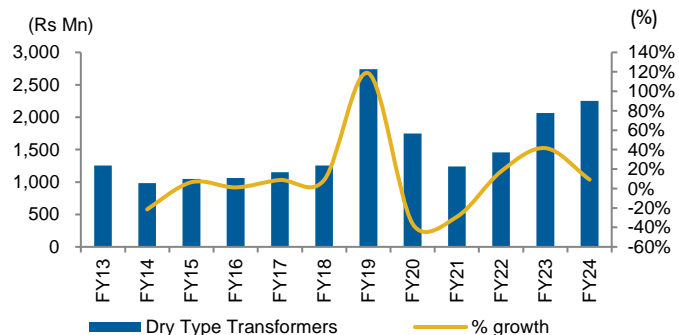
Source: JLL, Media

Exhibit 36: Cumulative investments in data centers (Rs Bn)

Exhibit 37: Cumulative capacity growth in data centers


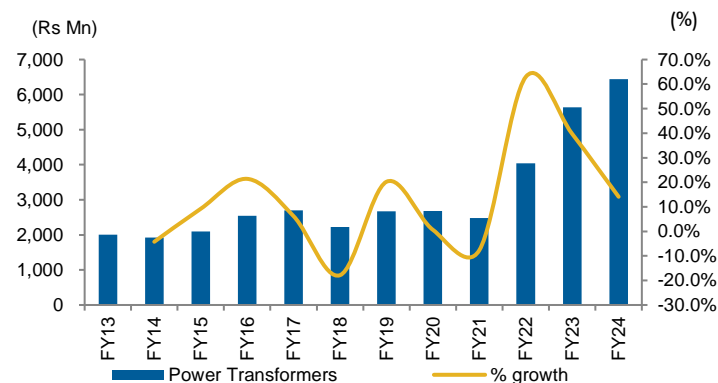
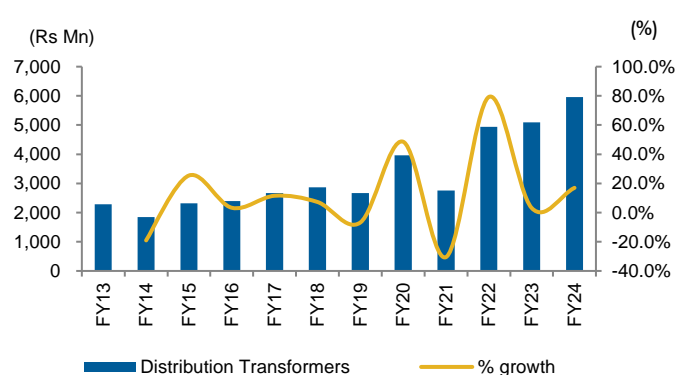
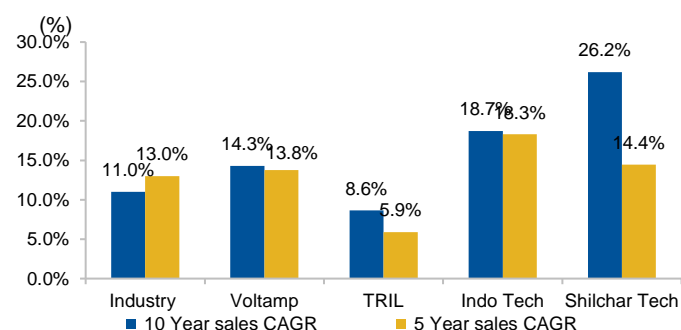
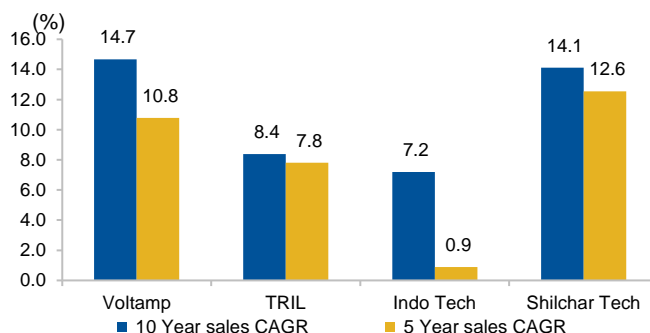
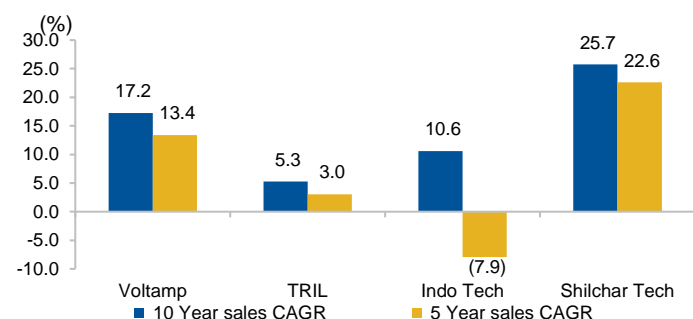
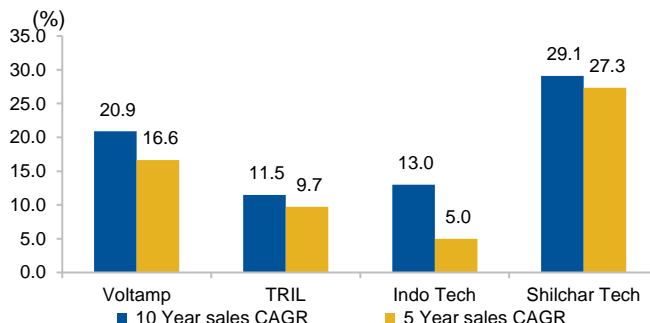
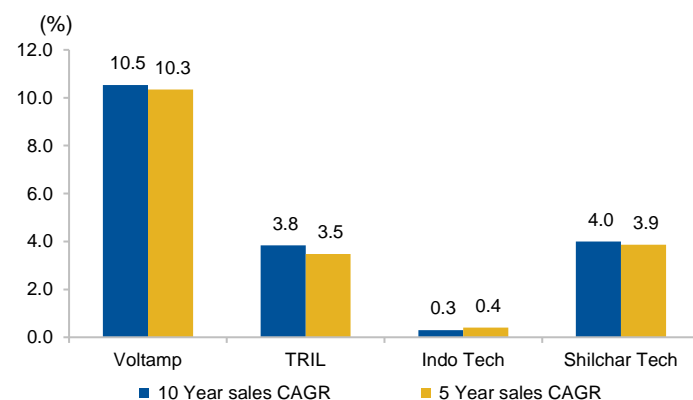
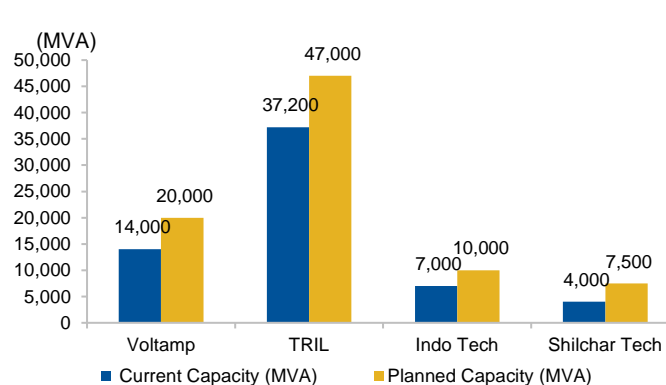
Source: JLL, Media

Outpacing industry growth and Strategic capacity expansion to meet rising demand

Voltamp revenue grew by 14%, outpacing industry growth of 11%/13%, over five and ten years. The company has highest asset turnover ratio than Industry and better ROE and ROCE profile. Voltamp has announced a Rs2 bn capex to establish a new manufacturing facility near Vadodara. This plant will focus on producing large transformers with capacities up to 250 MVA and 220 kV ratings, addressing the growing demand for electricity infrastructure over the next 5–6 years. The company has secured a suitable land parcel near Jarod village on the Vadodara-Halol Road, Gujarat, and has signed a land purchase agreement with a developer. Construction of the new factory will commence shortly, with operations expected to begin by Q1FY27 (April–June 2026). The expansion will increase Voltamp's total production capacity from 14,000 MVA to 20,000 MVA, enhancing its ability to cater to the burgeoning market demand.

Exhibit 38: Capacity expansion on the cards

Exhibit 39: Capex trend

Exhibit 40: Volume expected to see 15% CAGR over FY24-27E

Exhibit 41: EBITDA/ Per MVA and EBITDAM trend

Exhibit 42: Realization improvement

Exhibit 43: Dry transformers revenue trend


Source: Company, AMSEC

Exhibit 44: Power transformers revenue trend

Exhibit 45: Distribution transformers revenue trend

Exhibit 46: Pure-play transformer players' sales CAGR

Exhibit 47: Pure-play transformer players' EBITDA margin

Exhibit 48: Pure-play transformer players' ROE

Exhibit 49: Pure-play transformer players' ROCE

Exhibit 50: Pure play transformer players' gross asset turns

Exhibit 51: Pure-play transformer players' capacity (MVA)


Source: Company, AMSEC



Scaling up the high-margin service business

Transformers, with an expected lifespan of 60 years, are among the most critical and cost-intensive components in an electrical system, accounting for 30–35% of overall system costs. Recognizing the importance of maximizing asset efficiency, Voltamp has developed a comprehensive service portfolio based on the “Cradle to Grave” concept, ensuring total lifecycle management for its customers.

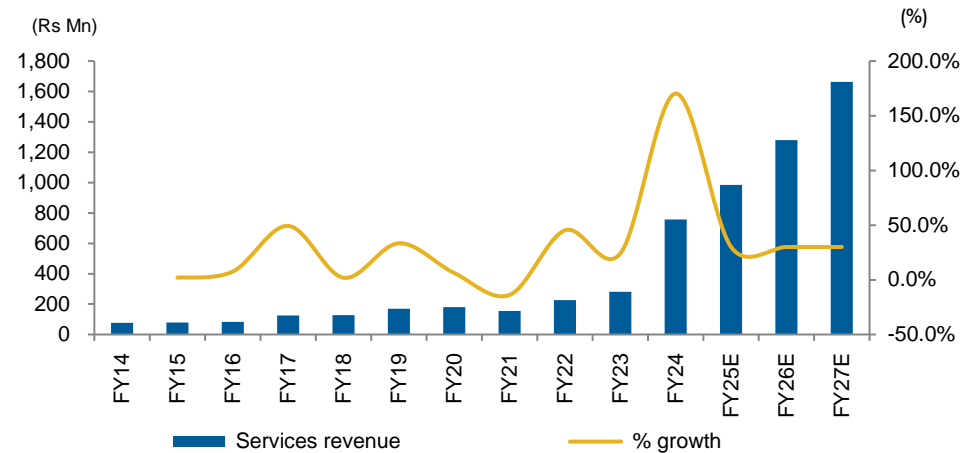
Voltamp’s service segment comprises two key subcategories: Annual Maintenance Contracts representing 70% of service revenue, and on-demand services including retrofitting, health check-ups, diagnostics, and emergency support. The company has also embraced sustainability by offering retro-fill services, replacing traditional mineral transformer oil with eco-friendly ester oil.

Voltamp operates service centers across major industrial hubs, including Vadodara, Ahmedabad, Surat, Raipur, Mumbai, Pune, New Delhi, Chandigarh, Chennai, Bengaluru, Secunderabad, Kolkata, and Bhubaneswar. These centers are equipped to provide a range of services tailored to transformer and electrical system needs, such as spares supply, asset management services, diagnostics, and condition monitoring, factory overhaul, and more.

To strengthen its service division, Voltamp has appointed Mr. Nisheeth Desai as an advisor. With over 48 years of experience in senior management roles at ABB India and Hindustan Brown Boveri, Mr. Desai is expected to drive the expansion of this high-margin business

Voltamp recorded Rs757 mn in service revenue for FY24 and we expect Rs1.6bn revenue by FY27E, representing a robust CAGR of 30% over FY24–27E. With service margins exceeding 40%, this segment is poised to become a key contributor to profitability.

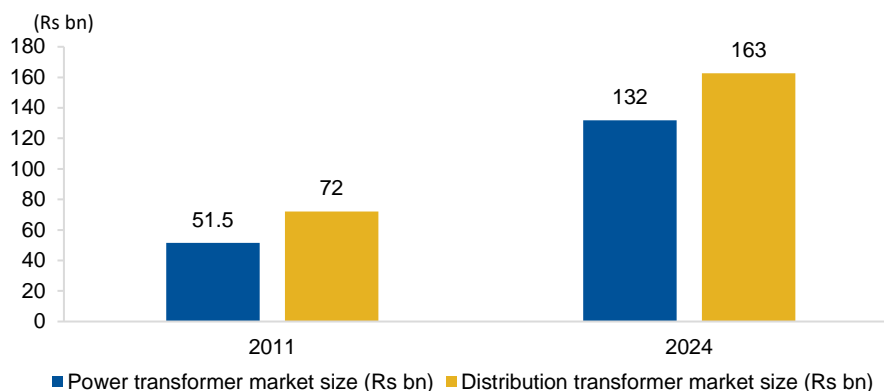
Exhibit 52: Services business is expected to see 30% CAGR over FY24-27E



Source: company, AMSEC research

Indian transformer market powers up with 7% growth in 13 years

Exhibit 53: High-voltage growth: 7% CAGR for power transformers, 6% for distribution over 2011-2024



Source: company, AMSEC research

The Indian transformer market, valued at approximately Rs294.3 bn, has witnessed a robust 13% CAGR over the last decade, despite a slowdown in power generation capacity additions and T&D infrastructure expansion. Power Transformers account for 45% (~Rs131 bn) of the total market, and grew at 13% CAGR from FY15-24; Meanwhile, Distribution Transformers form 55% (~Rs162 bn) of the market, expanding at 9% CAGR.

India's transformer manufacturing capacity stands at approximately 370 GVA, with capacity utilization averaging 60–70% over the last five years. This significant overcapacity has created intense pricing pressures, adversely impacting profitability across the industry.

In anticipation of growing domestic demand, driven by a power deficit scenario and the need for power sector expansion, as well as rising export opportunities, India's transformer industry has doubled its manufacturing capacity over the past five years.

The market is predominantly unorganized, with numerous small-scale players catering to the distribution transformer segment. However, an increasing number of these participants are transitioning to the medium-sized category, thereby expanding the organized sector.

India has 300+ transformer companies, with around 20 major organized players, including industry leaders like: Bharat Heavy Electricals Ltd (BHEL), ABB Ltd, Crompton Greaves Consumer Electricals Ltd (CGL), Areva T&D, EMCO Ltd, Bharat Bijlee Ltd (BBL), Vijai Electricals, Transformers and Rectifiers India Ltd (TRIL), Voltamp Transformers, among others.

