

# INITIATING COVERAGE JNK INDIA LIMITED

**APRIL 2025**



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**JNK India Ltd. | BUY | TP: Rs470 | Upside: 42%****Reforming to fire**
**MONARCH**  
 NETWORK CAPITAL

We initiate coverage on JNK India Ltd. (JNK) with a Buy and TP of Rs.470 (~42% upside). An established track record at most domestic refineries, approvals at large licensors, technical expertise and track record of the parent JNK Global and a one stop shop product portfolio, JNK India is constantly evolving with execution of larger projects & addition of new global licensors in new geographies like the US. Further, our ground checks indicate that the projects announced by domestic refiners, especially in petrochemicals, along with the huge opportunities in the global market, are likely to drive robust growth in order booking. A robust order book that secures strong growth for FY26, new set of order bookings which will set the growth path for FY27 & FY28, improving margins and return ratios will all drive re-rating in JNK India.

- Preferred among competition; enough approvals and adding more:** Apart from its best in industry technical expertise, JNK has a solid track record in domestic markets being approved by 70% of refining companies. It also has the advantage of one stop shop, being one of 3 players in India which manufactures all heating equipment and waste gas handling systems. Further, with scale up of turnover, JNK India is individually classifying for large projects and adding new global licensors like Lummus (Reliance project) and KBR (USA regeneration project) to approved list of licensors like L&T, EIL, etc. JNK has also won repeat order from IOCL and refineries in Mexico, Nigeria. Competition in domestic markets like BHEL does not cater to all products and is more focused on PSU orders, which further opens opportunities for JNK. Additionally, there is the advantage of technical support from parent JNK Global.
- Strong demand tailwinds in domestic and overseas markets:** While the refining capacity expansion in domestic and overseas markets have been sluggish due to structural changes in global supply chain and rising crude oil price along with adoption of CNG, EV, large expansion capex is lined up for petrochemical capacities for the next 5years driven by import substitution, low per capita consumption and rising demand from packaging, plastics and construction products. Our ground level checks indicate that the announced projects of IOCL, BPCL, Petronet and ONGC over next 6years can alone drive an annual demand of 2x JNK's FY25E revenue, if JNK just retains its market share and the projects get executed in time. There are several overseas projects expected in regions like Middle East, Russia, Africa and the US which can meaningfully augment the order book for the company.
- Order book secures growth for FY26; financials to drastically improve:** As of 31<sup>st</sup> Dec,'24, JNK had an order book of Rs12.3bn which easily secures strong growth for FY26, and new order booking will determine growth for FY27/ FY28. This business has high asset turnover and low capex requirement, which along with the recent equity raise from IPO, should preserve the net cash balance sheet and lead to improvement of return ratios with rising turnover. Margins should also improve with the absence of ESOP expenses, absorption of high employees and direct costs. The change in revenue recognition policy can further stabilize margins across quarters. We estimate a 21%/12%/ 19% CAGR in Rev/EBITDA/PAT over FY24-27E based on the order book, demand drivers and margin expansion levers.
- Valuation & Risks:** We believe that the high growth prospects, margin expansion and new order bookings will trigger a re-rating for JNK India. Therefore, we value JNK at 25x (30% discount to valuation of Thermax) FY27 PAT to arrive at TP of Rs470 with 42% upside and BUY rating. At CMP of Rs331, JNK trades at an attractive valuation multiple of 20.8x/ 17.7x FY26E/ FY27E PE.

Target Price	470	<b>Key Data</b>	
		Bloomberg Code	JNKINDIA:IN
CMP*	331	Curr Shares O/S (mn)	55.6
		Diluted Shares O/S(mn)	55.6
Upside	42%	Mkt Cap (Rsbn/USDbn)	18.2/21.2
Price Performance (%)		52 Wk H / L (Rs)	895/265
	1M 6M 1YR	3M Average Vol.	72,000
JNKINDIA IN equity	10.2	-54.5	-52.5
Nifty	1.6	-9.2	1.4

Source: Bloomberg, ACE Equity, MNCL Research

**Shareholding pattern (%)**

	Dec-24	Sept-24	Jun-24	Apr-24
Promoter	67.80	67.98	67.97	67.97
Dils	18.5	18.7	18.5	9.5
Fils	3.1	3.4	3.5	4.6
Others	10.6	10.0	10.0	18.0

Source: BSE

**Why should you read this report?**

- Our ground level checks on the expected projects in refinery and petrochemical space for next 6years, both in domestic and global market and its implied demand for JNK India.

**Ground level checks show strong demand**

Capex – Rs bn	Over 6years	For Heating equipment
<b>Refinery</b>		
BPCL	350	12
IOCL	315	10
<b>Petrochemical</b>		
BPCL	750	125
IOCL	223	37
ONGC	660	110
Petronet	35	6
<b>Total</b>	<b>2333</b>	<b>299</b>
Apprx. Capex for waste gas handling (over 6 years)		15
Total - Heating equipment + Waste gas systems		314
Assuming 20% market share for JNK India		63
<b>Annual demand - Rs bn</b>		<b>10.5</b>

Source: MNCL Research estimates

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Y/E Mar (Rs mn)	Revenue	YoY (%)	EBITDA	EBITDA (%)	Adj PAT	YoY (%)	Adj EPS	RoE (%)	RoCE (%)	P/E (x)	EV/EBITDA (x)
FY22	2,964	115.2	538	18.2	360	118.5	7.5	66.0	44.5	NM	NM
FY23	4,073	37.4	695	17.1	466	29.4	9.7	47.9	29.9	NM	NM
FY24	4,802	17.9	993	20.7	626	34.5	12.9	39.4	26.7	47.8	30.4
FY25E	5,259	9.5	669	12.7	461	-26.5	8.3	12.8	9.3	40.0	23.1
FY26E	7,310	39.0	1,156	15.8	886	92.2	15.9	15.7	14.9	20.8	13.3
FY27E	8,406	15.0	1,380	16.4	1,041	17.6	18.7	16.0	15.3	17.7	10.8

Source: Company, MNCL Research estimates

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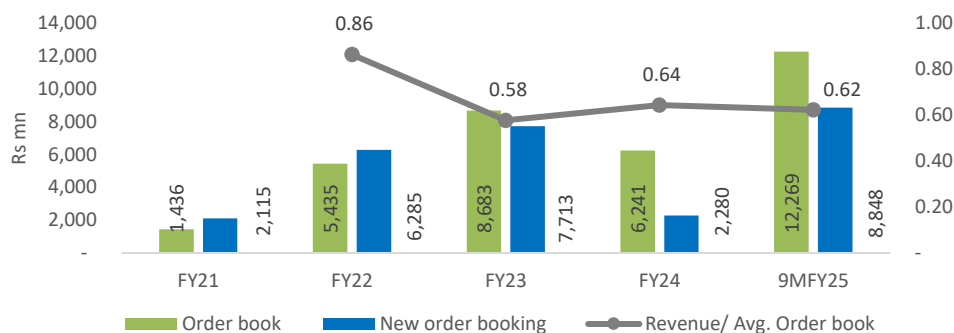
## Investment Thesis in Charts

**Exhibit 1: JNK is the largest one stop shop for all heating equipment solutions in the domestic oligopoly market**

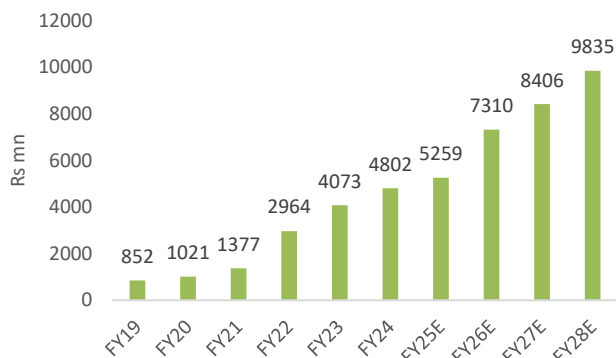
Company	Origin	Turnover – FY24 Rs mn	Net Worth FY24 – Rs mn	Process fired heater	Reformers	Cracking furnaces
JNK India	India	4,800	1,960	✓	✓	✓
Thermax	India	93,230	44,400	✓		
BHEL	India	2,38,930	2,44,380	✓		
Esteem Projects*	India	454	370	✓		
Heurtey Petrochem Solutions	France	NA	557	✓	✓	✓
TR Engineering	Spain	NA	NA	✓		
ITT Engineering India	Italy	919	140	✓	✓	✓

Source: Company, MNCL Research, \*FY23 nos for Esteem Projects

**Exhibit 2: Order book to sufficient to clock a strong growth in FY26E**

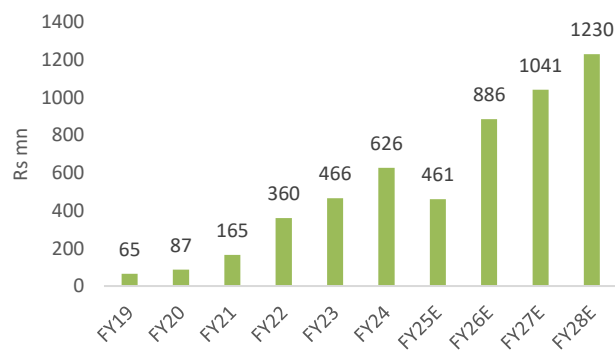


**Exhibit 3: We expect revenue to grow at 21% CAGR over FY24-27E**



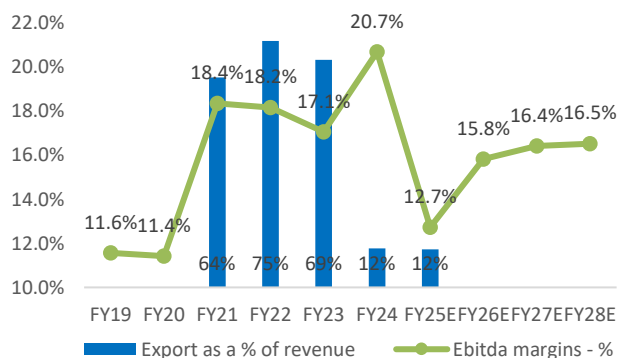
Source: Company, MNCL Research estimates

**Exhibit 4: We expect PAT to grow at 20% CAGR over FY24-27E**



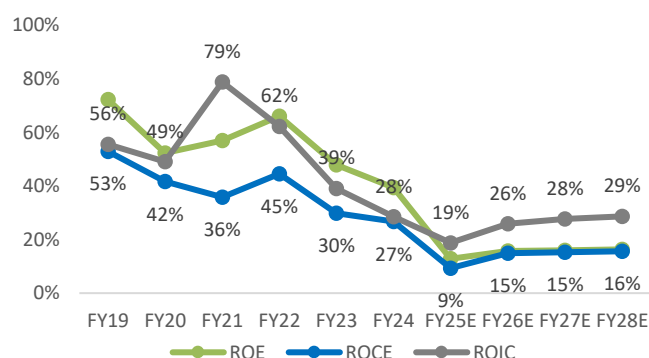
Source: Company, MNCL Research estimates

**Exhibit 5: Margin expansion driven by operational efficiency and no ESOP expense**



Source: Company, MNCL Research estimates

**Exhibit 6: Return ratios to remain above 15% (ROIC > 25%) with scale up in revenues**



Source: Company, MNCL Research estimates

## Approvals – enough; adding more; Competition – Highly preferred in an oligopoly market

JNK India (JNK) is a globally leading solution provider in the industrial heating equipment market, specialized in design, engineering, manufacturing and installation of process-fired heaters, reformers, and cracking furnaces used in refineries, petrochemical and fertilizer plants. It has also diversified into Waste Gas Handling (Flares and Incinerators). JNK India has a proprietary modularization facility in Mundra which is used to prefabricate and preassemble components in a controlled environment and then shipped from the Mundra port. The modularization unit has achieved a significant milestone by supplying some of the largest fully modularized heaters for the Mexico project. The Mundra facility spreads over 20,243 square meters with an installed capacity of 5,000 metric tonnes of fabrication and modularization per annum. Further, based on the requirement of projects, JNK takes certain facilities on a lease basis and once the project is completed the facility is shut down and all the equipment and machinery are shifted to other facilities for other projects.

