# OUR BUSINESS

*Some of the information in this section, including information with respect to our plans and strategies, contain forward-looking statements that involve risks and uncertainties. You should read "Forward-Looking Statements" on page 22 for a discussion of the risks and uncertainties related to those statements and also "Risk Factors" on page 58 for a discussion of certain risks that may affect our business, financial condition, cash flows or results of operations, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" on page 441, for a discussion of certain factors that may affect our business, financial condition or results of operations. Our actual results may differ materially from those expressed in or implied by these forward-looking statements.*

*We have included certain non-GAAP financial measures and other performance indicators relating to our financial performance and business in this Prospectus, each of which is a supplemental measure of our performance and liquidity and not required by, or presented in accordance with Ind AS, IFRS or U.S. GAAP. Furthermore, such measures and indicators are not defined under Ind AS, IFRS, U.S. GAAP or other accounting standards, and therefore should not be viewed as substitutes for performance, liquidity or profitability measures under such accounting standards. In addition, such measures and indicators, are not standardized terms, hence a direct comparison of these measures and indicators between companies may not be possible. Other companies may calculate these measures and indicators differently from us, limiting their usefulness as a comparative measure. Although such measures and indicators are not a measure of performance calculated in accordance with applicable accounting standards, our management believes that they are useful to an investor in evaluating our operating performance.*

*Unless otherwise indicated, industry and market data used in this section have been derived from the report titled "Assessing the Opportunity of Specialized Industrial Process Equipment in the Pharma, Chemicals and Food Processing Sector" dated November 29, 2024 (the "**F&S Report**"), prepared and issued by Frost & Sullivan (India) Private Limited ("**F&S**"), appointed by us pursuant to engagement letter dated April 8, 2024, and exclusively commissioned and paid for by us in connection with the Offer, for the purpose of understanding the industry in connection with this Offer. A copy of the F&S Report was made available on the website of our Company at https://www.standardglr.com/investors#f-s-industry-report. See "Certain Conventions, Use of Financial Information and Market Data and Currency of Presentation – Industry and Market Data" and "Risk Factors - Extracts of industry information included in this Prospectus has been derived from an industry report prepared by Frost & Sullivan (India) Private Limited exclusively commissioned and paid for by us for such purpose." on pages 20 and 95, respectively.*

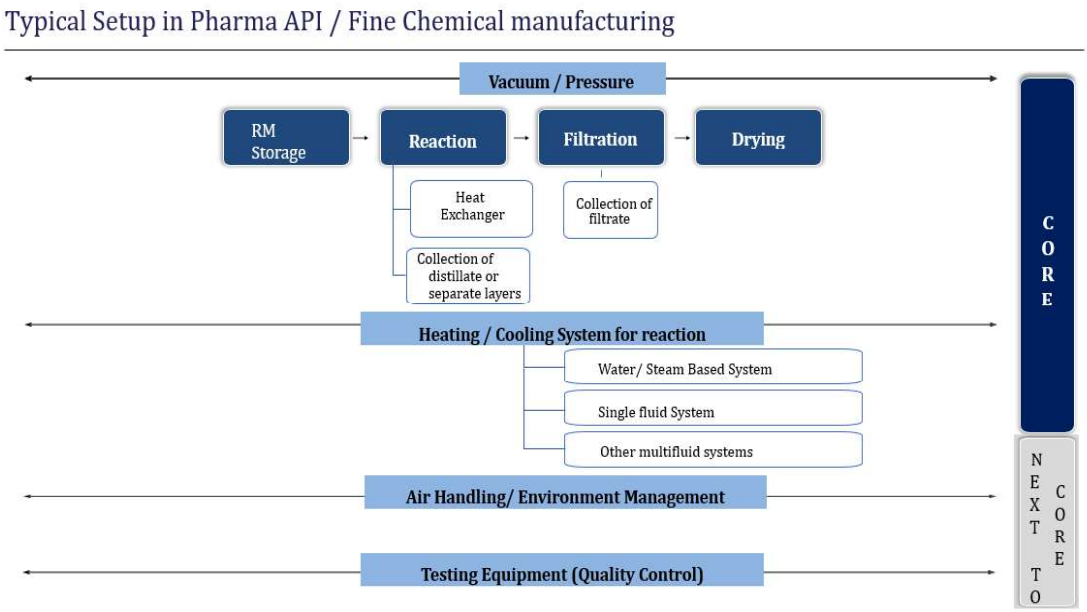
*Our Financial Year commences on April 1 and ends on March 31 of the immediately subsequent year, and references to a particular Financial Year are to the 12 months ended March 31 of that particular year. Unless otherwise indicated or the context otherwise requires, financial information for the six months period ended on September 30, 2024 and Financial Years ended March 31, 2024, March 31, 2023 and March 31, 2022 included herein is derived from the Restated Consolidated Financial Information included in this Prospectus. See "Restated Consolidated Financial Information" on page 372.*

## Overview

We are one of the top five specialised engineering equipment manufacturer for pharmaceutical and chemical sectors in India, in terms of revenue in Fiscal 2024 (*Source: F&S Report*), with in house capabilities across the entire value chain. Our capabilities include designing, engineering, manufacturing, assembly, installation and commissioning solutions as well as establishing standard operating procedures for pharmaceutical and chemical manufacturers on a turnkey basis. Our portfolio comprises core equipments used in the manufacturing of pharmaceutical and chemical products, which can be categorized into: (i) Reaction Systems; (ii) Storage, Separation and Drying Systems; and (iii) Plant, Engineering and Services (including other ancillary parts). We are also one of India's top three manufacturers of glass-lined, stainless steel, and nickel alloy based specialised engineering equipment, in terms of revenue in Fiscal 2024 (*Source: F&S Report*). We are also one of the top three suppliers of polytetrafluoroethylene ("**PTFE**") lined pipelines and fittings in India, in terms of revenue in Fiscal 2024 (*Source: F&S Report*). We have been the fastest-growing company in the industry in which we operate during the past three completed Fiscals in terms of revenue (*Source: F&S Report*).

We possess in-house capabilities to manufacture all the core specialised engineering equipment required in the active pharmaceutical ingredient ("**API**") and fine chemical products manufacturing process (*Source: F&S*

*Report*). Over the last decade we have supplied over 11,000 products. The below graphic illustrates our presence across the core functions of API or fine chemical product manufacturing process:




(*Source: F&S Report*)

Our engineered solutions are used in processes across pharmaceutical, chemical, food and beverage, biotechnology and fertilizer sectors. We customise our products basis the unique process requirements of our customers. We also provide turnkey automated equipment solutions, optimising processes like vacuum distillation, solvent recovery and gas dispersion.

We have a diversified customer base including end users operating in a range of sectors across pharmaceutical, chemicals, paint, bio technology and food and beverages. Our marquee customer base includes 30 out of approximately 80 pharmaceutical and chemical companies in the NSE 500 index as of June 30, 2024 (*Source: F&S Report*). Some of our customers include Apitoria Pharma Private Limited, Aurobindo Pharma Limited, CCL Food and Beverages Private Limited, Cohance Lifesciences Limited, Cadila Pharmaceutical Limited, Deccan Fine Chemicals (India) Private Limited, Dasami Lab Private Limited, Laurus Labs Limited, Granules India Limited, Macleods Pharmaceuticals Limited, MSN Laboratories Private Limited, Natco Pharma Limited, Honour Lab Limited, Hetero Drugs Limited, Hetero Labs Limited, Hazelo Lab Private Limited, Piramal Pharma Limited, Sanvira Biosciences Private Limited, Suven Pharmaceuticals Limited, Tagros Chemicals India Private Limited, Vamsi Labs Limited and Viyash Life Sciences Private Limited.

The following table sets forth our revenues by end user industries for the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022, respectively.

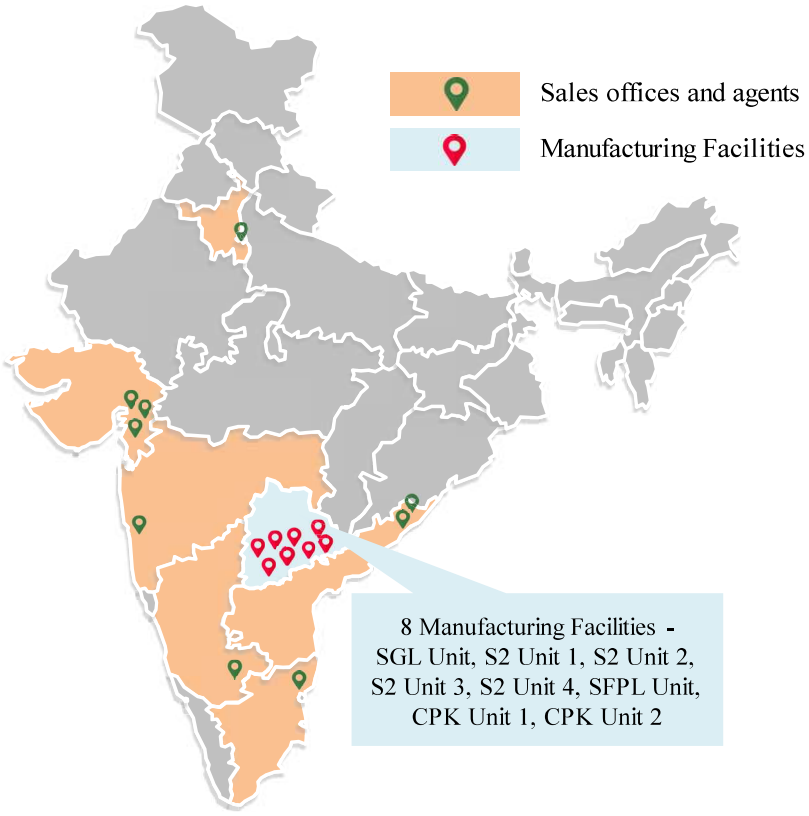
| **Particulars** | **Six months period ended September 30, 2024** | | **Fiscal 2024** | | **Fiscal 2023** | | **Fiscal 2022** | |
|---|---|---|---|---|---|---|---|---|
| | **Amount (₹ in million)** | **% of total revenue from operations** | **Amount (₹ in million)** | **% of total revenue from operations** | **Amount (₹ in million)** | **% of total revenue from operations** | **Amount (₹ in million)** | **% of total revenue from operations** |
| Pharmaceuticals | 2,307.04 | 75.10% | 4,446.70 | 81.79% | 4,119.79 | 82.80% | 2,054.33 | 85.53% |
| Chemicals | 402.45 | 13.10% | 681.72 | 12.54% | 713.37 | 14.34% | 324.48 | 13.51% |
| Others* | 362.47 | 11.80% | 308.27 | 5.67% | 142.72 | 2.86% | 23.06 | 0.96% |
| **Total** | **3,071.95** | **100.00%** | **5,436.69** | **100.00%** | **4,975.88** | **100.00%** | **2,401.87** | **100.00%** |

**Others includes: (i) paint; (ii) bio technology; (iii) food and beverages and (iv) other industries*

We operate through our eight manufacturing facilities spread across built-up/floor area of over 400,000 sq. ft., strategically located in Hyderabad, Telangana, the "*Pharma Hub*" of India, which accounted for 40.00% of the total Indian bulk drug production in Fiscal 2024 (*Source: F&S Report*). Our manufacturing capabilities are

complemented by a sales, service and distribution network operating from four sales offices located in Vadodara, Gujarat, Ankleshwar, Gujarat, Mumbai, Maharashtra and Vishakhapatnam, Andhra Pradesh and sales team members in Jhagadia, Gujarat, Chennai, Tamil Nadu, New Delhi, Bengaluru, Karnataka and Vijayawada, Andhra Pradesh with pan-India reach. We also have agency arrangements for sale and marketing of our products in Bangladesh as well as agency and distribution agreement for sale, marketing and distribution of our products in Russia. Further, we have resale arrangements for North America (excluding Cuba), South America, Europe (excluding Belarus and Russia) and certain countries in Asia and Africa.

Set our below are the locations of our various manufacturing facilities, branches, headquarters and sales touchpoints.




(*Map not to scale. This map is only for the purpose of representation and is not to be considered an accurate geopolitical representation)*

Our growth has been compounded by our partnerships. We have entered into an agreement with HHV Pumps Private Limited ("**HHV**"), for supply of vacuum pumps along with a private label arrangement. We also have a supply and purchase arrangement for India with Japan based Asahi Glassplant Inc. and GL Hakko Co. Ltd ("**GL Hakko**") for procurement of specified grades of glass for our glass lining division. These partnerships have enabled us to fortify our position in the Glass Lining and Vacuum Pumps market in India (*Source: F&S Report*). Further, we have also entered into an exclusive collaboration with GL Hakko for exclusively purchasing glass lined tubes manufactured by GL Hakko using which our Company will manufacture and sell shell and heat tube exchangers under the name of GL Hakko in India and abroad except Japan.