Exhibit 54: Power transformer industry size

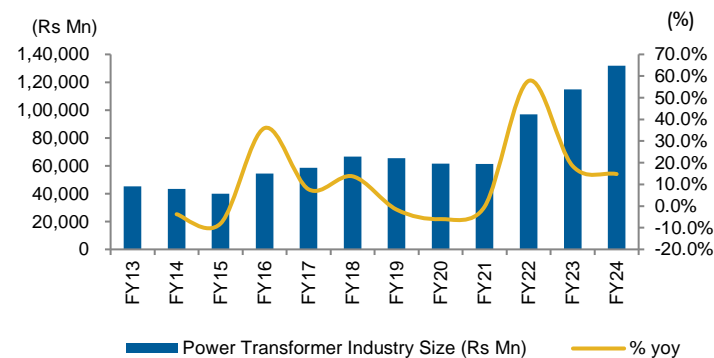
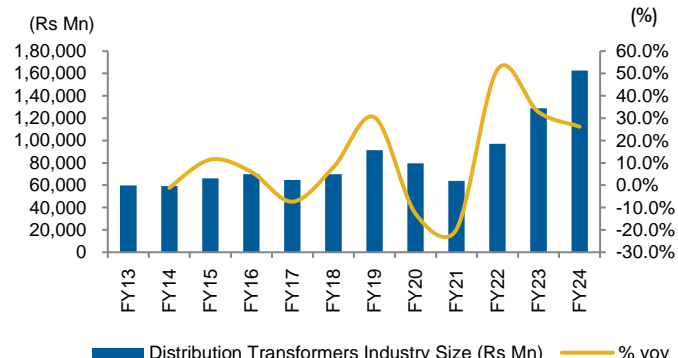
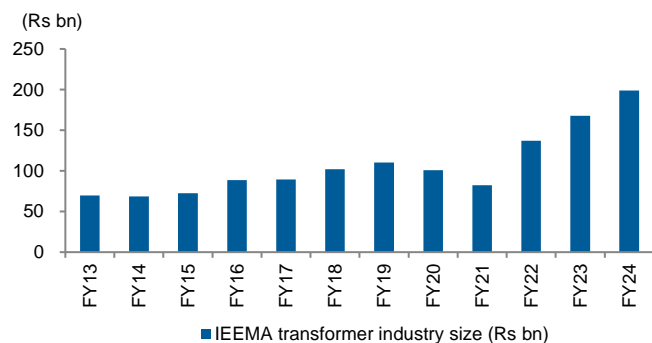
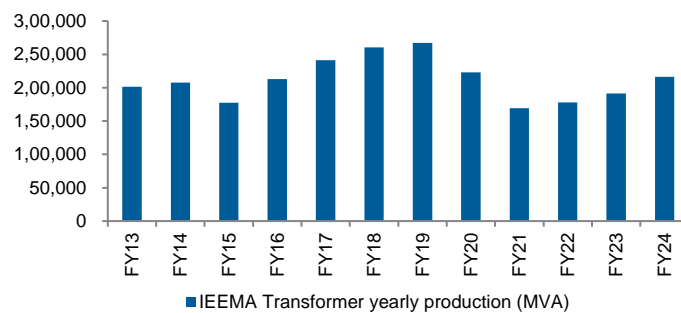
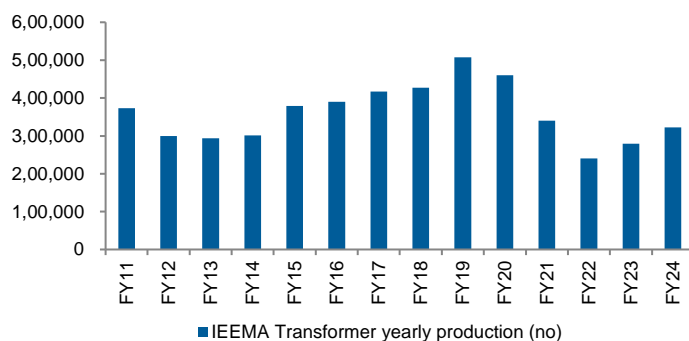
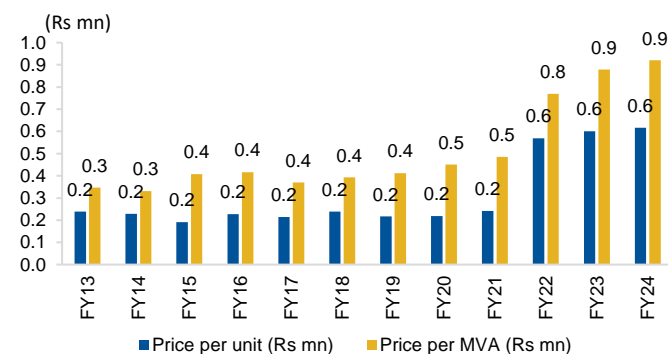
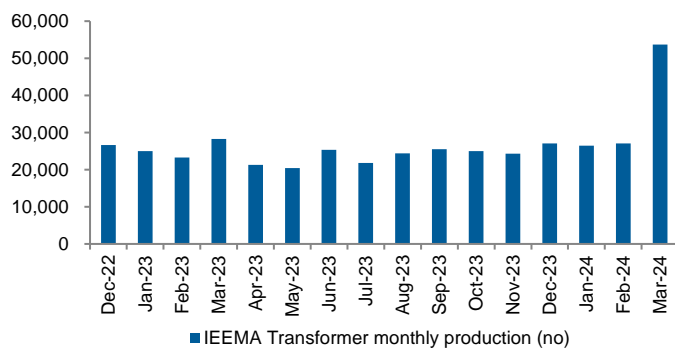
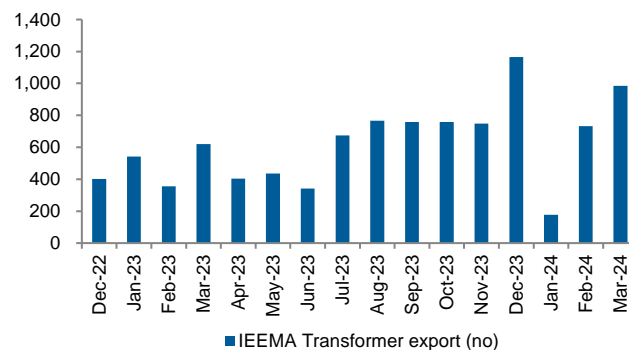
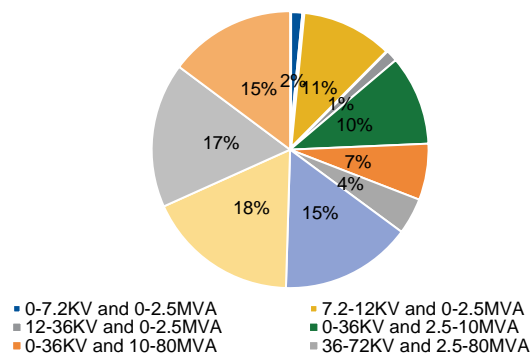
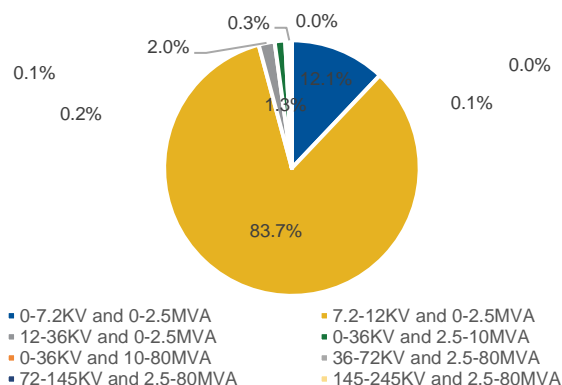


Exhibit 55: Distribution transformer industry size



Source: IEEMA, AMSEC research

Exhibit 56: IEEMA transformer industry size (Rs bn)

Exhibit 57: IEEMA transformer yearly production (MVA)

Exhibit 58: IEEMA Transformer yearly production (units)

Exhibit 59: Avg pricing of transformer (per MVA & Per unit)

Exhibit 60: IEEMA Transformer monthly production (units)

Exhibit 61: IEEMA transformer monthly exports

Exhibit 62: Break-down based on rating (MVA wise)

Exhibit 63: Break-down based on ratings (no)


Source: IEEMA, AMSEC research

Exhibit 64: Opportunity analysis of Indian transformer Industry

| Year | | FY05 | FY12 | FY15 | FY24 | FY32E | CAGR FY15-24 | CAGR 24- FY32E |
|--|--|----------|----------|----------|-----------------|-----------------|-----------------|-------------------|
| Total transformer capacity in country (MVA) | | 1,20,000 | 4,00,000 | 4,20,000 | 3,70,000 | | | |
| Industry capacity Utilization (%) | | 67% | 60% | 42% | 89% | | | |
| Total Transformer production (MVA) | | 80,156 | 2,41,580 | 1,75,075 | 3,29,137 | 8,00,275 | | |
| Utilities (MVA) | | | | | 70,728 | 1,62,995 | 1% | 11% |
| Non-Utilities (MVA) | | | | | 1,67,352 | 3,58,773 | 14% | 10% |
| Export (MVA) | | | | | 91,057 | 2,78,546 | 5% | 15% |
| Indian transformer Market size assessment | | | | | | | | |
| Utilities (Rs Mn) | | | | | 47,902 | 1,10,392 | | |
| per MVA price (Rs Lakh) | | | | | 7 | 7 | | |
| Non Utilities (Rs Mn) | | | | | 1,85,321 | 3,97,251 | | |
| per MVA price (Rs Lakh) | | | | | 11 | 11 | | |
| Export (Rs Mn) | | | | | 63,740 | 1,94,982 | | |
| per MVA price (Rs Lakh) | | | | | 7 | 7 | | |
| Total market size (Rs mn) | | | | | 2,96,963 | 7,02,625 | | 11% |

| Year | | | | FY14 | FY24 | FY32 | CAGR FY14-24 | CAGR 24-32E |
|---|--|--|--|-----------|-----------|-----------|-----------------|-------------|
| Utilities transformer market growth calculations | | | | | | | | |
| Total Power consumption (MU) | | | | 10,29,999 | 17,07,900 | 27,22,133 | 5.2% | 6% |
| Power consumption in GW (adjust based on 75% PLF) | | | | 157 | 260 | 414 | | |
| Installed capacity (GW) | | | | 248 | 441 | 999* | | |
| Transformation capacity (MVA) | | | | 5,30,546 | 12,51,080 | 23,31,692 | 9.0% | 8.1% |
| Transformation capacity addition (MVA) | | | | | 70,728 | 1,64,168 | | 11% |
| Cumulated Trans capacity Addn from FY14-FY24 | | | | | 7,20,534 | | | |
| Actual incremental power generation FY14-FY24 | | | | | 103 | | | |
| Per MW additional MVA added | | | | | 7 | | | |

| | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | FY31 | FY32 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Transformation capacity (MVA) | 13,60,261 | 14,75,992 | 15,98,668 | 17,28,704 | 18,66,542 | 20,12,651 | 21,67,526 | 23,31,694 |
| Transformation capacity Addn | 1,09,181 | 1,15,732 | 1,22,676 | 1,30,036 | 1,37,838 | 1,46,109 | 1,54,875 | 1,64,168 |
| Power consumption in GW (adjust based on 75% PLF) | 276 | 292 | 310 | 328 | 348 | 369 | 391 | 414 |

| Year | | | | FY15 | FY24 | | CAGR FY15-24 | |
|----------------------------------|--|--|--|---------------|---------------|--|-----------------|--|
| Export from India (Rs mn) | | | | | | | | |
| <650KVA | | | | 7,655 | 19,417 | | 11% | |
| 650-10000KVA | | | | 2,494 | 10,171 | | 17% | |
| 10000-50000KVA | | | | 4,085 | 4,927 | | 2% | |
| 50000-100000KVA | | | | 2,640 | 2,499 | | -1% | |
| 100000-250000KVA | | | | 2,677 | 3,451 | | 3% | |
| >250000KVA | | | | 954 | 21 | | -35% | |
| <1KVA | | | | 2,548 | 11,979 | | 19% | |
| 1-15KVA | | | | 2,93 | 908 | | 13% | |
| 16-500kva | | | | 1,551 | 7,704 | | 19% | |
| >550KVA | | | | 919 | 268 | | 13% | |
| Total | | | | 25,821 | 63,774 | | 11% | |

| Year | | | | FY11 | FY24 | | CAGR FY11-24 | |
|---|--|--|--|----------|----------|--|-----------------|--|
| Per MVA pricing data provided by IEEMA | | | | | | | | |
| Power transformer market size (Rs bn) | | | | 51.5 | 132 | | 7% | |
| Power transformer total production (MVA) | | | | 1,56,553 | 2,04,335 | | 2% | |
| Power transformer price per MVA (Lakh) | | | | 3.3 | 6.5 | | 5% | |
| Distribution transformer market size (Rs bn) | | | | 72 | 163 | | 6% | |
| Distribution transformer total production (MVA) | | | | 90,000 | 1,24,801 | | 2.5% | |
| Distribution transformer price per MVA (Lakh) | | | | 8.0 | 13.0 | | 3.5% | |

Source: IEEMA, AMSEC research

Exhibit 65: Sensitivity Analysis

| | | Power demand growth CAGR (FY24-FY32) | | | | |
|---|-----|--------------------------------------|-------|-------|-------|-------|
| | 11% | 4% | 5% | 6% | 7% | 8% |
| Average price of power transformers (Rs mn) | 4.5 | -0.8% | 2.9% | 6.1% | 9.1% | 11.8% |
| | 5.5 | 1.7% | 5.5% | 8.8% | 11.8% | 14.6% |
| | 6.5 | 3.9% | 7.7% | 11.1% | 14.2% | 17.1% |
| | 7.5 | 5.7% | 9.6% | 13.1% | 16.3% | 19.2% |
| | 8.5 | 7.4% | 11.4% | 14.9% | 18.1% | 21.1% |

| | | Export growth | | | | |
|--------------------------------------|-----|---------------|-----|-----|-----|-----|
| | 11% | 5% | 15% | 15% | 25% | 35% |
| Export realization per MVA (Rs Lakh) | 5 | 9% | 11% | 11% | 14% | 17% |
| | 6 | 9% | 11% | 11% | 14% | 18% |
| | 7 | 9% | 11% | 11% | 15% | 19% |
| | 8 | 9% | 11% | 11% | 15% | 20% |
| | 9 | 9% | 12% | 12% | 15% | 21% |

| | | Non-Utilities transformer growth | | | | |
|---|-----|----------------------------------|-----|-----|-----|-----|
| | 11% | 5% | 8% | 10% | 13% | 15% |
| Non Utilities realization per MVA (Rs Lakh) | 5 | 5% | 6% | 6% | 7% | 8% |
| | 8 | 7% | 8% | 9% | 11% | 12% |
| | 11 | 9% | 10% | 11% | 13% | 14% |
| | 13 | 10% | 11% | 13% | 15% | 16% |
| | 15 | 11% | 13% | 14% | 16% | 17% |

| | | Utilities transformer growth | | | | |
|---|-----|------------------------------|-----|-----|-----|-----|
| | 11% | 5% | 8% | 11% | 13% | 15% |
| Utilities realization per MVA (Rs Lakh) | 5 | 10% | 10% | 11% | 11% | 11% |
| | 6 | 10% | 11% | 11% | 11% | 12% |
| | 7 | 11% | 11% | 11% | 12% | 12% |
| | 8 | 11% | 11% | 12% | 12% | 13% |
| | 9 | 11% | 12% | 12% | 12% | 13% |

Source: IEEMA, AMSEC research



■ Powering demand: Utilities & Industrials spark transformer growth

- Utilities: Growth Driven by Smart Grid Investments**
 - The utilities sector, a major consumer of power transformers, relies on these essential components for the efficient transmission and distribution of electricity across extensive networks. Power transformers facilitate.
 - **Voltage regulation**, ensuring seamless electricity transfer over long distances while minimizing energy losses.
 - **Grid Stability**: Maintaining network integrity by matching transmission and distribution requirements
 - Government-backed **grid modernization** initiatives and investments in smart grid technologies are driving demand for power transformers, transforming utility operations and enhancing efficiency in electricity delivery.

- Industrial Sector: Capacity Expansion to Propel Transformer Demand**
 - The industrial sector, comprising manufacturing plants, production facilities, and industrial complexes, is a significant driver for transformer demand. This is due to its reliance on robust and reliable transformers to power essential processes and equipment.
 - **Power Transformers**: Critical for substations within large industrial setups, enabling voltage adjustments to match specific facility needs, ensuring operational efficiency.
 - **Distribution Transformers**: Vital for powering production lines and machinery, delivering electricity reliably and efficiently to support uninterrupted operations.
 - Additionally, industrial users often require customized transformers tailored to unique application demands, emphasizing their reliance on high-performance transformer solutions.