JNK India doesn't bid for orders in Korea and JNK Global doesn't bid for orders in India.

**JNK Global, located in south Korea is the parent company to JNK India and holds 32.56% stake in JNK India.** Both, JNK India and JNK Global work in collaboration with each other for several projects which means that JNK Global provides technical expertise to JNK India which relies on the past track record and net worth of JNK global to participate and bid for some of the global orders. JNK India pays 3% royalty to JNK Global for every award directly won and executed by them. In this collaboration what works for JNK India is the past track record of the parent JNK Global in qualifying for orders outside India. JNK India has executed more than 17 projects for JNK Global's customers in the overseas markets till date and working on few more for refineries in the US and Malaysia.

### Approvals of JNK India – Enough and adding more to the track record

JNK India is approved at all the domestic refinery & petrochemical plants in India along with approved track record at leading domestic licensors like Engineers India and L&T. JNK India is among the top 5 in bidding done for heating and waste gas handling equipment. **A year back, 7 out of the 12 oil refining companies in India were customers of JNK India and the company has supplied or were in process of supplying heating equipment to 11 of the 24 operating oil refineries across India.** To this list, JNK has added one large customer, which is Reliance Industries with a large order in FY25. On the EPC side, JNK is an approved vendor at Engineers India Ltd, L&T, etc. It also added the global licensor, Lummus with the Reliance order.

JNK India has successfully handled many fired heater projects across diverse locations in India such as Paradip, Numaligarh, Barauni, Panipat, and Vadodara. This being their core expertise, has qualified them for larger projects. Other large orders for JNK India include:

1. Successful Commissioning of Crude Heaters and CCR Heaters for Dangote Refinery Heaters (Nigeria).
2. Commissioning of Methanol Reformer for Assam Petrochemical.
3. Crude Heaters and Atmospheric Residue Heaters for Pemex, Mexico.
4. Hydrogen generation and dispensing station at IOCL R&D centre, Faridabad.
5. **Mega order from Reliance Industries for gas cracker unit (GCU) de-bottlenecking at Dahej, Gujarat and for their Maharashtra plant.**

**JNK's ramp up on turnover and net worth along with buildup of past track record are other reasons to qualify for large projects in existing and new geographies.**

To be a part of the bidding process, JNK India requires to clear turnover criteria. E.g. To bid for a Rs10bn project, JNK India should have a turnover of at least Rs10bn. For such large projects, JNK India bids through its parent JNK Global. Additionally, the rising turnover of JNK India is helping JNK India to participate for large projects individually. Another major factor which works in favor of JNK India is the increasing past track record as it completes new projects in new geographies. JNK started its operations in 2010 in India and did few projects which were subcontracting work for L&T. By 2025, it has created a 14year past track record with several large EPC players. A few examples of this are as follows:

1. **Dangote Refinery, Nigeria:** – Supply and designing was done by JNK India in 2019 for 13 fire heaters. The installation was done by JNK Global. In 2021, JNK India received first independent purchase order from Dangote refinery for flare systems.
2. **Pemex Refinery, Mexico:** - Crude Heaters and Atmospheric Residue heaters order worth Rs4bn was received in 2022 through JNK Global. This designing and supply order was constructed in Mundra and then supplied to Mexico. In 2QFY25, JNK India won a 2<sup>nd</sup> order for engineering, procurement, construction, and testing services of a combined plant package for Pemex refinery in Dos Bocas, Mexico.
3. **JNK India has enjoyed repeat orders from certain large domestic customers like Rashtriya Chemical and Fertilizers Ltd., Tata Projects Ltd., Numaligarh refinery and IOCL.**

#### **Entering new geographies and adding track record with new licensers**

To capture a larger pie of the global demand for heating and waste gas handling equipment, JNK India is penetrating new markets like the USA and Malaysia and have also bid for large orders with the help of its parent. Based in India, gives JNK India distinct advantage in terms of material costs for manufacturing and custom engineering. JNK India has increased its workforce by 50% in last two years across all areas to prepare for the new upcoming opportunities. The following are the two orders that has helped JNK India penetrate new markets globally:

1. **USA - July'24 – Significant order from JNK Global to supply a fired heater and cracking furnace for CVR Energy,** alkylolation regeneration project in Oklahoma, USA. Delivery of the project dated 18<sup>th</sup> June'25. This order is the first one for both JNK Global and JNK India and getting accepted in the USA is a very significant milestone.
2. **Malaysia – Feb'25 - Significant order from JNK Global Co. Ltd., for Residual Engineering, Procurement, Fabrication, Supply, and transportation till FOB (Mundra Port), and assistance on erection, commissioning, and testing for Treating Heater, Isomerization Combined Feed Heater, and Product Fractionator Reboiler Heater for Pengerang Biorefinery Sdn. Bhd.'s Biorefinery project, Malaysia.**

**These projects have helped JNK India establish two goals:**

- A. Create its presence and track record in both the USA and Malaysia.
- B. Adding/ proving capabilities to new licensers like KBR for the USA project. KBR is a global EPC company having an employee base of 38,000 and operating in 34 countries across the globe specializing in projects in domain like industrial, intelligence, aerospace and defense, etc.

## Competition – Highly preferred in an oligopoly market

The process fired heaters market has high barriers to entry and there are only a handful of suppliers as the engineering of industrial process fired heaters requires a complex understanding of various oil products. If the operation of a process fired heater is interrupted even for one day, users could incur significant losses, which is why suppliers undergo a thorough selection process. Since energy efficiency is one of the key aspects of any refinery, petrochemical and fertilizers plant and that is determined by the efficiency of the process fired heaters. Hence, the selection of suppliers requires strong credentials and references and there are limited number of suppliers who can supply this critical equipment. **JNK's** capabilities in thermal designing, engineering, manufacturing, supplying, installing and commissioning process fired heaters, reformers and cracking furnaces to companies forming part of some highly regulated industries, acts as a significant entry barrier to new entrants.

## JNK's one stop shop advantage

**Exhibit 7: JNK is the largest one stop shop for all heating equipment solutions in the domestic oligopoly market**

Company	Origin	Turnover – FY24 Rs mn	Net Worth FY24 – Rs mn	Process fired heater	Reformers	Cracking furnaces
JNK India	India	4,800	1,960	✓	✓	✓
Thermax	India	93,230	44,400	✓		
BHEL	India	2,38,930	2,44,380	✓		
Esteem Projects*	India	454	370	✓		
Heurtey Petrochem Solutions	France	NA	557	✓	✓	✓
TR Engineering	Spain	NA	NA	✓		
ITT Engineering India	Italy	919	140	✓	✓	✓

Source: Company, MNCL Research, \*FY23 nos for Esteem Projects

JNK's strategy of one stop shop for all heating equipment is proving beneficial in expanding market share in the oligopoly Indian market.

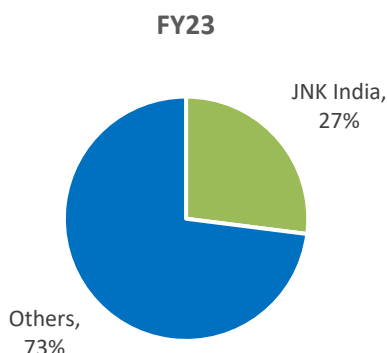
Among large players, JNK competes with Thermax, BHEL and Esteem Projects and among the small players, it competes with Heurtey Petrochem, TR Engineering and ITT Engineering India in the heating equipment space.

Thermax is not present in low capex fired heaters while JNK executes orders for both.

Among the large players, BHEL and Thermax are not present in cracking furnaces and reformers. Cracking furnaces are usually high-ticket size orders tendered to a single supplier where JNK stands to win large orders. Further, Thermax also outsources thermal and mechanical design while JNK does the complete process in-house. Also, BHEL is largely preferred for PSU projects while JNK is preferred at both PSU and private projects. These are some of the reasons why JNK stands to benefit from all corners and retain their high market share.

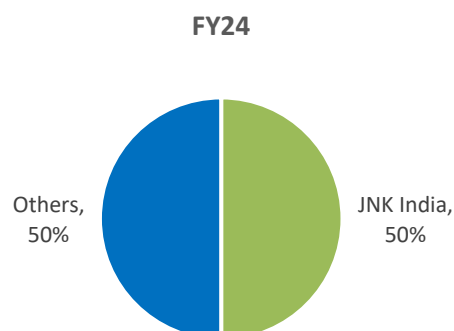
## JNK's has retained dominant market share in FY23 & FY24

**Exhibit 8: Out of Rs22bn of total industry wide order booking in FY23, 27% was taken by JNK India**



Source: Company, MNCL Research

**Exhibit 9: The market share increased to 50% out of the total industry wide order booking of Rs14bn in FY24**



Source: Company, MNCL Research

Others include Thermax, BHEL and Esteem projects among the large players and Heurtey Petrochem, ITT Engineering and TR Engineering among the small players.

**In FY23, JNK was the largest player in India for heating equipment in terms of the following:**

1. In terms of revenue from heating equipment, JNK clocked Rs4000mn in FY23 which was highest among its peers.
2. In terms of volume, JNK installed 25 units of heating equipment in FY23, the highest among its competitors in India.

However, the market share is subject to change due to several factors like bids from PSU or private refinery, profitability and customer requirement.