Our revenues from our various lines of business were as follows:

| Particulars | Six months period ended September 30, 2024 | | Fiscal 2024 | | Fiscal 2023 | | Fiscal 2022 | |
|---|---|---|---|---|---|---|---|---|
| | Amount (₹ in million) | % of total revenue from operations | Amount (₹ in million) | % of total revenue from operations | Amount (₹ in million) | % of total revenue from operations | Amount (₹ in million) | % of total revenue from operations |
| Reaction Systems | 1,653.62 | 53.83% | 3,083.09 | 56.71% | 3,047.86 | 61.25% | 1,638.78 | 68.23% |
| Storage, Separation and Drying Systems | 1,011.97 | 32.94% | 1,635.49 | 30.08% | 1,540.98 | 30.97% | 626.22 | 26.07% |
| Plant, Engineering and Services | 406.36 | 13.23% | 718.11 | 13.21% | 387.04 | 7.78% | 136.87 | 5.70% |
| **Total** | **3,071.95** | **100.00%** | **5,436.69** | **100.00%** | **4,975.88** | **100.00%** | **2,401.87** | **100.00%** |

*Note:*
*1. Reaction Systems include: (i) heat transfer systems; (ii) pipes and fittings; (iii) pumps; and (iv) reactors.*
*2. Storage, Separation and Drying Systems include: (i) Filtration and Drying; (ii) storage and (iii) vessels.*
*3. Plant, Engineering and Services include: (i) services; (ii) utility systems; and (iii) others*

We also benefit from an experienced management team, which is supported by a capable and motivated pool of employees. Our senior management team has diverse experience in manufacturing and functions related to our business, and an in-depth understanding of the specific industry, products and geographic regions they cover, which enables them to appropriately support and guide our employees. Our management team is guided by our seasoned Board, who have extensive experience in the pharmaceutical, chemicals and engineering sectors.

***Financial and operational metrics***

The following table sets forth certain key financial information relating to our business for the periods indicated:

*(in ₹ million, unless otherwise stated)*

| Particulars | Six months period ended September 30, 2024 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 |
|---|---|---|---|---|
| Revenue from Operations (₹ in millions) | 3,071.95 | 5,436.69 | 4,975.88 | 2,401.87 |
| *YoY Growth Rate (%)* | *NA* | *9.26%* | *107.17%* | - |
| *2Y CAGR (%)* | *NA* | *50.45%* | - | - |
| EBITDA[(1)] (₹ in millions) | 627.08 | 1,009.19 | 882.56 | 417.79 |
| EBITDA Margin (%)[(2)] | 20.09% | 18.36% | 17.65% | 17.30% |
| PAT[(3)] (₹ in millions) | 362.68 | 600.11 | 534.24 | 251.45 |
| *YoY Growth Rate (%)* | NA | *12.33%* | *112.46%* | - |
| PAT Margin (%)[(4)] | 11.62 | 10.92% | 10.68% | 10.41% |
| ROCE(%)[(5)] | 10.81% | 25.49% | 43.43% | 42.03% |
| ROE (%)[(6)] | 8.06% | 20.74% | 47.56% | 54.89% |
| RoA (%)[(7)] | 5.10% | 11.85% | 16.54% | 13.23% |
| Total Debt to Equity [(8)] | 0.39 | 0.32 | 0.53 | 1.01 |
| Net Debt to Equity [(9)] | 0.30 | 0.19 | 0.49 | 1.01 |
| Net Fixed Asset Turnover Ratio [(10)] | 2.79 | 6.08 | 7.60 | 6.26 |
| Adjusted ROCE (%) [(11)] | 13.09% | 29.41% | 44.10% | 42.51% |

*Notes:*

*(1) EBITDA is calculated as profit before tax expenses plus finance costs and depreciation and amortization expense and impairment of property, plant and equipment for the year/period.*
*(2) EBITDA Margin has been calculated. as EBITDA divided by Total Income*
*(3) PAT refers to Restated Profit for the year*

(4) *PAT margin refers to PAT divided by Total Income*

(5) *ROCE calculated as Profit before tax add finance cost divided by Average Capital employed. Capital employed refers to Total Equity plus total borrowings and lease liabilities (long term and short term) excluding cash and cash equivalents and Bank balances other than cash and cash equivalents*

(6) *Return on Equity has been calculated as net income (owners share) divided by Average Net Worth*
*Net Worth = Aggregate value of equity share capital (excluding non- controlling interest) and other equity created out of the profits, securities premium account and debit or credit balance of profit and loss account, after deducting the aggregate value of the accumulated losses but does not include reserves created out of revaluation of assets and write-back of depreciation.*

(7) *RoA is calculated as PAT divided by Average Total Assets*

(8) *Debt to equity ratio has been calculated as total borrowings and lease liabilities (including current maturities of long-term debt and lease liabilities) divided by Net Worth (excluding non-controlling interest)*

(9) *Net debt/ Equity refers to Total borrowings and lease liabilities including current maturities of long-term debt and lease liabilities) less cash and cash equivalents and Bank balances other than cash and cash equivalents divided by Net Worth (excluding non-controlling interest)*

(10) *Net Fixed asset turnover ratio calculated as Revenue from Operations/ Average Net Fixed Assets. Net Fixed assets includes Property, plant and equipment, Capital work-in-progress, Other intangible assets, goodwill, right of use assets and Intangible assets under development.*

(11) *Adjusted ROCE calculated as Profit before tax add finance cost divided by Average Capital employed. Capital employed refers to Total Equity plus total borrowings and lease liabilities (long term and short term) excluding cash and cash equivalents and Bank balances other than cash and cash equivalents and Fixed Deposits excluding Margin Money.*

## OUR STRENGTHS

### *One of the top five specialised engineering equipment manufacturers for pharmaceutical and chemical sectors in India with products across entire value chain.*

We are one of the top five specialised engineering equipment manufacturers for pharmaceutical and chemical sectors in India, in terms of revenue, in Fiscal 2024 (*Source: F&S Report*) with an in house capabilities across the value chain including design, engineering, manufacturing, assembly, installation and commissioning solutions as well as establishing standard operating procedures for pharmaceutical and chemical manufacturers on a turnkey basis. We are one of the top three manufacturers of glass-lined, stainless steel, and nickel alloy based specialised engineering equipment in Fiscal 2024, in India, in terms of revenue (*Source: F&S Report*). We attribute our leading market positions to various factors including our diverse product portfolio with a focus on customisation, our technical abilities including the quality and experience of our senior management and technically qualified employees, our Promoters' presence in the industry for over two decades, the quality of our products, our ability to deliver highly customised solutions in a timebound manner and our distribution network. Further, we have leveraged our market position along with our arrangements with HHV Pumps Private Limited for supply of vacuum pumps, and GL Hakko for our glass lining division, each done to increase our competitive advantage, sourcing raw materials, scalability, at competitive prices and broader customer reach across diverse segments by cross selling to existing customers. We have also entered into an exclusive collaboration with GL Hakko for exclusively purchasing glass lined tubes manufactured by GL Hakko using which our Company will manufacture and sell shell and heat tube exchangers under the name of GL Hakko in India and abroad except Japan.

We primarily cater to end users operating in the pharmaceutical and chemical industries. Growth in the end user's industry, also provides us scope for further growth due to our in-house capabilities to manufacture all of the core specialised engineering equipment required in the pharmaceutical and chemical sectors (*Source: F&S Report*).

The Indian pharmaceutical market has experienced robust growth as a result of opportunities created by the pandemic and a rebound in demand for non-covid acute and chronic treatment, as well as anti-inflammatory medications used after surgery. While the epidemic's impact lessened, pent-up demand for elective procedures, medical equipment, and therapies that had been postponed throughout the pandemic returned. Additionally, demand in the foreign market aided the rise of Indian pharmaceutical items. While the sector is likely to continue to grow at a strong rate, businesses must engage in capacity expansion to meet increased demand and develop new products (*Source: F&S Report*). Capital spending is likely to remain at the current level or perhaps increase to between ₹120 billion and ₹ 150 billion per year up to Fiscal 2027, owing to local and export demand from semi-regulated markets. Furthermore, the government's Production Linked Incentives ("**PLI**") policy, which envisions India as the world's pharmacy, would provide additional help (*Source: F&S Report*).

The demand for chemicals manufactured in India in the worldwide market is likely to grow in the coming years, as key markets move their demand away from China to avoid potential disruptions (*Source: F&S Report*). This will incentivize industry players to increase their capacity to meet future demand (*Source: F&S Report*). Further, it is predicted that the players' capex will increase by 7% to 9% CAGR until FY2025-26, to reach INR 70 Bn per year in FY2025-26 (*Source: F&S Report*). This predicted rise in expenditure is on account of robust demand

potential from overseas markets owing to China plus one trend, as well as government backing to ramp up capacity through PLI scheme (*Source: F&S Report*).

***Customized and innovative product offering across the entire pharmaceutical and chemical manufacturing value chain***

We are one of the few companies in India offering end to end customised solutions in the specialised engineering equipment used in the pharmaceutical and chemical sectors *(Source: F&S Report)*. As of September 30, 2024, our comprehensive product portfolio consists of more than 65 products and offerings across pharmaceutical and chemical industries. Our portfolio consists of: (i) Reaction Systems; (ii) Storage, Separation and Drying Systems; and (iii) Plant, Engineering and Services (including other ancillary parts). Our products are manufactured using various materials including stainless steel, carbon/ mild steel and nickel alloy, etc. Our capabilities include producing process equipment customised to the requirements of our customers. We can manufacture process equipment using various types of alloys with thickness ranging from 1 mm to 60 mm, which are used in food, pharmaceutical and fine chemical industries. For a detailed list of products manufactured by us, see "*-Portfolio of products and services"* on page 287.

Our service offerings include design, engineering, manufacturing, assembly, installation and commissioning solutions of pharmaceutical and chemical facilities on a turnkey basis. We also provide turnkey automated equipment solutions, optimising processes like vacuum distillation, solvent recovery and gas dispersion.

We also have the capability to cater to customized process needs of our end users and to deliver large and complex projects with a wide range of equipment, as a single point of contact. As a testament to our capabilities, we have delivered some of the largest and most complex equipment in India across our product portfolios (*Source: F&S Report*). Further, we are the only stainless steel glass lined reactor supplier in India with the potential to manufacture up to 10KL capacity (*Source: F&S Report*).

Our products are known for being reliable (*Source: F&S Report).* We have ensured that our range of products meet international standards of the market in which we operate. To such extent we believe that we offer our customers certain unique product features, based on our industry experience. Set out below are the details of some of the unique offerings from us:

1. ***STANGLASS –*** The chemical and pharmaceutical industry faces the challenge of ignition and explosions caused by sparks during the production of raw materials that generate static electricity. To combat that, we use innovative technology that aids end users address these current challenges. To suppress ignition and explosion problems caused by sparks, we have a supply and purchase agreement for India with GL Hakko and Asahi for procurement of certain grades of specialised glass. We offer "STANGLASS" that contributes to antistatic action. "STANGLASS" obtains its conductive performance by building a very fine network of conductive ceramics in the glass (*Source: F&S Report*).

2. ***No Stain Glass –*** Our customers in the past faced the challenge of stains forming on the glass lining of their reactors. To meet the customer challenge, we developed a type of glass, called "No Stain Glass", which effectively prevents these stains from forming.

3. ***Shell and tube heat exchanger –*** We are the only manufacturer of glass lined shell and tube heat exchanger in India (*Source: F&S Report*). We provide a state-of-the-art shell and tube heat exchanger featuring advanced corrosion-resistant technology. The glass lining effectively combats corrosion, significantly enhancing the longevity and reliability of the heat exchanger. This innovative design also boosts heat transfer efficiency, making the system more effective and energy-efficient (*Source: F&S Report*). We have also filed a patent application for the same.

4. ***Smart Seal –*** Smart Seal is a protective bush designed to fit snugly around the manhole cover of a glass-lined reactor, providing a barrier to prevent the maintenance hole cover from hitting the vessel. The protective bush is made of a durable, non-contaminating material and is designed to be easily removable for cleaning or maintenance purposes. The invention addresses the need for a more efficient and reliable mechanism for manholes, eliminating the dependence on traditional gaskets and the skilled process of shimming to prevent leaks (*Source: F&S Report*). We have filed a patent application for this technology.

5. ***Clampless Manhole –*** In the reactors, clamping the manhole is a major challenge and requires a huge effort from the customer's side. Instead of using clamps, we use bolting cleats, which require less torque and is easy to operate with long durability (*Source: F&S Report*).

6. ***Extended Nozzles –*** The traditional ways of lining nozzles generally damages them due to spillage of the corrosive chemicals on the mild steel surface. Improper vapor column assembly, charging lines, or any other lines cause leakage and damage to the mild steel surface. We have developed and provided glass lining on the outer periphery of the nozzle to resolve this issue (*Source: F&S Report*).

