

File No.: RKA/FY21-22/PL-175-158

# TECHNO-ECONOMIC VIABILITY STUDY REPORT

## OF

## AUTO COMPONENT MANUFACTURING COMPANY

SITUATED AT

G.S ESTATE, GT ROAD, LUDHIANA, PUNJAB-141010

OWNERS/ PROMOTERS

M/S G.S AUTO INTERNATIONAL LIMITED

- Corporate Valuers
- Business/ Enterprise/ Equity Valuations
- Lender's Independent Engineers (LIE)
- Techno Economic Viability Consultants (TEV)
- Agency for Specialized Account Monitoring (ASM)
- Project Techno-Financial Advisors
- Chartered Engineers
- Industry/ Trade Rehabilitation Consultants
- NPA Management
- Panel Valuer & Techno Economic Consultants for PSU Banks

REPORT PREPARED FOR

M/S G.S AUTO INTERNATIONAL LIMITED

*\*\*Important - In case of any query/ issue or escalation you may please contact Incident Manager  
Valuers@rkassociates.org We will appreciate your feedback in order to improve our services.*

*NOTE: As per IBA Guidelines please provide your feedback on the report within 15 days of its  
submission after which report will be considered to be correct*

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**Part L: R. K. Associates Important Disclaimer and Remarks** are integral part of this report and Feasibility assessment is subject to this section. Reader of the report is advised to read all the points mentioned in these sections carefully.



**PART A**

**REPORT SUMMARY**

1. **Name of the Company** : M/S G.S Auto International Limited
2. **Address of the Company** : G.S Estate, GT Road, Ludhiana, Punjab-141010
3. **Project Name** : G.S Auto International Limited
4. **Project Location** : G.S Estate, GT Road, Ludhiana, Punjab-141010
5. **Project Type** : Auto-parts Manufacturing Company
6. **Project Industry** : Manufacturing
7. **Product Type/ Deliverables** : Manufacturing of heavy and light automotive parts
8. **Report Prepared for Organization** : G.S Auto International Limited
9. **TEV Consultant Firm** : M/s. R.K Associates Valuers & Techno Engineering Consultants (P) Ltd.
10. **Report type** : Techno-Economic Viability Report
11. **Purpose of the Report** : To assess Project's Techno Economic Viability to help lender/s to take financial exposure decision on the Project.
12. **Scope of the Report** : To assess, evaluate & comment on technical and financial viability of the Project as per the details provided by the company about its projections and Project.



**13. Date of Report** : 01<sup>st</sup> July, 2021

**14. Documents referred for the Project** : **A. PROJECT INITIATION DOCUMENTS:**

1. Brief Write-up about the project
2. Financial Projections of the company
3. Write-up on Assumptions for Restructuring Proposals
4. Audited Financial Statements for last 5 years from BSE

**B. PROCUREMENT DOCUMENTS:**

1. List of Plant & Machinery along with acquisition costs for the same
2. Product Segregation of three major categories
3. List of Raw Material Suppliers
4. List of major customers of the company
5. Bank document of CECF Facility
6. Process Flow document
7. Water Bill

**C. STATUTORY APPROVALS**

**LICENCES & NOCs:**

1. MSME Udyam Certificate
2. Factory Permission Certificate
3. Punjab Pollution Control Certificate

**15. Means of Finance** : Equity + Debt

**16. Funding Organization** : Punjab National Bank

**17. Key Financial Indicators** :

Key Indicators	Ratios (Times)
Min. DSCR	1.29
Average DSCR	2.01
Max DSCR	4.19

**Note:** Above financial indicators are based on the financial projections provided by the firm and assessment and analysis of the same done by us.



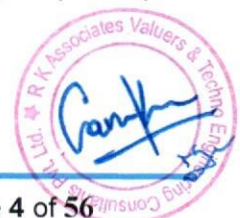
**PART B**

**INTRODUCTION**

- 1. ABOUT THE REPORT:** This is a Techno Economic Viability Study Report of the auto parts manufacturing company named M/s G.S Auto International Limited having registered office at situated at G.S Estate, GT Road, Ludhiana, Punjab-141010.
- 2. EXECUTIVE SUMMARY:** M/s G.S Auto International Limited incorporated on 29<sup>th</sup> June 1973 was established for manufacturing of auto parts. Initially the company was established as a private limited company. In the year 1985 company came out with public issue under the name M/s G.S Auto International Limited. The company manufactures heavy and light automotive (Nuts, Bolts, Washer, Pins, HANGER BRACKET, JACK PARTS (HAND TOOLS), HANGER BRACKET etc.) products through their two manufacturing units situated at Ludhiana and Jamshedpur respectively. The company has two manufacturing facilities, one at Ludhiana and one at Jamshedpur. Ludhiana Manufacturing unit produces three types of auto parts which includes; machine components, forged components and SGI casting components. The installed capacity at Ludhiana units stands at 10,000 MTs per annum for machine and forged categories and 4,500 MTs per annum for casting components (As per information provided by the client and survey conducted by our team). Moreover, company's second unit at Jamshedpur is established mainly to fulfil the immediate demand for TATA motors situated in nearby region. It is established mainly for the manufacturing of casting items with 12,000 MT per annum capacity (As per information provided by the client and Survey conducted by our team). Both Plants are currently operational and found to be running during survey however post lunch the plant was shut down temporarily due to power shortage and notice issued from the Punjab government & 60% capacity utilization for Ludhiana and Jamshedpur Plants respectively.

Further, the company generates their revenue from three main broad categories, i.e. Original Equipment Manufacturer (OEM), Replacement Market and Exports. OEM constitutes 35%-37%, Replacement Market constitutes highest proportion of company's sales, 62%-67%. Export sales constitute 2%-4% of the total sales of the company. (As per historical (Audited) and Estimates for Revenue provided by the company).

Moreover, the company is registered as Medium Manufacturing Unit vide registration number UDYAM-PB-12-0003474 dated 09.09.2020. The company has External Rating B+ (Stable) as per Infomerics rating dated 19.11.2020.



The company has working capital limits with PNB since 2005. Presently, the company is availing working capital limits fund based Rs 27.25 Crores and non-fund based Rs 5.50 Crores.

The company was doing well in their business prior to Covid-19 outbreak. Due to outbreak of pandemic, Government of India has imposed Pan-India lockdown in order to mitigate the infection spread. Due to lockdown, economy and businesses got badly affected not only in India but in the entire world. This has specifically impacted small and medium businesses which affected their working capital cycle due to mismatch in cash flow because of liquidity tightness on account of slow sales and slow realizations of receivables. Plants of the company was also stopped many times due to low level of demand as a result of lockdown and uncertainty across the nation. Further, auto component industry faced severe recession due to lower operating level of major OEMs. The company has low capacity utilization and lower sales in 2020-21 since first half year was under stress due to Covid-19 and partially closure of manufacturing facilities. Second half of the year also remained disruptive due to issues in raw material and labour availability.

### Previous 6-years Key Financial Parameters

The below mentioned table shows the key financial parameters of previous 5 years.

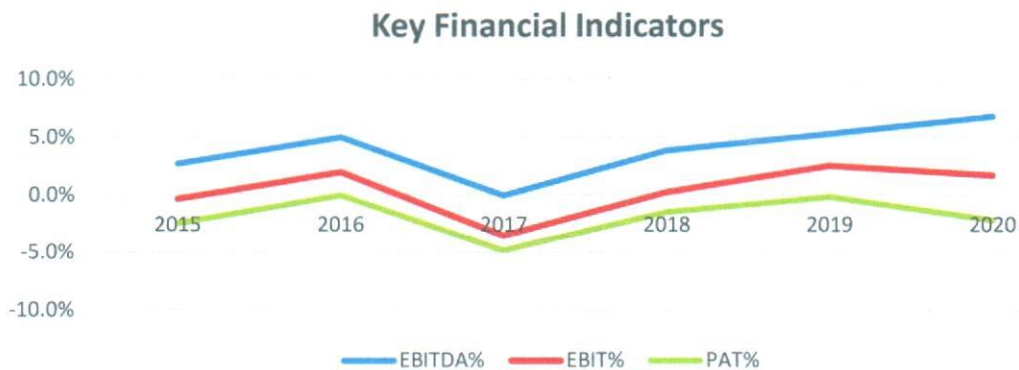
**Table 1: Past 6-year Financial Ratios**

Particulars	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenue	15,525.50	16,385.56	12,277.79	13,094.46	15,391.01	8,391.57
EBITDA	418.23	815.90	-7.10	502.22	812.12	567.70
EBITDA%	2.7%	5.0%	-0.1%	3.8%	5.3%	6.8%
EBIT	-56.50	317.64	-440.53	31.68	383.46	139.04
EBIT%	-0.4%	1.9%	-3.6%	0.2%	2.5%	1.8%
PAT%	-2.7%	-0.3%	-5.1%	-2.9%	-0.4%	-2.7%

**Note:** Net operating margins shows negative trends in few years due to higher interest rates and higher cost of Non-cash expenses.



Graphical Representation of the Key Financials of the previous years:



As a result of the pandemic the MSME were amongst the most affected businesses because of their low financial capabilities as compared to large sized businesses or conglomerates. In order to mitigate the financial burden arising from COVID pandemic, Government of India has taken several steps with policy measures, schemes and stimulus packages to revive the economic and specially help MSME sector. Ministry of Finance and RBI declared relief measures for the MSME and allowed one-time Restructuring and additional finance of 10% under Emergency Credit Line Guarantee Scheme (ECLGS). This scheme was earlier applicable up to 31st March 2021 which was further extended up to September 2021.