### Waste Gas Handling Systems – Closely competed market in India

**Exhibit 10: JNK retains substantial share in waste gas handling market**

Company	Origin	Flare systems	Incinerators
JNK India	India	✓	✓
Zeeco	USA	✓	✓
John Zink Hamworthy	USA	✓	✓
Airoil Flaregas	India	✓	
Ador Welding	India	✓	

Source: Company, MNCL Research

There are 5-8 players in the waste gas handling market in India but JNK, Zeeco and Airoil Flaregas are some of the prominent players in this space. The waste gas handling market is heavily dependent on past track record and therefore overseas players get a good share.

## Technology prowess and end-to-end project management leading to high global market share

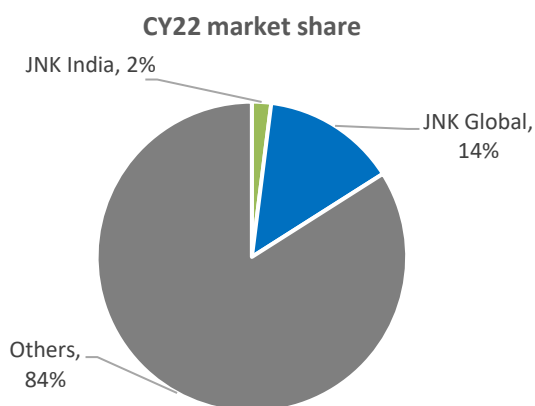
The heating equipment market is a closely competed market globally with approx. 12 companies, among which the major ones are shown in the table below. JNK Global is ranked amongst the top 3 industrial use process fired heater producers globally. Only the top 5 shown in the table below have the capabilities and track record to manufacture all three equipment.

**Exhibit 11: JNK Global is amongst the top 5 globally for industrial heating equipment**

Company	Origin	Process fired heater	Reformers	Cracking furnaces
JNK Korea/ JNK Global	South Korea	✓	✓	✓
Furnace Engineering Inc.	Japan	✓	✓	✓
Furnace Improvement Services (FIS)	USA	✓	✓	✓
Heurtey Petrochem Solutions	France	✓	✓	✓
ITT S.p.A	Italy	✓	✓	✓
Tecnicas Reunidas (TR)	Spain	✓	✓	
Unit Birwelco	UK	✓		
Boustead International Heaters	UK	✓		
Born Heaters Inc.	USA	✓		

Source: Company, MNCL Research

**Exhibit 12: JNK India and JNK Global had a 16% market share globally in CY22 of the total order booking worth Rs70bn**



Source: Company, MNCL Research

Although the competition remains intense globally, JNK Global has retained its market share and remains the leading manufacturer of heating equipment for the following reasons:

1. **Large performance track record globally:** JNK Global, which has a performance record of approximately 350 cases including renovation and additional facilities, has maintained long-term business relationships with **domestic and international EPC companies such as Samsung Engineering, Daerim Industrial, Hyundai Construction, and Toyo Engineering**, as well as **domestic business owners such as GS Caltex, Hyundai Oilbank, and Samsung Total**. Since its establishment, it has supplied more than 500 industrial heating furnaces to the Middle East, India, North America, South America, Africa, etc. for 20 years.

2. **Registered as technology partner with Oil refineries:** Major oil-producing countries such as the Middle East and India have their own vendor lists and receive equipment and materials for their projects from a limited number of companies, which requires a high level of technological prowess and performance record through technology testing. **JNK Global has been recognized for its technological prowess by being registered as a vendor for oil refineries in major industrial countries, including TAKREER, the largest oil refinery in the United Arab Emirates (UAE), and NIOEC, a subsidiary of NIORDC, the largest state-run oil refinery in Iran.**
  
3. **Responsible for entire process management from design to after-sales service:** In the industrial heating industry, **most companies subcontract manufacturing, construction, and after-sales service to external contractors. This inevitably leaves gaps in quality control.** However, JNK Heater is the only company that subcontracts only the manufacturing part to external contractors. This is because the company's FS team (field service team), which supervises the manufacturing, construction, and operation of products at the site, manages a thorough process management system from design to after-sales service. This FS team consists of veteran personnel from the industrial heating industry and is known to provide much faster resolutions than other companies when problems occur on-site, thereby satisfying customers.

**All the above listed factors combined gives us the confidence that JNK India along with its partnership with parent JNK Global will expand to new geographies and increase in market share within India and outside India.**

## Strong demand from domestic refineries and petrochemical projects

India's refining capacity witnessed no major growth post the Covid pandemic due to several reasons like low utilization levels during pandemic, surge in crude prices post the pandemic due to global supply chain issues, switching to Russian crude oil for better prices, introduction of windfall taxes on fuel exports, structural reduction in demand due to a switch to alternate fuels like CNG and EV. Several large brownfield refining projects got delayed due to these issues but now India needs new refining capacities as the current capacities are already operating at optimum utilization.

In the last decade, India's refining capacity increased by 42mntpa primarily to cater to growing domestic demand as exports remains at the same level. **Domestic demand for petroleum products grew by 4% CAGR in the past decade, driven by a 4% CAGR growth in transportation fuels, 2% CAGR for naphtha and others which include LPG and bitumen cumulatively grew by 4%. For the next 5 years, the transportation fuel demand is expected to slow down to 3% CAGR due to shift to EV, CNG and ethanol blending (target of 20% by 2026). In contrast the naphtha demand is expected to grow by a healthy 6-7% CAGR due to rising consumption of petrochemical products in India.**

India's per capita consumption of petrochemical is at 10-12 kg compared to global average of 30-35 kg, leaving considerable headroom for growth

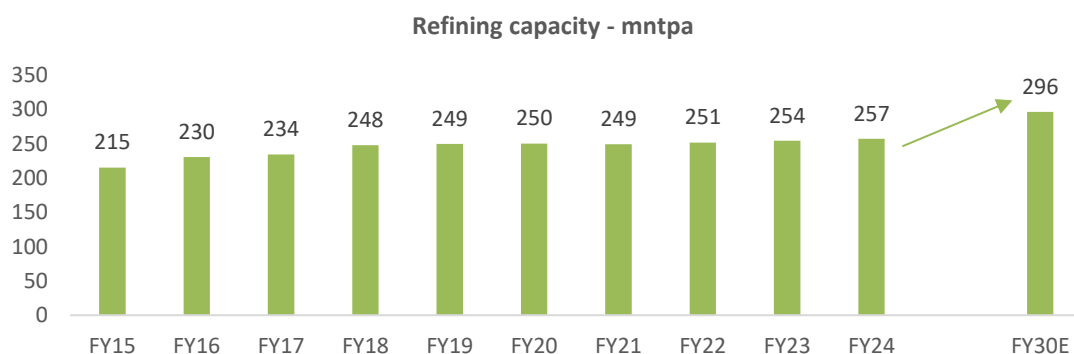
### Major drivers for petrochemical demand:

- Government of India's commitment to make India self-sufficient and globally competitive in petrochemical manufacturing as imports account for 20-30% of the total domestic demand. Investment under the Petroleum, Chemicals and Petrochemicals Investment Region policy (PCIPR), is expected to boost capacity addition in the petrochemical space.
- Continued growth in packaging, construction, plastics, fertilizers, synthetic fibers, solvents, additives and adhesives.

India's petrochemical capacity continues to be refinery integrated due to use of Naphtha as the feedstock. This contrasts with the Middle East and the US, where an abundant gas supply has led to standalone petrochemical plants. We don't expect this to happen in India due to unavailability of extra gas. Therefore, new refining capacities will be required to support petrochemical plants.

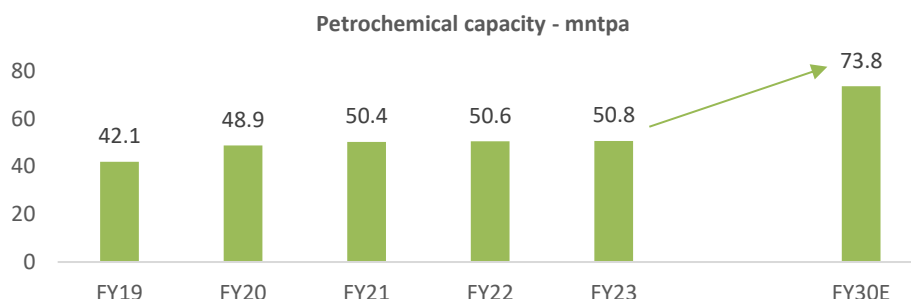
Due to the above listed factors, we expect India's refining capacity to reach close to 300mntpa by FY30 and the petrochemical capacity to reach 74mntpa by FY30. In the following section, we have done a ground level check on the upcoming refining and petrochemical capacities to validate this estimation.

### Exhibit 13: We expect refining capacities to expand quicker than in the last few years backed by demand for petrochemical plants



Source: Company, MNCL Research estimates

#### Exhibit 14: We expect large capital expenditure on the back of building petrochemical capacities



Source: Company, MNCL Research estimates

In a greenfield, all cracking furnace orders are allotted to a single manufacturer. So, if JNK India bags order for a greenfield project, it could be a very large order.

#### Capex requirement:

Around 10-20 process heaters are used in a typical refinery. Of all the process fired heaters, applications such as the crude distillation unit ("CDU"), vacuum distillation unit ("VDU"), delayed coker unit and catalytic reforming units are the most critical and the capex for these heaters is also high when compared with the other heater application areas in the refinery. Other applications for process fired heaters are hydrotreaters, hydrocrackers, fluid catalytic cracker ("FCC"), etc. Cracking furnaces and reformers are the most critical equipment used in a petrochemical plant. Process fired heaters and reformers are also used in the fertilizer plant. Reformers, the most critical equipment in a fertilizer plant, are used to convert the feedstock natural gas into ammonia. The exact capex for the heating equipment is as shown below:

#### Exhibit 15: Heating equipment are capital intensive and are the main process drivers for any Oil & gas company

Segments	Process Fired Heaters				Reformers		Cracking furnaces	
	High capex heaters*		Low capex heaters		Price per unit -		Price per unit -	
	Nos.	Price per unit - Rs mn	Nos.	Price per unit - Rs mn	Nos.	Rs mn	Nos.	Rs mn
Refinery - 15mntpa	4	2000	12	750	1	2000	0	0
Petrochemicals 1-1.5mntpa	0	0	4	500	1	3500	6	3500
Fertilizers 1mntpa	0	0	2	500	1	2000	0	0

Source: Company, MNCL Research

#### Exhibit 16: The requirement of Waste gas handling equipment is low in quantity but equally vital

Segments	Flares		Incinerators	
	Price per unit -		Price per unit -	
	Nos.	Rs mn	Nos.	Rs mn
Refinery - 15mntpa	1	2000	1	500
Petrochemicals 1-1.5mntpa	1	1000	0	0
Fertilizers 1mntpa	1	500	0	0

Source: Company, MNCL Research

**As a thumb rule, 3.3% of the capex of a refinery, 16.6% of the capex of a petrochemical plant, 6.2% of the capex of fertilizer plants are utilized in sourcing heating equipment.**

In the next section, we have done ground level checks on which are the actual projects which have started capex spend wrt. land allocation and prefeasibility studies and are very well expected to be executed in the next 5years, contributing to the demand for both heating equipment and waste gas handling systems.