With a monthly installed capacity of 150-200 glass lined vessels, we are one of India's top three glass-lined equipment manufacturers in Fiscal 2024 in terms of revenue *(Source: F&S Report)*. We are also a key supplier of GMP-compliant accessories for stainless steel glass-lined equipment (*Source: F&S Report*). We are one of the top three suppliers of multistage claw vacuum pumps in India in terms of revenue in Fiscal 2024 (*Source: F&S Report*).

With a view towards offering complementary products and increasing our capabilities, especially in the stainless steel equipment industry and PTFE lined pipes and fittings sector, we have acquired the business of M/s Yashasve Glass Lining Industries and M/s Higenic Flora Polymers, which has positioned us as one of the top three suppliers of PTFE lined pipelines and fittings in India, in terms of revenue, in Fiscal 2024 and enabled us to gain a 23.30% market share in India, in terms of revenue in Fiscal 2024 (*Source: F&S Report*). We have also acquired the business of C.P.K Engineers Private Limited, an entity engaged in the similar line of business and products as ours, which is expected to complement our existing production capabilities.

***Strategically located manufacturing facilities with advanced technological capabilities***

We operate through our eight manufacturing facilities spread across built-up/floor area of more than 400,000 sq. ft., strategically located in Hyderabad, Telangana, the "*Pharma Hub*" of India, which accounts for 40.00% of the total Indian bulk drug production (*Source: F&S Report*). We have the capabilities to manufacture reactors, receivers, and storage tanks ranging from 30 litres to 40,000 litres in size. We also have the capacity to manufacture around 300-350 equipments per month across our product portfolio of (i) Reaction Systems; (ii) Storage, Separation and Drying Systems; and (iii) Plant, Engineering and Services (including other ancillary parts). Our manufacturing facility can also produce up to 100 reactors per month. Further, we have an exclusive facility to make 30 ANFDs per month. We also have the capacity to manufacture 9,000 units per month of PTFE lined pipes and fittings. Further, we also provide supply and service of pumps. For further details of our manufacturing facilities, please see "- *Manufacturing Facilities*" on page 298.

Our manufacturing facilities are equipped with technologies and tools like 3D computer aided design ("**CAD**"), robotic welding and precision computer numerical control ("**CNC**") manufacturing. We have implemented several technological improvements in our production processes. Set out below are some of the key machinery installed at our manufacturing facilities:

1. *Cutting* - We use: (i) CNC plasma; (ii) CNC fiber laser; (iii) CNC nozzle bevel; (iv) CNC nozzle height; (v) CNC dish height; (vi) CNC plate bevelling machine cutting machines at our facilities which offer several advantages in terms of precision, speed, cost and versatility as compared to manual cutting machines. These allow us to manufacture process equipment as fine as 1 mm thickness.

2. *Production* – We use CNC vertical machining centre, which is a highly automated machine tool capable of performing multiple types of machining operations, such as milling, drilling, and tapping, with high precision and efficiency, allowing for the production of parts with tight tolerances and minimal errors. Once set-up, it can produce identical parts consistently and repeatedly, ensuring uniformity in production. It operates at high speeds and can perform multiple operations in one setup, significantly reducing cycle times and increasing productivity. It can handle a wide variety of materials, including metals, plastics, and composites, and can perform diverse operations such as milling, drilling, tapping, and contouring.

3. *Welding* – We rely on robotic welding or automated welding process which involves the use of mechanized programmable tools/robots that completely automate the welding process by performing the weld and handling the part. This technology is used to improve welding efficiency, quality, and consistency. It

provides uniform and high-quality welds with minimal variability and offers precise control over welding parameters, ensuring accurate welds

4. *Machining*- We use vertical turning lathe machine, which is a type of lathe that has a vertically oriented spindle, useful for machining large, heavy, and asymmetrical parts that are difficult to mount and turn on a horizontal lathe. It offers high precision and accuracy due to its rigid structure and stable workpiece support, leading to better surface finishes and tighter tolerances. The vertical design allows for easier loading and unloading of large workpieces, reducing setup time and increasing overall productivity.

5. *Finishing*- We use automatic buffing technology for giving a finish to our products. Buffing is a process used to polish and enhance the surface of materials, typically metals, plastics, and sometimes wood. The process involves using a buffing wheel and a polishing compound to achieve a smooth, shiny surface.

We have also migrated to inhouse manufacturing of gaskets through CNC gasket machinery. With in-house CNC gasket cutting, we have the flexibility to produce gaskets tailored to specific dimensions, materials, and design requirements of our applications. This customization capability allows us to meet unique customer demands and address specific operational challenges effectively. It has also provided us with greater control over the entire production process, including material selection, cutting accuracy, and quality assurance. This control helps ensure consistent product quality and adherence to industry standards, reducing the risk of defects and improving reliability. We have also implemented a process to use carbon/ mild steel scrap, generated from sheet cutting, to produce flanges. This initiative not only reduces waste but also adds value to the scrap material by converting it into a sellable product for our group company.

Our business success depends on the quality of our products and services, and we believe we have invested in robust manufacturing and documentation practices. We have developed systems to ensure product quality and client satisfaction, which are focused on providing products conforming to applicable standards, meeting client requirements, and ensuring the safety of our products.

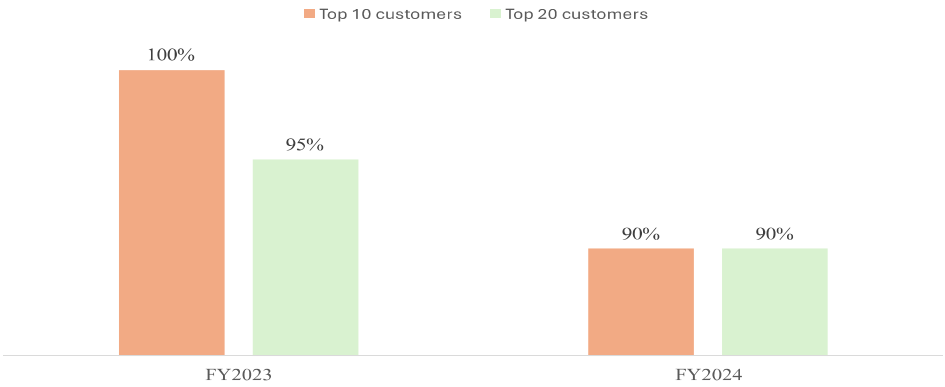
We also offer design capabilities to supplement our manufacturing capabilities. We have also filed for grant of patents for certain glass lined equipment, which are presently under process at various stages. Further, our design capabilities allow us to offer holistic solutions to our customers from designing of equipment to manufacture of such equipment to assembly and installation.

***Long term relationships with marquee clientele across sectors***

We have been able to establish long-standing relationships with some of the marquee clientele present in the pharmaceutical and chemical industries, in a relatively short period of time. Our ability to cater to customised processes addressing the requirements of our customers, technical know-how and our track record of timely fulfilment of customer orders, has helped us to establish these long-standing relationships in each of the product categories.

As of September 30, 2024, our customer base included 347 companies. Some of our customers are Apitoria Pharma Private Limited, Aurobindo Pharma Limited, CCL Food and Beverages Private Limited, Cohance Lifesciences Limited, Cadila Pharmaceutical Limited, Deccan Fine Chemicals (India) Private Limited, Dasami Lab Private Limited, Laurus Labs Limited, Granules India Limited, Macleods Pharmaceuticals Limited, MSN Laboratories Private Limited, Natco Pharma Limited, Honour Lab Limited, Hetero Drugs Limited, Hetero Labs Limited, Hazelo Lab Private Limited, Piramal Pharma Limited, Sanvira Biosciences Private Limited, Suven Pharmaceuticals Limited, Tagros Chemicals India Private Limited, Vamsi Labs Limited and Viyash Life Sciences Private Limited.

We enjoyed long-standing relationships in excess of 3 years with 13 of our top 20 customers, as of September 30, 2024. Our long-term relationships and ongoing active engagements with customers also allow us to plan our capital expenditure and enhance our ability to benefit from increasing economies of scale. Further, we have been able to obtain repeat orders from our existing customers, with repeat orders from more than 80.00% of our top 20 customers in each of the last three Fiscals and the six months period ended September 30, 2024. The following diagrams set forth percentage of our top 10 and top 20 clients of Fiscal 2022 who have given repeat orders in Fiscal 2023 and our top 10 and top 20 clients of Fiscal 2023 who have given repeat orders in Fiscal 2024:




***Select Case Studies of Enhancing Customer Relationships***

- We started our customer relationship with a pharmaceutical company approximately ten years ago by supplying a 1KL glass-lined reactor equipment. Over the course of the last decade, we expanded our offerings to the customer and have supplied multiple types of specialised manufacturing equipment used in their production. Subsequently we have supplied this customer with a 20 KL glass-lined reactor. Our relationship has continued to grow with this customer across other products. As of September 30, 2024, we have supplied them with various additional categories of equipment such as glass-lined reactors, glass-lined storage tanks and receivers, stainless steel reactors, heat exchangers, ANFD and PTFE pipes.

- We have a large chemical manufacturer company as a customer, with whom we began an association by supplying a 5KL glass-lined reactor in the year 2015. Our relationship has continued to grow with this customer across other products. As of September 30, 2024, we supplied them with glass-lined reactors of up to 16KL capacity, glass-lined storage tanks and receivers and vacuum pumps related equipments.

We attribute our ability to attract and retain marquee clientele to our focus on quality products manufactured to industry and customer specifications in a time bound manner and providing end-to end customised solutions at competitive pricing.

Our dedicated team of 28 design professionals as of September 30, 2024, possess expertise in process equipment design, including glass-lined equipment design and use design software and tools to create designs that meet our customer requirements and industry standards. We constantly explore new technologies, materials, and manufacturing processes with a view to improve our products and to offer cutting-edge solutions to customers. Further, we monitor capacity utilisation levels at our manufacturing facilities to ensure maintenance of optimum capacities which reduces the delivery turnaround time for our customers. Additionally, the location of our manufacturing facilities in and around Hyderabad, Telangana provides us proximity to the facilities of our key clients which in turn enables us to interact with them on a regular basis to further understand their needs and the operational performance of our equipment or designs.

***Consistent track record of profitable growth***

We have enjoyed growth in our revenue from operations, EBITDA and profit after tax in the past three fiscal years. We have been the fastest-growing company when compared to our peers during the past three completed Fiscals (*Source: F&S Report*). We have been able to achieve 50.45% growth of revenue from operations on a consolidated basis from Fiscal 2022 to Fiscal 2024. Having commenced operations in 2012, we have supplied over 11,000 equipment, in the last ten years of our operations. Our growth has been aided by our inorganic acquisitions of business of M/s Stanpumps Engineering Industries, M/s S2 Engineering Services, M/s Higenic Flora Polymers, M/s Yashasve Glass Lining Industries and C.P.K Engineers Private Limited. We also rely on partnerships, such as with HHV Pumps Private Limited for supply of vacuum pumps and a supply and purchase agreements with Asahi Glassplant Inc. and GL Hakko for certain grades of glass. Further, we have also entered into an exclusive collaboration with GL Hakko for exclusively purchasing glass lined tubes manufactured by GL Hakko using which our Company will manufacture and sell shell and heat tube exchangers under the name of GL Hakko in India and abroad except Japan.

For details of our certain key financial information relating to our business, please see "-*Financial and operational metrics"* on page 279.

***Experienced promoters and management team***

We are led by a qualified and experienced management team that we believe has the expertise and vision to manage and grow our business. Our management team is guided by our seasoned Board, who have a extensive experience in the pharmaceutical, chemicals and engineering sectors which allows us unique insight into the manner in which our end customers offerings may be produced.

Our Board of Directors includes a combination of management executives and independent directors who bring in diverse expertise. We believe that the combination of our experienced Board of Directors and our Promoters positions us well to capitalize on future growth opportunities.

In addition to our Board, we believe that our senior management and employees are experienced and skilled, providing us access to a pool of capable and motivated employees. Our Promoters and certain of our Key Managerial Personnel and Senior Management have been with us for several years, demonstrating continuity and commitment in our leadership. Our Senior Management has played an instrumental role in solidifying customer relationships. We rely on our leadership and management team's guidance to provide us with a competitive advantage as we seek to grow our business.

As of September 30, 2024 we had 460 permanent employees. Our Senior Management team has experience in manufacturing and finance functions, with our Promoters having significant experience in the pharmaceuticals and chemicals specialised engineering equipment industry. Our management team has also been able to create value through organic growth, including new business opportunities. The operational and management experience of our management team has also increased our ability to cater to the customized requirements of customers and proactively plan and deliver our products and services. We also have a robust corporate governance system in place to monitor, guide and support our operations, with oversight by an experienced Board of Directors.