Due to economic impact of pandemic, G.S Auto International Limited was also no exception and its cash cycles became unstable resulting in overall financial instability into the organisation. To rescue the company from the ongoing crisis, company has already availed 39.61 Crores Covid financial assistance facilities earlier last year. Now due to continued business disruption from Covid especially from Covid wave 2.0, company is still under cash flow stress and wants to further avail the relief under **Resolution Framework 2.0 – Resolution of Covid-19 related stress of Micro, Small and Medium Enterprises (MSMEs) floated by RBI dated: 05.05.2021** under which the restructuring of the borrower account has to be invoked by September 30, 2021. To review the feasibility of this proposal client has approached us to perform the Techno-Economic Viability report for the company in terms of this restructuring proposal.



**3. PURPOSE OF THE REPORT:** To assess Project's Technical and Financial Feasibility to help lender/s to take further course of action on loan account.

**4. SCOPE OF THE REPORT:** To only assess, evaluate & comment on Technical and Financial Feasibility of the restructuring proposal of the company as per the information provided by the company.

**NOTES:**

- *Project status is taken as per the information provided by the company. This has not been independently verified or inspected independently since this was out-of-scope of the work.*
- *Scrutiny about the company or its background is out-of-scope of this report.*
- *This report is only an opinion in respect to Technical and Financial Feasibility of the project as per the future Projections provided by the firm and independent analysis done by us and doesn't contains any recommendations including taking decision on the loan exposure.*
- *Product local and regional factors have not been assessed at our end.*

**5. METHODOLOGY/ MODEL ADOPTED:**

- a. Data/ Information collection.
- b. Review of Data/ Information collected related to TEV study.
- c. Review of restructuring proposal.
- d. Independent review & assessment of technology used and financial projections provided by the company.
- e. Projections are made extrapolating previous audited historical financials of the company in terms of income & expenditure since company is an ongoing concern.
- f. Assessment of Financial Statements.
- g. Projections of Revenue, P&L, Balance Sheet, Working Capital Schedule, Depreciation Schedule, Loan Schedule.
- h. Calculation of key financial indicators and ratio analysis including DSCR.
- i. Final conclusion.

**6. DATA/ INFORMATION RECEIVED FROM:**

Data/ Information received from:



**Table 2: Person from Whom Data Obtained**

Particulars	Details
Name	Mr Gurdip Makkar
Company	M/S. GS Auto International Limited
Email Address	<a href="mailto:gmakkar@gsgroupindia.com">gmakkar@gsgroupindia.com</a>
Contact No.	+91 7888697560

**7. DOCUMENTS / DATA REFERRED:**

- Audited Financial Statement of the company till FY 2020.
- Financial Projections for next 10 Years.
- Brief history and description of the company.
- List of Raw Material Suppliers.
- List of Top 10 customers of the company.
- List of Plant and Machinery along with their acquisition cost.
- Category wise sales details data for FY20-21.
- Write-up on company profile and assumptions for restructure proposal.
- Layout Plan.
- Survey Report conducted at the site

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**PART C**

**COMPANY PROFILE**

**1. COMPANY OVERVIEW:**

M/s. GS Auto International Limited was incorporated on 29<sup>th</sup> June, 1973 is a public limited company having its Corporate Office at G.S. Estate, G.T. Road, Ludhiana – 141010. This company was set up, to manufacture heavy and light automotive. The company initially started their manufacturing operations from Ludhiana manufacturing plant and then later in the year 2013-14 started their manufacturing plant at Jamshedpur.

The company generates their revenue from three main broad categories, i.e. Original Equipment Manufacturer (OEM), Replacement Market and Exports. OEM constitutes 35%-37% of the total revenue generation having a long-lasting business relation for up to 20 years. Some of the major customers in this domain are as follows:

S.No.	Customer Names
1.	Tata Motors Ltd.
2.	Daimler India Commercial Vehicles Private Limited
3.	VE Commercial Vehicles Ltd.
4.	SML Isuzu Ltd.
5.	OMAX Auto Ltd.
6.	Rane Automotive Ltd.
7.	Ram Krishna Forgings Ltd.
8.	Pooja Forge Ltd.

Replacement Market constitutes highest proportion of company's sales, 62%-67%. The company operated in this segment for last 30 years with an effective distribution network Pan-India.

Export sales constitute 2%-3% of the total sales of the company with 2.87 Crores for the FY 2019-20 and 1.46 Crores for the FY 2020-21. Further, to it, the company is planning to enhance their penetration in the export sales market.

List of products manufactured under the three broad categories listed below:

OEM Group	REP Group	EXP Group
AGRICULTURE CASTING - O.E.M	AGRICULTURE HUB BOLT	AXLE STUD – EXPORT
AGRICULTURE HUB BOLT - O.E.M	BUSHES	CENTRE BOLTS – EXPORTS
AGRICULTURE U BOLT - O.E.M	CHECK NUT - REPLACEMENT	HANGER BRACKET – EXPORTS
AXLE STUD -O.E.M	HANGER BRACKET - REPLACEMENT	HUB BOLT – EXPORTS
BUSHES OEM	HUB BOLT - REPLACEMENT	KING PINS – EXPORTS

# TECHNO-ECONOMIC VIABILITY REPORT

GS AUTO INTERNATIONAL LIMITED,  
LUDHIANA, PUNJAB

OEM Group	REP Group	EXP Group
CASTING	JACK PARTS (HAND TOOLS)	MISC. BOLTS – EXPORTS
CHECK NUT - O.E.M	KING PINS - REPLACEMENT	NUTS – EXPORTS
ELECTRICAL MOTOR ACCESSORIES- OEM	LEAF BOLT -REPLACEMENT	SHACKLE BOLT – EXPORTS
EXCAVATOR ASSEMBLY - O.E.M	MISC. BOLTS - REPLACEMENT	SPRING PINS – EXPORTS
HANGER BRACKET - O.E.M	NUTS – REPLACEMENT	U BOLT – EXPORTS
HUB BOLT - O.E.M	SPRING BOLT W/NUT – REPLACEMENT	WASHER EXPORT
JACK PARTS (HAND TOOLS)	SPRING PIN BOLT - REPLACEMENT	
KING PINS - O.E.M	SPRING PINS - REPLACEMENT	
MISC OEM	STUD –REPLACEMENT	
MISC. BOLTS - O.E.M	TRAILOR PART	
NUTS - O.E.M	WASHER REPLACEMENT	
OTHER CAST ARTICLES OF IRON STEEL-O.E.M		
RAILWAY EQUIPMENT DIVISION- OEM		
SHACKLE BOLT - O.E.M		
SPRING PIN BOLT		
SPRING PINS - O.E.M		
U BOLT - O.E.M		
WASHER - O.E.M		

## 2. PARTNERS SHAREHOLDING DETAILS

Details of the partners of M/S. GS Auto International Limited along with their share in the company are listed in the table below:

**Table 3: Partner Shareholding Details**

Promoters/ Promoter Group	No. of Equity Shares	% Holding
Jasbir Singh Ryait	580550	4
Surinder Singh Ryait	654430	4.51
Amarjit Kaur Ryait	123820	0.85
Dalvinder Kaur Ryait	144860	1
Ranjodh Singh Ryait	181540	1.25
G.J. Holdings Private Limited	4368340	30.1
Total shareholding of Promoter and Promoter Group	6053540	41.71
General Public	7176030	49.44



Promoters/ Promoter Group	No. of Equity Shares	% Holding
Others	1285010	8.85
<b>TOTAL</b>	<b>14514580</b>	<b>100</b>

Source: Data/Information provided by the Company

### 3. KEY PARTNERS/DIRECTORS PROFILE

**Table 4: Directors Details**

S. No.	Name	PAN	DIN	Age	Residential Address	Designation
1	Sh. Jasbir Singh Ryait	AEGPR1646M	00104979	59 years	208-H, B.R.S. Nagar, Ldh	Chairman & Jt. Managing Director
2	Sh.Surinder Singh Ryait	ABMPR3196H	00692792	56 years	224-H, B.R.S. Nagar, Ldh	Managing Director
3	Smt. Dalwinder Kaur Ryait	AEGPR1651E	00572812	58 years	208-H, B.R.S. Nagar, Ldh	Executive Director
4	Smt. Amarjeet Kaur Ryait	ABNPR0576N	00572776	55 years	224-H, B.R.S. Nagar, Ldh	Executive Director
5	Sh. Harkirat Singh Ryait	AOZPR5345G	07275740	33 years	208-H, B.R.S. Nagar, Ldh	Executive Director

Source: Data/ Information provided by the Company

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**PART D**

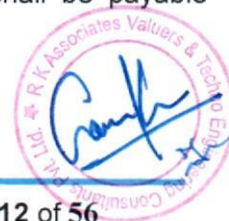
**RESTRUCTURING PROPOSAL**

Due to the Covid-19 pandemic the auto component industry segment in the MSME sector is facing difficulties due to lockdowns, labour shortage and raw material constraints since March 2020. The conditions started improving in the fourth quarter of 2020-21 but again with the emergence of second wave of Covid-19 from April 2021, the Indian economy again faltered and MSME sector affected badly due to lock down all over the country. Ministry of Finance and RBI declared relief measures for the MSME and allowed one-time Restructuring and additional finance of 10% under Emergency Credit Line Guarantee Scheme (ECLGS) to the ailing MSME units for their existing loan exposure as on 29<sup>th</sup> Feb 2020 and account being standard as on 31.03.2021.

Furthermore, under GECL scheme, credit for MSMEs would be up to 20 percent of the borrower's total outstanding credit or maximum upto Rs 50 Crores, as of February 29, 2020 whichever is lower. The additional credit given can be up to Rs 10 Crores for borrowers having an annual turnover of up to Rs 250 Crores for FY 2019-20. Under PNB-CECF, 10 percent of existing working capital limits was made available to all borrowers under standard, SMA0 and SMA1 categories.