## Ground level checks: Large capex planned for petrochemical plants

### 1. Bharat Petroleum Corp. Ltd. (BPCL)

#### A. Andhra Pradesh Refinery - Greenfield

**Capacity:** 9mntpa refining and 4mnt petrochemical.

**Capex:** Rs950bn

**Timeline:** 4years from final investment decision

**Status:** Board has approved Rs6.1bn towards pre-project activities, including land identification, feasibility studies and environmental assessment.

#### Capex for refineries and petrochemical plants

**Total capex planned:** Rs750bn

**Total capex committed out of planned:** Rs540bn

**Target:** BPCL wants to reach 2.9mntpa of petchem capacity or at least 8% product portfolio share by 2029.

#### B. BPCL Bina – Ethylene Cracker Project and downstream petrochemical plants

**Capex:** Rs500bn

**Commissioning Date:** 2028

**Capacity:** 2.2mntpa

**Key products:** HDPE, LLDPE, Polypropylene

**Status:** Technology licenses onboard for all critical packages, detailed engineering completed, financial (loan facility) closure achieved.

#### C. Kochi refinery – Polypropylene project

**Capex:** Rs50bn

**Commissioning Date:** 2027

**Capacity:** 400ktpa

**Key products:** Polypropylene

**Other comments:** Opportunistic expansion of PDPP in Kochi at later stage.

#### D. Expansion of Bina refinery by 3.2mntpa underway from 7.8mntpa to 11mntpa

**BPCL's Total Capex outlay:**

**FY26: Rs190bn & FY27: Rs250bn**

**5year capex plan: Rs1500bn**

## 2. Indian Oil Corp. Ltd. (IOCL)

**Location:** Paradip

**Product:** PX, PTA

**Capex:** Rs138bn

**Other Petrochemical projects:** Barauni, Gujarat & Panipat.

**Capex:** Barauni – Rs19.2bn, Panipat – Rs32.5bn, Gujarat – Rs33.1bn

### Exhibit 17: IOCL's Director – Finance Anuj Jain expects India's petchem industry to grow at a CAGR of 11-12% as explained in a recent conference call

<b>Amit Murarka:</b>	Sure. Also, on pet-chem side, I think some discussion has already happened. But just checking like given that there is so much of a drag in the spreads that you are seeing for quite some time and it seems more structural now, have you given any thought when you are evaluating pet-chem expansions in your new refineries? What kind of assumptions you're doing like taking when you build in IRR for such projects? I just wanted to understand that as well.
<b>Anuj Jain:</b>	See, we understand that pet-chem margin is a cyclical trend, okay? But one thing is for sure that there's a huge demand in India. A lot of imports are happening in India. Pet-chem sector is expected to grow by 11% to 12% per annum, okay? Today, it is \$51 billion. In '21, it will become double, \$200 billion in '27. And by 2040, it is expected to touch \$400 billion. So, there's a huge potential of petrochemicals in the country. Lot of imports are happening. So, definitely, we are investing a lot of our CAPEX in pet-chem cycle, and we hope that there may be some cycles where the earnings will come down. But definitely, from time to time in the past, we have seen we get reasonably good margins in pet-chem. So, this is a long-term strategy of the company.

Source: Company, MNCL Research estimates

### Greenfield Project in Nagapattinam

IOCL in JV with Chennai petroleum Corp. Ltd. (75%:25%) working on a 9mntpa refinery in Nagapattinam, Tamil Nadu with a capex of Rs315bn excluding land cost.

**Total capex expected in 5years at IOCL: Rs538bn**

## 3. ONGC

Aims to spend Rs1lakhcrore in 2 projects to scale up the petrochemical capacity from 3mntpa to 8.5 - 9 mntpa by 2030. This expansion will be segregated into two projects one through Opal – (ONGC Petro additions Ltd.) and another through MRPL (Mangalore refinery and petroleum Ltd.)

**Total capex expected in 5years at ONGC – Rs1000bn**

#### 4. Petronet LNG

#### Exhibit 18: Snapshot from the conference call of Petronet indicating that they should finalize the vendors for equipment shortly



**PETRONET  
LNG  
LIMITED**

**Mayank Maheshwari:** Thank you for the call, sir. Sir, my first question was on petrochemicals. In terms of the progress, can you just talk to us about where we are on the progress, what has been done, what's going through in fiscal '26 for you? And the second question was related to the Dahej. You talked about 40%, 50% utilization rate. So, in your time frame over the next three to four years, how do you see the capacity mix between spot versus contracted for Dahej eventually panning out?

**Vinod Kumar Mishra:** Your question is regarding petrochemicals, so, as you know that we are already going on and most of the things have been finalized in terms of long lead items. We are in the process of placing orders for petrochemicals, maybe large extending items will be ordered right now, but it takes time to get those items because it takes some time. But we shall be ordering this. We have already finalized and given it to our PMC, Engineers India limited. We are now doing the tendering for placing of the orders. So as far as the Capex is concerned, as I said, we expect INR 3,000 crore to INR 3,500 crore of Capex next year for petrochemical complex. As you know that we are also tying up with the vendors and we are in the process already, we have invited a consultant who is doing this job. We shall be doing the financial closure for financing of this project. As we have already told you earlier that it will be 70-30 debt mix. So, probably this will be finalized within the next three-four months. And thereafter, we shall be ready for any kind of Capex. But initially as you know that Capex will be hardly 15% to 20% the first year, FY 25-26. And then it may ramp up to 30%. And again, next year to 35%. Like that, it will be there. So, we expect that next year, there should be Capex of around INR 3,000 crore to INR 3,500 crore for this Petchem project. We shall be going in a big way very shortly because we have already made the preparations, and as soon as the orders are placed, then we shall be going to get the agreements. And thereafter, we shall be applying the contractors to start this work.

Source: Company, MNCL Research estimates

Rs35bn in FY26 – petrochemical expansions.

**Total capex at Petronet: Rs35bn**

#### 5. Haldia Petrochem - Greenfield

**Location: South India**

**Capex: Rs800bn**

**Capacity: 3.5mntpa**

**Total capex announced by the above 4 Oil & gas companies (excluding Haldi Petrochem): Rs3073. This capex no. does not include several other projects in discussion like Haldia Petrochemicals, Reliance Industries and some more by the PSU companies as we don't have an accurate status of the projects as on date. These projects once active can lead to incremental demand for heating equipment over and above the Rs3073bn calculated above.**

**Exhibit 19: We expect Rs10.5bn worth of annual demand for JNK India from domestic markets**

Capex - Rsbn	Total - over 6years (announced)	Share for Heating equipment
<b>Refinery</b>		
BPCL	350	12
IOCL	315	10
ONGC	-	-
Petronet	-	-
<b>Petrochemical</b>		
BPCL	750	125
IOCL	223	37
ONGC	660	110
Petronet	35	6
<b>Total</b>	<b>2,333</b>	<b>299</b>
<b>Apprx. Capex for waste gas handling (over 6 years)</b>		<b>15</b>
<b>Total - Heating equipment + Waste gas systems</b>		<b>314</b>
<b>Assuming 20% market share for JNK India</b>		<b>63</b>
<b>Annual demand - Rs bn</b>		<b>10.5</b>

Source: MNCL Research estimates, capex no streamlined as per guidance in JNK India's DRHP.

P.S: Cancellation or indefinite delay in any of the above projects can materially impact the domestic demand for JNK India. Companies and projects unaccounted in the above table, within the Oil and fertilizer industry can materially add to the domestic demand for JNK India.

## Exports – Huge Sea of opportunities; JNK constantly expanding its presence

### Global Demand drivers for Refineries

1. Aviation and road transportation
2. Rapid industrialization and urbanization
3. Exponential increase in population in Asian countries as Asia has 43% of World's refinery capacity.

### Global Demand drivers for the petrochemical industry:

1. Plastics
2. Fertilizers
3. Synthetic fibers
4. Solvents, additives, adhesives, and pharmaceuticals.

**Major capex countries for refinery capacities:** Asia – 43%; North America 26% and Europe 21%

**Global refining capacity in the last decade 2011 to 2021 has grown by a mere 0.8% CAGR from 95mbpd to 101.9mbpd. With global unrest continuing and rather increasing due to the tariff imposed by President Trump, we expect a slow scale up in refining capacities globally. There is a long list of new refining capacities expected to be commissioned over the next 5 years, compiled by Frost and Sullivan. Out of the total 64 refineries expected to be commissioned in the 20 countries of interest by CY2030, we have shown the relevant projects in the table below:**