**OUR STRATEGIES**

***Continue to expand and improve our existing product portfolio and enter into additional end-user industries***

We have consistently sought to diversify our portfolio of products which could cater to our customers across various segments and geographies, and we are well positioned to capitalize on industry opportunities. We intend to continue to strengthen our existing product portfolio in line with our capabilities and further diversify into products with prospects for increased growth and profitability. We are presently in the process of setting up additional manufacturing facilities. Further, we also plan to consolidate certain of our existing facilities to achieve cost efficiencies.

The demand for pharmaceutical and chemical equipment engineering products is expected to continue to grow over Fiscals 2025 to Fiscals 2027 (*Source: F&S Report*). Capital spending is likely to remain at the current level or perhaps increase to between ₹120 billion and ₹ 150 billion per year up to Fiscal 2027, owing to local and export demand from semi-regulated markets (*Source: F&S Report*). Further it is predicted that the players' capex will increase by 7% to 9% CAGR until FY2025-26, to reach INR 70 Bn per year in FY2025-26(*Source: F&S Report*). We anticipate that this will allow us to increase our operations through sales of existing products as well as newer products. We will continue to pursue new products within our existing segments as well as explore the use of our engineering capabilities to diversify our product offerings, especially in products from related segments.

Over the years, we have been able to increase our product portfolio due to our in-house capabilities, partnerships and acquisitions. The growth in our product portfolio has been undertaken in a systematic manner to offer complementary products and services to our existing portfolio of products and with a view towards increasing value addition to the overall ecosystem of a chemical or pharmaceutical manufacturing facility. For example, we have in Fiscal 2024 started production of PTFE lined pipes and supply of vacuum pumps in Fiscal 2022, which in turn has allowed us to increase our overall revenue share from a chemical or pharmaceutical manufacturing facility and a competitive edge for in our turnkey offerings.

In order to maintain our leadership position and to further develop our various product segments, we intend to further diversify our product offerings. We also propose to enter into additional end-user industries such as oil and gas, paint and coatings, edible oils, flavours and fragrances, aerospace and heavy engineering, etc.

As of September 30, 2024, our sales and marketing team in India consisted of 99 employees, with a focus on Southern and Western regions of India. We may seek to expand our team to expand our sales and marketing reach will allow us to target newer customers in these regions.

***Expand our capacity by increasing the capabilities of our existing manufacturing plants as well as set up new manufacturing plants***

Our capacity expansion is largely driven by customer demand and growth of the end-use industries. To cater to the growing demand from our existing customers and to meet requirements of new customers, we intend to expand our manufacturing capacities for existing products.

As of date, we operate eight manufacturing facilities. For further information of our existing manufacturing facilities see "-*Manufacturing Facilities*" on page 298. We have in the past, invested significant amounts towards capital expenditure in order to expand our manufacturing capacities. Our capital expenditure in each of the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022 was as follows:

| Particulars | Six months period ended September 30, 2024 | | Fiscal 2024 | | Fiscal 2023 | | Fiscal 2022 | |
|---|---|---|---|---|---|---|---|---|
| | ₹ in million | % of total revenue from operations | ₹ in million | % of total revenue from operations | ₹ in million | % of total revenue from operations | ₹ in million | % of total revenue from operations |
| Capital expenditure | 140.43 | 4.57% | 372.50 | 6.85% | 300.76 | 6.04% | 118.94 | 4.95% |

As part of our growth strategy, we intend to continue to invest in creation of additional capacities, both for our existing products as well as for creation of new products. Towards this end, we intend to utilise an amount of up to ₹ 400.00 million from the Net Proceeds towards expansion of our existing manufacturing units and upcoming facilities through funding of capital expenditure requirements of our Company towards purchase of machinery and equipment. We propose to purchase new machineries and equipment to build-up additional capacity for our glass lining and stainless steel and nickel alloy equipment operations from the Offer Proceeds. Some of the machineries and equipment that we intend to purchase are (i) welding machines, (ii) cranes; (ii) laser scanning cutting machines, etc. For more information on the machineries and equipment proposed to be purchased, see "*Objects of the Offer*" on page 158. Further, we have started the construction of an additional facility in Hyderabad, Telangana, S2 Unit 5, to complement our existing offerings of glass lining equipment and stainless steel and nickel alloy equipment.

The installation of new machinery and equipment as well addition of a new facility will enable us to increase our production capacity, scale our operations, onboard new customers, introduce new products, better serve our existing customers, enable us to better address the business requirements of large customers, further improve our customer service and facilitate our growth strategy. Expansion in our capacity will also lead to a reduction in our delivery time and which in turn would allow us to increase our orders in hand.

***Capitalise on increasing demand from international markets to grow our exports***

While our revenue from operations have grown at a CAGR of 50.45% between Fiscals 2022 and Fiscal 2024, we have been predominantly focussed on domestic market with exports contributing to less than one percent of our revenue from operations in each of Fiscal 2024, Fiscal 2023 and Fiscal 2022. With a view to increasing our share of revenues from international markets and to capitalise on increasing demand from international markets, we have agency arrangements for sale and marketing of our products in Bangladesh as well as agency and distribution agreement for sale, marketing and distribution of our products in Russia. We have also entered into an exclusive supply and purchase agreement of glass lined equipment and related parts, accessories and components manufactured by us, across identified territories globally, including the North America (excluding Cuba), South America, Europe (excluding Belarus and Russia) and certain countries in Asia and Africa.

The global glass lined equipment represents a significant opportunity with the TAM being expected to increase from US$ 2.1 billion in CY 23 at a CAGR of 10.1% to US$ 3.4 billion in CY 28. (*Source: F&S Report).*

We aim to leverage our diverse product portfolio, customer acceptance in domestic markets and end-to-end offerings for specialised engineering equipment for pharmaceutical and chemical sectors to expand into international markets. We believe that as we increase our exports to international markets, we will be able to increase our addressable market, expand our geographical footprint and augment our revenues. Furthermore, our strategy of diversifying our customer base and expanding our geographical footprint will help us mitigate the risks associated with economic fluctuations in any one region and our high dependence on select customers.

We have also received accreditations for U symbol from The American Society of Mechanical Engineers, NB mark form the National Board of Boiler & Pressure Inspectors and R symbol from the National Board of Boiler & Pressure Vessel Inspectors. These accreditations allow our products to be utilised by companies operating in various countries across the globe and allows competitive advantage against competitors whose products are not similarly qualified or certified.

***Grow inorganically through strategic acquisitions and alliances***

In terms of strategic acquisitions, we intend to explore and consider opportunities that can create synergies between the proposed target companies and us and are also in line with our growth strategy. With a view towards offering complementary products and increasing our capabilities, especially in the glass lining equipment industry and PTFE lined pipes and fittings sector, we have recently acquired the business undertaken by M/s Higenic Flora Polymers and M/s Yashasve Glass Lining Industries, both firms engaged in the business of manufacturing, supply, installation and repair of PTFE lined pipes and fittings. We have also acquired the business of C.P.K Engineers Private Limited, which we believe will complement our existing production capabilities.

We have entered into agreement with HHV Pumps Private Limited for supply of vacuum pumps along with a private label arrangement. We also have a sale and purchase agreement with Asahi Glassplant Inc. and GL Hakko for supply of certain grades of glass used by our glass lining division. These partnerships have enabled us to grow a faster pace as compared to our peers and established our leadership position in the industry (*Source: F&S Report*). Further, we have also entered into an exclusive collaboration with GL Hakko for exclusively purchasing glass lined tubes manufactured by GL Hakko using which our Company will manufacture and sell shell and heat tube exchangers under the name of GL Hakko in India and abroad except Japan.

We plan to target entities that expand our opportunities in other end-markets, geographic regions, new customers and new products. We intend to maintain a disciplined approach to acquisitions and consider various selection criteria such as skills of the management team, operation scale, technological capability, product portfolio, customer base, end-market exposures, valuation and estimated costs, as well as cultural fit. We believe that the industry experience of our Promoters and Senior Management, financial strength and manufacturing capabilities will enable us to identify and secure appropriate acquisition opportunities in the future.

**BUSINESS OPERATIONS**

***Portfolio of products and services***

Our products cater to a range of end-use industries such as pharmaceutical, agrochemicals, speciality and fine chemicals, active pharmaceutical ingredients, food and bulk chemicals. We have significantly expanded and diversified our product portfolio in recent years, strategically focusing on glass lined reactors and receivers, stainless steel and nickel alloy equipment, filtration and drying equipment and heat exchangers used in the pharmaceutical, chemical and food industries.

Our offerings cover a large range of designs and customisations. We offer over 65 unique designs across our range of products. An overview of our various offerings, is set out below:

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| ***Reaction Systems*** | | | |
| Heat Transfer System | Column | A column is a vertical vessel incorporating mass transfer devices like trays, random and structured packing. Columns are used for absorption and extraction processes as well. | Glass Lined Equipment |
| Heat Transfer System | Column | | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| Heat Transfer System | Condenser | A condenser is a heat exchange device used to convert vapor or gas into liquid by cooling it down. In essence, it works by removing heat from a vaporized substance, causing it to condense into its liquid form. | Glass Lined Equipment |
| Heat Transfer System | Condenser | | Stainless steel and nickel alloy |
| Heat Transfer System | Shell & Tube Heat Exchangers | A Shell and Tube Heat Exchanger is a widely used type of heat exchanger, especially in industries like oil refining, chemical processing, power generation, and HVAC. It consists of a series of tubes, one set carrying the hot fluid and the other set carrying the cold fluid, with heat being transferred between the two through the walls of the tubes. This type of heat exchanger is robust, versatile, and can be designed to handle large heat loads and high pressures. | Stainless steel and nickel alloy |
| Heat Transfer System | Box Heat Exchangers | A box heat exchanger, also known as a plate-and-frame heat exchanger, is a type of heat exchanger used for efficiently transferring heat between two fluids. The term "box" typically refers to its structural design, where multiple thin plates are arranged in a frame to form a compact unit, often resembling a box. These heat exchangers are widely used in industries such as food and beverage, pharmaceuticals, HVAC, chemical processing, and power generation. | Stainless steel and nickel alloy |
| Heat Transfer System | Distillation Columns | A distillation column is a key piece of equipment used in the separation of mixtures based on differences in boiling points of their components. It's a vital part of many industrial processes, especially in the chemical, petrochemical, pharmaceutical, food and beverage, and oil refining industries. Distillation columns are used to separate liquid mixtures into their individual components, such as separating ethanol from water or purifying crude oil into its various fractions.<br>The basic principle behind distillation is that the components of a liquid mixture have different volatilities (boiling points). When the mixture is heated, the more volatile component will vaporize first, and as the vapor rises through the column, it can be condensed and collected at various points. | Stainless steel and nickel alloy |
| Heat Transfer System | Rasing Film Evaporator | A Raising Film Evaporator (RFE) is a type of heat exchanger used in the evaporation process, where a liquid is concentrated by removing its solvent, typically water, under controlled conditions. It's especially popular in industries like food processing, pharmaceuticals, and chemical engineering due to its ability to handle heat-sensitive materials effectively. | Stainless steel and nickel alloy |
| Heat Transfer System | Falling Film Evaporator | A Falling Film Evaporator (FFE) is a widely used type of evaporator that operates based on the principle of a thin film of liquid falling down the vertical tubes or plates of the evaporator. It’s an efficient heat exchanger used to concentrate heat-sensitive liquids, such as food products, chemicals, and pharmaceuticals, by removing the solvent (typically water). | Stainless steel and nickel alloy |
| Heat Transfer System | Multi effect Evaporator with ATFD | A Multi-Effect Evaporator (MEE) with Automatic Thin Film Dryer (ATFD) is a combination of two technologies designed to efficiently concentrate and dry heat-sensitive liquids or slurries, typically used in the chemical, | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| | | pharmaceutical, and food industries. Both systems work in tandem to achieve highly efficient evaporation and drying with minimal energy consumption, while preserving the quality of the product. | |
| Heat Transfer System | Forced Circulation Evaporator | A Forced Circulation Evaporator (FCE) is a type of evaporator used to concentrate solutions or slurries by applying heat and creating a forced circulation of the liquid through the evaporator's heat exchange surfaces. This system is often used in situations where the liquid to be evaporated is highly viscous, tends to foul the heat exchange surfaces, or has a high tendency to form crystals. It is widely employed in industries such as chemical processing, food and beverage, pharmaceuticals, and wastewater treatment. | Stainless steel and nickel alloy |
| Pipes and Fittings | PTFE lined pipes and Fittings | PTFE-lined pipes are mild steel pipes with a layer of polytetrafluoroethylene (PTFE) liner fused to the inside walls. PTFE is well-known for its remarkable chemical resistance, non-stick characteristics, durability at high temperatures, and low friction coefficient. These properties make PTFE an excellent material for lining the interior surfaces of pipes, providing corrosion protection, and assuring smooth fluid flow in a wide range of industrial applications. | PTFE lined pipes and Fittings |
| Pumps | Multistage dry claw type | A Multistage Dry Claw Type Vacuum Pump is a type of positive displacement pump that operates using two claw-shaped rotors to generate a vacuum. It is typically used in industrial applications where a high vacuum level and reliable performance are required, such as in pharmaceutical, chemical, food processing, and electronics industries.<br>This pump is particularly known for its dry operation—which means it does not rely on lubrication or sealing fluids between the rotor and the housing. Instead, it relies on the precise mechanical design of the rotors and the vacuum chamber to create suction. The multistage design allows it to achieve higher vacuum levels than single-stage systems. | Pumps |
| Pumps | Multistage lobe and claw type | Multistage Lobe and Claw Type Vacuum Pumps combine the lobe and claw pump technologies into a multistage vacuum system. Both the lobe and claw pumps are positive displacement pumps that are designed to provide high levels of vacuum, but they differ in the mechanics of how they operate. In multistage systems, several stages are used to achieve deeper vacuum levels and handle higher gas volumes, making these pumps highly suitable for demanding applications in industries such as pharmaceuticals, chemical processing, food processing, and electronics manufacturing. | Pumps |
| Pumps | Single stage dry claw type | A Single Stage Dry Claw Type Vacuum Pump is a type of positive displacement vacuum pump that uses two claw-shaped rotors to generate vacuum. This pump is called "dry" because it operates without the need for lubricating oil or other liquids between the rotors. The claw design allows for efficient compression and evacuation of gases, making it | Pumps |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| | | suitable for clean processes where oil contamination must be avoided.<br>The single-stage configuration means that the pump compresses the gas in just one set of rotors, without the multiple compression stages used in more complex pumps like multistage claw or lobe pumps. | |
| Pumps | Single stage oil sealed rotary vane type | A Single Stage Oil-Sealed Rotary Vane Type Vacuum Pump is a type of positive displacement vacuum pump that uses rotating vanes to create a vacuum. It is called "oil-sealed" because it uses oil to lubricate and seal the internal components, which helps to create a tight seal between the vanes and the casing, improving efficiency and preventing air leaks.<br>This type of pump is widely used in industrial, laboratory, and manufacturing processes where medium vacuum levels are required. Its ability to handle air and gas pumping with high efficiency, combined with its cost-effectiveness, makes it a popular choice for many applications | Pumps |
| Pumps | Double stage oil sealed rotary vane type | A double-stage oil-sealed rotary vane type vacuum pump is a device used to create a vacuum by removing air and other gases from a sealed chamber. | Pumps |
| Pumps | Roots booster type | The Roots Booster Type Vacuum Pump is a specialized type of positive displacement pump designed to provide high pumping capacity and low to medium vacuum levels in a wide range of industrial applications. Often used in combination with other vacuum pumps, such as rotary vane pumps or dry claw pumps, it is a key component in achieving deeper vacuum levels, especially when large volumes of gas need to be pumped quickly.<br><br>The Roots Booster works on the Roots principle, where two rotors in the pump chamber rotate in opposite directions to displace air, creating a pumping effect. This pump is often used to boost the capacity of another pump, typically a primary pump, by increasing its throughput, especially when dealing with large volumes of air or gases | Pumps |
| Pumps | Scroll vacuum type | A Scroll Vacuum Pump is a type of positive displacement pump that uses two interleaved spirals (or "scrolls") to generate vacuum. It is known for its oil-free operation, low noise, compact design, and high efficiency in creating a vacuum. Scroll vacuum pumps are widely used in laboratories, electronics manufacturing, pharmaceuticals, and medical applications due to their clean and efficient performance.<br>Scroll vacuum pumps work by trapping gas between the scrolls and gradually compressing and evacuating it to achieve a vacuum level. They are ideal for applications where oil-free and clean vacuum pumping is required. | Pumps |
| Reactors | AE/BE/CE | A glass-lined reactor is a critical piece of equipment for processes where chemical resistance, cleanliness, and temperature control are vital. Its unique combination of corrosion resistance (due to the glass lining) and structural strength (from the metal outer shell) makes it ideal for | Glass Lined Equipment |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| | | sensitive applications, such as in the pharmaceutical and chemical industries. However, they must be handled with care due to the potential for glass lining damage, and they tend to come with higher upfront costs compared to other reactor types. | |
| Reactors | AE | **AE Reactor (Anhydrous Ether Reactor) -** Likely an Anhydrous Ether Reactor, used for solvent-based organic reactions where water contamination is a concern | Glass Lined Equipment |
| Reactors | BE | **BE Reactor (Batch Reactor) -** Likely refers to a Batch Reactor, where the reaction is carried out in discrete, controlled batches | Glass Lined Equipment |
| Reactors | CE | **CE Reactor (Continuous Stirred Tank Reactor - CSTR) –**<br>Most commonly refers to a Continuous Stirred Tank Reactor (CSTR), used for continuous, steady-state reactions with constant mixing and flow of reactants and products | Glass Lined Equipment |
| Reactors | Reactor | A reactor is a vessel or system where chemical reactions take place under controlled conditions. It is designed to provide the ideal environment for chemical reactions to occur, typically by controlling parameters like temperature, pressure, flow rate, mixing, and sometimes catalysts. Reactors are essential in a wide range of industries, including chemicals, pharmaceuticals, food processing, petrochemicals, energy production, and biotechnology.<br>The function of a reactor is to convert raw materials (reactants) into desired products through a chemical transformation. The design and operation of a reactor depend on the type of reaction, the scale of the process, and the physical properties of the reactants and products | Stainless steel and nickel alloy |
| Reactors | Receiver | Receiver is a general term for any vessel or container used to collect, store, and hold products or by-products in a chemical, pharmaceutical, or industrial process | Stainless steel and nickel alloy |
| Reactors | Hydrogenerator | A Hydrogenerator is a type of equipment used in various industries, particularly in chemical processing, pharmaceuticals, and energy production, to generate hydrogen gas ($H_2$). | Stainless steel and nickel alloy |
| Reactors | Fermenter | A fermenter (also known as a bioreactor) is a specialized vessel used in biotechnology and pharmaceutical industries to facilitate the fermentation process. Fermentation is a biological reaction where microorganisms, such as bacteria, yeast, or fungi, convert raw materials into valuable products like alcohol, acids, antibiotics, enzymes, and other bio-based compounds.<br>Fermenters are designed to provide an ideal environment for these microorganisms to grow and carry out their metabolic activities by controlling various factors like temperature, pH, oxygen supply, nutrient feed, and agitation. The exact design of a fermenter depends on the type of fermentation (e.g., aerobic, anaerobic, batch, continuous), the microorganisms used, and the desired product | Stainless steel and nickel alloy |
| Reactors | Mixing vessels | Mixing vessels are indispensable in industries where homogeneous blending, emulsification, dissolution, or chemical reactions are necessary. The type of mixing vessel selected depends on the material being processed, the required mixing intensity, heat sensitivity, and whether the process is batch or continuous. With careful selection and proper design, mixing vessels can significantly improve | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| | | process efficiency and product quality across various industries | |
| ***Storage, Separation and Drying Systems*** | | | |
| Filtration and Drying | ANFD (Agitated Nutsche Filter Dryer) | ANFD stands for Agitated Nutsche Filter-Dryer, which is a type of equipment used in chemical, pharmaceutical, and food industries for solid-liquid separation and drying of wet cake or slurry. It combines the functions of both filtration and drying into a single unit, making it efficient for batch processing applications where solid separation and drying are necessary | Stainless steel and nickel alloy |
| Filtration and Drying | Nutsche filter | A Nutsche filter is a reliable and versatile piece of equipment used for solid-liquid separation in batch processes. Its ability to handle slurries, its suitability for various industries, and its potential for use in closed systems make it ideal for applications in pharmaceuticals, chemicals, food processing, and more. Whether used for filtering, washing, or drying, the Nutsche filter provides efficient solid-liquid separation with relatively low maintenance requirements | Stainless steel and nickel alloy |
| Filtration and Drying | Vacuum Tray Driver | A Vacuum Tray Dryer (VTD) is a type of industrial drying equipment used to remove moisture from heat-sensitive materials under a vacuum. It is particularly suited for drying substances that may degrade or lose their efficacy at high temperatures, such as pharmaceuticals, chemicals, food products, and biological materials | Stainless steel and nickel alloy |
| Filtration and Drying | RCVD (Roto Cone Vacuum Dryer) | The Rotary Cone Vacuum Dryer (RCVD) is an advanced drying equipment widely used in industries like pharmaceuticals, chemicals, and food processing for drying heat-sensitive materials under vacuum conditions. It offers an efficient method for drying materials that cannot tolerate high temperatures, ensuring the preservation of the product's quality and integrity.<br>The RCVD operates under vacuum and utilizes the rotational movement of a cone-shaped vessel to mix and agitate the material while it is being dried. The combination of vacuum and the controlled heat environment allows moisture to evaporate at much lower temperatures than conventional drying methods, making it ideal for heat-sensitive substances | Stainless steel and nickel alloy |
| Filtration and Drying | Tray Dryer | A Tray Dryer is a widely used drying equipment designed for batch drying of solid materials in various industries such as pharmaceuticals, chemicals, food processing, and cosmetics. It operates on the principle of convective heat transfer, where heat is transferred to the material via hot air circulating in the drying chamber, resulting in the evaporation of moisture.<br>Tray dryers are especially useful for drying heat-sensitive materials, powders, granules, and bulk materials, where low to moderate temperatures are necessary to prevent degradation or loss of efficacy.<br>The Tray Dryer works by circulating warm air over the materials placed on trays, where the heat causes the moisture to evaporate. The evaporated moisture is then carried away by the exhaust air, leaving behind the dried product | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| Filtration and Drying | Paddle Dryer (TBV) | A Paddle Dryer (TBV), often referred to as a Thermal Batch Vacuum (TBV) Dryer, is an advanced drying technology used to handle viscous, heat-sensitive, and slurry-like materials that need to be dried in batch or vacuum conditions. This type of dryer is widely used in industries such as pharmaceuticals, chemicals, food processing, petrochemicals, and environmental applications where efficient, controlled drying is necessary.<br>The TBV Paddle Dryer operates on the principle of indirect heat transfer combined with mechanical agitation, and typically operates in a vacuum environment to facilitate low-temperature drying, preserving the integrity of the product.<br>The TBV Paddle Dryer uses indirect heat applied to the material via steam-heated jackets or hot oil coils. Inside the dryer, paddle agitators or blades rotate to mix and stir the material. The vacuum inside the dryer reduces the pressure in the chamber, allowing moisture or volatile components to evaporate at lower temperatures | Stainless steel and nickel alloy |
| Filtration and Drying | Filtration & Drying | Separation of solids and liquids is a common unit process in all chemical/pharmaceutical plants and filtration is the most common and effective way of doing so. We offer a range of equipment for this purpose. After filtration, the wet solids usually have to be dried by heating. Hence filtration & drying are usually consecutive or simultaneous processes.<br><br>However, each reaction in the manufacturing process may have slightly different requirements. Hence, we work closely with customers and offer bespoke solutions that meet their specific process needs. Some of the products we manufacture are ANFD, Vacuum Tray Driver, RCVD, Tray Dryer, Paddle Dryer, Filtration and drying Filters and RCVD | Stainless steel and nickel alloy |
| Filtration and Drying | Filters | Filters are essential components in filtration and drying processes across various industries, such as pharmaceuticals, chemicals, food processing, and environmental management. They are used to separate solids from liquids or gases in a controlled and efficient manner. Depending on the application, filters can also aid in drying processes by helping remove solvents or moisture from the product | Glass Lined Equipment |
| Filtration and Drying | Filters | | Stainless steel and nickel alloy |
| Filtration and Drying | RCVD | *Please see description of RCVD above in this table* | Glass Lined Equipment |
| Filtration and Drying | Tray Dryer | A Tray Dryer is a widely used drying equipment designed for batch drying of solid materials in various industries such as pharmaceuticals, chemicals, food processing, and cosmetics. It operates on the principle of convective heat transfer, where heat is transferred to the material via hot air circulating in the drying chamber, resulting in the evaporation of moisture.<br>Tray dryers are especially useful for drying heat-sensitive materials, powders, granules, and bulk materials, where low to moderate temperatures are necessary to prevent degradation or loss of efficacy.<br>The Tray Dryer works by circulating warm air over the materials placed on trays, where the heat causes the moisture to evaporate. The evaporated moisture is then | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| | | carried away by the exhaust air, leaving behind the dried product | |
| Storage | Receivers | Receiver is a general term for any vessel or container used to collect, store, and hold products or by-products in a chemical, pharmaceutical, or industrial process | Glass Lined Equipment |
| Storage | Receivers | | Stainless steel and nickel alloy |
| Storage | Tanks | Storage tanks are containers designed to store liquids or solids or gases at atmospheric or low pressures and are constructed using thin walled materials. Storage tanks are typically cylindrical and primarily serve the function of fluid storage | Glass Lined Equipment |
| Storage | Tanks | | Stainless steel and nickel alloy |
| Storage | Silos | A silo is a large storage structure used to hold and store bulk materials, such as grains, feed, cement, chemicals, or even pharmaceutical powders. Silos are essential in industries like agriculture, food processing, pharmaceuticals, chemicals, and construction, where large quantities of materials need to be stored and efficiently managed before they are processed or transported.<br>The design and operation of a silo are critical to ensuring that stored materials remain in optimal condition, and that they can be efficiently handled and moved when needed. Silos can be used for short-term storage or long-term bulk storage depending on the industry and material type | Stainless steel and nickel alloy |
| Storage | Blenders | Blenders, also known as mixers, are used to combine materials in various industries like pharmaceuticals, food processing, chemicals, cosmetics, and biotechnology. They ensure uniformity in the final product by blending different ingredients or materials, whether they are in the form of powders, liquids, granules, or pastelike substances. Blending is crucial for ensuring consistent product quality, uniformity of ingredients, and efficiency in manufacturing processes | Stainless steel and nickel alloy |
| Vessel | Vessel | A vessel in industrial applications, particularly in pharmaceutical, chemical, and biotechnological industries, refers to a container or reactor used to hold and process materials for mixing, reaction, heating, cooling, storage, or separation. These vessels come in a variety of designs, depending on the purpose they serve, and are often equipped with specialized components for controlling conditions such as temperature, pressure, agitation, and atmosphere (e.g., inert or oxidative).<br>Vessels are crucial in ensuring controlled, consistent, and efficient operations in processes like reaction synthesis, pharmaceutical production, chemical processing, and biological fermentation | Stainless steel and nickel alloy |
| ***Plant Engineering and Services*** | | | |
| Services | Services | - | Others |
| Utility System | Hot Water System | A hot water system is a crucial component in many industries, including pharmaceutical, chemical, food processing, and biotechnology sectors. It is used to supply heated water for various processes such as heating, sterilization, cleaning, and heating processes. In these applications, hot water systems are critical for maintaining the desired temperature, ensuring efficient heat transfer, and ensuring that operations are carried out under controlled conditions | Stainless steel and nickel alloy |