In view of the above, the company is seeking Restructuring of its Loans and additional loan of Rs 2.72 Crores under Emergency Credit Line Guarantee Scheme (ECLGS). The proposal details and assumptions are as under:

1. The WCTL is carved out against Old and slow moving stocks due to transition from phase IV to VI and Covid-19 Pandemic and old debtors.
2. Interest for CC is considered @ 8.00 % on CC limit of Rs 20.00 Crores after WCTL and Non fund limits has been considered at 5.50 Crores as per existing sanction.
3. Covid loan (CECF) of Rs 2.72 Crores (Balance Rs 1.41 Crores as on 30-06-21) @ 7.30.% (Existing Rate), the repayment has been rescheduled in 36 equal monthly installments of Rs 3.90 lac each with a moratorium period from July 2021 to March 2022 and installments starting from April, 2022 with in total period of 5 years. Interest shall be payable monthly as and when due.
4. GECL of Rs 545 lac @ 7.65.% (Existing Rate), the repayment has been rescheduled in 36 monthly installments of Rs 15.14 lac each starting from August, 2022 with moratorium period extended from one to two years within total period of 5 years. Interest shall be payable monthly as and when due.



5. Additional WCTL of Rs 2.72 Crores under Emergency Credit Line Guarantee Scheme (ECLGS) of NCGTC repayable in 36 monthly instalments of Rs 7.56 lakhs with 2 years moratorium. Instalments starting from July 2023. Interest @7.65% P.A shall be payable monthly as and when due.
6. WCTL of Rs 7.25 Crores is carved out of Current CC limits of Rs 27.25 Crores. The moratorium for WCTL has been considered for 2 years w.e.f from July 2021 to June 2023 and repayment in 60 monthly equal installments of Rs 12.08 lac starting from July 2023. Interest @8.00% P.A shall be payable monthly as and when due.
7. FITL Rs 3.25 Crores has been created for interest for future period from July 2021 to June 2023 (2 years) @ 8% P.A calculated monthly on CC limit of Rs 20.00 Crores. FITL shall bear interest rate 8% P.A. The repayment has been considered to be repayable in 24 equal monthly installments of Rs.13.54 lac starting from July 2023 to June 2025. Interest @8.00% P.A shall be payable monthly as and when due.
8. FACR Ratio is not applicable as all the loans against fixed assets and project loan of the company stand repaid in April 2019 and there is nil outstanding as on date.
9. The depreciation has been calculated on various assets on straight line method as per The Companies Act, 2013.

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**PART E**

**PLANT INFRASTRUCTURE DETAILS**

**LUDHIANA MANUFACTURING UNIT**

**1. PLANT LOCATION:**

The manufacturing facility of G.S Auto International Limited is located in major Industrial township of Ludhiana, Punjab in North India, which is spread over an area of 79845 sq. Yards, as per the documents provided to us by the company.

- a. Distance from Ludhiana (Main city) – About 8 k.ms.
- b. Distance from Ludhiana Railway Station – About 9 k.ms.
- c. Distance from State Capital (Chandigarh) – About 110 k.ms.
- d. Distance from National Capital – About 320 k.ms.

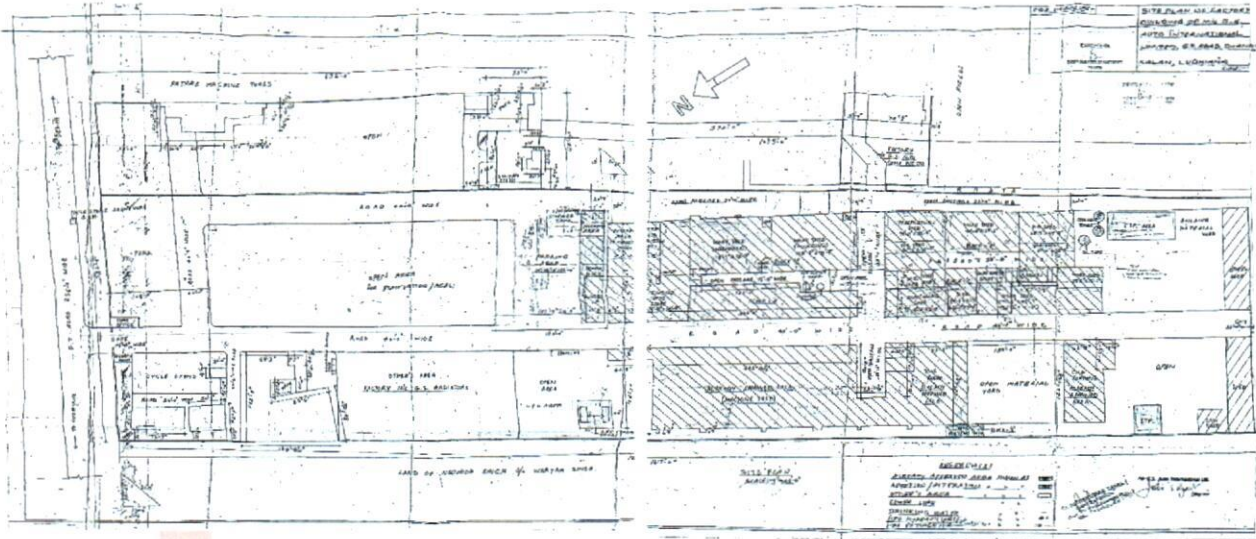
**2. LAND DETAILS:**

The factory land is situated at G.S. Estate, G.T. Road, Dhandari Kalan, Ludhiana, Punjab 141010. The land is registered in the name of M/s, G.S. Auto International Limited. The total area of land admeasures about 79845 sq. yards. Land use conversion has also been completed. And the total covered area of the plant with its civil structures admeasures to about 45,000 Sq.mtrs.

The master plan for the proposed use of site, has been prepared in accordance with the requirements of the project with due considerations of the requirements of machines and equipment's, the facilities and user amenities required.



### Layout - Design of the Whole Project



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### **3. BUILDING & CIVIL WORKS:**

The planning of the building structures and infrastructure facilities has been done keeping in view the major attributes like entrance to the plot, vehicular movement inside the plot and other functional requirements.

The building and the civil work has been according to the planned layout and the layout has been approved by the competent Authority – Joint Director of Factories – Punjab.

The age of the structures builds within the plant premises ranges around 25 to 30 years, with timely maintenance to all the structures when required.

The plant area is fenced with walls on all the four sides of the property, with its dedicated entry from the Eastern Side of the Property. The property is adjoined with G.T. Road on the East Side, Service Lane on the West, Other Industries on the North and G.S. Radiator in the South.



**4. PHTOGRAPHS OF THE PROJECT:**



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## **5. PLANT AND MACHINERY DETAILS:**

The manufacturing unit has Arpa Moulding Lines, Linear Moulding Machines and Mould Making Machines & Furnace with melting capacity 900 Kg. of metals along with Automatic (DISA). The manufacturing company has processes line for processing of Alloy Steel components i.e. Annealing, bar drawing, hot forging, cold forging, precision machining, heat treatment and induction hardening.

The company is manufacturing following types of Auto components:

1. Machine Components
2. Forged Components
3. SGI casting components

In respect of SGI casting component the company has liquid metal processing capacity of 4,500 MT per annum. The total capitalisation cost for machinery and its other auxiliary items is ~Rs.22 Crores as per the documents provide by the company.

## **6. UTILITIES:**

### **a) Electricity-**

The electricity requirement for the plant will depends according to requirement.

The electricity consumption mainly ranges between 3500 KW to 4000 KW. The electricity consumption for the month of April was at 3719.218 KW as per the electricity bill provided.

The estimated power consumption for production per day is ~2000 units per day.

### **b) Water-**

Water is required at different stages of production process. The water requirement is fulfilled by the Municipal water supply and submersible available within the plant premises.

### **c) Transportation-**

The company has different method for supply of fixed goods. These are as follows:

- i. Company have their own vehicles (trucks, tempas, etc.) for supply in local market.
- ii. Company has contacts with local logistics dealers for supply of fixed products to different parts of the country.
- iii. And the OEM customers use their own transport/logistic to supply the product from manufactured to their premises.

**d) Pollution Control Management-**

Punjab Pollution control board has provided many NOC's as the company is controlling the spread of Air Pollution by using different kind of products/ technology which are described below:

- I. Water Scrubber is being used in all the tempering, heating and annealing furnaces which are used for Hardening process.
- II. Dual track induction furnace are fitted with bag filters to reduce the air pollution.
- III. All the air polluting machineries are provided with adequate stack height so that the air pollution is released at prescribed height with provisions for emission sampling facility.
- IV. Diesel Generators are provided with acoustic enclosures for controlling noise pollution and stack is also provided above the roof level with a height of 4.5 metres to control air pollution.
- V. The water treatment plant is installed with 100 KL capacity to neutralize the polluted water.

**7. OBSERVATION DURING SITE SURVEY:**

- a. We have conducted the survey on 1st July-21 of Ludhiana Plant.
- b. The whole survey was conducted by Mr Gurdip Makkar (C.F.O of G.S Auto Ltd). Further, Mr Makkar appointed two production engineers for explaining the process flow and details about the machinery.
- c. One of the furnace used in annealing was not working because of low demand due imposed lockdown in the market because of Covid-19 pandemic.
- d. The company was running during the survey but stopped production after 2:00 pm till next two days due to notice given by Punjab Government regarding non-availability of electricity to complete industrial demand.
- e. The condition of the civil structure is average as these are almost 25-30 years old.
- f. The condition of the machinery installed in the industry is average and maintenance has been done time to time. As per the information provided during the site survey below is the expenditure occurred in recent years on the preventive of the machinery:-
  - 2018-19 = 1.48 Cr.
  - 2019-20 = 1.08 Cr.
  - 2020-21 = 1.32 Cr.