**Exhibit 20: Large capex is expected globally in relevant countries like Russia, Nigeria, South Korea, etc.**

Name of the Refinery	Country	Installed Capacity BPD	Installed Capacity MMTPA	Commissioning Year
Shaheen project in Ulsan (Integrated Refinery - Petrochemical Plant)	South Korea	63,530	3.2	CY2026
<b>South Korea Total</b>		<b>63,530</b>	<b>3.2</b>	
Thailoil refinery in Sriracha	Thailand	120,000	6.0	CY2025
<b>Thailand Total</b>		<b>120,000</b>	<b>6.0</b>	
Balikpapan refinery upgradation	Indonesia	100,000	5.0	CY2024
Cilacap Refinery Upgradation	Indonesia	52,000	2.6	CY2026
<b>Indonesia Total</b>		<b>152,000</b>	<b>7.7</b>	
Manila Refinery	Philippines	400,000	20.1	CY2027
<b>Philippines Total</b>		<b>400,000</b>	<b>20.1</b>	
Dung Quat refinery (upgrade)	Vietnam	22,000	1.1	CY2025
<b>Vietnam Total</b>		<b>22,000</b>	<b>1.1</b>	
Bandar Abbas (Shahid Qassem Soleimani petrorefinery)	Iran	300,000	15.1	CY2027
Morvarid Makran Refinery	Iran	300,000	15.1	CY2027
Kermanshah refinery unit	Iran	50,000	2.5	CY2025
Star refinery expansion	Iran	90,000	4.5	CY2024
Lavan in the Persian Gulf	Iran	150,000	7.6	CY2026
Star refinery	Iran	300,000	15.1	CY2027
Persian Gulf's Qeshm island	Iran	70,000	3.5	CY2025
Anahita Refinery	Iran	150,000	7.6	CY2030
<b>Iran Total</b>		<b>1,410,000</b>	<b>71.0</b>	
Southeastern Maysan Governorate	Iraq	50,000	2.5	CY2028
Nineveh Governorate	Iraq	70,000	3.5	CY2028
Southern Basra city	Iraq	30,000	1.5	CY2028
Southern Dhi Qar Governorate	Iraq	50,000	2.5	CY2028
Unit in Wasit in East Iraq	Iraq	100,000	5.0	CY2028
Unit in Muthanna in South Iraq	Iraq	70,000	3.5	CY2028
Western Alanbar Governorate	Iraq	70,000	3.5	CY2028
Upgradation of Haditha refinery	Iraq	20,000	1.0	CY2024
Baiji complex, Rehab	Iraq	210,000	10.6	CY2025
Upgrade Qayyarah refinery	Iraq	70,000	3.5	CY2025
Refinery in the Dhi Qar province	Iraq	100,000	5.0	CY2026
Zubair oil field (new plant)	Iraq	300,000	15.1	CY2025
Southern Iraqi town of Nassiriya	Iraq	150,000	7.6	CY2027
<b>Iraq Total</b>		<b>1,290,000</b>	<b>65.0</b>	
Fergana Refinery Modernisation	Uzbekistan	109,000	5.5	CY2024
Karaoul Bazar - BOR's condensate refinery	Uzbekistan	50,000	2.5	CY2025
<b>Uzbekistan Total</b>		<b>159,000</b>	<b>8.0</b>	
Atyrau refinery	Kazakhstan	119,000	6.0	CY2024
Shymkent oil refinery	Kazakhstan	119,000	6.0	CY2029
<b>Kazakhstan Total</b>		<b>238,000</b>	<b>12.0</b>	
Saudi Aramco and SABIC Yanbu	Saudi Arabia	400,000	20.1	CY2025
Jubail Refinery Project	Saudi Arabia	400,000	20.1	CY2027
<b>Saudi Arabia Total</b>		<b>800,000</b>	<b>40.3</b>	
Duqm CBH	Oman	300,000	15.1	CY2024
<b>Oman Total</b>		<b>300,000</b>	<b>15.1</b>	
Dangote Refinery	Nigeria	650,000	32.7	CY2024
Waltersmith Refinery	Nigeria	50,000	2.5	CY2025
BUA Refinery	Nigeria	200,000	10.1	CY2026
Tongjei Island Refinery	Nigeria	400,000	20.1	CY2028
<b>Nigeria Total</b>		<b>1,300,000</b>	<b>65.5</b>	

Source: Company, Frost & Sullivan

**Exhibit 21: Several projects in JNK Global's target geographies like Mexico and Russia**

Cabinda Refinery	Angola	60,000	3.0	CY2024
Soyo	Angola	100,000	5.0	CY2024
Lobito Refinery	Angola	200,000	10.1	CY2025
<b>Angola Total</b>		<b>360,000</b>	<b>18.1</b>	
Hassi Messaoud III refinery	Algeria	112,000	5.6	CY2024
Tiaret Refinery	Algeria	100,000	5.0	CY2030
<b>Algeria Total</b>		<b>212,000</b>	<b>10.7</b>	
Petroleum Hub	Ghana	900,000	45.3	CY2030
<b>Ghana Total</b>		<b>900,000</b>	<b>45.3</b>	
Assuit oil refinery upgrade	Egypt	56,000	2.8	CY2024
<b>Egypt Total</b>		<b>56,000</b>	<b>2.8</b>	
Sogara Upgrade	Gabon	19,000	1.0	CY2025
<b>Gabon Total</b>		<b>19,000</b>	<b>1.0</b>	
Olmecca Refinery	Mexico	340,000	12.2	CY2024
Olmecca Refinery	Mexico		4.9	CY2025
Soto La Marina	Mexico	60,000	3.0	CY2027
<b>Mexico Total</b>		<b>400,000</b>	<b>20.1</b>	
Heartland Refinery	Canada	188,000	9.5	CY2025
Edmonton Refinery II	Canada	167,000	8.4	CY2025
Dubose Refinery	Canada	200,000	10.1	CY2028
Kitimat Refinery	Canada	125,000	6.3	CY2030
<b>Canada Total</b>		<b>680,000</b>	<b>34.3</b>	

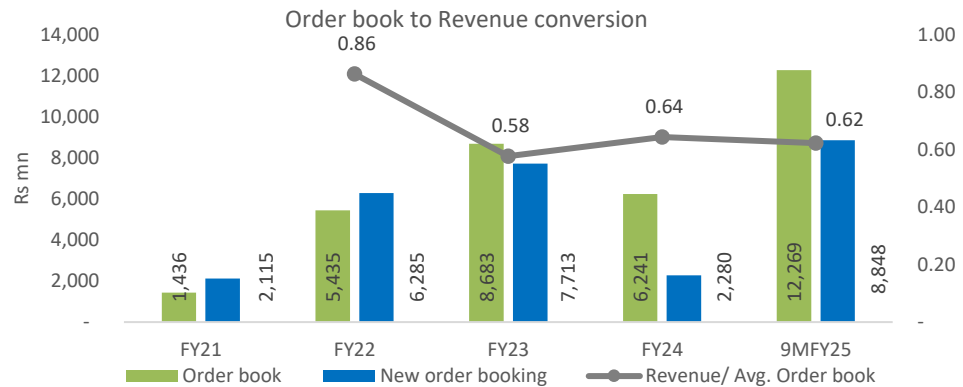
Ornsk Refinery Expansion	Russia	170,000	8.4	CY2028
Refinery as part of VNHK Complex	Russia	240,000	12.0	CY2029
Khabarovsk Refinery Phase 2	Russia	99,000	5.0	CY2027
Sakhalin Refinery	Russia	90,000	4.5	CY2028
Moscow Refinery Expansion	Russia	87,000	4.4	CY2025
Afipsky Refinery Upgrade	Russia	32,000	1.6	CY2026
Ryazan refinery Expansion	Russia	44,000	2.2	CY2027
Komsomolsk Refinery Expansion	Russia	72,000	3.7	CY2026
Perm Refinery Expansion	Russia	36,000	1.8	CY2026
Novoshakhtinsky Refinery Expansion	Russia	36,000	1.8	CY2024
Ilsky Refinery Expansion	Russia	30,000	1.5	CY2024
Yanos Refinery Upgrade	Russia	67,500	3.4	CY2024
<b>Russia Total</b>		<b>1,003,500</b>	<b>50.3</b>	
<b>Countries of Interest - Total</b>		<b>9,885,030</b>	<b>497.6</b>	

Source: Company, Frost & Sullivan

Some of the above projects have already been commissioned and some of them were on the bid list of JNK Global. The upcoming projects from the above list can lead to huge demand for JNK global and JNK India depending on their qualification. Therefore, we believe that few orders on the global side along with annual demand as shown in domestic market section, can very well set the growth path for JNK India.

## Strong order booking Momentum assures revenue visibility for FY26

### Exhibit 22: The order book to revenue conversion has average to 0.6x with rising order bookings



Source: Company, MNCL Research

If meaningful large orders are not received till Sept'25, we will have to downward revise our FY27 estimates.

**JNK India has a robust order book of Rs12,269mn (as of 14<sup>th</sup> Feb'25) which secures strong revenue growth (>30%) for FY26 with levers for margin expansion. FY27 onwards, the trajectory of revenue growth will be decided based on the new order bookings and timelines for their delivery.**

**Export Bid book:** Exports orders worth Rs40bn in Middle East, Africa, US and Eastern Europe

**Domestic bid book:** BPCL Bina and IOCL Paradip have finalized petrochemical project with the licensor, but JNK will take some time to get orders. There is Rs40bn worth of bid book in the domestic market and finalization expected in 1HFY26.

#### History of Order booking:

##### 1QFY25 – Order inflow of Rs7098mn in a single quarter

- Significant order from Indian Oil Corporation Limited (IOCL) for the supply of an incinerator package for its refinery unit at Barauni, Bihar
- First Major order from Reliance Industries Limited for a Gas Cracker Unit (GCU) for its debottlenecking project at Dahej, Gujarat and Nagothane, Maharashtra. **Delivery – Mar'26.**
- An order from Forbes Marshall for 200KWp RSPV Power plant in the field of Renewable Energy.
- An order from Energy Vault for 30T assembly for Gravity Energy Storage System.

##### 2QFY25 – Order inflow of Rs1684mn in a single quarter

- Secured an order from JNK Global Co. Ltd. to supply a fired heater and reformer furnace for KBR-CVR Energy, USA's alkylation regeneration project. **Delivery in 15months.**
- Awarded a contract with JNK Global Co. Ltd. for engineering, procurement, construction, and testing services of a combined plant package for Pemex refinery in Dos Bocas, Mexico.
- Strengthened our domestic presence with a significant order from Hindustan Petroleum Corporation Limited (HPCL) for the installation of an HP-TDAE unit on an LSTK basis at the HPCL Mumbai Refinery. **Delivery: 18-22months.**
- Received an order from Adani-Mundra Petrochem Ltd for the provision of a flare package for their green PVC project in Mundra, Gujarat.

##### 6<sup>th</sup> February 2025:

Significant order from JNK Global Co. Ltd., Korea, for Residual Engineering, Procurement, Fabrication, Supply, transportation and assistance for Erection, Commissioning, and testing of Treating Heater, Isomerization Combined Feed Heater, and Product Fractionator Reboiler Heater for Pengerang Biorefinery Sdn. Bhd.'s **Biorefinery project, Malaysia.** **Delivery: 9<sup>th</sup> April'26.**

## Optionality: Hydrogen refueling systems & CBG

On 4<sup>th</sup> January 4, 2022, the National Green Hydrogen Mission was approved by the Union Cabinet. Currently, India spends over \$160 billion of foreign exchange every year for energy imports. These imports are likely to double in the next 15 years. With this Mission, India will reduce energy imports and gain expertise in green hydrogen. The initial outlay for this Mission will be Rs197bn.

### ***Mission Sub-Components***

1. SIGHT Programme: Targeting domestic manufacturing of electrolyzers and production of Green Hydrogen.
2. Pilot projects: The Mission will also support pilot projects in emerging end-use sectors and production pathways.
3. R&D Projects: Public-Private Partnership framework for R&D (Strategic Hydrogen Innovation Partnership – SHIP) will be facilitated under the Mission.
5. Skill Development: A coordinated skill development programme will also be undertaken under the Mission.

### ***Mission Outcomes by 2030***

1. Development of green hydrogen production capacity of at least 5mnt with an associated renewable energy capacity addition of about 125 GW in the country.
2. Over Rs8tn in total investments.
3. Creation of over 6lakh jobs.
4. Cumulative reduction in fossil fuel imports over Rs1tn.