| Product Type | Sub Product | Description of sub product | Material Used |
|---|---|---|---|
| Utility System | SKIDS | A SKID (often referred to as a skid-mounted system) is a pre-fabricated, modular unit used in industries such as pharmaceutical, chemical, oil and gas, and food processing. It contains all the necessary equipment and systems required for specific processes, assembled and mounted on a single steel frame or "skid" structure for ease of transportation, installation, and integration.<br>Skid systems are designed to streamline operations by providing compact, fully functional units that can be easily transported and installed at a site. These systems offer the flexibility of pre-assembly, reducing the time and cost associated with installation and integration. | Stainless steel and nickel alloy |
| Utility System | Single fluid Heating & Cooling systems | Single fluid heating and cooling systems are commonly used in industrial processes where heat needs to be transferred either to or from a fluid, typically for applications such as temperature control, energy recovery, cooling, or heating processes. These systems utilize a single fluid (liquid or gas) to transport heat, which is either absorbed or released based on the needs of the process.<br>Single fluid systems are efficient because they simplify the heat exchange process, minimize the number of components, and reduce the complexity of managing multiple fluids. They are found across various industries, including chemical, pharmaceutical, food processing, and HVAC (Heating, Ventilation, and Air Conditioning). | Stainless steel and nickel alloy |

***Products and our Offerings***

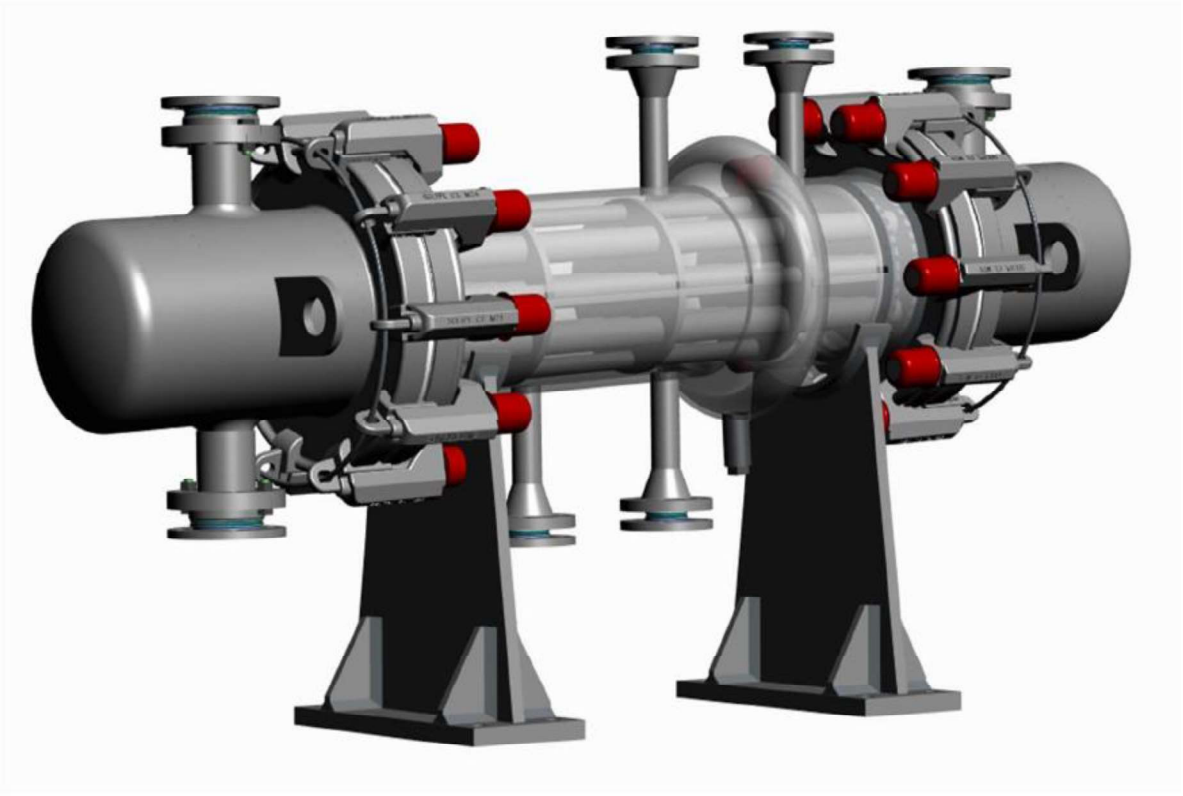
Below are the illustrations of some of the products manufactured by us:

***Storage Tanks***

***BE Reactor***

*RCVD*

*AE Reactor*



*Heat Exchangers*

***Filtration & Drying:***

Separation of solids and liquids is a common unit process in all chemical/pharmaceutical plants and filtration is the most common and effective way of doing so. We offer a range of equipment for this purpose. After filtration, the wet solids usually have to be dried by heating. Hence filtration & drying are usually consecutive or simultaneous processes.

However, each reaction in the manufacturing process may have slightly different requirements. Hence, we work closely with customers and offer bespoke solutions that meet their specific process needs. Some of the products we manufacture are ANFD, Vacuum Tray Driver, RCVD, Tray Dryer, Paddle Dryer, Filtration and drying Filters and RCVD.

***Glass Lined Equipment:***

Glass lining technology is extensively used in various industries for its corrosion resistance and durability. Glass-lined reactors are crucial for chemical synthesis and controlled reactions in the chemical and pharmaceutical sectors. They protect against corrosive chemicals and maintain substance purity. Receivers with glass lining are utilized in food and beverage, pharmaceutical, and chemical processing industries for collecting and storing materials. Glass-lined heat exchangers and equipment fittings are employed in industries requiring efficient heat transfer while preserving material integrity.

The various steps in a chemical process require storage, mixing, agitation, pressurizing, heating or cooling of different chemicals or mixtures thereof. While many different kinds of equipment need to be used for these processes, the material of construction of such equipment depends on the degree of corrosiveness of the chemical that needs to be handled. As the chemicals get more corrosive, the ability of metals to withstand the process for extended processes reduces or extremely expensive metals might be needed. Glass lined equipment are a relatively inexpensive solution to this specific need in the industry. Glass lined equipment are built primary from steel, hence they are strong (unlike pure glass). However, they are coated with glass on all surfaces which are intended to be in contact with corrosive chemicals.

***Heat Exchangers***

Heat Exchangers are devices or systems used to transfer heat from one medium to another and can be used for both cooling and heating purposes. Heat exchangers are used in API and chemical manufacturing process mainly in the distillation and drying unit operations.

Some of the key products include column, condenser, shell and tube heat exchangers and box heat exchangers.

***Storage***

Storage tanks are containers designed to store liquids or solids or gases at atmospheric or low pressures and are constructed using thin walled materials. Storage tanks are typically cylindrical and primarily serve the function of fluid storage.

***PTFE lined pipes and fittings***

PTFE-lined pipes are mild steel pipes with a layer of polytetrafluoroethylene (PTFE) liner fused to the inside walls. PTFE is well-known for its remarkable chemical resistance, non-stick characteristics, durability at high temperatures, and low friction coefficient. These properties make PTFE an excellent material for lining the interior surfaces of pipes, providing corrosion protection, and assuring smooth fluid flow in a wide range of industrial applications.

PTFE lined piping and fittings are primarily used for connecting equipment or transportation of corrosive fluid from one equipment to another equipment during the manufacturing process, for further processing. These pipes are usually made of mild steel or stainless steel and lines with PTFE to withstand corrosive properties of the manufacturing process. These can also withstand temperatures up to 200 degrees Centigrade. These pipes and fitting are primarily used in equipment for chemical, pharmaceuticals and food & beverages industries.

Other key products include valves made of spheroidal graphite iron or carbon steel and coated with fluorinated ethylene propylene, perfluoro alkoxy. Our fittings portfolio includes bends, tees, concentric and eccentric reducers, reducing flanges, PTFE lined sight glasses, PTFE lined expansion joints or bellows and valves.

***Vacuum Pumps***

Vacuum pump is a device that removes gas molecules or air particles from a sealed volume in order to achieve difference in pressure creating a partial vacuum. By reducing the pressure, vacuum pumps lower the boiling points of the substances, allowing distillation to occur at lower temperatures. This is particularly important for heat-sensitive materials that might decompose at higher temperatures. The decrease in the boiling point of liquids or solvents inside a product through use of vacuum pumps increases the rate of evaporation and results in an increased drying rate of the product.

Typical applications of vacuum pumps include in distillation systems, drying and filtration systems, solvent recovery systems and as centralised vacuums in pharmaceutical laboratories, freeze drying systems, short path distillation processes and steam sterilization processes. End user industries in which vacuum pumps find use include chemical and pharmaceuticals, electrical & power, food and beverage, medical and oil & gas.

***Plant, Engineering and Services***

Plant engineering services include the assistance in execution of API and chemical projects on a turn-key basis that involve the usage of many of our product offerings. This service involves providing inputs to our customers on improvements in plant design and subsequently project managing the construction of the API and chemical facility, installation of equipment manufactured by us and products from other suppliers that are necessary for the completion of the full plant. Our responsibility includes a combination or all of coordination, procurement, installation, commissioning and qualification of the facility.

***Manufacturing Facilities***

Our manufacturing capabilities consist of eight facilities located in Hyderabad, Telangana covering a total built-up/floor area of more than 400,000 sq. ft.

**Set out below are the details of our manufacturing facilities:**

**SGL Unit** - The SGL Unit is dedicated to manufacturing glass lined equipment with a capacity to manufacture more than 1,600 equipment on an annual basis. The facility is spread across an area of 187,000 sq. ft. and is equipped with 17 electric overhead traveling ("**EOT**") cranes, 11 furnaces including three agitator furnaces and three component furnaces with a combined rated power exceeding 5.99 MW. The electric furnaces are equipped with precise temperature control systems. The manufacturing process is streamlined with the use of special purpose tooling, jigs, fixtures and automation. It is also equipped with a machine shop with six CNC and heavy machining equipment and a plasma cutting machine. The facility has the capability to machine components or entire fabricated equipment ranging up to 3.40 mts. in diameter and up to 12 mts. in length. The specialized tooling along with a machine shop enables us to achieve a high level of precision, repeatability and interchangeability of parts for our customers.

We also rely on robotic welding at SGL Unit for various materials such as carbon/ mild steel. The facility also has assembly capacity with dedicated infrastructure for surface preparation, painting, and pickling and passivation of equipment.