- g. The main machinery which is being used by the company is from brand "Brothers and Marshal".
- h. As per the information provided the R&D department is planning to make and installed in-house CNC machines to increase the overall plant capacity and to decrease the cycle time.
- i. The company is also planning to move to new technology machinery to increase the productivity and to start making new automobile parts to enter new segment of "Bharat Stage-VI".
- j. The company has inbuilt laboratory facility to check the chemical composition of raw material & finished goods.
- k. To maintain the quality of product the company installed PDI checking system after each process in which random product is check after every 15-20 items.
- l. The company is dealing in many types of automobile items, some of them are as follows:-
  - Hub Bolts
  - U-Bolts
  - Centre Bolts
  - King Pin
  - Wheel-nuts
  - Shackle bolts
  - Leaf spring balls
- m. Below is the quantity of different items in numbers with approx. value supplied by the company during 23rd to 30th June:
  - Supply to Local market – 45,044 nos. (Approx. Rs.79, 35,341/-).
  - Supply to OEM – 9,361 nos. (Approx. Rs.8,05,135/-)
  - Export – 12,748 nos. (Approx. Rs.8,41,666/-)

### **JAMSHEDPUR MANUFACTURING UNIT**

#### **1. PLANT LOCATION:**

The proposed project is located at M-9, Large sector, Jamshedpur, Jharkhand on the land area measuring 3 acres as per the documents provided by the company.

- a) Distance from the Jamshedpur (Main city)- About 17 k.ms.
- b) Distance from the Tatanagar railway station- 22 k.ms.
- c) Distance from Ranchi Airport – 117 k.ms.
- d) Distance from the State Capital (Ranchi) - 110 k.ms

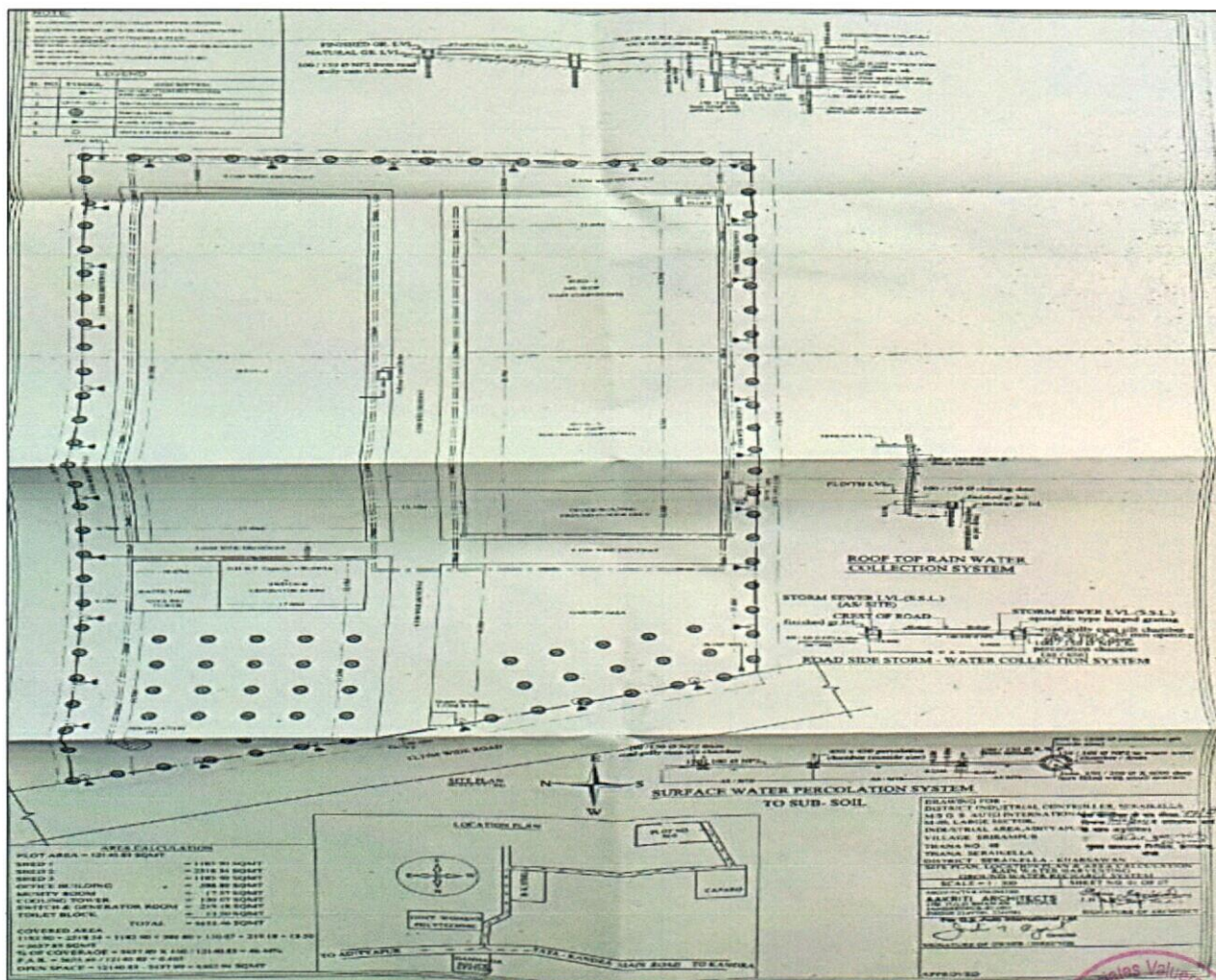


e) Distance from the National Capital - 1347 k.ms.

## 2. LAND DETAILS:

The factory land is situated at Adityapur Industrial Area, Large Sector, Jamshedpur, and Jharkhand. The Land is registered in the name of the all G.S Auto International Ltd. Total Area of the land is 3 Acres. Land is Lease hold having its lease period of 30 years starting 12/04/07. The promoters have a proper legal standing for putting up the proposed project. The master plan for the proposed use of site, has been prepared in accordance with the requirements of the project with due considerations of the requirements of machines and equipment's, the facilities and user amenities required.

### Layout - Design of the Whole Project



### 3. PHOTOGRAPHS OF THE PROJECT:



### 4. PLANT & MACHINERY DETAILS:

The estimated cost of whole Plant and Machinery is Rs 31.92 Crores (as per Fixed Asset Report). The Main Machinery of the Plant includes Machine AP Moulding, Induction Furnaces, and CNC Turning Machines etc.

### 5. UTILITIES

#### (a) Electricity: -

Power requirement is 20000 KW is sanctioned load for the plant

Steam & Fuel is required for steam generation. The steam requirement is about 2.3 tons for one ton of paper production.

#### (b) Water: -

Water is required for manufacturing process and other jobs is 26 KL/Day



- (c) **Transportation:** - Company has planned to transport their product to the market with the help of hired vehicles. These vehicles will carry the products to the required places when needed.

**6. Site Inspection:**

The Plant was running at the time of site inspection, with 60% capacity due to covid-19 pandemic. The Plant & machinery were found to be average condition.



**PART F**

**PLANT TECHNICAL DETAILS**

**LUDHIANA MANUFACTURING UNIT:**

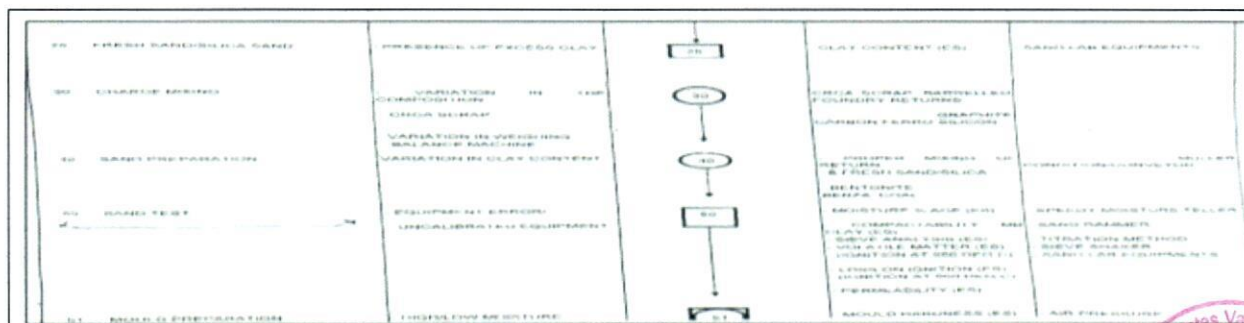
**1. MANUFACTURING PROCESS:**

The company is manufacturing 3 types of auto components viz. machine components, forged components and SGI casting components.

The major stages involved in the production of SGI casting components include:

- **LAB TESTING** – This step includes the testing of the Raw material for determining the quality of the material to find its composition in order to find out, if it is matching the defined standards. This process includes Inspection of Scrap Iron, Alloys, Chemical Ferro Silicon, Bentonite
- **SAND PREPARATION FOR MOULDS** – This step includes testing of Fresh sand or Silica sand to check the presence of excess clay, Charge Mixing, Sand Preparation and Sand Test.
- **MOULD PREPARATION** – This step includes Venting in Moulds, Core making and baking and Core Fitting.
- **MELTING** – This step includes the melting of the raw material, Tapping and then the Skimming of Slag which is the removal of Slag from the melted material.
- **POURING** – The melted material is now poured with certain precautions into the mould, and then the Lab analysis is done for finding the composition and microstructure
- **The Shot- Blasting** process is done to remove the surface contaminates due to the above processes, late the hardness and destructive testing is done on the product.