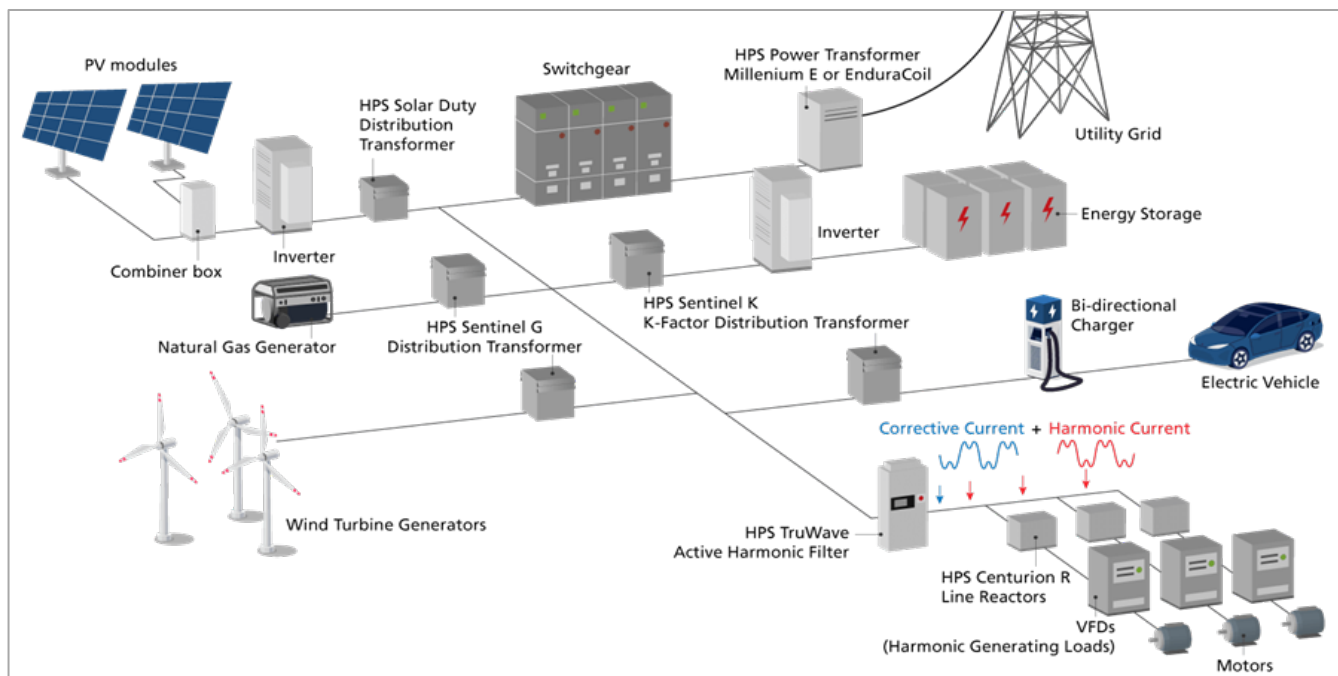
- Others:**
 - **Oil and Gas**: Increasing reliance on high-efficiency transformers to power extensive pipeline operations.
 - **Metals and Mining**: Crucial role in mineral extraction, refining, and processing applications, where stable and reliable power is vital for heavy-duty equipment and operations.
 - **Automotive**: The rapid development of electric vehicle charging infrastructure.
 - **Food and Beverages**: Transformers are becoming indispensable for powering food refrigeration and freezing units, enabling uninterrupted operations in cold storage facilities and processing plants.
 - **Power Generation**: Increasing emphasis on grid modernization and sustainable energy solutions to improve efficiency and integrate renewable energy into existing networks.
 - **Data Centres**: UPS transformers are in high demand to ensure reliable and uninterrupted operation of critical equipment.

Exhibit 66: Various global players and their product level capabilities

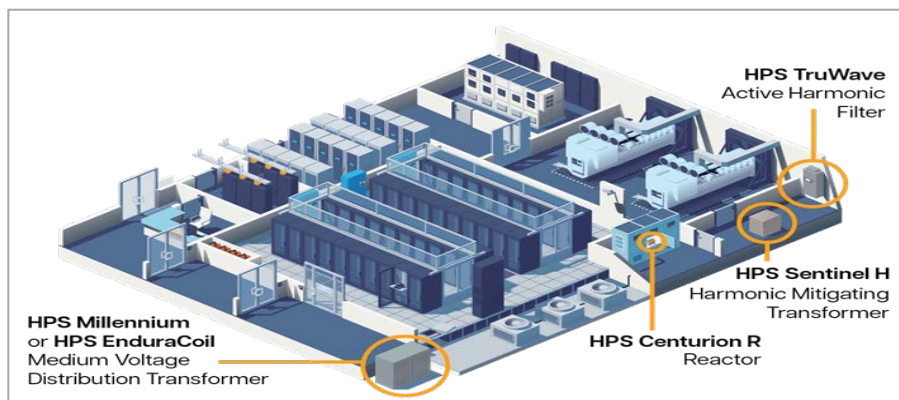
| Particulars | Usage | Voltage/rating | |
|--|--|----------------|---|
| Siemens Energy | | | |
| Generator Step-up Transformers | Industrial, Residential/ Commercial, Utilities | 1,100 KV | Up to 1,300 MVA (3 phases) and 700 MVA (1 phase) |
| Unit Auxiliary Transformers | Industrial, Residential/Commercial, Utilities | 40 MVA | |
| System-interconnecting Transformers | Industrial, Residential/Commercial, Utilities | 1,100 KV | Up to 1,300 MVA (3 phases) |
| Plant-feeding Transformers | Industrial, Residential/Commercial, Utilities | 1,100 KV | Up to 1,300 MVA (3 phases) |
| Hitachi Energy | | | |
| Generator Step-up Transformers (GSU) | Industrial, Residential/ Commercial, Utilities | 1,000 KV | |
| Shell Specialty Transformers | Industrial, Residential/Commercial, Utilities | 550 KV | poly transformer has power ratings of up to 500 MVA |
| HVDC Converter Transformers | Industrial, Residential/Commercial, Utilities | 800 kV | |
| System Intertie Transformers | Industrial, Residential/Commercial, Utilities | 765 KV | Power rating up to 1,300 MVA |
| Schneider Electric | | | |
| Minera MP Liquid-filled Power Transformers | Industrial, Residential/Commercial, Utilities | 170 kV | |
| Toshiba Energy Systems | | | |
| Generator Step-up Transformers (GSU) | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Auto Transformers | Industrial, Residential/Commercial, Utilities | 1,200 KV | Ratings: Up to 1,500 MVA |
| Two Winding Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | up to 1,000 MVA. |
| Medium Power Transformers | Industrial, Residential/Commercial, Utilities | 245 KV | 25 MVA to 60 MVA |
| Traction Transformers | Industrial, Residential/Commercial, Utilities | 245 KV | up to 200 MVA |
| HD Hyundai Electric | | | |
| DPRS Explosion Proof Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Phase Shift transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Gas Isolation Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| SVC Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Mobile Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Eco Power Transformer | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Generator Set Up Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | up to 1,200 MVA |
| Transmission Network Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | up to 1,200 MVA |
| Distribution Small and Medium Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | up to 1,200 MVA |
| General Electric Company | | | |
| Conventional Power Transformers | Industrial, Residential/Commercial, Utilities | | |
| Autotransformers | Industrial, Residential/Commercial, Utilities | | |
| Generator Set up Transformers | Industrial, Residential/Commercial, Utilities | | |
| Phase-shifting Transformers | Industrial, Residential/Commercial, Utilities | | |
| Transformers for SVC | Industrial, Residential/Commercial, Utilities | | |
| Industrial Transformers | Industrial, Residential/Commercial, Utilities | | |
| Hvdc Converter Transformers | Industrial, Residential/Commercial, Utilities | | |
| Green Transformers | Industrial, Residential/Commercial, Utilities | | |
| CG Power and Industrial Solutions | | | |
| Generator Transformers | Industrial, Residential/Commercial, Utilities | 400 KV | Rating: 25 to 600 MVA |
| Autotransformers | Industrial, Residential/Commercial, Utilities | 765 KV | 50 to 1,500 MVA |
| Furnace Transformers | Industrial, Residential/Commercial, Utilities | 33KV | up to 12 to 46 MVA |
| Locomotive and Tracksides Power Transformers | Industrial, Residential/Commercial, Utilities | 25 KV | 3.9 to 7.5 MVA |
| Mitsubishi Electric Corporation | | | |
| Core Form Transformers | Industrial, Residential/Commercial, Utilities | 69–275 kV | |
| Shell Form Transformers | Industrial, Residential/Commercial, Utilities | 115–765 kV | |
| Hyosung Heavy Industries | | | |
| Ester Oil Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| Gas-insulated Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| Mobile Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| Phase Shifting Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| STATCOM Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| Scott Transformers | Industrial, Residential/Commercial, Utilities | Up to 765 KV | |
| Bharat Heavy Electricals Limited | | | |
| HVAC Power Transformers | Industrial, Residential/Commercial, Utilities | 1,200 KV | |
| HVDC Converter Transformers | Industrial, Residential/Commercial, Utilities | 800 KV | |
| Phase Shifting Transformers | Industrial, Residential/Commercial, Utilities | Up to 400KV | |
| Dry Type Transformer | Industrial, Residential/Commercial, Utilities | Up to 200KV | |
| Fuji Electric Co., Ltd | | | |
| Power Transformers | Industrial, Residential/Commercial, Utilities | 230 KV | |
| Power Transformers | Industrial, Residential/Commercial, Utilities | 33 to 133 KV | 90-125 MVA |
| WEG | | | |
| Small Power Transformer | Industrial, Residential/Commercial, Utilities | | |
| Medium Power Transformer | Industrial, Residential/Commercial, Utilities | | |
| LS Electric Co., | | | |
| LS Electric Power Transformers | Industrial, Residential/Commercial, Utilities | Up to 550 KV | 800 MVA (3 phases) and 500 MVA (single phase). |
| Hammond Power Solutions | | | |
| Power Transformers | Industrial, Residential/Commercial, Utilities | 138 KV | Upto 50 MVA |

Source: Company, AMSEC Research

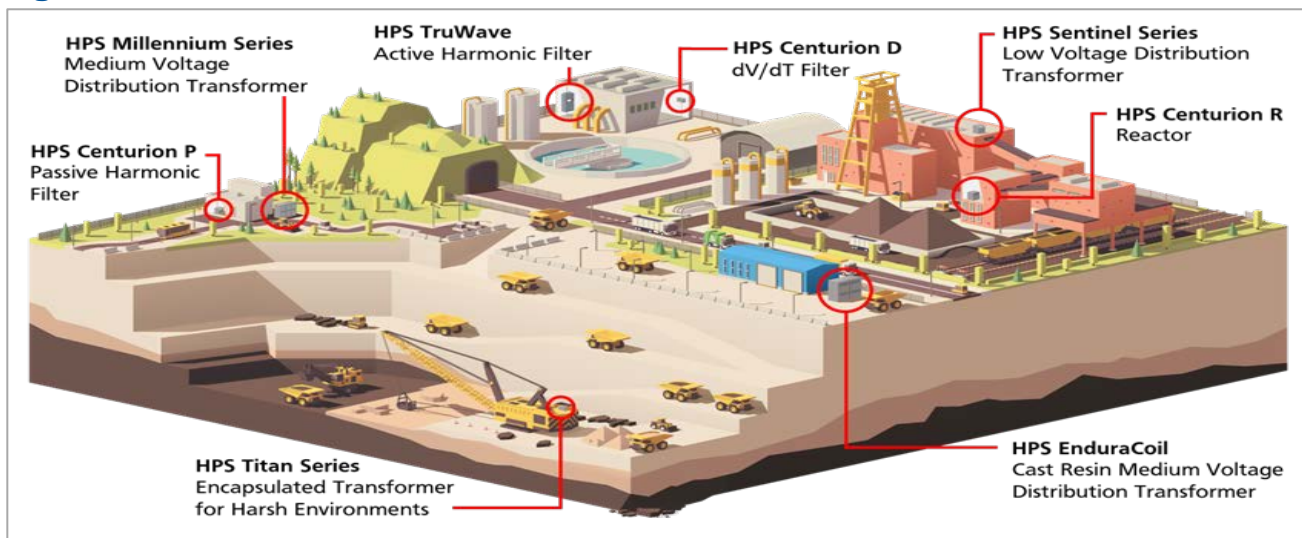
Micro-grid



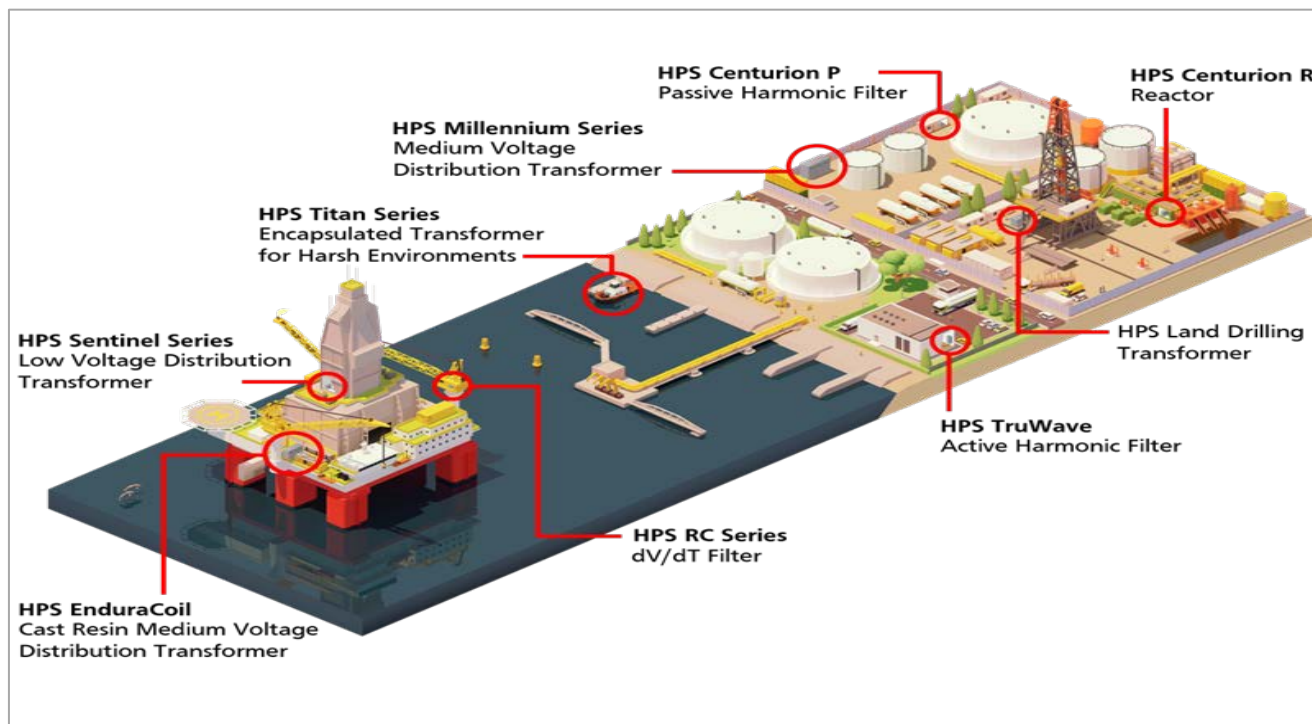
Data Centre



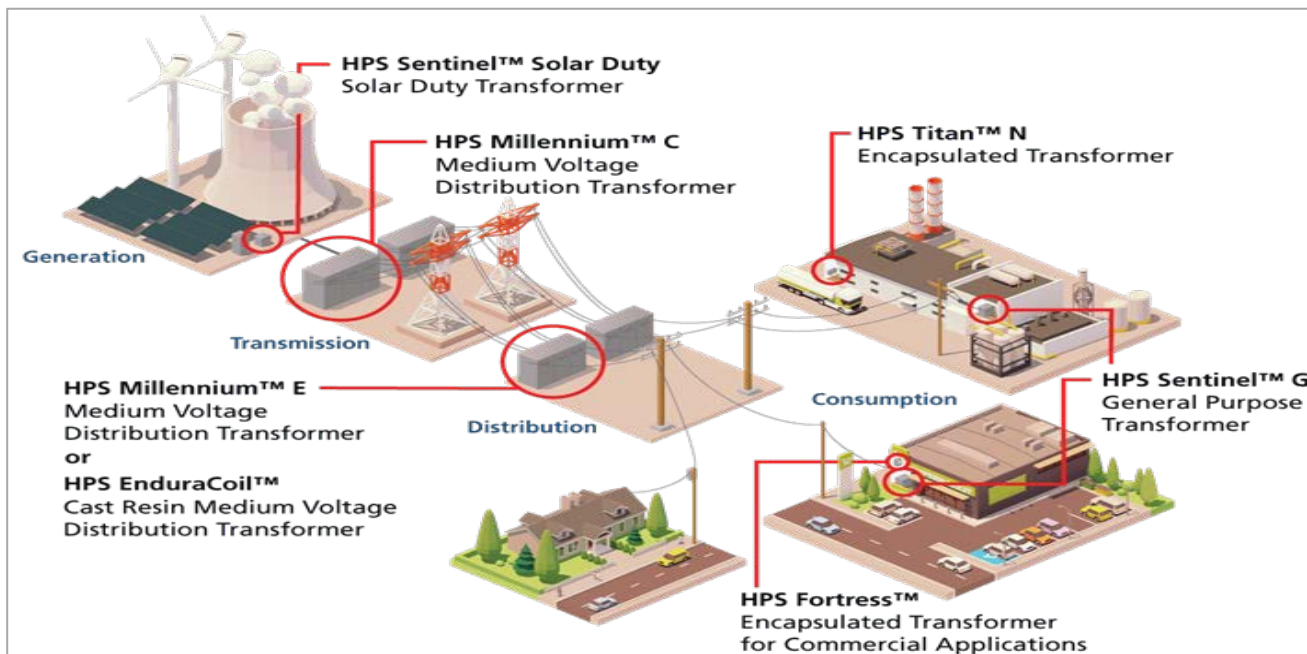
Mining



Petro-chemical



Power Grid Infra



T&D and PGCIL Capex: Powering the next growth surge in transformers

The government aims to achieve 500 GW of non-fossil fuel capacity, A total of 1,91,474 ckm of transmission lines and 13,07,435 MVA of transformation capacity (including HVDC bi-pole/BTB) is planned for addition in ISTS and InSTS from 2022 to 2032. However, Most of T&D capex is catered to 220kv and above for renewable energy connectivity. More than >220kv range, there are only six large players operating.