Our electricity requirements for this facility are sourced from a combination of electricity drawn from the grid and the captive renewable energy generation through a solar plant with a capacity to generate power up to 3,600KVA.

**S2 Unit 1 -** It is dedicated to manufacturing stainless steel and nickel alloy based reactors and ANFDs with assembling capacity and is spread across an area of more than 99,000 sq. ft. The facility is equipped with 16 EOT cranes, machine shop with vertical machining centres, CNC turn-mill, CNC drilling and vertical turning lathes, boring machine, hydraulic plate bending machine, CNC plasma cutting machines, CNC laser cutting machine, column and boom welding and manual machining centres and other equipment required to manufacture filter-dryers and reactors such as jigs, fixtures, welding manipulators.

S2 Unit 1 has a capacity to manufacture up to 458 equipment on an annual basis. Our electricity requirements for this facility are sourced from the grid.

**S2 Unit 2 -** The facility is dedicated to manufacturing stainless steel and nickel alloy filtration and drying, and storage equipment. The facility is spread over an area of more than 38,000 sq. ft. and is equipped with 4 EOT cranes and welding machines.

**S2 Unit 3 -** This facility is dedicated to supply and service of vacuum pumps, covering an area over 18,000 sq. ft. It is equipped with four EOT cranes, welding machines, assembly bays, overhead cranes and electronics facilities which are capable of providing automated pump control systems. The facility also has pump decontamination and cleaning capabilities along with overhead cranes for handling and pump refurbishment equipment for comprehensive overhauls of rotating equipment. In addition, the facility features a dedicated stores and assembly/testing area. The facility is capable to supply and service around 440 vacuum pumps annually. Our electricity requirements for this facility are sourced from the grid.

**S2 Unit 4-** This facility is dedicated to manufacturing heat transfer systems using stainless steel and nickel alloy. The facility is spread across an area of over 42,000 sq. ft. and is equipped with seven EOT cranes and welding machines, VTL, H boring machine, dish pressing machine and manual machining centre. The facility is capable of manufacturing 684 heat exchangers and nickel alloy equipment on an annual basis. Our electricity requirements for this facility are sourced from the grid.

**SFPL Unit-** This facility is dedicated to manufacturing PTFE lined pipes and fittings and is spread across an area of 35,000 sq. ft. and is equipped with four EOT cranes, welding machines, isostatic machinery, lathe machine, drilling machine, buffing machine, injection molding machine. The facility is capable of manufacturing 108,000 units per year.

**CPK Unit 1 –** This facility is engaged in the manufacturing stainless steel and nickel alloy equipment, storage tanks, receivers, RVPDs and VTDs and heat exchange systems. The facility is spread across more than 17,000 sq. ft. Equipped with three EOT cranes and welding machines, the facility is capable of manufacturing 180 units annually.

**CPK Unit 2 -**This facility manufactures stainless steel and nickel alloy equipment, storage tanks, receivers, RVPDs, VTDs and heat exchange systems. The facility is spread across more than 6,000 sq. ft. and is equipped with 2 EOT cranes and welding machines. The facility is capable of manufacturing 60 units annually.

**S2 Unit 5-** This is an under-construction facility, whereby we plan to manufacture stainless steel and nickel alloy based equipment. The facility is proposed to be built over an area of more than 1,00,000 sq. ft. The construction of the unit is expected to be completed by February 28, 2025.

Set out below are the details of our installed capacity, actual production and capacity utilisation as of September 30, 2024, March 31, 2024, March 31, 2023 and March 31, 2022:

| Manufacturing Facility | As of September 30, 2024 | | | As of March 31, 2024 | | | As of March 31, 2023 | | | As of March 31, 2022 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Installed Capacity (in number of units) | Actual Production (in number of units)* | Capacity Utilisation (%)# | Installed Capacity (in number of units) | Actual Production (in number of units)* | Capacity Utilisation (%)# | Installed Capacity (in number of units) | Actual Production (in number of units)* | Capacity Utilisation (%)# | Installed Capacity (in number of units) | Actual Production (in number of units)* | Capacity Utilisation (%)# |
| **SGL Unit** | 805 | 576 | 71.60 | 1,609 | 1,345 | 83.59 | 1,609 | 1,166 | 72.47 | 1,609 | 1,274 | 79.18 |
| **S2 Unit 1** | 229 | 204 | 89.08 | 458 | 332 | 72.49 | 458 | 382 | 83.41 | 115 | 99 | 86.46 |
| **S2 Unit 2** | 190 | 182 | 95.79 | 380 | 326 | 85.79 | 380 | 223 | 58.68 | 95 | 86 | 90.53 |
| **S2 Unit 3** | 220 | 214 | 97.27 | 440 | 440 | 100.00 | 440 | 323 | 73.41 | 110 | 41 | 37.27 |
| **S2 Unit 4** | 342 | 221 | 64.62 | 684 | 484 | 70.76 | 684 | 684 | 100.00 | 171 | 95 | 55.56 |
| **SFPL Unit** | 54,000 | 35,558 | 65.85 | 90,000 | 57,484 | 63.87 | - | - | - | - | | - |
| **CPK Unit 1** | 90 | 39 | 43.33 | - | - | - | - | - | - | - | - | - |
| **CPK Unit 2** | 30 | 14 | 46.67 | - | - | - | - | - | - | - | - | - |

**The actual production details mentioned are a function of the orders received.*

*#The capacity utilization has been calculated on actual production during the relevant year divided by the installed capacity of the manufacturing unit.*

*Notes:*

1. *SGL Unit manufactures primarily glass lined equipments;*
2. *S2 Unit 1 manufactures primarily stainless steel and nickel alloy reactors and ANFDs;*
3. *S2 Unit 2 manufactures primarily stainless steel and nickel alloy filtration and drying, and storage equipment;*
4. *S2 Unit 3 undertakes supply and servicing of pumps;*
5. *S2 Unit 4 primarily manufactures stainless steel and nickel alloy heat transfer system, vessel and utility systems;*
6. *SFPL Unit primarily manufactures PTFE lined pipes and fittings;*
7. *SFPL Unit commenced production of PTFE lines pipes and fittings from June 1, 2023. Accordingly, the installed capacity disclosed for Fiscal 2024 has been calculated for a period of 10 months.*
8. *Each of S2 Unit 1, S2 Unit 2, S2 Unit 3 and S2 Unit 4 commenced production from December 26, 2021. Accordingly, the installed capacity for Fiscal 2022 has been calculated for a period of three months.*
9. *In addition to our Manufacturing Units set out above, we have acquired the business of C.P.K. Engineers Private Limited in Fiscal 2025. Accordingly, CPK Unit 1 and CPK Unit 2 have commenced manufacturing of stainless steel and nickel alloy reactors, storage systems, utility systems, heat transfer systems and filtration and drying from May 1, 2024, with an annual capacity of 180 units and 60 units, respectively.*
10. *The S2 Unit 5 is presently under construction and the construction is expected to be completed by February 28, 2025.*
11. *The above table has been certified by Global Engineers & Industrial Consultants, vide their certificate dated December 30, 2024.*

**Raw materials**

The key raw materials for our business requirements are stainless steel, carbon/ mild steel, nickel alloy, forgings, castings, chemicals and PTFE powder. Additionally, we also rely on certain bought out components such as motor, gear box, mechanical seals, etc.

Filtration and drying equipment are predominantly manufactured out of stainless steel and nickel alloy. These are predominantly standard grades and are purchased directly from the manufacturers based on agreements. The ability to source directly from the mill enables control over quality and a better pricing compared to the open

market. We maintain a base inventory of stainless steel and nickel alloy based on our expectation of orders. This enables us to maintain predictability of the material cost while bidding for customer orders. We also use customer advances to book material upfront and lock in the raw material cost.

Glass lined equipment manufacturing uses carbon steel and forgings. However, these are customized grades which we get source from a select few steel manufacturers. Due to the proprietary nature of the material, we maintain a stock of these items based on estimated orders. This ensures continuity of supply, competitive pricing and predictability of input costs for projects under negotiation.

In addition to the above, bought out components that are installed on both these kinds of equipment are sourced from suppliers, based on customer approvals.

**Marketing and sales**

Our manufacturing capabilities are complemented by a sales, services and distribution network operating from four sales offices located in Vadodara, Gujarat, Ankleshwar, Gujarat, Mumbai, Maharashtra and Vishakhapatnam, Andhra Pradesh and sales team members in Jhagadia, Gujarat, Chennai, Tamil Nadu, New Delhi, Bengaluru, Karnataka and Vijayawada, Andhra Pradesh with pan-India reach. We also have agency arrangements for sale and marketing of our products in Bangladesh as well as agency and distribution agreement for sale, marketing and distribution of our products in Russia. Further, we have resale arrangements for North America (excluding Cuba), South America, Europe (excluding Belarus and Russia) and certain countries in Asia and Africa.

**Logistics**

We depend on various forms of transportation to either receive raw materials for our manufacturing purposes or to deliver the finished products to our customers, including for certain export sales. For these purposes, we rely on third-party transportation and logistics providers. We typically enter into non-exclusive agreements with such transportation providers for the delivery of our products.

**Exports**

While our focus is on the domestic market to meet the demand requirements of our customers, we also export some of our products to limited international markets with majority of them to Russia and Oman. In Fiscal 2024, we exported our products to only one country. In the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022, we derived ₹ 183.61million, ₹ 20.37 million, ₹ 13.42 million and ₹ 5.88 million from sales of our products with end customers in overseas markets, constituting 5.98%, 0.37%, 0.27% and 0.24%, of revenue from our operations, respectively.

**Set forth are the details of the costs of our raw materials, freight and forwarding charges, commission on sales and advertising and sales promotion for the relevant period indicated therein**

*(in ₹ million, except percentage data)*

| Particulars | For the six months ended September 30, 2024 | | For the financial year ended March 31, 2024 | | For the financial year ended March 31, 2023 | | For the financial year ended March 31, 2022 | |
|---|---|---|---|---|---|---|---|---|
| | Amount | % of revenue from operations | Amount | % of revenue from operations | Amount | % of revenue from operations | Amount | % of revenue from operations |
| Raw materials | 1,968.39 | 64.08% | 3,903.59 | 71.80% | 3045.09 | 61.20% | 1830.54 | 76.21% |
| Freight and forwarding charges | 39.87 | 1.30% | 56.24 | 1.03% | 60.72 | 1.22% | 43.51 | 1.81% |
| Commission on sales | 0.14 | 0.00% | 0.57 | 0.01% | 4.81 | 0.10% | 4.21 | 0.18% |
| Advertising and sales promotion | 11.84 | 0.39% | 11.95 | 0.22% | 12.54 | 0.25% | 0.44 | 0.02% |

**Customer Service and Support**

We offer maintenance and servicing for our products providing an additional revenue stream. These services include equipment inspection, repair, and replacement of components, ensuring customer satisfaction and generating recurring revenue.

**Quality Control**

Our business success depends on the quality of our products and services, and we believe we have invested in robust manufacturing and documentation practices. We have developed systems to ensure product quality and client satisfaction, which are focused on providing products conforming to applicable standards, meeting client requirements, and minimizing risks and ensuring the safety of our products. Further, our end customers in the pharmaceutical industries are dependent on the maintenance of our manufacturing standards, quality controls and testing procedures in order to comply with cGMP practices as our equipment is integral to the production process of APIs and other pharmaceutical products.

Some of our facilities are ISO 9001:2015 certified organization for Quality Management System, ISO 14001:2015 certified for Environmental Management System, ISO 27001:13 certified for Information Security management System and ISO 45001:2018 certified for Occupational Health and Safety Management System. We have also received certifications such as CE and NABL.

In addition to the inspections conducted by the external agencies, we also conduct internal inspection and incremental quality control of raw materials used for our projects in order to maintain quality assurance. We believe that strict procedures followed by us help us to ensure timely delivery and competitive prices of our products and services in the market. We also conduct prototyping and testing of our products to ensure their functionality, reliability, and performance. This iterative process allows us to validate our designs and make necessary improvements before the final production.

Further, in order to derive better insights into the markets for raw materials we maintain healthy relationships with our suppliers. This also helps us to manage our raw material supply chain and inventory, resulting in greater predictability of supply and, consequently, a greater ability to meet production schedules and achieve timely delivery of our products and services for our clients.

**Competition**

Our major competitors are HLE Glasscoat Ltd, BEW Engineering Pvt Ltd, Thermax Ltd, Praj Industries and GMM Pfaudler. For further details, please see "*Industry Overview*" on page 193.

**Employees**

As of September 30, 2024, we had 460 permanent employees, on a consolidated basis. The following table provides information about our permanent employees, as of September 30, 2024, on a consolidated basis:

| Department | Number of Employees |
|---|---|
| Management | 13 |
| Operation | 109 |
| Design | 28 |
| Sales and Marketing | 99 |
| Maintenance and Quality Control | 45 |
| Finance and Accounts | 29 |
| Procurement and Store | 50 |
| Human Resources, Legal and Administrative | 24 |
| Information Technology | 2 |
| Service | 61 |
| **TOTAL** | **460** |

In addition, as of September 30, 2024, we had 731 contract labourers and 71 trainees, interns and apprentices.