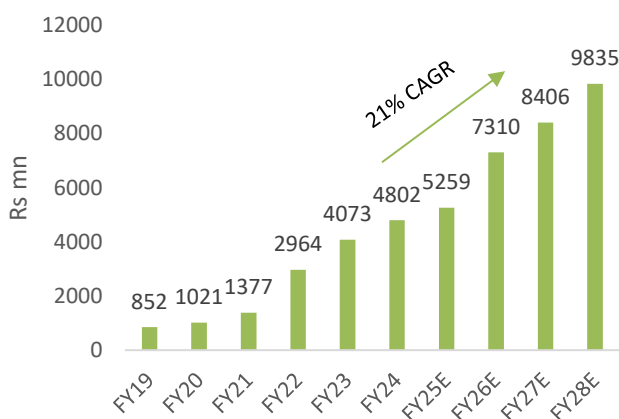
Some of the large energy players like Reliance Industries Limited, GAIL, NTPC, IOCL and L&T plan to foray into the green hydrogen space. IOCL is at the forefront of the green hydrogen revolution. It is planning to setup India's first green hydrogen unit for the Mathura refinery, which will be used to process crude oil.

Two hydrogen refueling stations have been established (one each at Indian Oil R&D Centre, Faridabad, and National Institute of Solar Energy, Gurugram). The refueling station at Indian Oil R&D Centre has been set up by JNK India. JNK global also has huge expertise in the green hydrogen space which can be leveraged but currently the economics of green hydrogen projects are not better than the conventional energy sources, which is leading to poor interest in scaling up green hydrogen systems. Similarly, JNK India is also expecting some order booking on the Compressed biogas (CBG) as a fuel for energy. But CBG is also undergoing issues in scalability due to the establishment of an efficient source. Therefore, scaling green hydrogen/ CBG as an energy source remains a future possibility and an optionality in our estimates.

## Financial Analysis – Expect material improvement

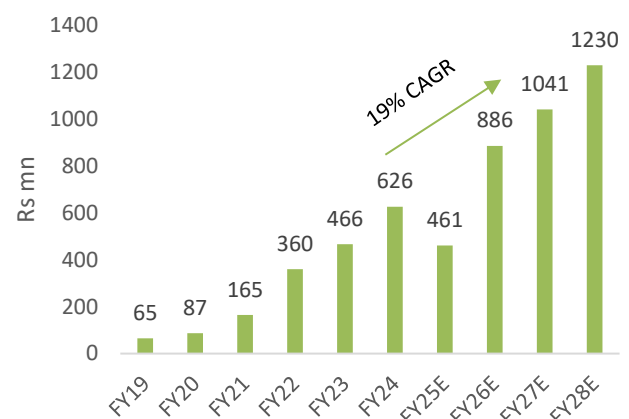
- A. FY26 secured, awaiting orders to determine growth trajectory:** The current order book of JNK as on 31<sup>st</sup> Dec'24 is Rs12.26bn, which is to be largely completed by Mar'26 with some projects slipping over to FY27. Therefore, we believe JNK is well set to grow exponentially in FY26 with the existing order book (including any delays). Beyond FY26, we believe that JNK needs at least Rs6bn worth of orders by Sept'25 or there will be risk to our FY27/ FY28 estimates. We estimate a 21%/12%/ 19% CAGR in Rev/EBITDA/PAT over FY24-27E based on the order book, demands drivers and margin expansion levers.

**Exhibit 23: Revenues to grow by ~21% CAGR over FY24-27E**



Source: MNCL Research estimates

**Exhibit 24: PAT to grow by ~19% CAGR over FY24-27E**



Source: MNCL Research estimates

- B. Margins to surge on normalization of cost structure:** Margins were impacted in FY25 due to various factors like increased direct cost, increase in no. of employees (scaling up for the increased order book) and expected Rs100mn of ESOP reserve expenses. We expect margins to scale up to 16-17% levels once all these factors are normalized with scale of revenues, starting FY26. Margins were also high in FY21-23 due to the high concentration of exports. Exports are high margin orders as compared to domestic orders.

**Exhibit 25: We expect margin expansion driven by no ESOP expense and normalizing of employee cost**



Source: Company, MNCL Research estimates

- C. Quarterly run-rate of margins heavily depends on the lifecycle of projects:** JNK's margin on quarterly basis has been a roller coaster rise mainly as the margins depend on which stage the project has reached thereby deciding the revenue recognition. The exhibit below explains the margin trajectory in the project lifecycle. JNK's quarterly margin trajectory is the combination of every project under execution and stage of these respective projects.

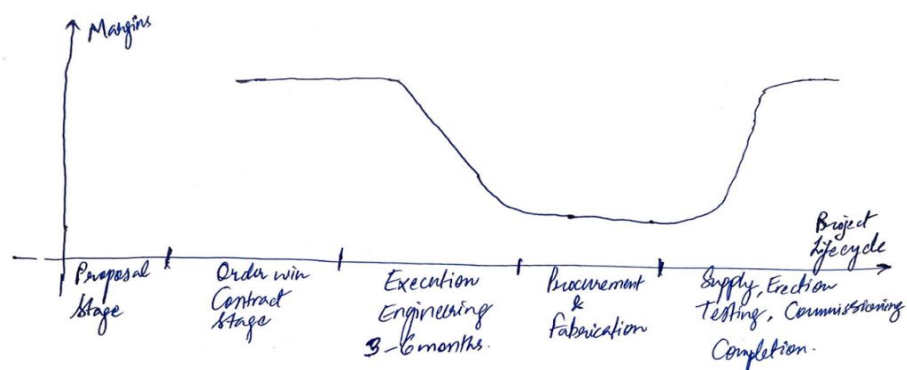
**Design and engineering** – Since JNK has in-house capability, there is no huge employee cost but billing to client is high which in turn leads to high margins in this stage of the project.

**Supply of bought items** – The procured items from external entities, are supplied at a cost which doesn't have a lot of room for margins. Therefore, at this stage the margins may be subdued. Similarly, supply of fabricated parts which is outsourced and has a huge cost will have low margins as the billing will not be huge.

**Supervision, installation, technical testing and commissioning** – An in-house team is employed (labor force) for couple of months and the installation bill to client is very high which lead to high margins.

**However, JNK is working on a change in the revenue recognition system which will be on a cost basis and can bring stability in margins across quarters.**

**Exhibit 26: Company margins are the function of individual project margins which vary according to their stage/ lifecycle of execution**

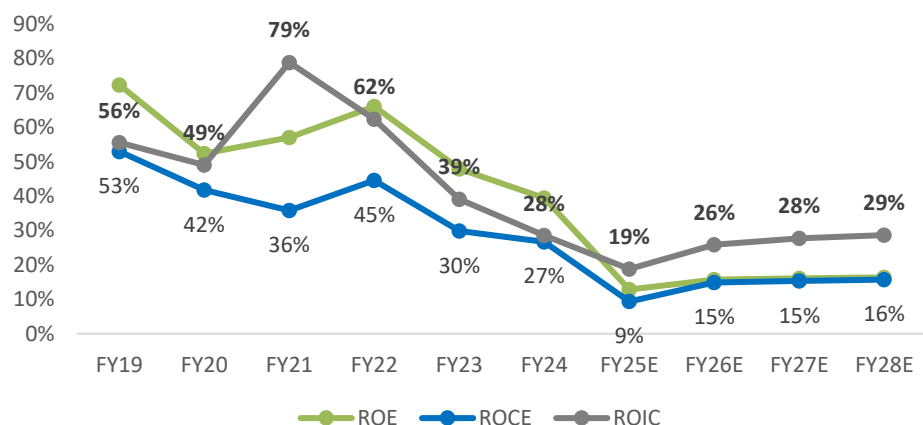


Source: Company, MNCL Research

**D. Return Ratios – to be maintained around 20% levels: ROIC to breach 25%**

JNK's business has very low capex requirements and high gross block turnover, which is why the scale up of revenue and margins is expected to improve its return ratios and bring it in the range of 15-17% on ROE/ROCE. Debt levels will remain negligible post the IPO fund raise as the company has non fund limits to finance the working capital requirement. Due to the cash on books, the ROIC is expected to remain higher than 25%.

**Exhibit 27: Expect return ratios to remain safely above 15% with an increase in utilization**



Source: Company, MNCL Research estimates; ROCE and ROIC is post-tax

## E. Cash conversion cycle -

Since last 3years, working capital was funded by internal accruals but going ahead the IPO money will help manage the working capital requirements.

**Phases of the working capital cycle:** Inventory days are based on the milestone-based dispatches of the prefabricated products. For the Reliance order, it's 45-50days but can stretch if the foundation work of the tower gets delayed especially at PSU refineries. During the first 6months of the project, payable days gradually increase and receivable days decrease depending on the milestones achieved. Payable days are 100days for PSU and the last 100days of the year have a lot of dispatches. During installation and commissioning, the payables and inventory decline and receivables increase.

A security deposit of 10% must be provided to the customer immediately upon receipt of purchase order. This is usually arranged through bank guarantees. JNK manages its working capital requirement through non-fund-based lines. Some of the projects like the Reliance order have 30% advance payment and JNK will require no additional working capital deployment for this huge project.

Receivable days for private projects are 120 days and for PSU projects, it is 20% higher. Most of the payments from clients happen based on milestones. Some of the milestones are Procurement of RM, Release of engineering drawings and various dispatches. 10% of the payment is received after completion of the projects and another 15% of the payment is received post issuance of the performance bank guarantee. 10% of the retention money is always paid 1year after the testing of project is completed.

Therefore, we expect that the cash conversion cycle will continue to stay at 120-130 days.

**Exhibit 28: An elongated design, assembling and commissioning process leads to a long cash conversion cycle**

no of days	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E
<b>Inventory days</b>	46	5	74	245	213	133	125	128	128	128
<b>Debtor days</b>	178	76	143	135	102	162	135	133	133	133
<b>Creditor days</b>	182	94	358	178	103	183	130	130	130	130
<b>Cash conversion cycle</b>	<b>42</b>	<b>-13</b>	<b>-140</b>	<b>203</b>	<b>212</b>	<b>113</b>	<b>130</b>	<b>131</b>	<b>131</b>	<b>131</b>

Source: Company, MNCL Research estimates

## Valuation – Undervalued @ 17.7x Mar’27 PE

Despite heavy dependence on the Oil&gas and fertilizer industry, our ground level checks indicate that the total addressable market is huge as compared to the revenue base of JNK and there is a long pipeline of projects both in domestic and overseas markets. Diversification into waste gas handling systems further broadens the offerings for JNK. This translates into 21%/12%/ 19% CAGR in Rev/EBITDA/PAT over FY24-27E.