PGCIL is likely to see aggregate capex of over Rs.3 trillion between FY24 to FY32. Further, the National Electricity Plan (NEP) has estimated to Rs.3 lakh crore worth of projects are in the planning stage and are yet to enter the bidding stage. These projects are scheduled to be commissioned by end-FY32. This gives a potential bidding pipeline of Rs.3.84 trillion. PGCIL expected to win 50% of this pipeline.

Government initiatives such as the Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) are helped in reviving demand for distribution transformers, particularly in rural and urban areas. DDUGJY focused on feeder segregation, the establishment and modernization of substations, and the addition of extensive HT and LT lines, while the IPDS enhanced urban power infrastructure. Furthermore, the Saubhagya scheme, which aimed to electrify rural households, had created incremental demand for smaller-capacity distribution transformers.

These schemes had envisaged substantial investment of Rs155 bn allocated specifically for the procurement of power and distribution transformers in the 11-66kV range. This surge in demand had particularly benefited organized players like Voltamp, which leads the market for transformers below 220kV.

Infrastructure developments, including metro rail projects, have further boosted the need for distribution transformers. With government spending intensifying in this segment, Voltamp is well-positioned to leverage its dominant market presence, especially as smaller players exit the industry.

Exhibit 67: National Electricity plan for 2022-2032

| Transmission System Type / Voltage Class | Unit | At the end of 2021-22 | Addition during 2022-27 | At the end of 2026-27 | Addition during 2027-32 | At the end of 2031-32 |
|--|------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
| Transmission lines | | | | | | |
| (a) HVDC (\pm 320 kV/ 500 kV/800 kV Bipole) | | 19,375 | 80 | 19,455 | 15,432 | 34,887 |
| (b) 765 kV | ckm | 51,023 | 36,558 | 87,581 | 27,138 | 1,14,719 |
| (c) 400 kV | ckm | 1,93,978 | 34,618 | 2,28,596 | 20,989 | 2,49,585 |
| (d) 230/220 kV | ckm | 1,92,340 | 43,431 | 2,35,771 | 13,228 | 2,48,999 |
| Total-Transmission Lines | ckm | 4,56,716 | 1,14,687 | 5,71,403 | 76,787 | 6,48,190 |
| Sub-stations | | | | | | |
| (a) 765 kV | MVA | 2,57,200 | 3,43,500 | 6,00,700 | 3,19,500 | 9,20,200 |
| (b) 400 kV | MVA | 3,93,113 | 2,84,970 | 6,78,083 | 1,35,745 | 8,13,828 |
| (c) 230/220 kV | MVA | 4,20,637 | 1,47,860 | 5,68,497 | 42,610 | 6,11,107 |
| Total – Substations | MVA | 10,70,950 | 7,76,330 | 18,47,280 | 4,97,855 | 23,45,135 |
| HVDC | | | | | | |
| (a) Bi-pole link capacity | MW | 30,500 | 1,000 | 31,500 | 32,250 | 63,750 |
| (b) Back-to back capacity | MW | 3,000 | 0 | 3,000 | 0 | 3,000 |
| Total- HVDC | MW | 33,500 | 1,000 | 34,500 | 32,250 | 66,750 |

Source: National_Electricity_Plan_Volume_II

| | As on 30.09.2024 | By Mar 2027 | By Mar 2032 |
|-------------------------------------|------------------|-------------|-------------|
| Peak Demand (GW) | 249.85* | 296 | 388 |
| Installed Capacity (GW) | 452.69 | 669 | 997 |
| RE Capacity (GW) | 201.45 | 537 | 613 |
| Transmission Lines (ISTS) (ckm) | 2,11,805 | 2,51,221 | 2,94,545 |
| Transmission Capacity (ISTS) (MVA) | 5,29,065 | 9,33,190 | 12,81,355 |
| Transmission Lines (InSTS) (ckm) | 2,77,047 | 3,20,182 | 3,53,645 |
| Transmission Capacity (InSTS) (MVA) | 7,47,705 | 9,48,590 | 11,30,530 |
| Inter-Regional Capacity (MW) | 1,18,740 | 1,42,940 | 1,67,540 |

Source: National_Electricity_Plan_Volume_I

Exhibit 68: Estimated cost of Transmission System during the period 2027-32

| | Rs Mn |
|---|------------------|
| Additional transmission system of 220 kV and above voltage level (Transmission lines, Substations, and reactive compensation etc.) | 49,09,200 |
| Inter State Transmission System | 39,16,240 |
| intra-State transmission system | 9,92,960 |
| Total T&D Investment | 98,18,400 |

Source: Company, AMSEC Research, : National_Electricity_Plan_Volume_I

Exhibit 69: Distribution Transformers: Capacities set for major boost by 2030 (33/0.4kV,22/0.4kV,11/0.4 kV)

| | As of 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | Expected capacity/number by 2029-30 |
|-----------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------------------------|
| Number of DT | 1,46,74,261 | 5,53,242 | 6,14,488 | 6,20,579 | 5,80,657 | 5,63,968 | 5,59,048 | 5,75,458 | 5,90,413 | 1,93,32,115 |
| Capacity of DT (MVA) | 6,89,192 | 24,621 | 28,173 | 31,683 | 30,610 | 29,809 | 31,430 | 30,869 | 31,517 | 9,27,656 |

Source: Company, AMSEC Research, : National_Electricity_Plan_Volume_I

Exhibit 70: Planned sub-station (66/33/22kV) capacity of India by end of 2029-30

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | Expected capacity/number by 2029-30 |
|------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------------|
| Number of S/s | 39965 | 1173 | 2003 | 2286 | 1870 | 1230 | 1218 | 1155 | 1257 | 52157 |
| Capacity of S/s (MVA) | 482810 | 14523 | 21878 | 24628 | 21889 | 14909 | 14442 | 13232 | 16020 | 624332 |

Source: Ministry of Power, AMSEC Research

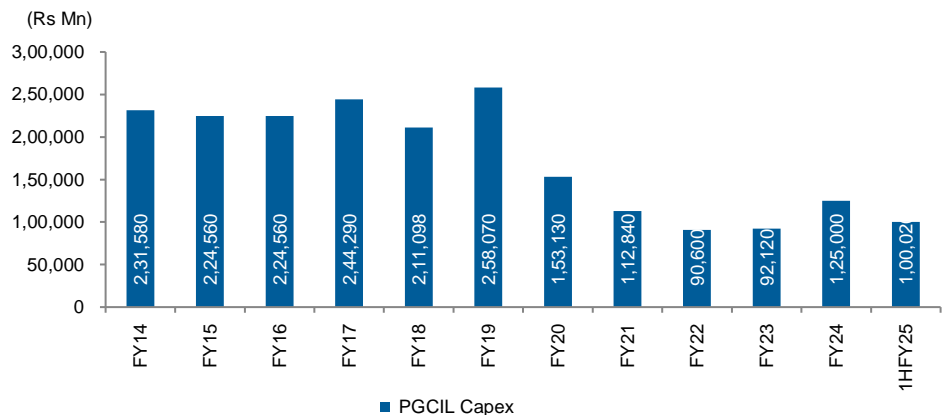
Exhibit 71: Transformation Capacity (220 kV and above) (MVA)

| | Up to July-2024 | FY30E | CAGR FY19-24 | CAGR FY24-FY30 |
|---------------|------------------|------------------|--------------|----------------|
| ± 800 kV HVDC | 18,000 | 38,000 | 15% | 16% |
| ± 500 kV HVDC | 13,500 | 13,500 | 0% | 0% |
| ± 320 kV HVDC | 2,000 | 7,000 | | 28% |
| 765 kV | 2,97,700 | 5,31,700 | 7% | 13% |
| 400 kV | 4,62,423 | 5,27,188 | 8% | 3% |
| 220 kV | 4,72,077 | 4,72,077 | 6% | 0% |
| Total | 12,65,700 | 15,89,465 | 7% | 5% |

Exhibit 72: Transmission line (220 kV and above) (All figures in CKM)

| | Up to July-2024 | FY30E | CAGR FY19-24 | CAGR FY24-FY30 |
|--------------------|-----------------|-----------------|--------------|----------------|
| ± 800 kV HVDC | 9,655 | 15,855 | 10% | 10% |
| ± 500 kV HVDC | 9,432 | 9,432 | 0% | 0% |
| ± 320 kV HVDC | 288 | 2,208 | | 50% |
| 765 kV | 54,797 | 76,983 | 6% | 7% |
| 400 kV | 2,04,647 | 2,09,736 | 2% | 1% |
| 230/ 220 kV | 2,08,768 | 2,02,590 | 3% | 0% |
| Grand Total | 4,87,587 | 5,16,804 | 3% | 1% |

Source: Company, AMSEC Research

Exhibit 73: PGCIL's capex revival


Source: PGCIL, AMSEC Research



Rising competition could shock margins and realizations

Voltamp holds a strong position in the 132kV to 220kV transformer segment, with capacity set to expand to 20,000 MVA from 14,000 MVA. It competes with major players like CG Power, TRIL, Bharat Bijlee, Siemens, Schneider electric Shilchar Technologies, Indo Tech etc. There is limited competition above 220KV transformer include BHEL, CG Power, TRIL, Hitachi Energy, Siemens and GE T&D. However, transformer below 220Kv has huge competitions.

Lot of small players like EMCO transformers and IMP power Ltd have shut shop. Lot of Chinese players entering the Indian Market after CEA announcing thermal power capacity expansion. Chinese not competing in the small size transformers. In addition, with China-based companies now banned from participating in utility projects in India. Lot of transformer player announced aggressive capacity expansion like CG Power expanding capacity to 44,900 MVA from 37,900MVA currently, TRIL expanding capacity to 47,000MVA from 37,200MVA now etc. Rising competitive intensity in the industry could pose threat to margins, in our view.

Exhibit 74: Transformer players, capability and capacity details

| Company | Transformers | | | | Capacity (MVA) | |
|------------------------|--------------|-------|-------|-------|----------------|---------|
| | 132KV | 220KV | 400KV | 765KV | Current | Planned |
| BHEL | ✓ | ✓ | ✓ | ✓ | 45,000 | NA |
| CG Power | ✓ | ✓ | ✓ | ✓ | 23,900 | 44,900 |
| Schneider Electric | ✓ | ✓ | x | x | 6,000 | NA |
| TRIL | ✓ | ✓ | ✓ | ✓ | 37,200 | 47,000 |
| Hitachi Energy | ✓ | ✓ | ✓ | ✓ | 20,000 | NA |
| Siemens | ✓ | ✓ | ✓ | ✓ | 15,000 | 30,000 |
| GE T&D | x | x | ✓ | ✓ | 25,000 | NA |
| Voltamp Transformers | ✓ | ✓ | x | x | 14,000 | 18,000 |
| Bharat Bijlee | ✓ | ✓ | x | x | 15,000 | NA |
| EMCO | ✓ | ✓ | ✓ | x | 20,000 | NA |
| IMP Power | ✓ | ✓ | x | x | 15,000 | NA |
| Indo Tech Transformers | ✓ | ✓ | ✓ | x | 7,000 | NA |
| Diamond Power | ✓ | ✓ | x | x | 10,000 | NA |
| Shilchar Technologies | ✓ | ✓ | x | x | 4,000 | 7500 |

Source: Company, AMSEC Research

Exhibit 75: Exhibit: Peer comparison trend

| Revenue (Rs Mn) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | 5 Year CAGR | 10 Year CAGR |
|------------------------|--------|--------|--------|--------|--------|--------|-------------|--------------|
| CG Power | 79,979 | 51,099 | 29,640 | 54,835 | 69,725 | 80,460 | 0% | 4% |
| TRIL | 8,554 | 7,010 | 7,421 | 11,618 | 13,960 | 12,947 | 9% | 6% |
| GE T&D | 42,188 | 31,587 | 34,524 | 30,660 | 27,732 | 31,679 | -6% | -1% |
| Voltamp Transformers | 8,288 | 8,586 | 6,923 | 11,272 | 13,851 | 16,162 | 14% | 14% |
| Bharat Bijlee | 9,323 | 9,287 | 7,311 | 12,657 | 14,185 | 18,725 | 15% | 14% |
| EMCO | 8,063 | 8,414 | 3,460 | 68 | - | - | | |
| IMP Power | 4,133 | 2,646 | 956 | 656 | 281 | | | |
| Indo Tech Transformers | 2,134 | 2,053 | 2,060 | 2,801 | 3,709 | 5,036 | 19% | 18% |
| Diamond Power | 20,448 | 11,317 | - | - | 155 | | | |
| Shilchar Technologies | 1,184 | 713 | 1,178 | 1,802 | 2,802 | 3,969 | 26% | 14% |

| EBITDA (Rs Mn) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | 5 Year CAGR | 10 Year CAGR |
|------------------------|-------|---------|--------|--------|--------|--------|-------------|--------------|
| CG Power | 1,148 | -10,713 | -3,916 | 5,662 | 10,010 | 10,978 | 57% | 6% |
| TRIL | 613 | 514 | 685 | 741 | 1,209 | 1,341 | 17% | 12% |
| GE T&D | 4,445 | -2,498 | 1,703 | -890 | 1,097 | 3,316 | -6% | 1% |
| Voltamp Transformers | 936 | 1,137 | 774 | 1,390 | 2,309 | 3,223 | 28% | 36% |
| Bharat Bijlee | 606 | 704 | 387 | 869 | 1,196 | 1,746 | 24% | |
| EMCO | 825 | 551 | -640 | -689 | -157 | | | |
| IMP Power | 374 | 149 | -573 | -1,765 | -457 | | | |
| Indo Tech Transformers | -21 | 19 | 113 | 221 | 363 | 596 | | |
| Diamond Power | -106 | -6,472 | -22 | -28 | -237 | | | |
| Shilchar Technologies | 142 | 31 | 95 | 194 | 531 | 1,133 | 51% | 31% |