Furthermore, the following table provides information in regard to contract labourers employed by the Company in the last three fiscals:

| Number of contract labourers employed | Expenses incurred towards contract labourers (in ₹ million) | Brief terms of employment* | Expiry of contract* |
|---|---|---|---|
| Fiscal 2022 - 489 | Fiscal 2022 - 282.24 | Our Company has entered into contracts with several contractors for employment of labourers for availing, *inter alia*, services of supply of security employees to carry out certain tasks, house-keeping, and removal of scarp as per the terms agreed in their respective contracts.<br><br>Under these contracts, the contractor is responsible for the safety and welfare of the personnel, where our Company has the obligation to provide all amenities such as canteen, drinking water, washing, rest room etc. Our Company is required to make payments to the contractor as per the terms of the contract after deducting TDS or in relation to any work assigned by our Company but properly carried out by the labourers. | These contracts typically have a term of one year which may be mutually extended by parties to the contract. |
| Fiscal 2023 - 550 | Fiscal 2023 - 535.09 | | |
| Fiscal 2024 - 823 | Fiscal 2024 - 531.81 | | |

**of the currently employed contract labourers*

Our human resource practices are aimed at recruiting talented individuals, ensuring continuous development and addressing their grievances, if any, in a timely manner. We conduct training workshops for our employees to develop a variety of skill sets and organize modules at regular intervals to promote teamwork and the personal growth of employees. We train our employees in our manufacturing operations, including machine utilization, operations flow, quality management and work safety.

Our human resource department continuously focuses on employee engagement and motivation, which further helps in achieving the strategic objectives of the organization.

For the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022, our employee benefits expense were ₹ 136.38 million, ₹ 207.68 million, ₹ 157.52 million and ₹ 135.21 million, constituting 4.44%, 3.82%, 3.17% and 5.63%, respectively, of our total revenue from operations.

The table below provides the attrition rate for our employees for the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022:

| Particulars | As at six months period ended September 30, 2024 | As of March 31, 2024 | As of March 31, 2023 | As of March 31, 2022 |
|---|---|---|---|---|
| Total number of employees | 460 | 378 | 307 | 250 |
| Employees Resigned during the Fiscal | 65 | 139 | 99 | 52 |
| Employees joined during the Fiscal | 127 | 158 | 156 | 137 |
| Attrition rate (%) | 12.87% | 29.89% | 24.38% | 28.11% |

*Note:*

*1. 20 employees of CPK Engineers private limited were transferred to our company in six months ended September 30, 2024 on account of slump sale. 52 employees of M/s Higenic Flora Polymers and M/s Yashasve Glass Lining Industries were transferred to our Company in Fiscal 2024 and 117 employees of M/s S2 Engineering Services and M/s Stanpumps Engineering Industries were transferred to our Company in Fiscal 2022, due to the slump sales during the respective Fiscals;*

*2. Attrition rate has been calculated as the number of employees who have resigned during the period, divided by the number of employees existing as of the beginning of the period and the numbers of employees who have joined during the period.*

Further set out below are the details of ESIC, provident fund, Professional Tax and Tax Deduction at Source on salaries ("**TDS**") obligations of the Company during the six months ended September 30, 2024, Fiscal 2024, Fiscal 2023, and Fiscal 2022:

(₹ in Million)

| Particulars | Half year ended Sep 30, 2024 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 |
|---|---|---|---|---|
| Provident Fund (₹ million) | 2.34 | 4.43 | 3.78 | 3.65 |
| Employee State Insurance Corporation (ESIC) | 0.24 | 0.43 | 0.21 | 0.54 |
| Professional Tax (PT) | 0.16 | 0.29 | 0.23 | 0.21 |
| Number of employees for whom provident fund has been paid | 142 | 168 | 163 | 234 |
| Number of employees for whom provident fund is not applicable | 23 | 19 | 22 | 30 |
| TDS on Salary (₹ million) | 2.03 | 3.66 | 2.75 | 1.10 |
| Tax Deducted at Source on other than salaries (₹ million) | 10.61 | 11.02 | 10.32 | 7.54 |
| Number of employees for whom TDS has been paid | 26 | 21 | 17 | 10 |

There have been certain delays in payment of our statutory dues to ESIC, provident fund dues and TDS for our employees in past periods. For details of such delays in payment, please see *"Risk Factors - There have been certain instances of delays in payment of statutory dues by our Company in the past. Any delay in payment of statutory dues by our Company in the future may result in the imposition of penalties and in turn may have an adverse effect on our Company's business, financial condition, results of operation and cash flows"* on page 87.

**Insurance**

We believe that our insurance coverage is in accordance with industry custom, including the terms of and the coverage provided by such insurance.

We have comprehensive insurance to protect our company against various hazards like burglary, fire, earthquakes, flood and other force majeure events, explosions, including hazards that may cause loss of life, severe damage to and the destruction of property and equipment and environmental damage. Our principal types of insurance coverage include motor vehicle insurance, fire insurance, property insurance, housebreaking insurance, commercial package insurance, marine cargo insurance, marine export import insurance, directors and officers' liability insurance, and burglary insurance. Further, we also hold employees' mediclaim which covers employees working for our Company.

Also see, "*Risk Factors – An inability to maintain adequate insurance cover in connection with our business may adversely affect our operations and profitability.*" on page 77.

**Intellectual Property**

Our Company has one registered trademark. For further information, see "*Government and Other Approvals – Intellectual Property related approvals*" on page 482.

**Environmental, Social and Governance**

We are committed to ensure responsible and safe operations and help us enrich the communities we work and live in. We believe in caring for and nurturing the environment and the community. We work collectively and individually towards a sustainable and green environment.

Our activities are subject to laws and government regulations, including in relation to safety, health, and environmental protection. These safety, health, and environmental protection laws and regulations impose controls on air and water release or discharge, noise levels, storage handling, the management, use, generation, treatment, processing, handling, storage, transport, or disposal of hazardous materials in relation to our manufacturing operations.

We continually aim to comply with the applicable health and safety regulations and other requirements in our business operations. This is further driven by our ESG focused practices within our organisation.

We aim to ensure a safe and healthy environment and further provide for safety measures in order to achieve zero accidents on a sustainable basis. We take initiatives to reduce the risk of accidents at our manufacturing facility including by providing training and safety manuals to our employees. We implement work safety measures to ensure a safe working environment including general guidelines for health and safety at our facilities. To ensure workplace safety, we also provide personal protective equipment to our employees.

Environmental requirements imposed by the regulatory authorities in India will continue to have an effect on our operations. We believe that we have materially complied, and will continue to comply, with all applicable environmental laws, rules and regulations. We have obtained, or are in the process of obtaining or renewing, environmental consents and licenses from the relevant government agencies that are necessary for us to carry on our business.

For information regarding applicable health, safety and environmental laws and regulations, see "*Key Regulations and Policies in India*" on page 308.

**Corporate Social Responsibility**

We have adopted a corporate social responsibility ("**CSR**") policy in compliance with the requirements of the Companies Act, 2013 and the Companies (Corporate Social Responsibility) Rules, 2014. Our CSR initiatives are part of our overall strategy of developing communities and environmental sustainability, as well as creating a protected future for the generations to come. In order to achieve this, our CSR initiatives are aimed towards infrastructure, vocational training and education initiatives. In the six months period ended September 30, 2024, Fiscal 2024, Fiscal 2023 and Fiscal 2022 our Company incurred ₹ 4.60 million, ₹13.87 million, ₹2.20 million and ₹1.45 million towards CSR activities. Some of the key CSR initiatives undertaken by us include:

i. *Empowering Youth through Skill Development:* We have undertaken the initiative to provide apprenticeships to students, enabling them to upskill their knowledge in engineering. Through real-time training, we aim to develop their skills and prepare them for a successful future, recognizing the youth as the future of our country.

ii. *Supporting Akshaya Patra Foundation: Providing Food for Children in Need:* We have extended our support to the Akshaya Patra Foundation by donating towards the purchase of machinery. This donation aims to help the foundation serve nutritious meals to children in need, ensuring they have access to food and supporting their overall development and well-being.

iii. *Community Welfare: Providing Access to Clean Water and Water Purification Plant for Rural Communities:* In Kazipally village, we are constructing a water tank to provide comfort to the residents during the summer months, ensuring they have access to clean and safe water for drinking and utility, thus alleviating the hardships caused by water scarcity. Further, we have established a water purification plant to provide pure and safe drinking water in one village located at Gudem Madavaram, Krishna District, Andhra Pradesh. This initiative aims to improve the health and well-being of the communities by addressing the challenge of waterborne diseases.

iv. *Infrastructure Development: Building Canals for Water Provision:* We are also committed to improving the infrastructure in rural areas. We have undertaken the construction of a canal in a village to ensure the provision of water for irrigation and daily needs, thereby enhancing the quality of life for the villagers.

**Property**

Our Registered Office is located at D.12, Phase-1, IDA Jeedimetla, Hyderabad, Telangana-500055, India. Our Registered Office has been leased to us for a period of 2 years pursuant to a lease deed dated April 16, 2024. Our Corporate Office is located at 10th Floor, PNR High Nest, Hydernagar, KPHB Colony, Hyderabad, Telangana - 500085, India, and is owned by us.

As on the date of this Prospectus, the following table sets forth the details of our manufacturing facilities:

| Sr. No. | Manufacturing Facility | Address | Leased/Owned | Name of the lessor | Lease Term | Date of lease deed | Whether any related party transactions have taken place with respect to the lease* |
|---|---|---|---|---|---|---|---|
| 1. | SGL Unit | Survey no. 42A, situated at Alinagar, Chetlapotharam village, under Gaddapotharam panchayat, Jinnaram mandal, Sangareddy District -502 319 Hyderabad, Telangana | Leased | M/s. S2 Engineering Services | 8 years | June 11, 2021 | Yes |
| 2. | S2 Unit 1 | 53/4, Narsapur Road, Bahadurpally, Qutubullapur, Medchal-Malkajgiri – 500 043, Hyderabad, Telangana | Leased | M/s. S2 Engineering Equipment | 5 years | February 23, 2022 | Yes |
| 3. | S2 Unit 2 | Plot number 1, Apuroopa Township, Jeedimetla, Hyderabad – 55, Telangana | Leased | Thermal Systems (Hyderabad) Private Limited | 1year | May 31, 2024 | No |
| 4. | S2 Unit 3 | Shed number D-29, IDA Jeedimetla, Phase 5, Jeedimetla, Qutubullapur, Medchal-Malkajgiri – 500 055, Hyderabad, Telangana. | Leased | Accurate Engineers | 3 years | November 2, 2022 | No |
| 5. | S2 Unit 4 | 35/A SVCIE, Phase-I IDA, Jeedimetla, Qutubullapur, Medchal-Malkajgiri – 500 055, Hyderabad, Telangana | Leased | M/s. S2 Engineering Services | 11 months | December 17, 2024 | Yes |
| 6. | S2 Unit 5[#] | Survey No. 42/A1/1, situated at Alinagar H/o Chetlapotharam | Leased | M/s. Excel Wovensacks Private Limited | 5 years | February 29, 2024 | No |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | village under Gram Panchayat Gaddapotharam Village, Jinnaram Mandal, Sangareddy District- 502 319 Hyderabad, Telangana | | | | | |
| 7. | SFPL Unit | Sy.No.364/1,364/2, 365, Shivampet, Nawabpet, Medak Hyderabad – 502 313, Telangana | Owned | | - | - | |
| 8. | CPK Unit 1 | Plot No.46/A and A33 Part, Phase-I, IDA, Jeedimetla Village Quthbullapur Mandal, Medchal.-Malkajgiri District – 500055, Hyderabad, Telangana | Leased | C.P.K. Engineers Private Limited | 3 years | July 12, 2024 | Yes |
| 9. | CPK Unit 2 | Plot No.33/A, Phase-II, IDA, Jeedimetla Village, Quthbullapur Mandal, Medchal.-Malkajgiri District, 500055, Hyderabad, Telangana | Leased | Universal Engineers | 3 years | July 12, 2024 | Yes |

[#] *This facility is presently under construction.*

*Further, as of September 30, 2024, we had four sales and service offices located in Vadodara, Gujarat, Ankleshwar, Gujarat, Mumbai, Maharashtra and Vishakhapatnam, Andhra Pradesh.*

** For further details in relation to these transactions, see, "Summary of the Offer Document – Summary of Related Party Transactions" and "Restated Consolidated Financial Information – Note 35 – Related party disclosures" on pages 30 and 410.*