While there is no listed pure play peer to JNK India in the domestic or overseas market, we have made a comparison with large players like Thermax and BHEL in the table below. We find that the expected performance of JNK India in the next 3years is very much competent and remarkable as compared to the large peers, but valuations remain subdued. **We believe that the upcoming high growth, margin expansion and new order bookings will drive the re-rating at JNK India. Therefore, we value JNK at 25x (30% discount to valuation of Thermax) FY27 PAT to arrive at TP of Rs470 with 42% upside and BUY rating. At CMP of Rs331, JNK trades at an attractive valuation multiple of 20.8x/ 17.7x FY26E/ FY27E PE.**

**Exhibit 29: Despite strong growth and expected margin and return ratio improvement, JNK remains undervalued**

	Mkt Cap (Rs mn)	CAGR % (FY24-FY27E)			EBITDA Margin (%)				P/E			
		Revenue	EBITDA	PAT	FY24	FY25E	FY26E	FY27E	FY24	FY25E	FY26E	FY27E
Thermax Ltd	3,83,916	15.0	23.1	16.7	8.3	8.7	9.6	10.2	56.2	57.3	44.5	35.1
Bharat Heavy Electricals Ltd	7,34,506	29.5	102.3	134.0	2.7	5.1	8.9	10.2	NM	NM	32.8	20.7
JNK India Ltd	18,591	20.9	12.0	19.0	20.7	12.7	15.8	16.4	47.8	40.0	20.8	17.7

	P/B				RoE				EV/EBITDA			
	FY24	FY25E	FY26E	FY27E	FY24	FY25E	FY26E	FY27E	FY24	FY25E	FY26E	FY27E
Thermax Ltd	8.6	7.5	6.6	5.8	15.5	14.4	16.4	18.6	63.7	41.1	32.2	26.2
Bharat Heavy Electricals Ltd	3.0	3.0	2.8	2.5	1.2	4.0	9.5	12.6	145.0	48.7	20.6	15.3
JNK India Ltd	15.3	3.5	3.1	2.6	39.5	12.8	15.7	16.0	30.4	23.1	13.3	10.8

Source: Company, Bloomberg, MNCL Research estimates

**Exhibit 30: Comfortable valuations, lucrative upside**

PE Ratio	Mar’27
EPS (Rs)	18.7
P/E (x)	25.0
Fair Value/share (Rs)	470
CMP	331
Upside	42%

Source: Company, MNCL Research estimates

### Scenario Analysis:

**Exhibit 31: Order booking and margins can lead to extreme possibilities for JNK**

Scenario Analysis	Bear	Base	Bull
Revenue CAGR - FY24-27E - %	17.8%	20.5%	22.4%
Margin - FY27 - %	16.0%	16.4%	17.1%
Order booking	Low	As per expectations	High
Ascribed multiple - x	22.0	25.0	28.0
Implied Target Price	378	470	570
CMP	331	331	331
Upside	14%	42%	72%

Source: Company, MNCL Research estimates

## Key risks to our thesis

1. **Major delay in project execution at PSU:** Any major delay in project execution from PSU refineries in terms of readiness of the site for equipment erection can impact both revenue recognition and payment completion. Heavy concentration of PSU orders in the order book may lead to elongation in the receivable days by 15-20%. Receivable days for PSU are usually 15-20% higher than private companies. We have already accounted for these PSU led small delays in our forecast.
2. **Major slowdown in capex by refineries across the globe:** Major slowdown or delay in new project announcement by refineries across the globe can lead to draw down in our revenue growth estimates and could also lead to de-rating of the valuation multiple. For the next 5years, our ground check indicates that there are enough projects to drive growth for JNK, but we will keep a close watch on the demand scenario. If meaningful large orders are not received till Sept'25, we will have to downward revise our FY27 estimates.
3. **Margins remain volatile on a quarterly basis but will iron out on an annual basis:** Due to the nature of business and the revenue recognition based on the milestones of the business, the margins will remain volatile on a quarterly basis, but our estimates are based on project completion i.e. an annual basis. However, the management is contemplating a revised revenue recognition policy based on the cost incurred and this can lead to more stable margins across the quarters.

## About The Company

JNK India (JNK) is a globally leading solution provider in the industrial heating equipment market, specialized in design, engineering, manufacturing and installation of process-fired heaters, reformers, and cracking furnaces used in refineries, petrochemical and fertilizer plants. It has also diversified into Waste Gas Handling (Flares and Incinerators). JNK India has a proprietary modularization facility in Mundra which is used to prefabricate and preassemble components in a controlled environment and then shipped from the Mundra port. The modularization unit has achieved a significant milestone by supplying some of the largest fully modularized heaters for the Mexico project. The Mundra facility spreads over 20,243 square meters with an installed capacity of 5,000 metric tonnes of fabrication and modularization per annum. Further, based on the requirement of projects, JNK takes certain facilities on a lease basis and once the project is completed the facility is shut down and all the equipment and machinery are shifted to other facilities for other projects.

JNK Global, located in south Korea is the parent company to JNK India and holds 32.56% stake in JNK India. Both, JNK India and JNK Global work in collaboration with each other for several projects which means that JNK Global provides technical expertise to JNK India which relies on the past track record and net worth of JNK global to participate and bid for global orders.

**Exhibit 32: Key processes like CDU, VDU, FCCU where fired heaters are used in refineries**



Source: Company, MNCL Research

### Details about the products:

**Process fired Heaters** – Fuel is heated in a combustion chamber of fired heater and its heat is transferred to fluid or gas to be heated (crude oil, etc.)

**Reformers** – Steam and a catalyst is used to convert the hydrocarbon (natural gas or naphtha) into synthetic gas (i.e. hydrogen and carbon monoxide) in a reformer. Syngas is a key building block to make several ranges of chemicals, including methanol, ammonia, and synthetic fuels.

**Cracking furnaces** – Process to break down large hydrocarbon molecules into small ones which can be used in variety of products like fuels, chemicals and plastics.

#### **Waste gas handling systems:**

##### **Flare systems:**

The flare system is a gas combustion device used in industrial plants such as petroleum refineries, chemical plants, natural gas processing plants etc. It basically released the heat and the pressure of the waste gas. Gas combustion is the process where in the presence of oxygen, the fuel gas releases all the extra heat and pressure.

##### **Incinerator systems:**

All sulphur recovery units (“SRUs”) in refineries have thermal incinerators to treat the tail gas effluent from the SRUs prior to emitting the waste gas to the atmosphere. The purpose of the thermal incinerator is to facilitate the oxidation of all the common reduced sulphur compounds (H<sub>2</sub>S, COS, CS<sub>2</sub> and sulphur vapor) to SO<sub>2</sub> prior to release to the atmosphere.

#### **Board of Directors – Decades of relevant experience**

**Arvind Kamath** is the Chairperson and Whole Time Director at JNK India. He is also the Promoter of the company. He has been associated with JNK India since August 16, 2010. He holds a bachelor’s degree in chemical engineering from the Mangalore University, Mangaluru, Karnataka. He was previously associated with Sulzer Pumps India Private Limited, Chetra Seals Private Limited, Mascot Flowtech Private Limited and Mascot Global Private Limited. He has an extensive experience in the capital equipment industry.

**Goutam Rampelli** is the Whole Time Director at JNK India. He is also the Promoter of the company. He has been associated with the company since August 31, 2015. He has successfully completed his bachelor’s degree in chemical engineering from the National Institute of Technology, Warangal, and completed his master’s degree in chemical engineering from the Indian Institute of Technology, Bombay. He was previously associated with Larsen and Toubro Limited and L&T Hydrocarbon Engineering Limited. He is also a member of Institute of Directors. He has an extensive experience in the fired heaters and reformer packages industry.

**Dipak Kacharulal Bharuka** is a Whole Time Director and Chief Executive Officer at JNK India. He is also the Promoter of the company. He has been associated with the company since March 14, 2011. He is also associated as a designated partner in NIAA Ventures LLP. He has successfully completed his master’s degree of engineering in Mechanical and Industrial (Machine Design Engineering) from University of Roorkee, Roorkee and Executive MBA from S.P. Jain Institute of Management & Research. He was previously associated with Larsen and Toubro Limited. He has an extensive experience in the fired heaters and reformer packages industry.

**Bang Hee Kim** is the Non-Executive Director at JNK India. He has been associated with the company since August 16, 2010. He has successfully completed his bachelor’s degree in science from the Yonsei University, South Korea. He was previously associated with DL E&C CO., Limited. He is also the member of Gas Safety Technology Deliberation Committee in Korea Gas Safety Corporation. He is also an adjunct professor at Yonsei University, South Korea. He has an extensive experience in the fired heaters and reformer packages industry.

**Balraj Kishor Namdeo** is an Independent Director at JNK India. He has been associated with the company since June 3, 2023. He holds a bachelor’s degree in engineering from the Bhopal University and a master’s degree in interdisciplinary programme of industrial management from the Indian Institute of Technology, Bombay. He has experience in the oil and gas industry and the petrochemical industry, was previously associated with Hindustan Petroleum Corporation Limited and Ratnagiri Refinery and Petrochemicals Limited.

**Sudha Bhushan** is an Independent Director at JNK India. She has been associated with the company since June 3, 2023. She has successfully cleared her examination for bachelor's degree in commerce from the University of Delhi. She is a fellow member of the Institute of Chartered Accountants of India and an associate member of the Institute of Company Secretaries of India. She is also a registered valuer (securities or financial assets) and an insolvency professional, registered with Insolvency and Bankruptcy Board of India. She has experience in finance and was previously associated with Deloitte Haskins & Sells and Deloitte Touche Tohmatsu India Private Limited.

**Raman Govind Rajan** is an Independent Director at JNK India. He has been associated with the company since June 3, 2023. He holds a bachelor's degree in chemical engineering from the Banaras Hindu University and a MBA from the University of Strathclyde, Glasgow, United Kingdom. He has experience in oil and gas, chemicals and fertilisers industry and was previously associated with Engineers India Limited, GAIL (India) Limited, Projects & Development India Limited, Rashtriya Chemical & Fertilisers Limited and The Fertilisers Association of India.

**Mohammad Habibulla** is an Independent Director at JNK India. He has been associated with the company since July 19, 2023. He holds a master's degree in chemical engineering from the Indian Institute of Technology, Kanpur. He has experience in hydrocarbon industry. He is currently the director of engineering with NPCC Engineering Private Limited and was previously associated with L&T - Chiyoda Limited, Larsen and Toubro Limited and L&T Hydrocarbon Engineering Limited.