Source: Cline, Company, AMSEC Research



| PAT (Rs Mn) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | 5 Year CAGR | 10 Year CAGR |
|------------------------|--------|---------|--------|--------|-------|--------|-------------|--------------|
| CG Power | -5,035 | -13,237 | 12,952 | 9,125 | 9,627 | 14,270 | | 19% |
| TRIL | 45 | 4 | 71 | 140 | 407 | 445 | 58% | 24% |
| GE T&D | 2,127 | -3,026 | 603 | -496 | -15 | 1,811 | -3% | 4% |
| Voltamp Transformers | 848 | 894 | 1,122 | 1,328 | 1,999 | 3,074 | 29% | 28% |
| Bharat Bijlee | 415 | 456 | 261 | 556 | 832 | 1,314 | 26% | |
| EMCO | -251 | -689 | -1,602 | -152 | 2,847 | | | |
| IMP Power | 21 | -142 | -723 | -2,231 | -520 | | | |
| Indo Tech Transformers | -84 | 19 | 63 | 122 | 257 | 469 | | |
| Diamond Power | -2,694 | -7,947 | -241 | -254 | -429 | | | |
| Shilchar Technologies | 78 | 15 | 55 | 140 | 431 | 919 | 64% | 36% |

| EBITDAM (%) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | Avg 5 yrs | Avg 10 yrs |
|------------------------|------|-------|-------|------|------|------|-----------|------------|
| CG Power | 1.4 | -21.0 | -13.2 | 10.3 | 14.4 | 13.6 | 0.8 | -0.6 |
| TRIL | 7.2 | 7.3 | 9.2 | 6.4 | 8.7 | 10.4 | 8.4 | 7.8 |
| GE T&D | 10.5 | -7.9 | 4.9 | -2.9 | 4.0 | 10.5 | 1.7 | 4.4 |
| Voltamp Transformers | 11.3 | 13.2 | 11.2 | 12.3 | 16.7 | 19.9 | 14.7 | 10.8 |
| Bharat Bijlee | 6.5 | 7.6 | 5.3 | 6.9 | 8.4 | 9.3 | 7.5 | 4.6 |
| EMCO | 10.2 | 6.6 | -18.5 | | | | | |
| IMP Power | 9.1 | 5.6 | -59.9 | | | | | |
| Indo Tech Transformers | -1.0 | 0.9 | 5.5 | 7.9 | 9.8 | 11.8 | 7.2 | 0.9 |
| Diamond Power | -0.5 | | | | | | | |
| Shilchar Technologies | 12.0 | 4.3 | 8.1 | 10.8 | 18.9 | 28.5 | 14.1 | 12.6 |

| ROE (%) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | Avg 5 yrs | Avg 10 yrs |
|------------------------|-------|----------|--------|-------|-------|------|-----------|------------|
| CG Power | -20.1 | -1,517.8 | -127.0 | 198.7 | 68.9 | 59.4 | - | - |
| TRIL | 1.4 | 0.1 | 2.1 | 4.0 | 10.9 | 9.4 | 5.3 | 3.0 |
| GE T&D | 16.2 | -24.4 | 5.5 | -4.5 | -0.1 | 15.6 | -1.6 | 3.9 |
| Voltamp Transformers | 13.0 | 12.5 | 14.2 | 15.0 | 19.5 | 25.0 | 17.2 | 13.4 |
| Bharat Bijlee | 5.8 | 6.1 | 3.0 | 5.3 | 6.7 | 8.1 | 5.8 | 3.1 |
| EMCO | -4.5 | -13.8 | -41.5 | 1.9 | -33.6 | - | -17.4 | -8.7 |
| IMP Power | 1.8 | -13.1 | -110.8 | 269.9 | 23.6 | | 42.4 | 18.7 |
| Indo Tech Transformers | -6.5 | 1.5 | 4.8 | 8.8 | 16.3 | 21.6 | 10.6 | -7.9 |
| Diamond Power | -36.8 | -124.4 | -79.8 | 4.2 | 5.4 | | -48.7 | -17.4 |
| Shilchar Technologies | 13.5 | 2.5 | 8.7 | 19.2 | 42.9 | 55.5 | 25.7 | 22.6 |

| ROCE (%) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | Avg 5 yrs | Avg 10 yrs |
|------------------------|------|-------|-------|-------|-------|------|-----------|------------|
| CG Power | -0.7 | -33.4 | 148.4 | 80.6 | 75.4 | 71.5 | 68.5 | 33.1 |
| TRIL | 8.2 | 7.7 | 9.4 | 10.4 | 14.9 | 15.0 | 11.5 | 9.7 |
| GE T&D | 30.0 | -17.0 | 11.3 | -0.8 | 6.7 | 23.1 | 4.6 | 12.1 |
| Voltamp Transformers | 17.9 | 15.0 | 16.9 | 18.3 | 23.8 | 30.4 | 20.9 | 16.6 |
| Bharat Bijlee | 8.8 | 9.4 | 5.0 | 7.6 | 8.9 | 10.7 | 8.3 | 6.5 |
| EMCO | 6.0 | 3.4 | -5.4 | -2.6 | 336.1 | | 82.9 | 36.8 |
| IMP Power | 14.2 | 4.0 | -24.4 | -99.3 | -65.5 | | -46.3 | -10.1 |
| Indo Tech Transformers | -4.8 | 2.0 | 7.0 | 13.2 | 18.8 | 24.0 | 13.0 | 15.0 |
| Diamond Power | -2.2 | -24.2 | -1.0 | -1.4 | -11.4 | | -9.5 | 1.9 |
| Shilchar Technologies | 17.5 | 4.5 | 12.6 | 20.9 | 48.4 | 58.9 | 29.1 | 27.3 |

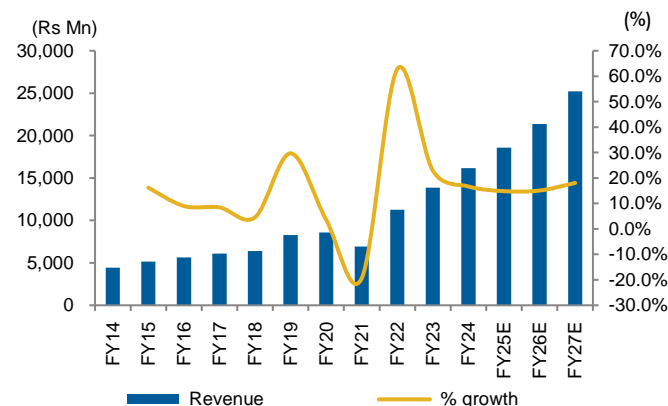
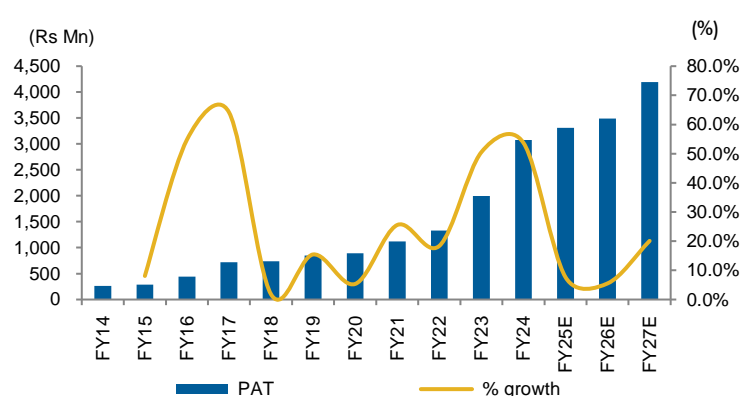
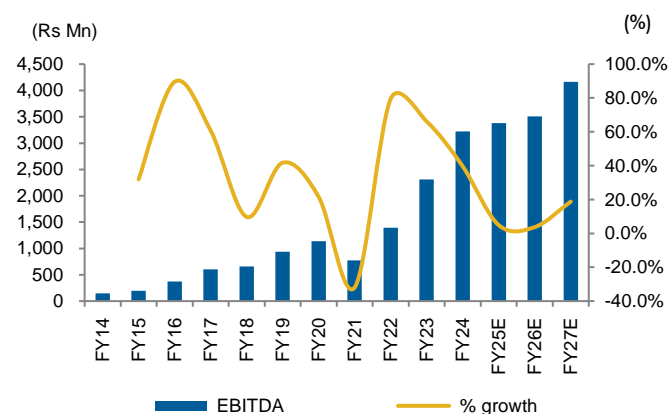
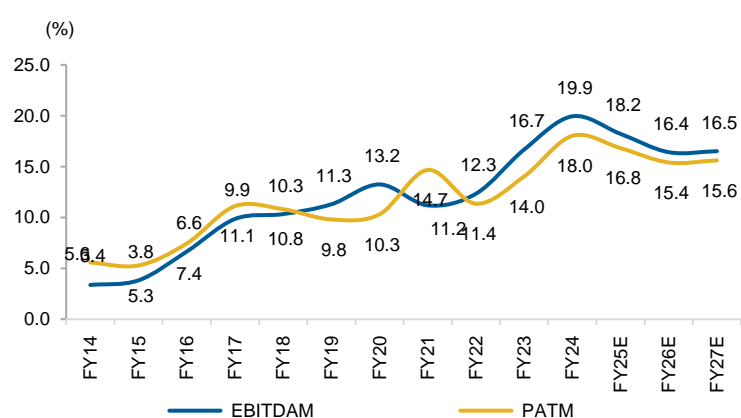
| Gross Asset Ratio (x) | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | Avg 5 yrs | Avg 10 yrs |
|------------------------|------|------|------|------|------|------|-----------|------------|
| CG Power | 2.4 | 1.9 | 1.3 | 2.5 | 3.4 | 3.6 | 2.6 | 2.1 |
| TRIL | 3.4 | 2.7 | 2.8 | 4.3 | 5.0 | 4.4 | 3.8 | 3.7 |
| GE T&D | 5.0 | 3.3 | 3.6 | 3.3 | 3.6 | 4.0 | 3.6 | 3.9 |
| Voltamp Transformers | 12.3 | 10.1 | 7.9 | 11.0 | 11.7 | 11.8 | 10.5 | 10.3 |
| Bharat Bijlee | 9.6 | 8.4 | 5.0 | 7.9 | 8.1 | 8.8 | 7.6 | 6.9 |
| EMCO | 2.8 | 3.2 | 1.3 | | | | 2.2 | 2.2 |
| IMP Power | 2.7 | 1.8 | 0.7 | 0.5 | 0.2 | | 0.8 | 2.0 |
| Indo Tech Transformers | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| Diamond Power | 1.3 | 0.7 | - | - | 0.0 | | 0.2 | 2.4 |
| Shilchar Technologies | 2.6 | 1.5 | 2.5 | 3.7 | 5.3 | 6.9 | 4.0 | 3.9 |

Source: Company, AMSEC Research

Financial analysis

Over the past decade, Voltamp has delivered a revenue CAGR of 13.8%, accelerating to 14% over the last five years. Margins have significantly improved, reaching 19.9% in FY24 from 10.3% in FY18, driven by a favorable sales mix, high-margin industrial orders, improved gross margins, operating leverage, and rising service income. PAT has grown at a CAGR of 28% over the last decade and 29% in the last five years, reflecting the impact of margin expansion.

Looking ahead, revenue is projected to grow at 16% CAGR over FY24-27E, supported by 16% CAGR in volume growth. However, PAT growth is expected to moderate to 11%, as margins are anticipated to decline to 16.5% by FY27E due to intensifying competition, supply chain challenges in CRGO material, and rising industrial metal prices.

Exhibit 76: Revenue trend

Exhibit 77: Earnings trend

Exhibit 78: EBITDA growth trend

Exhibit 79: Margin trend


Source: Company, AMSEC Research

Healthy balance sheet and cash flow

Voltamp has remained debt-free for over 24 years and is expected to maintain this position in the years ahead. The company has utilised robust cash reserves and liquid investments to fund growth initiatives without raising equity. Its listing was solely due to a family arrangement, and the company has a strong track record of healthy and consistent dividend payouts.

With a solid net cash position of Rs607 mn, Voltamp leverages cash terms with vendors to secure competitive pricing and prioritize deliveries. Creditor days have remained below five over the last nine years. Working capital efficiency improved to 103 days in FY24 from 151 days in FY14, driven by a reduction in debtor days from 117 to 54.

Operational efficiency and margin improvements have boosted cash flow from operations to Rs2.1 bn in FY24, with a CFO-to-EBITDA ratio of 93.9%. Return ratios have also strengthened, with ROE and ROCE reaching 25% and 30.4%, respectively, in FY24.

The return ratios are expected to remain above 20% over FY25-27E. Working capital is projected to stay below 100 days, while cumulative CFO is forecasted at Rs5.9 bn, with free cash flow reaching Rs3.4 bn over the same period.

Exhibit 80: Debt-free for decades

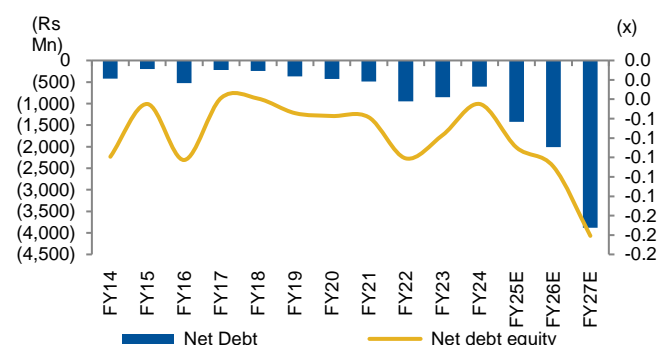


Exhibit 81: CFO and FCFF

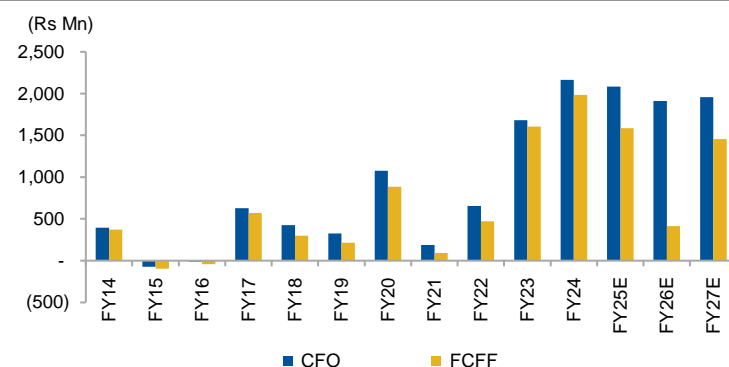


Exhibit 82: Return ratio trend

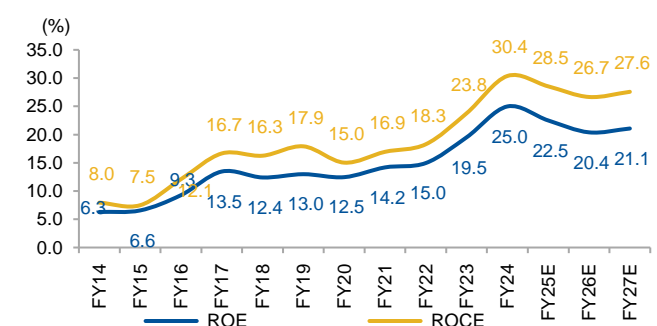


Exhibit 83: CFO (Pretax)/EBITDA %

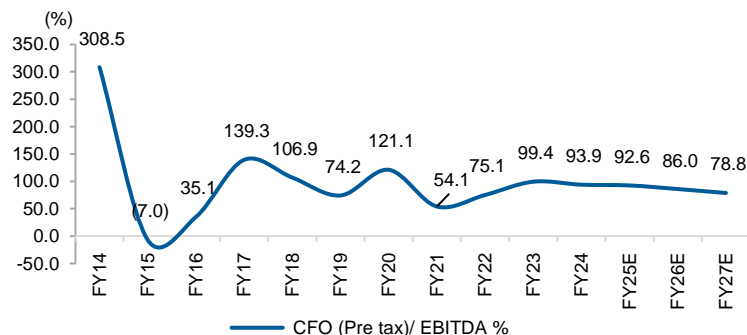


Exhibit 84: Net working capital days

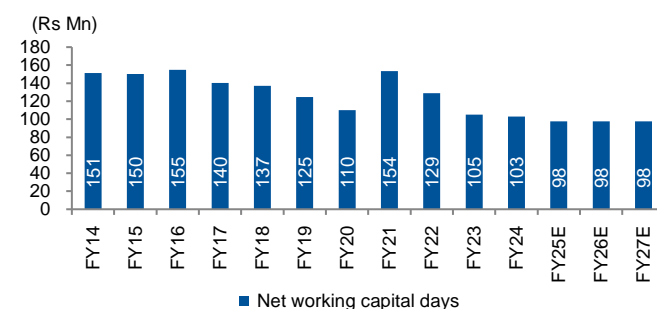
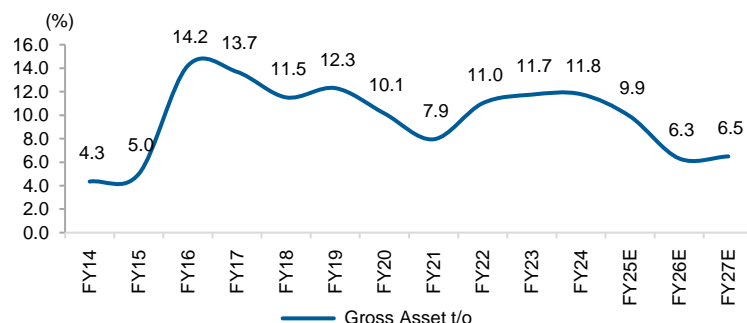