**2. PROCESS FLOW CHART:**



52 VENTING IN MOULDS	CONTENT IN PREPARED SAND - VARIATION IN G.C.S.	52	- PERMEABILITY (ES) - G.C.S. (ES) - FREE FROM DAMAGE (FC) - AS PER WORKMANSHIP STD (FC)	- MOLD CONDITION - VENT SIZE/LOCATION
60 CORE MAKING & BAKING (IF REQUIRED)	- VARIATION MOLASSES QTY. - MOISTURE IN BASE SAND - MORE CLAY IN BASE SAND	60	- CORE CONDITION (FC) - CORE HARDNESS	- CORE BOX CONDITION - MOLASSES 8-10% - CLAY CONTENT 8% MAX. - DRY BASE SAND (NO MOISTURE) - FURNACE TEMP./TIME OR SHELL CORES
70 CORE FITTING (IF REQUIRED)		70		
80 MELTING OF SCRAP	- COATED SCRAP - RUSTY, OILY/GREASY SCRAP - IMPROPER RATIO OF CHARGE	80	- CHEMICAL COMPOSITION (ES) - CARBON EQUIVALENT (ES)	- MELTING TIME - TAPPING TEMPERATURE
90 TAPPING		90		- TAPPING TEMPERATURE
100 INOCULATION	- VARIATION IN THE SIZE OF INOCULANT	100		- INOCULATION SIZE
110 SKIMMING OF SLAG		110	- REMOVAL OF SLAG 0.4% to 0.5 % (Should be Final Ref. Bath sample report)	(INOCULANT TO BE ADDED THOROUGHLY IN TO MOLTEN METAL) W/FD002 WEIGHING BALANCE - SLAG COAGULANT
120 POURING	- LOW TEMPERATURE - IMPROPER TAPPING - IMPROPER SKIMMING OF SLAG - IMPROPER MIXING OF INOCULANT	120	- METAL SHOULD BE FREE FROM SLAG (FC)	- POURING TIME - POURING TEMPERATURE
130 KNOCK OUT		130		- KNOCK OUT TIME BUZZER/AUTO CYCLE
140 LAB ANALYSIS		140	- COMPOSITION (ES) - MICRO STRUCTURE (ES) - HARDNESS (ES)	
150 FETTLING	- IMPROPER INGATES	150	- RUNNERS RISERS & INSIDE COMPLETELY (FC)	- PROCESSING TIME - SHOT QUALITY - BELT CONDITION
170 COARSE GRINDING		170	- UN-WANTED MATERIAL TO BE REMOVED OFF	- GRINDING WHEEL CONDITION
180 HARDNESS & DESTRUCTIVE TESTING	Note-1) 100% Visual Inspection as per WIQA/004 & REF Samples & 100% sound test should be done	180	- HARDNESS - NO CAVITY, SHRINKAGE, POROSITY, BLOW HOLES	Calibration & verification of hardness M/C Blade condition visual aids



The production of machine components include:

- **Raw Material Inspection** – This is the initial step in which the raw material use for the production purposed is inspected for it pre-defined standards in Diameter, Length, Composition, Microstructure, Hardness and surface of the material.
- **Annealing** – The annealing process is a heat treatment process that changes the physical and sometimes also the chemical properties of a material to increase ductility and reduce the hardness to make it more workable.
- **Pickling** - Pickling is a metal surface treatment used to remove impurities, such as stains, inorganic contaminants, rust or scale from ferrous metals, copper, precious metals and aluminium alloys. A solution called pickle liquor, which usually contains acid, is used to remove the surface impurities.
- **Threading** - Thread grinding is done on a grinding machine using specially dressed grinding wheels matching the shape of the threads. The process is usually used to produce accurate threads or threads in hard materials; a common application is ball screw mechanisms.
- **Tempering** - Tempering is reheating hardened steel to a temperature below the lower critical temperature for the purpose of decreasing hardness and increasing toughness.

### 3. PROCESS FLOW CHART:

The process flow chart below defines all the process that are included in the production of a Machine component for ex. Hub Bolt.

OPERATION NUMBER BRIEF DESCRIPTION	INCOMING SOURCE OF VARIATION	PROCESS FLOW DIAGRAM	PRODUCT CHARACTERISTICS	PROCESS CHARACTERISTICS
10 RAW MATERIAL INSPECTION	- DIA VARIATION - DE-CARB - SURFACE CRACK	10	- DIA (IP) - LENGTH (IP) - COMPOSITION (ES) - MICRO STRUCTURE (ES) - HARDNESS (ES) - SURFACE (FC)	- WET SYSTEM ANALYSIS - STD SAMPLE - SUPPLY SPECIFICATION - WORK INSTRUCTIONS
20 ANNEALING	- DE-CARB MATERIAL - BANDED STRUCTURE	20		- ANNEALING TEMPERATURE - SOAKING TIME - COOLING RATE - FURNACE OF TEMPERATURE
30 INSPECTION		30	- HARDNESS (ES) - MICROSTRUCTURE (ES)	
40 STEP TURNING		40	- STEP DIA (IP) - STEP LENGTH (IP)	- TOOL SET-UP
50 PICKLING	- SCALE	50	- FREE FROM SCALE (FC)	- PICKLING TIME - CONCENTRATION
60 BAR DRAWING	- SCALES	60	- DIA (IP) - NO DIE MARKS (FC)	- DIA SET-UP
70 BLANK CUTTING		70	- LENGTH (IP)	- STOPPER SET-UP



OPERATION NUMBER BRIEF DESCRIPTION	INCOMING SOURCE OF VARIATION	PROCESS FLOW DIAGRAM	PRODUCT CHARACTERISTICS	PROCESS CHARACTERISTICS
80 REDUCING	- DIA U/S	80	- STEP LENGTH (IP)	---
90 COLD FORGING	- LENGTH U/S - HIGH HARDNESS	90	AS PER PROCESS DRG (IP)	- DIE CONDITION
100 SMALL END TURNING & CHEMFERING (CNC)	- LENGTH VARIATION	100	- STEP LENGTH (IP) - STEP DIA (IP) - ROOT RADIUS (IP) - CHEMF. ANGLE & WIDTH (IP)	- TOOL SETTING
110 LONG END TURNING & CHEMFERING (CNC)	- ECCENTRICITY - MATERIAL CRACKS - DIA VARIATION	110	- 1st STEP DIA (IP) - 2nd STEP DIA (IP) - ANGLE 90° (INCLUDING) (BP) - RADIUS AT THE ROOT OF TAPER (BP) - COLLAR DIA (BP) - CONCENTRICITY (BP) - CHEMF. LENGTH & WIDTH (IP)	- TOOL SET-UP - COOLANT FLOW
120 STAMPING	- TOOL MARKS AT FACE	120	GS LOGO SHOULD BE VISIBLE (FC)	- STAMP CONDITION
130 KNURLING	- PRE-ROLL DIA VARIATION	130	- KNURLING OUTER DIA (BP) - KNURLING LENGTH (BP) - KNURLING PITCH (BP)	- KNURLING ROLLER SET-UP - WORK REST SET-UP - STOPPER SET-UP - KNURLING ROLL CONDITION

OPERATION NUMBER BRIEF DESCRIPTION	INCOMING SOURCE OF VARIATION	PROCESS FLOW DIAGRAM	PRODUCT CHARACTERISTICS	PROCESS CHARACTERISTICS
140 THREADING (BOTH ENDING)	PRE-ROLL DIA VARIATION	140	- THREAD SIZE (BP) - THREAD LENGTH (BP)	- THREAD ROLLER SET-UP - WORK REST SET-UP - STOPPER SET-UP - THREAD ROLL CONDITION
150 HARDENING	- IMPROPER MATERIAL COMPOSITION - DE-CARB - IMPROPER HARDENABILITY	150	---	- QUENCHING OIL TEMP - HARDENING TEMPERATURE - SOAKING TIME
151 INSPECTION	---	151	- HARDNESS (IP) - FREE FROM DE-CARB (IP)	---
160 TEMPERING	- HARDNESS VARIATION	160	---	- SOAKING TEMPERATURE - SOAKING TIME
161 INSPECTION	---	161	- HARDNESS (BP) - MICROSTRUCTURE (ES)	---
170 COUNTER SINKING	- TOTAL LENGTH VARIATION - HIGH HARDNESS	170	- COUNTER HOLE DEPTH (BP) - COUNTER HOLE DIA (BP)	- STOPPER SET-UP - DRILL WEAR
180 RE-ROLLING (LONG SIDE)	- SALT RESIDUAL DENTS	180	- THREAD SHOULD QUALIFY GO/NOGO GAUGES (BP) - MAJOR DIA OF THREAD (BP)	- THREAD ROLLER ASSET-UP - WORK REST SET-UP - STOPPER SET-UP - THREAD ROLLER WEAR

190 RE-ROLLING (SMALL SIDE)	- SALT RESIDUAL DENTS	190	- THREAD SHOULD QUALIFY GO/NOGO GAUGES (BP) - MAJOR DIA OF THREAD (BP)	- THREAD ROLLER ASSET-UP - WORK REST SET-UP - STOPPER SET-UP - THREAD ROLLER WEAR
200 ZINC PLATING	- THREAD SIZE VARIATION - DENTS	200	- PLATING THICKNESS (BP) - FREE FROM DENTS (FC) - NO PEEL OFF (FC)	- BATH CONCENTRATION - VOLTAGE - CURRENT - HOLDING TIME - PASSIVATION
210 HYDROGEN DE-EMBRITTLMENT	- AIR BUBBLES	210	- PRODUCT TO BE FREE FROM AIR BUBBLES (ES)	- SOAKING TEMPERATURE - SOAKING TIME
220 PASSIVATION	---	220	- COLOUR (FC)	- TEMPERATURE OF SOLUTION
230 FINAL INSPECTION	---	230	- ALL PARAMETER	---
240 PACKAGING	---	240	AS PER CUSTOMER REQUIREMENT	---
250 LAY OUT INSPECTION	---	250	---	---

**4. RAW MATERIAL USED:**

As per the details provided by the company the primary raw material used for the different manufacturing processes include, M.S. Carbon Steel and Alloy Steel with the consumption rate of 24 Metric Tonne per day and M.S Scrap with the consumption rate of 10 MetricTonne per day.

**5. MANPOWER:**

As per the details provided by the company officials the current manpower stands a total of 715, which includes 90 No.s of Office staff including all the department and 625 No.s of Labours which also includes some daily basis workers.

And there is adequate amount of skilled workers available in the area of subject industry.

The company has maintained its industrial relations record of not losing even a single day due to industrial actions since its inception.