## Financials

**Exhibit 33: Income Statement**

P&L - Y/E March (Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
<b>Revenues</b>	<b>852</b>	<b>1,021</b>	<b>1,377</b>	<b>2,964</b>	<b>4,073</b>	<b>4,802</b>	<b>5,259</b>	<b>7,310</b>	<b>8,406</b>
Materials cost	340	295	255	930	1,406	2,275	2,524	3,509	4,035
% of revenues	39.9	28.9	18.5	31.4	34.5	47.4	48.0	48.0	48.0
Employee cost	74	126	326	414	532	519	840	1,029	1,184
% of revenues	8.7	12.4	23.7	14.0	13.1	10.8	16.0	14.1	14.1
Others	340	483	544	1,081	1,440	1,015	1,225	1,615	1,807
% of revenues	39.9	47.3	39.5	36.5	35.4	21.1	23.3	22.1	21.5
<b>EBITDA</b>	<b>99</b>	<b>117</b>	<b>253</b>	<b>538</b>	<b>695</b>	<b>993</b>	<b>669</b>	<b>1,156</b>	<b>1,380</b>
<b>EBITDA margin (%)</b>	<b>11.6</b>	<b>11.4</b>	<b>18.4</b>	<b>18.2</b>	<b>17.1</b>	<b>20.7</b>	<b>12.7</b>	<b>15.8</b>	<b>16.4</b>
Depreciation & Amortisation	3	9	19	30	66	56	58	65	70
<b>EBIT</b>	<b>96</b>	<b>108</b>	<b>234</b>	<b>509</b>	<b>629</b>	<b>937</b>	<b>611</b>	<b>1,091</b>	<b>1,311</b>
Interest expenses	5	3	13	38	42	100	120	119	123
Other income	1	13	7	7	42	52	132	224	220
Exceptional items	-	(0)	(0)	-	-	-	-	-	-
<b>PBT</b>	<b>92</b>	<b>118</b>	<b>228</b>	<b>478</b>	<b>629</b>	<b>889</b>	<b>623</b>	<b>1,197</b>	<b>1,407</b>
Taxes	27	30	63	118	163	262	162	311	366
Effective tax rate (%)	29%	26%	28%	25%	26%	30%	26%	26%	26%
<b>PAT</b>	<b>65</b>	<b>87</b>	<b>165</b>	<b>360</b>	<b>466</b>	<b>626</b>	<b>461</b>	<b>886</b>	<b>1,041</b>
Minority/Associates	-	-	-	-	-	-	-	-	-
Extraordinary Items	-	-	-	-	-	-	-	-	-
<b>Reported PAT</b>	<b>65</b>	<b>87</b>	<b>165</b>	<b>360</b>	<b>466</b>	<b>626</b>	<b>461</b>	<b>886</b>	<b>1,041</b>
<b>Adjusted PAT</b>	<b>65</b>	<b>87</b>	<b>165</b>	<b>360</b>	<b>466</b>	<b>626</b>	<b>461</b>	<b>886</b>	<b>1,041</b>

**Exhibit 34: Key Ratios**

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
<b>Growth Ratio (%)</b>									
Revenue	234.7	19.8	34.9	115.2	37.4	17.9	9.5	39.0	15.0
EBITDA	156.5	18.2	116.9	113.0	29.0	43.0	(32.7)	72.8	19.4
Adjusted PAT	196.5	33.5	88.8	118.5	29.4	34.5	(26.5)	92.2	17.6
<b>Margin Ratios (%)</b>									
Gross	60.1	71.1	81.5	68.6	65.5	52.6	52.0	52.0	52.0
EBITDA	11.6	11.4	18.4	18.2	17.1	20.7	12.7	15.8	16.4
Adjusted PAT	7.7	8.5	12.0	12.1	11.4	13.0	8.8	12.1	12.4
<b>Return Ratios (%)</b>									
ROE	72.3	52.3	56.9	66.0	47.9	39.4	12.8	15.7	16.0
ROCE	52.9	41.7	35.8	44.5	29.9	26.7	9.3	14.9	15.3
ROIC	55.5	49.0	78.8	62.3	39.0	28.5	18.8	25.8	27.7
<b>Turnover Ratios (days)</b>									
Gross block turnover ratio (x)	NA	NA	NA	NA	63.9	30.8	23.1	24.5	23.9
Debtors	178	76	143	135	102	162	135	133	133
Inventory	46	5	74	245	213	133	125	128	128
Creditors	182	94	358	178	103	183	130	130	130
Cash conversion cycle	42	(13)	(140)	203	212	113	130	131	131
<b>Solvency Ratio (x)</b>									
Net debt-equity	(0.0)	(0.2)	(0.5)	(0.3)	(0.1)	0.1	(0.6)	(0.5)	(0.5)
Debt-equity	0.1	0.0	0.2	0.1	0.3	0.3	0.1	0.1	0.0
Interest coverage ratio	20.0	37.7	17.4	13.5	14.9	9.4	5.1	9.2	10.7
Gross debt/EBITDA	0.1	0.0	0.4	0.1	0.5	0.6	0.8	0.4	0.2
Current Ratio	1.3	1.7	1.5	1.3	1.6	1.5	2.7	2.8	3.0
<b>Per share Ratios (Rs)</b>									
Adjusted EPS	10.9	14.5	27.5	7.5	9.7	12.9	8.3	15.9	18.7
BVPS	20.5	35.1	61.4	15.0	25.5	40.4	94.0	108.3	125.2
CEPS	11.3	16.0	30.6	8.1	11.1	14.1	9.3	17.1	20.0
DPS	-	-	2.0	0.1	0.3	0.3	0.8	1.6	1.9
Dividend payout %	-	-	7	2	3	2	10	10	10
<b>Valuation (x)*</b>									
P/E (adjusted)	NM	NM	NM	NM	NM	47.8	40.0	20.8	17.7
P/BV	NM	NM	NM	NM	NM	15.3	3.5	3.1	2.6
EV/EBITDA	NM	NM	NM	NM	NM	30.4	23.1	13.3	10.8
Dividend yield %	NM	NM	NM	NM	NM	0.0	0.3	0.5	0.6

Source: Company, MNCL Research Estimates

**Exhibit 35: Balance Sheet**

Y/E March (Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
<b>Sources of Funds</b>									
Equity Share Capital	6	6	6	96	96	97	111	111	111
Reserves & surplus	117	204	362	626	1,128	1,857	5,117	5,914	6,851
Shareholders' fund	123	210	368	722	1,224	1,954	5,228	6,025	6,962
Total Debt (incl. pref shares if its thr)	7	4	90	60	338	548	548	422	322
Def tax liab. (net)	-	-	2	-	-	-	-	-	-
Lease liabilities	-	-	27	90	103	108	108	108	108
Minority interest	-	-	-	-	-	-	-	-	-
<b>Total Liabilities</b>	<b>130</b>	<b>214</b>	<b>487</b>	<b>872</b>	<b>1,665</b>	<b>2,609</b>	<b>5,883</b>	<b>6,554</b>	<b>7,391</b>
Gross Block	NA	NA	32	92	128	184	271	326	377
Less: Acc. Depreciation	NA	NA	(24)	(38)	(73)	(101)	(135)	(180)	(233)
Net Block	8	11	8	55	54	83	135	146	144
Right to use asset	-	-	26	142	149	148	124	104	88
Capital WIP	-	-	-	-	-	35	8	3	2
Intangible Assets	2	2	1	4	4	3	2	2	2
Net Fixed Assets	10	13	35	201	207	268	270	255	235
Investments	-	-	-	111	-	-	-	-	-
Inventories	43	4	52	624	821	832	864	1,230	1,415
Sundry debtors	415	212	540	1,100	1,144	2,131	1,945	2,663	3,063
Cash	7	51	272	257	472	291	3,477	3,429	3,889
Loans & Advances	-	-	2	8	3	19	19	19	19
Other assets	75	124	350	382	732	1,736	1,736	1,736	1,736
Total Current Asset	540	390	1,217	2,372	3,171	5,010	8,042	9,078	10,123
Trade payables	170	76	249	453	398	1,139	899	1,250	1,437
Other current Liab.	192	67	399	1,294	1,066	1,305	1,305	1,305	1,305
Provisions	58	47	116	64	250	225	225	225	225
Net Current Assets	120	201	452	560	1,457	2,341	5,613	6,299	7,156
<b>Total Assets</b>	<b>130</b>	<b>214</b>	<b>487</b>	<b>872</b>	<b>1,665</b>	<b>2,609</b>	<b>5,883</b>	<b>6,554</b>	<b>7,391</b>

Source: Company, MNCL Research Estimates

**Exhibit 36: Cash Flow**

Y/E March (Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Operating profit bef working capital changes	105	124	292	557	753	1,134	669	1,156	1,380
Trade and other receivables	(286)	196	(365)	(601)	(46)	(984)	186	(718)	(400)
Inventories	(26)	39	(48)	(573)	(196)	(11)	(33)	(366)	(185)
Trade payables	116	(92)	175	208	(55)	741	(240)	351	187
Net change - WC	(45)	(14)	(128)	(49)	(690)	(1,115)	(87)	(734)	(397)
Direct Taxes	(22)	(19)	(50)	(119)	(150)	(120)	(162)	(311)	(366)
<b>Cash flow from operations</b>	<b>38</b>	<b>92</b>	<b>114</b>	<b>389</b>	<b>(87)</b>	<b>(101)</b>	<b>421</b>	<b>111</b>	<b>618</b>
Net Capex	(8)	(10)	(40)	(191)	(72)	(80)	(60)	(50)	(50)
Others	(24)	(34)	(127)	(58)	(178)	(62)	132	224	220
<b>Cash flow from investing activities</b>	<b>(32)</b>	<b>(45)</b>	<b>(167)</b>	<b>(249)</b>	<b>(250)</b>	<b>(141)</b>	<b>72</b>	<b>174</b>	<b>170</b>
FCF	30	82	74	198	(159)	(180)	361	61	568
Issue of share capital	-	-	-	-	-	-	-	-	-
Increase/(decrease) in debt	-	-	-	-	-	-	-	-	-
Dividend	(5)	(3)	12	51	(1)	(10)	(46)	(89)	(104)
<b>Cash flow from financing</b>	<b>(36)</b>	<b>(3)</b>	<b>82</b>	<b>5</b>	<b>266</b>	<b>145</b>	<b>2,693</b>	<b>(334)</b>	<b>(327)</b>
<b>Net change in cash</b>	<b>(30)</b>	<b>44</b>	<b>29</b>	<b>145</b>	<b>(71)</b>	<b>(97)</b>	<b>3,186</b>	<b>(48)</b>	<b>460</b>

Source: Company, MNCL Research Estimates

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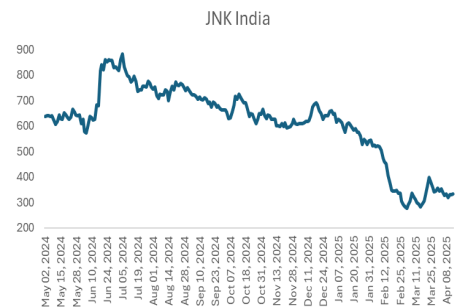
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