Exhibit 85: Gross asset turnover



Source: Company, AMSEC Research



Quarterly financial performance

Exhibit 86: Q2FY25 Quarterly financial performance (Consolidated)

| Y/E March (Rs mn) | 2QFY24 | 3QFY24 | 4QFY24 | 1QFY25 | 2QFY25 | yoy (%) | qoq (%) | 1HFY24 | 1HFY25 | yoy (%) |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|---------------|--------------|------------------|------------------|--------------|
| Net sales | 3,814 | 4,085 | 5,042 | 4,282 | 3,977 | 4.3 | (7.1) | 7,036 | 8,259 | 17.4 |
| Stock adjustment | (112) | (209) | 99 | 127 | (553) | | | (503) | (425) | (15.4) |
| Consumption of raw materials | 2,808 | 2,928 | 3,433 | 3,001 | 3,360 | 19.7 | 12.0 | 5,555 | 6,361 | 14.5 |
| Employee cost | 135 | 119 | 167 | 137 | 142 | 5.9 | 3.9 | 253 | 280 | 10.7 |
| Other expenditure | 296 | 198 | 335 | 259 | 277 | (6.2) | 7.2 | 563 | 536 | (4.8) |
| Total expenditure | 3,126 | 3,036 | 4,034 | 3,524 | 3,228 | 3.2 | (8.4) | 5,868 | 6,751 | 15.0 |
| EBITDA | 688 | 1,048 | 1,007 | 758 | 750 | 9.0 | (1.1) | 1,168 | 1,508 | 29.1 |
| Other income | 179 | 248 | 232 | 288 | 320 | 78.9 | 11.3 | 409 | 608 | 48.6 |
| Interest | 3 | 3 | 13 | 3 | 3 | 9.5 | (2.9) | 5 | 7 | 23.9 |
| Depreciation | 27 | 30 | 33 | 30 | 32 | 15.7 | 6.6 | 51 | 61 | 21.4 |
| Profit before tax | 836 | 1,264 | 1,194 | 1,013 | 1,035 | 23.8 | 2.2 | 1,521 | 2,048 | 34.6 |
| Provision for taxation | 152 | 318 | 259 | 218 | 278 | 82.8 | 27.3 | 329 | 496 | 50.9 |
| PAT | 684 | 946 | 935 | 794 | 757 | 10.7 | (4.7) | 1,192 | 1,552 | 30.2 |
| Income from JV/Associates | | | | | | | | - | - | - |
| Operating PAT | 684 | 946 | 935 | 794 | 757 | 10.7 | (4.7) | 1,192 | 1,552 | 30.2 |
| Exc (income)/expense | | | | | | | | - | - | - |
| Reported PAT | 684 | 946 | 935 | 794 | 757 | 10.7 | (4.7) | 1,192 | 1,552 | 30.2 |
| Equity capital (FV Rs 10) | 101 | 101 | 101 | 101 | 101 | | - | 101 | 101 | |
| Basic EPS (in Rs) | 67.6 | 93.5 | 92.4 | 78.5 | 74.9 | | | 117.8 | 153.4 | |
| EBITDA (%) | 18.0 | 25.7 | 20.0 | 17.7 | 18.9 | 82bp | 115bp | 16.6 | 18.3 | 166bp |
| PAT (%) | 17.1 | 21.8 | 17.7 | 17.4 | 17.6 | 48bp | 24bp | 16.0 | 17.5 | 149bp |
| Tax / PBT (%) | 18.2 | 25.1 | 21.7 | 21.6 | 26.8 | 866bp | 529bp | 21.6 | 24.2 | 260bp |
| Raw Material / Net Sales (%) | 70.7 | 66.6 | 70.1 | 73.1 | 70.6 | (-9bp) | (-246bp) | 71.8 | 71.9 | 6bp |
| Gross Margin (%) | 29.3 | 33.4 | 29.9 | 26.9 | 29.4 | 9bp | 246bp | 28.2 | 28.1 | (6bp) |
| Employee cost / Net Sales (%) | 3.5 | 2.9 | 3.3 | 3.2 | 3.6 | 5bp | 38bp | 3.6 | 3.4 | (21bp) |
| Other Exp / Net Sales (%) | 7.8 | 4.9 | 6.6 | 6.0 | 7.0 | (-78bp) | 93bp | 8.0 | 6.5 | (152bp) |
| Volume (MVA) | 2,935 | 3,278 | 4,105 | 3,526 | 3,598 | 22.6 | 2.0 | 5,686 | 7,124 | 25.3 |
| Realisation (Rs/MVA) | 12,99,452 | 12,46,133 | 12,28,161 | 12,14,269 | 11,05,452 | (14.9) | (9.0) | 12,37,391 | 11,59,311 | (6.3) |
| EBITDA/MVA | 2,34,322 | 3,19,821 | 2,45,403 | 2,14,954 | 2,08,402 | (11.1) | (3.0) | 2,05,360 | 2,11,645 | 3.1 |

Source: Company, AMSEC Research

10-year financial snapshot

Exhibit 87: Financial Snapshot

| Particulars (Rs mn) | FY14 | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25E | FY26E | FY27E | CAGR | |
|------------------------|-------|-------|-------|--------|--------|--------|--------|-------|--------|---------|---------|--------|---------|---------|-------------|---------------|
| | | | | | | | | | | | | | | | FY14- 24 | FY24- FY27 |
| Order book | 5,005 | 4,696 | 5,407 | 5,200 | 6,170 | 6,848 | 6,918 | 4,431 | 6,209 | 5,859 | 7,839 | 13,553 | 18,454 | 21,170 | 4.6 | 39.3 |
| Order inflow | 7,152 | 9,429 | 9,967 | 10,767 | 10,164 | 12,533 | 11,419 | 6,242 | 12,915 | 11,533 | 15,284 | 21,398 | 22,467 | 22,917 | 7.9 | 14.5 |
| Volume | 6,628 | 8,217 | 9,202 | 10,189 | 9,180 | 11,053 | 10,298 | 8,729 | 11,137 | 11,883 | 13,070 | 15,684 | 17,566 | 20,201 | 7.0 | 15.6 |
| Sales | 4,448 | 5,169 | 5,633 | 6,109 | 6,390 | 8,288 | 8,586 | 6,923 | 11,272 | 13,851 | 16,162 | 18,561 | 21,360 | 25,219 | 13.8 | 16.0 |
| EBIDTA | 150 | 197 | 374 | 602 | 660 | 936 | 1,137 | 774 | 1,390 | 2,309 | 3,223 | 3,381 | 3,506 | 4,165 | 35.9 | 8.9 |
| PAT | 263 | 284 | 440 | 722 | 735 | 848 | 894 | 1,122 | 1,328 | 1,999 | 3,074 | 3,309 | 3,492 | 4,194 | 27.9 | 10.9 |
| CFO | 396 | (72) | (12) | 630 | 425 | 325 | 1,078 | 188 | 656 | 1,680 | 2,163 | 2,085 | 1,912 | 1,956 | 18.5 | -3.3 |
| CFI | (317) | 211 | 119 | (454) | (202) | (109) | (857) | 207 | (463) | (1,273) | (1,414) | (284) | (1,292) | 49 | | |
| CFF | (178) | (118) | (122) | (152) | (182) | (183) | (275) | (253) | (261) | (363) | (633) | (983) | (1,035) | (1,138) | | |
| Equity | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | 101 | | |
| Total Net Worth | 4,247 | 4,408 | 5,084 | 5,650 | 6,201 | 6,867 | 7,482 | 8,342 | 9,421 | 11,072 | 13,536 | 15,884 | 18,364 | 21,445 | 12.3 | 16.6 |
| Gross Debt | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Gross Block | 1,004 | 1,014 | 390 | 440 | 548 | 667 | 840 | 866 | 1,018 | 1,171 | 1,365 | 1,865 | 3,365 | 3,865 | 3.1 | 41.5 |
| LT Investments | 1,774 | 1,942 | 1,755 | 2,952 | 3,355 | 3,554 | 4,171 | 4,688 | 4,796 | 6,504 | 8,904 | 9,804 | 9,904 | 10,004 | | |
| Cash & Curr.t Inv | 422 | 198 | 522 | 218 | 244 | 373 | 428 | 489 | 951 | 851 | 607 | 1,426 | 2,011 | 3,879 | 3.7 | 85.5 |
| Key Ratios | | | | | | | | | | | | | | | | |
| EPS | 26.0 | 28.1 | 43.5 | 71.4 | 72.6 | 83.9 | 88.3 | 110.9 | 131.3 | 197.6 | 303.8 | 327.1 | 345.1 | 414.5 | | |
| ROE% | 6.3 | 6.6 | 9.3 | 13.5 | 12.4 | 13.0 | 12.5 | 14.2 | 15.0 | 19.5 | 25.0 | 22.5 | 20.4 | 21.1 | | |
| ROCE% | 8.0 | 7.5 | 12.1 | 16.7 | 16.3 | 17.9 | 15.0 | 16.9 | 18.3 | 23.8 | 30.4 | 28.5 | 26.7 | 27.6 | | |
| Net Debt Equity | (0.1) | (0.0) | (0.1) | (0.0) | (0.0) | (0.1) | (0.1) | (0.1) | (0.1) | (0.1) | (0.0) | (0.1) | (0.1) | (0.2) | | |
| Gross Asset T/O (x) | 4.3 | 5.0 | 14.2 | 13.7 | 11.5 | 12.3 | 10.1 | 7.9 | 11.0 | 11.7 | 11.8 | 9.9 | 6.3 | 6.5 | | |
| Inventory days | 47 | 58 | 61 | 49 | 55 | 47 | 49 | 67 | 68 | 46 | 51 | 68 | 68 | 68 | | |
| Receivable days | 117 | 102 | 96 | 92 | 83 | 78 | 64 | 90 | 62 | 60 | 54 | 35 | 35 | 35 | | |
| Payable days | 13 | 9 | 3 | 1 | 1 | 0 | 3 | 4 | 1 | 1 | 2 | 5 | 5 | 5 | | |
| WC Days | 151 | 150 | 155 | 140 | 137 | 125 | 110 | 154 | 129 | 105 | 103 | 98 | 98 | 98 | | |
| Div Payout % | 38.5 | 35.6 | 28.8 | 21.0 | 20.7 | 26.8 | 28.3 | 22.5 | 26.7 | 30.4 | 29.6 | 29.0 | 29.0 | 26.5 | | |
| Cost Matrix | | | | | | | | | | | | | | | | |
| Gross Margin % | 20.2 | 13.1 | 17.9 | 21.1 | 21.4 | 19.4 | 22.5 | 24.8 | 18.9 | 25.2 | 26.0 | 27.6 | 26.0 | 26.1 | | |
| RM/Sales% | 79.8 | 86.9 | 82.1 | 78.9 | 78.6 | 80.6 | 77.5 | 75.2 | 81.1 | 74.8 | 74.0 | 72.4 | 74.0 | 73.9 | | |
| Employee/Sales% | 4.1 | 4.1 | 3.8 | 3.6 | 3.8 | 3.6 | 3.9 | 4.8 | 3.4 | 2.9 | 3.3 | 3.0 | 3.0 | 3.0 | | |
| Other Exp/Sales% | 10.0 | 9.7 | 10.9 | 8.3 | 8.5 | 6.8 | 7.7 | 7.6 | 6.4 | 5.9 | 6.8 | 6.8 | 7.0 | 7.0 | | |
| EBITDAM % | 3.4 | 3.8 | 6.6 | 9.9 | 10.3 | 11.3 | 13.2 | 11.2 | 12.3 | 16.7 | 19.9 | 18.2 | 16.4 | 16.5 | | |
| PATM % | 5.6 | 5.3 | 7.4 | 11.1 | 10.8 | 9.8 | 10.3 | 14.7 | 11.4 | 14.0 | 18.0 | 16.8 | 15.4 | 15.6 | | |

Source: Company, AMSEC Research



Key risks to our forecast

- **Industrial and Private Capex Slowdown:** About 60% of Voltamp's sales stem directly from corporates, with the remaining 40% attributed to A-class contractors and EPC players. Any slowdown or delays in industrial or private capex could significantly impact order inflow and revenue growth.
- **Significant increase in raw material prices:** With ~70% of raw material costs driven by silicone steel, CRGO electrical steel, conventional steel, copper, and transformer oil, any significant price increases could erode profitability. Silicone steel, primarily imported from Russia, Europe, and Japan, poses sourcing challenges. Copper, procured domestically from Vedanta and hedged on the LME, along with transformer oil sourced from Savita Oil and Apar Industries, are also susceptible to price surges.
- **Dependence on imported components:** The reliance on imported CRGO electrical steel sheets and other critical components remains a vulnerability. Escalating geopolitical conflicts, such as the ongoing tensions in West Asia, could disrupt supply chains and escalate input costs.
- **Currency fluctuations:** With about 70% of the total input costs tied to imported materials, rupee depreciation poses a direct threat to margins, as Voltamp does not hedge currency risks due to high hedging costs.
- **Competitive pressure and pricing challenges:** Aggressive capacity expansions by MNCs and established industry players, along with a resurgence of unlisted regional and revived sick units, intensify competition. Chinese manufacturers, now focusing on the private sector, further pressure pricing. In green energy and private sector projects, EPC players often turn to lower-cost local suppliers, further squeezing price realizations.



Outlook and valuation

Voltamp Transformers Ltd. (Voltamp) is a prominent manufacturer of oil-filled power and distribution transformers, specializing in customized transformers for industrial, building, and power applications. With over six decades of experience, Voltamp has established itself as a key player in India's growing power sector, benefiting from rising urbanization, improved capacity utilization, and increasing industrial capex across sectors. The company holds 15% market share in the organized industrial application transformers segment. Over period the company could reposition itself from T&D player to Industrial sector players.

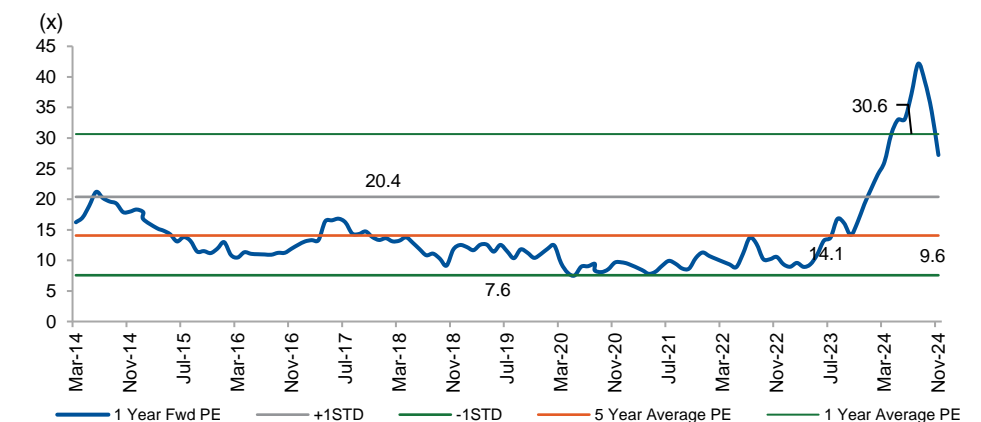
Voltamp has maintained a debt-free balance sheet for over 24 years, reflecting its strong financial discipline. The company posted robust ROE and ROCE ratios of 25% and 30%, respectively, in FY24. Currently, the stock is trading at 27.7x/23.1x on FY26E/27E earnings, respectively. We initiate coverage on Voltamp with a target price of Rs12,436, based on a 30x FY27E EPS multiple. This target multiple reflects the ongoing industrial capex recovery and a 25% discount to the industry average P/E of 40x for FY27E.