**JAMSHEDPUR MANUFACTURING UNIT:**

**6. MANUFACTURING PROCESS:**

The Company is using DISA Plant Technology of Denmark in Jamshedpur. Jamshedpur Unit was set up for manufacturing of casting items only to cater the immediate requirements of Tata Motors situated locally. The installed capacity of Jamshedpur plant (SGI casting components) is 12000 MT per annum of liquid metal processing

Plant is divided into Three Phase:

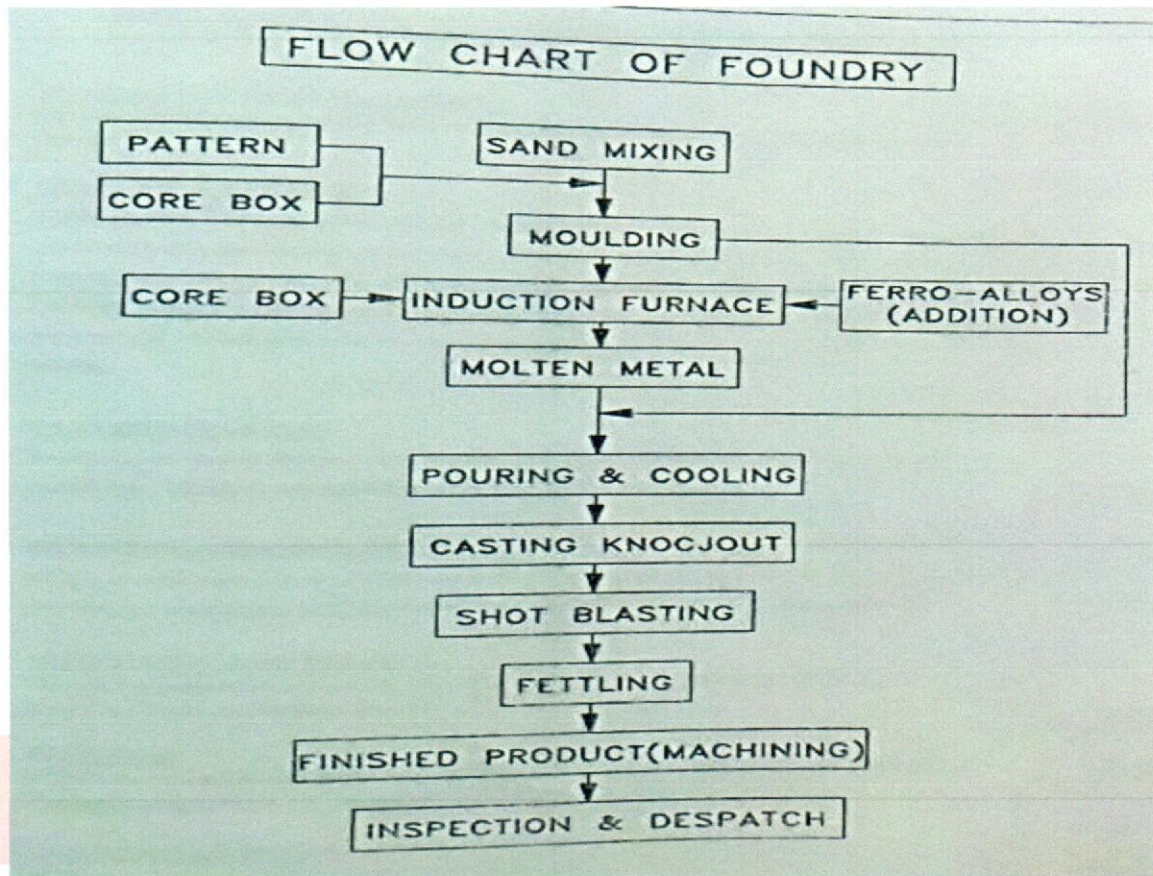
- 1) Foundry Section
- 2) Machining Section.
- 3) Packing Section.

In Foundry Section, Machinery such as Moulding machine, Furnaces, Shot Blasting etc. are the main machinery which all are used in Casting Process (Casting is a manufacturing process in which a liquid material is usually poured into a mold, which contains a hollow cavity of the desired shape, and then allowed to solidify. The solidified part is also known as a casting, which is ejected or broken out of the mold to complete the process).

After Foundry section parts Moulded are send to tool Section for machining process for precision after that it finally quality inspected and send to respective vendors.



**7. PROCESS FLOW CHART:**



VALUERS & TECHNO ENGINEERING CONSULTANTS (P) LTD. Source- Data/information provided by the company

**8. RAW MATERIAL USED:**

As per the information provided by the company, Scrap waste of iron and metals are of the major raw materials used in the Auto parts manufacturing.

As per the information provided by the company, the Scrap is available on demand from local as well as from nearby by districts.

**9. MANPOWER REQUIREMENT:**

The total required manpower as estimated by the company for the Jamshedpur plant is 291 resources.



**Table 5: Plant Workers requirement**

Particular	Production In-charge	Skilled Manpower	Unskilled Labour	Supervisor	Total
Production Workers	2	175	80	12	269

**Table 6: Administrative Staff requirement**

Particular	Sales Manager	Accountant	Clerk	Peon	Guards	Total
Administrative Staff	8	1	6		7	22



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**PART G**

**PRODUCT PROFILE**

**LUDHIANA MANUFACTURING UNIT:**

**1. PRODUCT DETAILS:**

The company has its first unit at Ludhiana for manufacturing of Auto Parts. At Ludhiana Unit, company is manufacturing 3 types of auto components viz. machine components, forged components and SGI casting components. The installed capacity of Ludhiana Unit for machined/forged components is 10000 MTs per annum and 4500 MTs per annum for liquid metal processing in respect of SGI casting components.

The company is engaged in the manufacturing of various auto parts as mentioned below:

1. Hub Bolt
2. Centre Bolt
3. U Bolt
4. Spring Pin
5. King Pin
6. Wheel Nuts
7. Shackle Bolts
8. Leaf Spring Balls

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**2. PRODUCTS MANUFACTURED AT LUDHIANA MANUFACTURING PLANT:**



U-BOLT



CENTRE BOLT



SPRING PIN



HUB BOLT



CASTING



THREADED RING



BUSH



NUTS

Source - Pics obtained from the Company



### **3. CUSTOMER BASE:**

The company is supplying their products to all the three dimensions in the auto mobile commercial vehicle industry i.e.:

1. OEM (Original Equipment Manufacturers)
2. Replacement Market (After Sales Market)
3. Export Market

- **OEMs (Original Equipment Manufacturers)**

Original Equipment Manufacturers (OEM) which approx. constitutes 35% to 37% of total turnover. In this segment, the supplies are mainly to the following companies: -

- a) Tata Motors Ltd.
- b) Daimler India Commercial Vehicles Pvt. Ltd.
- c) VE Comm. Vehicles Ltd.
- d) SML Isuzu Ltd.
- e) OMAX Auto Ltd.
- f) Rane Automotive Ltd.
- g) Ram Krishna Forgings Ltd.
- h) Pooja Forge Ltd.

Orders in this case depend upon monthly forecast production of the respective OEMs. Depending on their monthly production schedule, each and every OEM gives their orders for the next 2-3 months.

- **Replacement Market**

The company is supplying in after sales market, which constitutes approx. 62% to 67%

Of total sales through its PAN India based network of Distributors/Dealers from past

More than 30 years and orders in this case are also a continuous process. At any point of time, orders equivalent to approximate 2 months of replacement market sales remains in hand.

- **Exports Sales**

Export sales constitute approximate 2% to 3% of total sales. The company exploring new markets to increase the exports in future. The company had export sales of Rs 2.87 Crores in 2019-20 and Rs. 1.46 Crores in 2020-21.

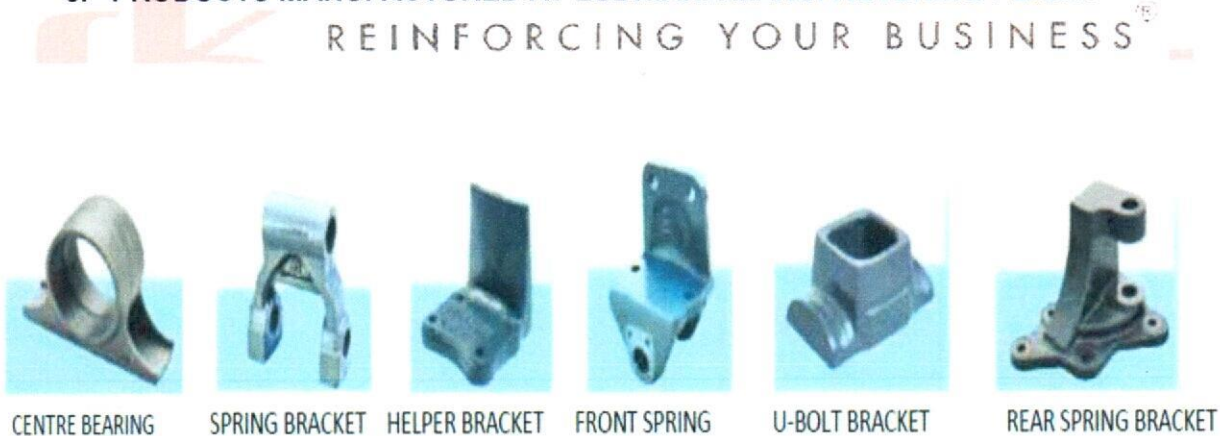


**JAMSHEDPUR MANUFACTURING UNIT:**

**4. PRODUCT DETAILS:**

AGRICULTURE HUB BOLT
BUSHES
CHECK NUT – REPLACEMENT
HANGER BRACKET – REPLACEMENT
HUB BOLT – REPLACEMENT
JACK PARTS (HAND TOOLS)
KING PINS – REPLACEMENT
LEAF BOLT –REPLACEMENT
MISC. BOLTS – REPLACEMENT
NUTS – REPLACEMENT
SPRING BOLT W/NUT – REPLACEMENT
SPRING PIN BOLT – REPLACEMENT
SPRING PINS – REPLACEMENT
STUD –REPLACEMENT
TRAILOR PART
WASHER REPLACEMENT

**5. PRODUCTS MANUFACTURED AT LUDHIANA MANUFACTURING PLANT:**



*Source - Pics obtained from the Company*

**6. SUPPLY CHANNEL:**

Company products will be supplied in the Tata & Aftermarket they have the ratio of 60:40.