Exhibit 88: Peer Valuations

| Company | CAGR over FY25-27E | | | PE | | | EV/EBITDA | | | ROE | | |
|---------------------------|--------------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Sales | EBITDA | PAT | FY25E | FY26E | FY27E | FY25E | FY26E | FY27E | FY25E | FY26E | FY27E |
| CG Power | 26.0% | 32.0% | 32.0% | 103.1 | 75.9 | 59.2 | 76.1 | 56.0 | 43.8 | 31.4 | 32.9 | 32.3 |
| GE T&D India | 32.0% | 36.0% | 39.0% | 91.3 | 65.6 | 47.6 | 64.0 | 47.0 | 34.6 | 34.3 | 37.3 | 40.9 |
| Transformers & Rectifiers | 47.0% | 64.0% | 76.0% | 95.6 | 46.7 | 30.8 | 48.3 | 25.8 | 17.9 | 17.3 | 23.2 | 27.9 |
| Voltamp | 16.0% | 8.9% | 10.9% | 29.1 | 27.6 | 23.0 | 28.1 | 26.9 | 22.2 | 22.5 | 20.4 | 21.1 |
| Average | 30.2% | 35.2% | 39.5% | 79.8 | 54.0 | 40.1 | 54.1 | 38.9 | 29.6 | 26.4 | 28.5 | 30.6 |

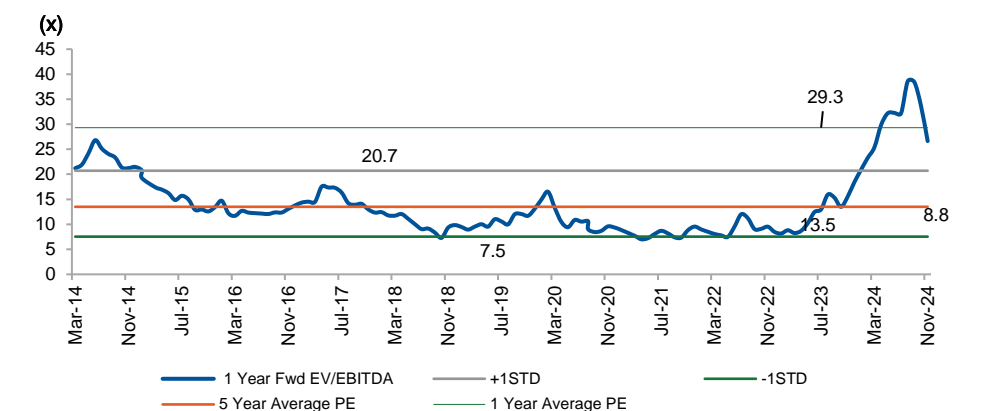
Source: Company, Bloomberg, AMSEC Research, Note: CMP as on 21st Nov'24

Exhibit 89: Valuation check: 1-year forward P/E



Source: Company, Bloomberg, AMSEC Research

Exhibit 90: Valuation check: 1-year forward EV/EBITDA



Source: Company, Bloomberg, AMSEC Research



Company Overview

Voltamp transformers Ltd (Voltamp) has been a leading player in the design, manufacture, and supply of transformers for over 61 years, with a strong track record of 70,000 installations across India and overseas. The company serves a diverse clientele, including corporate sectors, private utilities, PSUs, MNCs, and large cooperatives, with 95% of listed corporates and MNCs in India being regular customers.

Voltamp has a strong presence across various industries such as power, steel, cement, oil & gas, chemicals, petrochemicals, and green energy. Major EPC firms like Larsen & Toubro, Technip, Thyssenkrupp, Toyo, Petrofac, Engineers India, Tata Projects, Thermax, as well as multinational engineering giants like Siemens, ABB, GE, and Hitachi, have sourced transformers up to 220 kV voltage class from Voltamp for over three decades.

The company also leads the Indian market in cast resin dry-type transformers, manufactured under a technology transfer agreement with HTT, Germany. With a 35% market share and 22,000 installations, Voltamp is a leader in this segment. Additionally, its in-house testing facilities are accredited by the National Accreditation Board for Testing and Calibration Laboratories, ensuring compliance with international standards.

Products and services:

Voltamp is a leading manufacturer of energy-efficient and customized industrial application transformers, catering to diverse industries and infrastructure projects. The company's product and service offerings include:

1. **Oil Filled Power and Distribution Transformers:** Voltamp manufactures oil-filled power and distribution transformers up to 160 MVA, 220 kV class. These serve a wide range of customers, including state electricity boards, refineries, fertilizer plants, and steel and cement industries, as well as international markets. The company has successfully developed 50 MVA, 220 kV ester oil-filled transformers to enhance sustainability and efficiency.
2. **Dry Type Transformers:** Voltamp offers vacuum resin-impregnated and cast resin dry-type transformers, both of which are widely used for industrial applications. With technical collaboration from HTT, Germany, the company produces resin-impregnated dry-type transformers up to 5 MVA, 11 kV class, and cast resin dry-type transformers up to 12.5 MVA, 33 kV class.
3. **Induction Furnace Transformers:** Designed to provide efficient heating for industrial operations, these transformers are customized for induction furnaces with coil construction tuned to inverter circuits. Operating at medium frequencies (500 Hz or 1000 Hz), they maximize heat generation for demanding industrial processes.
4. **Compact Sub-Station:** Voltamp's prefabricated substations (PSS), or unitized substations (USS), are available up to 2.5 MVA, 33 kV class. These substations are durable, environment-friendly, and suitable for medium-to-low voltage distribution applications in urban and rural areas.
5. **Unitised Sub-Station:** Manufactured per IEC 62271 standards, these composite systems house HT switchgear, transformers, LT switchgear, and associated equipment in a compartmentalized steel enclosure, meeting the specific safety and power distribution needs of urban and industrial sectors.
6. **Ring Main Units:** Voltamp offers the VGRM12, an SF6-insulated medium-voltage switchgear system. Compact and functional, it is suitable for advanced MV secondary distribution systems, supporting capacities up to 2.5 MVA, 33 kV class.
7. **Services Business:** Voltamp's service division provides comprehensive lifecycle management for transformers, optimizing their 60-year lifespan. By focusing on reducing carbon footprints (transformers being a major contributor to global emissions), the company offers a range of services, including: Spares and capacity enhancement; Asset management and condition monitoring; Factory and on-site overhauling; Emergency services and retrofitting; Retrofit with ester oil for eco-friendly performance; Customer training (on-site/virtual).

Exhibit 91: Oil Filled Transformers



Exhibit 92: Dry Type/Cast Resin Transformers

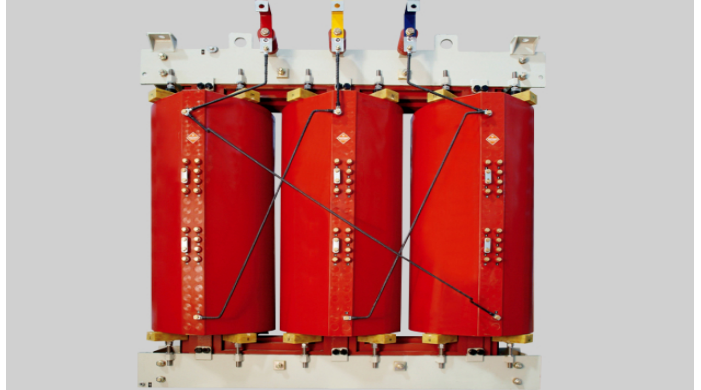


Exhibit 93: Unitised Sub-Station



Exhibit 94: Induction Furnace Transformers



Exhibit 95: Switchgear/CSS



Voltamp's manufacturing prowess

Voltamp Transformers Ltd operates manufacturing facilities in Gujarat with a total installed capacity of 14,000 MVA, supporting a diverse range of transformer products.

Unit 1: Makarpura, Vadodara

- Spread over 6 acres with a built-up area of 11,800 sq. mtrs.
- Specializes in manufacturing power transformers of assorted ratings up to 120 MVA, 220 kV class.

Unit 2: Vadodla, Savli, Vadodara

- Situated on 17 acres of land with a built-up area of 16,300 sq. mtrs.
- Focused on distribution and dry-type transformers up to 10 MVA, 33 kV class.
- Installed capacity includes: 4,500 MVA (175 units/month) for oil-filled transformers, and 1,500 MVA (100 units/month) for dry-type transformers and allied products like RMUs and compact substations.

Exhibit 96: Key Management Personnel

| Person | Designation | Profile |
|--------------------------|-----------------------------------|--|
| Shri Kanubhai S. Patel | Chairman & Managing Director | <ul style="list-style-type: none"> • Fellow member of the Institute of Chartered Accountants of India and the Institute of Company Secretaries of India • Completed the Global Advanced Management Program at Kellogg School of Business, Chicago, USA • Possesses over 45 years of rich experience • Key responsibilities include policy-making, business restructuring , marketing strategies, financial control and marketing & business development and long-term strategic planning • Serves as an Independent Director at Meghmani Finechem Ltd, Ahmedabad, and Paramount Ltd, Vadodara |
| Shri Kunjalbhai L. Patel | Vice Chairman & Managing Director | <ul style="list-style-type: none"> • Electrical Engineer from MS University, Vadodara. Alumni of INSEAD France • Rich experience of over 3 decades; working full time in the company since 1994 • Key responsibilities include overall operations, new products and segments, technological improvement and building relations with leading customers • Former Chairman of the CII – Gujarat Region Council, and United Way of Baroda |
| Nisheet Desai | Advisor Service Business Units | <ul style="list-style-type: none"> • Electrical Engineer from MS University, Vadodara • Rich experience of over 48 years • Key responsibility is to scale up the services business • Illustrious 45-year tenure with ABB India, beginning his career with the erstwhile Hindustan Brown Boveri Ltd. During his time at ABB, he held key positions, including Business Manager for critical departments such as the Distribution Relay, Power Technology Division, and AC Systems. |
| Shailesh Prajapati | Chief Financial Officer (CFO) | <ul style="list-style-type: none"> • Associate Member of the Institute of Chartered Accountants of India. • Expertise in the field of Accounts & Finance, taxation and banking • Work experience of more than 15 years. • Overall, in charge of finance, taxation and banking operations |

Source: Company, AMSEC Research

Exhibit 97: Voltamp's journey & milestones

| Year | Events |
|-----------|--|
| 1970-1998 | <ul style="list-style-type: none"> Commenced manufacture of transformers up to 10,000 KVA, 66KV for utilities and Industrial clients Commenced manufacture of 132 KV Class Transformers Commenced manufacture of 50 MVA, 132 KV Class Power Transformers ISO 9001:2000 Accreditation for quality assurance for design, manufacture and after sales services by M/s. KPMG Peatmarwick LLP, U.S.A. Entered into Technical License with M/s. Mora Tranformatoren GmbH, Germany for manufacture of Vacuum Resin Impregnated Dry Type Transformers and subsequently started manufacture of the same. |
| 2000-2006 | <ul style="list-style-type: none"> Commenced manufacture of Induction Furnace Transformers Entered into a Technical License with M/s.HTT Hochspannungstechnik und Transformatorbau GmbH, Germany for manufacture of Cast Resin Dry Type Transformers and subsequently started manufacture of the same. Company increased its total capacity to 5,400MVA in FY06 from 3,000 MVA in FY03. Voltamp Transformers' IPO was fully subscribed in August 2006 with majority of the demand from institutional investors. |
| 2013-2021 | <ul style="list-style-type: none"> Shri Kanubhai S. Patel was appointed as CEO & Managing Director, then Chairman, and redesignated as Chairman and Managing Director of the Company. The board approved scheme of Amalgamation between Kunjal Investments Pvt Ltd and Voltamp Transformers Ltd. |
| 2022-2024 | <ul style="list-style-type: none"> Achieved volume of 13,070 MVA and expanded capacity to 14,000 MVA in FY24 |

Source: Company, AMSEC Research

Exhibit 98: Top Shareholders

| Shareholder Name | % Holding |
|-----------------------------------|-----------|
| Promoter & Promoter Group | 38.0% |
| HDFC Small Cap Fund | 8.0% |
| Nippon Life India | 6.4% |
| Nalanda India Equity Fund Limited | 6.1% |
| Oxbow Master Fund Limited | 3.4% |
| Nalanda India Fund Limited | 2.9% |
| Dsp Small Cap Fund | 2.8% |
| UTI Mid Cap Fund | 1.1% |

Source: Company, AMSEC Research

What is a transformer?

A transformer is a passive electrical device that facilitates the transfer of electrical energy between circuits through electromagnetic induction. It is primarily used to adjust voltage levels—either by increasing it (step-up transformer) or decreasing it (step-down transformer). In a step-up transformer, voltage is increased from the primary winding (the coil receiving power from the source) to the secondary winding (the coil delivering transformed voltage to the load). In contrast, a step-down transformer reduces the voltage in the same process.

To ensure safe operation, transformers require an effective cooling medium to prevent overheating, which can lead to fire or explosion risks. Overheating occurs naturally under load but must be managed to maintain operational safety. Oil-filled transformers offer greater efficiency compared to dry-type transformers, which are constrained by their voltage ratings and physical size.

Dry Type Transformer: Operates without any insulating liquid, relying on air for cooling. Its windings and core are enclosed within a sealed, pressurized tank, ensuring safety and efficiency even without liquid insulation. The two primary types are: Cast Resin Transformer (CRT) and Vacuum Pressure Impregnated Transformer (VPI).

Oil Immersed Transformer: Also known as an oil-filled transformer, this type uses oil as a cooling and insulating medium. Its core and windings are submerged in a steel tank filled with insulating oil, which dissipates heat generated during operation. The heat from the core and windings transfers to the oil and is then dissipated into the surrounding medium. Depending on cooling capacity, oil-immersed transformers are categorized as immersed natural cooling transformer and immersed forced air-cooling transformer.

Types of transformers based on their purpose

Power Transformer: Designed for high-voltage transmission networks, power transformers operate at ratings like 400kV, 220kV, 110kV, 66kV, and 33kV, often exceeding 200MVA. These are typically installed at generating stations and transmission substations to manage high-capacity loads efficiently.

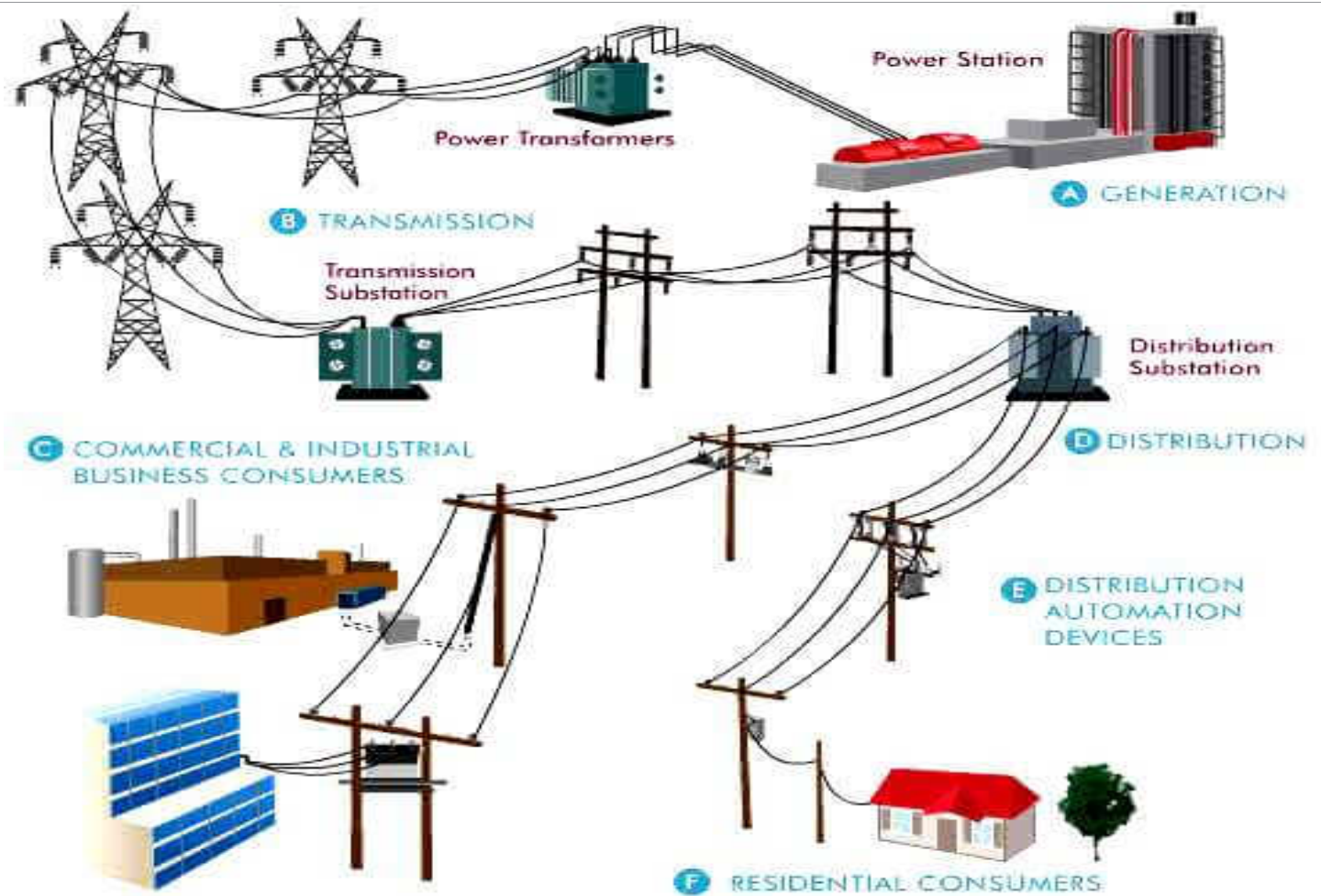
Distribution Transformer: Also known as a consumption transformer, it steps down voltage for end-user applications in residential, commercial, and industrial settings. Distribution transformers prioritize good voltage regulation and are optimized for 24/7 operation at peak efficiency, typically around 50% load.