**PART H**

**INDUSTRY OVERVIEW & ANALYSIS**

**1. INTRODUCTION**

- a. In 2020, India was the fifth-largest auto market, with ~3.49 million units combined sold in the passenger and commercial vehicles categories. It was the seventh largest manufacturer of commercial vehicles in 2019.
- b. The two wheelers segment dominates the market in terms of volume owing to a growing middle class and a young population. Moreover, the growing interest of the companies in exploring the rural markets further aided the growth of the sector.
- c. India is also a prominent auto exporter and has strong export growth expectations for the near future. In addition, several initiatives by the Government of India and major automobile players in the Indian market is expected to make India a leader in the two-wheeler and four-wheeler market in the world by 2020.

**2. MARKET SIZE**

VALUERS & TECHNO ENGINEERING CONSULTANTS (P) LTD.

- a. Domestic automobiles production increased at 2.36% CAGR between FY16-20 with 26.36 million vehicles being manufactured in the country in FY20. Overall, domestic automobiles sales increased at 1.29% CAGR between FY16-FY20 with 21.55 million vehicles being sold in FY20.
- b. Two wheelers and passenger vehicles dominate the domestic Indian auto market. Passenger car sales are dominated by small and mid-sized cars. Two wheelers and passenger cars accounted for 80.8% and 12.9% market share, respectively, accounting for a combined sale of over 20.1 million vehicles in FY20. Two-wheeler sales stood at 1,195,445 units in March 2021, compared with 1,846,613 units in March 2020, recording a decline of 35.26 %.
- c. Passenger vehicle (PV) sales stood at 279,745 units in March 2021, compared with 2, 17,879 units in March 2020, registering a growth of 28.39%.



- d. As per Federation of Automobile Dealers Associations (FADA), PV sales in December 2020 stood at 271,249 units, compared with 218,775 units in December 2019, registering a 23.99% growth.
- e. Overall, automobile export reached 4.77 million vehicles in FY20, growing at a CAGR of 6.94% during FY16-FY20. Two wheelers made up 73.9% of the vehicles exported, followed by passenger vehicles at 14.2%, three wheelers at 10.5% and commercial vehicles at 1.3%.
- f. EV sales, excluding E-rickshaws, in India witnessed a growth of 20% and reached 1.56 lakh units in FY20 driven by two wheelers. According to NITI Aayog and Rocky Mountain Institute (RMI) India's EV finance industry is likely to reach Rs. 3.7 lakh Crores (US\$ 50 billion) in 2030. A report by India Energy Storage Alliance estimated that EV market in India is likely to increase at a CAGR of 36% until 2026. In addition, projection for EV battery market is forecast to expand at a CAGR of 30% during the same period.
- g. Premium motorbike sales in India recorded seven-fold jump in domestic sales, reaching 13,982 units during April-September 2019. The luxury car market is expected to register sales of 28,000-33,000 units in 2021, up from 20,000-21,000 units sold in 2020. The entry of new manufacturers and new launches is likely to propel this market in 2021.

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### 3. INVESTMENTS:

In order to keep up with the growing demand, several auto makers have started investing heavily in various segments of the industry during the last few months. The industry has attracted Foreign Direct Investment (FDI) worth US\$ 25.40 billion between April 2000 and December 2020, according to the data released by Department for Promotion of Industry and Internal Trade (DPIIT). Some of the recent/planned investments and developments in the automobile sector in India are as follows:

- In 2019-20, the total passenger vehicles sales reached ~2.8 million, while ~2.7 million units were sold in FY21.
- In January 2021, Fiat Chrysler Automobiles (FCA) announced an investment of US\$ 250 million to expand its local product line-up in India.
- In January 2021, Lamborghini announced it is aiming to achieve sales in India higher than the 2019-levels, after recovering from pandemic-induced disruptions.



- In January 2021, Tesla, the electric car maker, set up a R&D centre in Bengaluru and registered its subsidiary as Tesla India Motors and Energy Private Limited.
- In November 2020, Mercedes Benz partnered with the State Bank of India to provide attractive interest rates, while expanding customer base by reaching out to potential HNI customers of the bank.
- Hyundai Motor India invested ~Rs. 3,500 Crores (US\$ 500 million) in FY20, with an eye to gain the market share. This investment is a part of Rs. 7,000 Crores (US\$ 993 million) commitment made by the company to the Tamil Nadu government in 2019.
- In October 2020, Kinetic Green, an electric vehicles manufacturer, announced plan to set up a manufacturing facility for electric golf carts besides a battery swapping unit in Andhra Pradesh. The two projects involving setting up a manufacturing facility for electric golf carts and a battery swapping unit will entail an investment of Rs. 1,750 Crores (US\$ 236.27 million).
- In October 2020, Japan Bank for International Cooperation (JBIC) agreed to provide US\$ 1 billion (Rs. 7,400 Crores) to SBI (State Bank of India) for funding the manufacturing and sales business of suppliers and dealers of Japanese automobile manufacturers and providing auto loans for the purchase of Japanese automobiles in India.
- In October 2020, MG Motors announced its interest in investing Rs. 1,000 Crores (US\$ 135.3 million) to launch new models and expand operations in spite of the anti-China sentiments.
- In October 2020, Ultraviolette Automotive, a manufacturer of electric motorcycle in India, raised a disclosed amount in a series B investment from Go Frugal Technologies, a software company.
- In September 2020, Toyota Kirloskar Motors announced investments of more than Rs 2,000 Crores (US\$ 272.81 million) in India directed towards electric components and technology for domestic customers and exports.
- During early September 2020, Mahindra & Mahindra signed a MoU with Israel-based REE Automotive to collaborate and develop commercial electric vehicles.



- In April 2020, TVS Motor Company bought UK's iconic sporting motorcycle brand, Norton, for a sum of about Rs. 153 Crores (US\$ 21.89 million), making its entry into the top end (above 850cc) segment of the superbike market.
- In March 2020, Lithium Urban Technologies partnered with renewable energy solutions provider, Fourth Partner Energy, to build charging infrastructure across the country.
- In January 2020, Tata Auto Comp Systems, the auto-components arm of Tata Group entered a joint venture with Beijing-based Prestolite Electric to enter the electric vehicle (EV) components market.

#### **4. GOVERNMENT INITIATIVES:**

The Government of India encourages foreign investment in the automobile sector and has allowed 100% foreign direct investment (FDI) under the automatic route. Some of the recent initiatives taken by the Government of India are -

- In Union Budget 2021-22, the government introduced the voluntary vehicle scrap policy, which is likely to boost demand for new vehicles after removing old unfit vehicles currently plying on the Indian roads.
- In February 2021, the Delhi government started the process to set up 100 vehicle battery charging points across the state to push adoption of electric vehicles.
- The Union Cabinet outlaid Rs. 57,042 Crores (US\$ 7.81 billion) for automobiles & auto components sector in production-linked incentive (PLI) scheme under the Department of Heavy Industries.
- The Government aims to develop India as a global manufacturing centre and a Research and Development (R&D) hub.
- Under NATRiP, the Government of India is planning to set up R&D centres at a total cost of US\$ 388.5 million to enable the industry to be on par with global standards.
- The Ministry of Heavy Industries, Government of India has shortlisted 11 cities in the country for introduction of EVs in their public transport systems under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme. The Government will also set up incubation centre for start-ups working in the EVs space.

- In February 2019, the Government of India approved FAME-II scheme with a fund requirement of Rs. 10,000 Crores (US\$ 1.39 billion) for FY20-22.

## 5. ACHIEVEMENTS:

- Following are the achievements of the Indian automotive sector:
- In H12019, automobile manufacturers invested US\$ 501 million in India's auto-tech start-ups according to Venture intelligence.
- On 29th July 2019, Inter-ministerial panel sanctioned 5,645 electric buses for 65 cities.
- Project Implementation and Sanctioning Committee (PISC) on 3rd January 2019.
- Under NATRiP, following testing and research centres have been established in the country since 2015.
- International Centre for Automotive Technology (ICAT), Manesar
- National Institute for Automotive Inspection, Maintenance & Training (NIAIMT), Silchar
- National Automotive Testing Tracks (NATRAX), Indore
- Automotive Research Association of India (ARAI), Pune
- Global Automotive Research Centre (GARC), Chennai
- SAMARTH Udyog - Industry 4.0 centres: 'Demo cum experience' centres are being set up in the country for promoting smart and advanced manufacturing helping SMEs to implement Industry 4.0 (automation and data exchange in manufacturing technology).

## 6. ROAD AHEAD:

The automobile industry is supported by various factors such as availability of skilled labour at low cost, robust R&D centres, and low-cost steel production. The industry also provides great opportunities for investment and direct and indirect employment to skilled and unskilled labour. Indian automotive industry (including component manufacturing) is expected to reach Rs. 16.16 to 18.18 trillion (US\$ 251.4-282.8 billion) by 2026. The Indian auto industry is



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expected to record strong growth in 2021-22, post recovering from effects of COVID-19 pandemic. Electric vehicles, especially two-wheelers, are likely to witness positive sales in 2021-22. Further, a study by CEEW Centre for Energy Finance recognised US\$ 206 billion opportunities for electric vehicles in India by 2030.