Isolation Transformer: Characterized by separate primary and secondary windings linked only by magnetic flux, isolation transformers electrically decouple input and output circuits. These are often used for safety and noise reduction in sensitive electrical equipment.

Instrument Transformers: Commonly used for measurement and protection, instrument transformers step down high voltages or currents to safer levels for devices like meters, relays, and protective instruments. They ensure accurate measurement and safety by electrically isolating the secondary winding from the high-voltage primary circuit.



Exhibit 99: Generation transmission and distribution value chains



Source: Company, AMSEC Research

ESG Roadmap and Goals

Carbon Footprint Matrix

| | |
|---|---|
| Total GHG (in thousand metric/tonnes) (E) | - |
| Total GHG/Sales (E) | - |
| Total GHG/EVIC (E) | - |
| Net Zero Targets Set | - |
| SBTi Targets | - |

Sustainable Debt Profile

| | |
|-----------------------|---|
| Green Debt | - |
| Social Debt | - |
| Sustainability Debt | - |
| Sustainability Linked | - |
| Transition Debt | - |

Third-Party ESG Rating

| | |
|------------------------------|----|
| MSCI Rating | NA |
| Sustainalytics Risk Score | NA |
| Sustainalytics Risk Category | NA |
| S&P Global ESG Rank | NA |

Fund Exposure

| | |
|-----------------|---|
| ESG Funds | - |
| Article 9 Funds | - |
| Article 8 Funds | - |

Voltamp: ESG Roadmap and Goals

Voltamp Transformers Ltd. has embarked on its Environmental, Social, and Governance (ESG) journey with a focused commitment to sustainability, community development, and ethical governance. Key highlights of its ESG initiatives include:

Environmental:

- **Rooftop solar:** The company is on track to achieve 100% renewable energy use by 2027. Solar installations at all manufacturing sites are already in place to reduce carbon footprint.
- **Water conservation:** The Company prioritizes water conservation, employing various measures to reduce freshwater consumption and installing efficient wastewater treatment and harvest systems across its manufacturing sites. Implements Zero Liquid Discharge systems and recycles treated wastewater for gardening at Savli unit.
- **Waste management:** Adopts "Reduce, Reuse, Recycle" principles across operations to minimize waste.
- **GHG Emissions:** Extended life of transformers equivalent to 500 MVA, cutting carbon emissions by 60,000 kg in FY24 through lifecycle management services.

Specific commitments, goals and targets

| Parameter | Target - 2027 | Target 2030 |
|---|---------------|-------------|
| Electricity usage from renewable energy | 100 | - |
| Net zero emissions of GHG (scope 1 & 2) | 70 | 100 |
| Net zero waste to landfill | 100 | - |
| Water neutrality for owned operation | 100 | - |
| Increase in diversity ratio | 20 | 33 |
| Supply chain assessment on ESG | 100 | - |

Social:

- **Mission Shiksha Project:** From 2021 to 2023, supported 356 students with academic fees, kits, and family assistance. 175 families received assistance with utility bill payments and counseling, and 100 families were given ration kits.
- **Training for Rural Economic Empowerment (TREE) Project:** Provides tailoring and skill development training for women and adolescent girls to enhance employability and raise awareness on social issues.
- **Unnati Project:** Tackles menstrual health challenges, promotes gender workshops, and creates support groups for women and girls, in collaboration with Arch Foundation, a Non-Government Organization.
- **Mid-Day Meal Program:** In collaboration with Akshaya Patra, served over 455,220 meals to school children, combating hunger and malnutrition.

Governance:

- **Anti-corruption or anti-bribery policy:** The Company conducts all business transactions in an honest, fair and ethical manner. It prohibits bribery in all business dealings.
- **Board compositions:** As on 31st March 2024, the Company has 6 Directors comprising of 2 Managing Directors, 1 Non-Executive Director & 3 Non-Executive Independent Directors. The Company has two-woman directors on Board, out of which one is Independent Woman Director.
- **Whistle Blower Policy:** Provides a safe mechanism for employees and directors to report concerns under a robust vigil mechanism.

Financials

Profit and Loss Statement

| Particulars | FY23 | FY24 | FY25E | FY26E | FY27E |
|----------------------------|---------------|---------------|---------------|---------------|---------------|
| Net sales | 13,762 | 16,094 | 18,469 | 21,254 | 25,093 |
| Other operating income | 89 | 68 | 92 | 106 | 125 |
| Total Revenue | 13,851 | 16,162 | 18,561 | 21,360 | 25,219 |
| Consumption of materials | 10,327 | 11,303 | 13,364 | 15,721 | 18,536 |
| Staff Expenses | 401 | 539 | 554 | 638 | 753 |
| Other operating expenses | 814 | 1,097 | 1,262 | 1,495 | 1,765 |
| Total Expenditure | 11,542 | 12,939 | 15,180 | 17,854 | 21,054 |
| EBITDA | 2,309 | 3,223 | 3,381 | 3,506 | 4,165 |
| Depreciation | 97 | 114 | 121 | 196 | 271 |
| Operating profit | 2,212 | 3,110 | 3,260 | 3,310 | 3,894 |
| Other income | 401 | 890 | 1,116 | 1,308 | 1,649 |
| EBIT | 2,613 | 4,000 | 4,376 | 4,618 | 5,543 |
| Interest | 9 | 21 | 22 | 23 | 25 |
| Share of net profit of JV | - | - | - | - | - |
| Profit before tax | 2,604 | 3,979 | 4,354 | 4,595 | 5,518 |
| Tax | 604 | 905 | 1,045 | 1,103 | 1,324 |
| Share in profit of asso | - | - | - | - | - |
| Minority interest | - | - | - | - | - |
| Reported net profit | 1,999 | 3,074 | 3,309 | 3,492 | 4,194 |
| EO Items | - | - | - | - | - |
| Adjusted net profit | 1,999 | 3,074 | 3,309 | 3,492 | 4,194 |
| Share O/s mn | 10 | 10 | 10 | 10 | 10 |
| EPS Rs (adjusted) | 197.6 | 303.8 | 327.1 | 345.1 | 414.5 |

Balance Sheet

| Y/E Mar | FY23 | FY24 | FY25E | FY26E | FY27E |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Application of Funds: | | | | | |
| Non Current Assets | 7,227 | 9,751 | 11,030 | 12,434 | 12,762 |
| Gross block (Total) | 1,171 | 1,365 | 1,865 | 3,365 | 3,865 |
| Less : accumulated dep | 498 | 599 | 720 | 916 | 1,187 |
| Net block (Total) | 673 | 767 | 1,146 | 2,449 | 2,678 |
| ROU | - | - | - | - | - |
| Capital work in progress | 2 | 7 | 7 | 7 | 7 |
| Goodwill | - | - | - | - | - |
| Deferred tax assets | - | - | - | - | - |
| Long term loans and advances | 10 | 17 | 17 | 17 | 17 |
| Other non-current assets | 6,542 | 8,960 | 9,860 | 9,960 | 10,060 |
| Current Assets | 4,998 | 5,460 | 6,894 | 8,361 | 11,513 |
| Current investment | 672 | 313 | 313 | 1,313 | 2,313 |
| Inventories | 1,748 | 2,262 | 3,441 | 3,960 | 4,675 |
| Sundry debtors | 2,264 | 2,388 | 1,771 | 2,038 | 2,406 |
| Cash & Cash eq | 177 | 292 | 1,113 | 698 | 1,566 |
| Bank balance | 2 | 2 | - | - | - |
| Short loans and advances | 1 | 3 | 3 | 3 | 3 |
| Others current assets | 134 | 200 | 253 | 349 | 550 |
| Total Assets | 12,225 | 15,211 | 17,924 | 20,795 | 24,276 |
| Sources of Funds: | | | | | |
| Share Capital | 101 | 101 | 101 | 101 | 101 |
| Reserves | 10,971 | 13,435 | 15,783 | 18,263 | 21,344 |
| Minority Interest | - | - | - | - | - |
| Shareholders' Funds | 11,072 | 13,536 | 15,884 | 18,364 | 21,445 |
| Non-Current Liabilities | 133 | 203 | 203 | 203 | 203 |
| Long term borrowings | - | - | - | - | - |
| Lease liabilities | - | 17 | 17 | 17 | 17 |
| Deferred tax liability | 17 | 57 | 57 | 57 | 57 |
| Other long-term liabilities | - | - | - | - | - |
| Long-term provisions | 116 | 129 | 129 | 129 | 129 |
| Current Liabilities | 1,020 | 1,472 | 1,837 | 2,228 | 2,628 |
| Short term borrowings | - | - | - | - | - |
| Lease liabilities | - | 16 | 16 | 16 | 16 |
| Trade payables | 30 | 85 | 253 | 291 | 344 |
| Other current liabilities | 897 | 1,255 | 1,417 | 1,747 | 2,062 |
| Short term provisions | 93 | 117 | 152 | 175 | 206 |
| Total Equity & Liabilities | 12,225 | 15,211 | 17,924 | 20,795 | 24,276 |
| Net Working Capital | 3,601 | 4,173 | 3,575 | 4,066 | 4,950 |
| Total Gross Debt | - | - | - | - | - |
| Total Net Debt | (851) | (607) | (1,426) | (2,011) | (3,879) |
| Total Invested capital | 10,221 | 12,929 | 14,458 | 16,353 | 17,566 |
| Capital Employed | 11,089 | 13,593 | 15,941 | 18,421 | 21,502 |

Cash Flow Statement

| Particulars | FY23 | FY24 | FY25E | FY26E | FY27E |
|-----------------------------------|----------------|----------------|--------------|----------------|----------------|
| PBT | 2,604 | 3,979 | 4,354 | 4,595 | 5,518 |
| Other Financial adjust. | (271) | (715) | (973) | (1,088) | (1,354) |
| Changes in working capital | (38) | (237) | (250) | (491) | (884) |
| Tax Paid | (616) | (865) | (1,045) | (1,103) | (1,324) |
| Cashflow from operat. | 1,680 | 2,163 | 2,085 | 1,912 | 1,956 |
| Capital exp. & Advances | (74) | (177) | (500) | (1,500) | (500) |
| Change in Liquid investments | (1,355) | (1,408) | (900) | (1,100) | (1,100) |
| Other investing cashflow | 157 | 170 | 1,116 | 1,308 | 1,649 |
| Cashflow from invest. | (1,273) | (1,414) | (284) | (1,292) | 49 |
| Issue of equity | - | - | - | (0) | - |
| Issue/repay debt | - | - | - | - | - |
| Interest Paid | (9) | (18) | (22) | (23) | (25) |
| Dividends paid | (354) | (607) | (961) | (1,012) | (1,113) |
| Other financing cashflow | - | (9) | - | - | - |
| Cashflow from financing | (363) | (633) | (983) | (1,035) | (1,138) |
| Chg. in cash & cash eq | 44 | 115 | 819 | (415) | 868 |
| Opening cash & cash eq | 133 | 177 | 294 | 1,113 | 698 |
| Exchange diff on forex | - | - | - | - | - |
| Closing cash & cash eq | 177 | 292 | 1,113 | 698 | 1,566 |
| Closing other cash | 2 | 2 | - | - | - |
| Free cash flow to firm | 1,606 | 1,985 | 1,585 | 412 | 1,456 |

Ratios

| Particulars | FY23 | FY24 | FY25E | FY26E | FY27E |
|---------------------------|-------|-------|-------|---------|---------|
| PER SHARE | | | | | |
| EPS Rs (adjusted) | 198 | 304 | 327 | 345 | 415 |
| CEPS Rs | 207 | 315 | 339 | 365 | 441 |
| Book Value Rs | 1,094 | 1,338 | 1,570 | 1,815 | 2,120 |
| VALUATION | | | | | |
| EV / Net Sales | 2.9 | 5.7 | 5.2 | 4.5 | 3.7 |
| EV / EBITDA | 17.5 | 28.5 | 28.2 | 27.0 | 22.3 |
| P / E Ratio | 20.7 | 30.1 | 29.2 | 27.7 | 23.1 |
| P / BV Ratio | 3.7 | 6.8 | 6.1 | 5.3 | 4.5 |
| FCF Yield (%) | 3.9 | 2.1 | 1.6 | 0.4 | 1.5 |
| GROWTH YOY% | | | | | |
| Sales Growth | 22.9 | 16.7 | 14.8 | 15.1 | 18.1 |
| EBITDA Growth | 66.1 | 39.6 | 4.9 | 3.7 | 18.8 |
| Net Profit Growth | 50.5 | 53.7 | 7.7 | 5.5 | 20.1 |
| Gross Fixed Asset Growth | 15.1 | 16.6 | 36.6 | 80.4 | 14.9 |
| PROFITABILITY (%) | | | | | |
| Gross Profit/ Net sales | 25.4 | 30.1 | 28.0 | 26.4 | 26.5 |
| EBITDA / Net Sales | 16.7 | 19.9 | 18.2 | 16.4 | 16.5 |
| EBIT / Net sales | 18.9 | 24.7 | 23.6 | 21.6 | 22.0 |
| NPM / Total income | 14.0 | 18.0 | 16.8 | 15.4 | 15.6 |
| CFO (Pre-tax) /EBIDTA % | 99.4 | 93.9 | 92.6 | 86.0 | 78.8 |
| CFO (Post tax) /PAT % | 84.0 | 70.4 | 63.0 | 54.8 | 46.6 |
| Raw Material/Net Sales | 74.8 | 74.0 | 72.4 | 74.0 | 73.9 |
| Int/PBIT | 0.4 | 0.7 | 0.7 | 0.7 | 0.6 |
| ROE | 19.5 | 25.0 | 22.5 | 20.4 | 21.1 |
| ROCE | 23.8 | 30.4 | 28.5 | 26.7 | 27.6 |
| ROIC | 19.6 | 25.1 | 22.6 | 20.5 | 21.2 |
| Tax / PBT | 23.2 | 22.7 | 24.0 | 24.0 | 24.0 |
| TURNOVER | | | | | |
| Net Woking Cycle | 105 | 103 | 98 | 98 | 98 |
| Debtors Velocity (Days) | 60 | 54 | 35 | 35 | 35 |
| Inventory (Days) | 46 | 51 | 68 | 68 | 68 |
| Creditors Velocity (Days) | 1 | 2 | 5 | 5 | 5 |
| Current Ratio | 4.2 | 3.5 | 3.6 | 3.2 | 3.5 |
| Quick Ratio | 2.5 | 2.0 | 1.7 | 1.4 | 1.7 |
| LIQUIDITY | | | | | |
| Gross Asset Ratio | 11.7 | 11.8 | 9.9 | 6.3 | 6.5 |
| Total Asset Ratio | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| Net Debt-Equity Ratio | (0.1) | (0.0) | (0.1) | (0.1) | (0.2) |
| Interest Coverage (x) | 293.4 | 192.1 | 196.2 | 197.0 | 224.4 |
| PAYOUT | | | | | |
| Payout % | 30.4 | 29.6 | 29.0 | 29.0 | 26.5 |
| Dividend % | 600.0 | 900.0 | 950.0 | 1,000.0 | 1,100.0 |
| Yield % | 1.5 | 1.0 | 1.0 | 1.0 | 1.2 |

Source: Company, AMSEC Research



Recommendation rationale

| | |
|---------------------------------|------------------------------------|
| Buy: Potential upside of | >+15% (absolute returns) |
| Accumulate: | >+5 to +15% |
| Hold/Reduce: | +5 to -5% |
| Sell: | < -5% |
| Not Rated (NR): | No investment opinion on the stock |

Sector rating

| | |
|---------------------|--|
| Overweight: | The sector is expected to outperform relative to the Sensex. |
| Underweight: | The sector is expected to underperform relative to the Sensex. |
| Neutral: | The sector is expected to perform in line with the Sensex. |

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