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**PART I**

**COMPANY'S FINANCIAL FEASIBILITY**

- 1. PROJECTIONS OF THE FIRM:** The projections of the firm are done for next 7 years period from FY 2021-22 to 2028-29 based on the loan tenor are elaborated below:

**A). PROFIT & LOSS ACCOUNT:**

Particulars (Rs. In lakhs)	FY2020	FY 2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
<b>Net Income</b>	<b>8391.5</b>	<b>7726.8</b>	<b>10071.5</b>	<b>11946.5</b>	<b>13741.5</b>	<b>13741.5</b>	<b>13741.5</b>	<b>13741.5</b>	<b>13741.5</b>	<b>13741.5</b>
<b>Expenses</b>										
Raw materials Expenses	4108.8	3528.3	4424.2	5249.2	6039.0	6039.0	6039.0	6039.0	6039.0	6039.0
Consumable stores & spares	629.4	652.3	755.4	896.0	1030.6	1030.6	1030.6	1030.6	1030.6	1030.6
Changes in Inventory of Finished products	-494.0	-240.3	713.0	-150.0	0.0	0.0	0.0	0.0	0.0	0.0
Power & Fuel	599.3	594.9	775.5	943.8	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6
Selling & Distribution expenses	911.1	848.1	856.1	1015.5	1305.4	1305.4	1374.2	1374.2	1374.2	1374.2
Direct Labour (Factory Wages & Salaries)	1903.5	1673.4	1812.9	2269.8	2610.9	2610.9	2610.9	2610.9	2610.9	2610.9
Other Mfg. expenses	295.8	250.9	327.3	418.1	481.0	481.0	481.0	481.0	481.0	481.0
Depreciation	420.0	402.3	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0
Interest	455.2	429.3	356.0	381.9	366.6	319.9	278.9	260.8	249.0	240.4
<b>Sub Total</b>	<b>8829.0</b>	<b>8139.2</b>	<b>10410.4</b>	<b>11414.3</b>	<b>13309.1</b>	<b>13262.4</b>	<b>13290.1</b>	<b>13271.9</b>	<b>13260.2</b>	<b>13251.6</b>
Add: Other non-operating income: Interest Commission etc.	89.9	36.5	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Profit Before Tax	-347.4	-375.8	-298.9	422.2	472.4	519.1	491.4	509.6	521.3	529.9
Tax	-82.8	2.7	0.0	63.3	94.5	103.8	98.3	132.5	135.5	137.8
Profit After Tax	-264.7	-378.5	-298.9	358.9	377.9	415.3	393.1	377.1	385.8	392.1
Other comprehensive income	40.1	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Profit/Loss for the year</b>	<b>-224.6</b>	<b>-333.2</b>	<b>-298.9</b>	<b>358.90</b>	<b>377.9</b>	<b>415.3</b>	<b>393.1</b>	<b>377.1</b>	<b>385.8</b>	<b>392.1</b>

**Notes & Assumptions Considered:**

Sl. No.	Item	Assumptions and Basis
1.	General	<p>a. The projections of the firm are done for next 7 years period from FY 2021-22 to 2028-29 based on the loan tenor.</p> <p>b. Projections are done based on the historical financials approach and not based on micro item wise calculation approach.</p> <p>c. We have considered Revenue based model (top to bottom approach) while making the future financial projections.</p>
2.	Revenue	<p>a. Revenue figures shown for FY 2021 are based on the provisional financials provided by the company as per actual sales.</p> <p>b. Estimated growth rate for the financial years ending 2022, 2023 &amp; 2024 provided by the company and considered by us are 27.5%, 18.6% &amp; 15% respectively. Further the growth rate has been taken constant up to financial year ending 2029.</p> <p>c. Revenue of Rs. 10071.5 lakhs for the financial year 2022 which shows a growth rate of ~30% as compared to the preceding financial year, has been judiciously taken keeping the fact in mind the post corona (prolonged around 1.5 years) and especially after second wave, Indian Economy will be recovering up at a faster rate and we also believe that the replacement market and export market segments of the company will experience significant boost in the sales figures, more importantly because the vehicular traffic will be increasing sharply and will require regular maintenance which will give a sharp boost to the replacement market sales. In last 5 years up to pre Covid period i.e. FY 2015 – 2019, average revenue is approximately Rs.170 cr. and more so the revenue figure of Rs. 10071.5 lakhs is still behind the from 2017 revenue figures mark, so the revenue figures for 2022 appears to be reasonable in post corona recovery considering the revival of business normalcy.</p> <p>d. Further, estimated growth rates for the financial years 2023 &amp; 2024 are in the line with post corona revival growth rates of economy and industry.</p> <p>e. Post FY 2025 growth rate has been taken constant since it is not practical to foresee for such a longer period as various factors will be changing and impacting overall economic and particularly industrial growth.</p>
3.	Raw material Expense	<p>a. Based on the historical financial data, raw material expenses are averagely 48% of revenue of last 5 years from FY 2015 to 2020. However from 2015-2017 the average raw material expenses was averagely 44.46%. From 2018-2020 it shot up higher to 51.11% which is because of increase in raw material prices but it couldn't</p>

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Sl. No.	Item	Assumptions and Basis
		<p>be compensated against with increase in price. Again in preceding year 2021 it normalised to 45.6% of the revenue due to change in business model where the company decided to hike the sale price to compensate the increase in input raw material price. For this as per information provided by the company, they have raised the sale price twice, one in January'21 and one in June'21 for compensating the increase in input cost.</p> <p>b. Therefore based on the above facts and the data and explanation provided by the company, in our assumptions, for calculating expense for future years, it is assumed at 44% of the revenue at a normalised rate assuming that the increase in input cost will be compensated with the increase in sale price and due to company's future plans for implementing process &amp; product re-engineering and improvements for achieving high productivity, efficiency and achieving cost saving benefits in the shape of product mix, expected additions of new generation machines thereby reducing raw material cost ratio.</p>
4.	Consumable Stores & Spares	<p>a) Based on the historical financial data (as a percentage of revenue) at 7.5%</p> <p>b) Financial Statement for past 5 years from FY-15 to FY-20</p>
5.	Power and Fuel	<p>a) Power and fuel is assumed at 8% (approx.) of the revenue for estimating future projections of the same.</p> <p>b) Financial Statements for the past 5 years from FY-15 to FY-20</p>
6.	Selling and Distribution Expense	<p>a) We have assumed that selling &amp; distribution expense to be 8.5% % of revenue for the FY-22 and FY-23 then after it has been increased to 9.5% for next two years and at 10% for the rest future years.</p> <p>b) As per our independent research and analysis, the repair and maintenance expenses and its growth rate are reasonable and within industry standards. Also, after Corona virus outbreak companies need to enhance their selling and distribution channels in order to make their business more viable and effective. For this reason, in order to make competitive edge in the market an increasing trend for the same is considered.</p>
7.	Salary and Wages	<p>a) Based on the previous 5-year historical trend Labour wages expense is coming out at an average of 20.7% as percent of revenue. However, based on the information provided by the company official during our site inspection and via email that new automated machinery for manufacturing purpose will be setup in the month of September 2021. As, a result 1% reduction in the respective expense is taken into account in the future projections.</p>

Sl. No.	Item	Assumptions and Basis
		b) Salary and wage cost include salary for Production, Quality and Others Staff which is in nature of fixed expenses and cost remain fix irrespective of production activities. Variable portion of Direct Labour will vary with production activities and overall labour cost will decrease with increase in production. Addition of new automatic high production capacity machines and subsuming of many operations of the different departments into these machines will increase the efficiencies and reduce the labour requirements, space requirement and also reduce the labour requirement for movement of the materials.
8.	Other Expenses	a) We have assumed other expenses at 3.5% of the revenue for future years. b) Average of historical proportion as a percentage of revenue, based on the financial statement for past 5 years from FY-15 to FY-20
9.	Debt, repayment and Interest assumptions	a) **As per the detailed notes below. b) As pre restructuring proposal prepared by the company and as per GECL product under ECLGS scheme.

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**\*\*Notes for the assumptions of restructuring purpose taken by the company and considered by us:**

- The WCTL is carved out against Old and slow-moving stocks due to transition from phase IV to VI and Covid-19 Pandemic and old debtors.
- Interest for CC is considered @ 8.00 % on CC limit of Rs 20.00 Crores after WCTL and Non fund limits have been considered at 5.50 Crores as per existing sanction.
- Covid loan (CECF) of Rs 2.72 Crores (Balance Rs 1.41 Crores as on 30-06-21) @ 7.30.% (Existing Rate), the repayment has been rescheduled in 36 equal monthly installments of Rs 3.80 lac each with a moratorium period from July 2021 to March 2022 and installments starting from April, 2022 with in total period of 5 years. Interest shall be payable monthly as and when due.
- GECL of Rs 545 lac @ 7.65.% (Existing Rate), the repayment has been rescheduled in 36 monthly installments of Rs 15.14 lac each starting from August, 2022 with moratorium period extended from one to two years within total period of 5 years. Interest shall be payable monthly as and when due.
- Additional WCTL of Rs 2.72 Crores under Emergency Credit Line Guarantee Scheme (ECLGS) of NCGTC repayable in 36 monthly instalments of Rs 7.56 lakhs with 2 years moratorium. Instalments starting from July 2023. Interest @7.65% P.A shall be payable monthly as and when due.
- WCTL of Rs 7.25 Crores is carved out of Current CC limits of Rs 27.25 Crores. The moratorium for WCTL has been considered for 2 years with effective from July 2021 to June 2023 and repayment in 60 monthly equal installments of Rs 12.08 lac starting from July 2023. Interest @8.00% P.A shall be payable monthly as and when due.
- FITL Rs 3.25 Crores has been created for interest for future period from July 2021 to June 2023 (2 years) @ 8% P.A calculated monthly on CC limit of Rs 20.00 Crores. FITL shall bear interest rate 8% P.A. The repayment has been considered to be repayable in 24 equal monthly installments of Rs 13.54

*lac starting from July 2023 to June 2025. Interest @8.00% per annum shall be payable monthly as and when due.*

**B). BALANCE SHEET:**

Particulars (Rs. In lakhs)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
<b>Assets</b>										
<b>Non-Current Assets</b>										
Property, Plant and Equipment	5102.07	4742.11	4352.11	3962.11	3572.11	3182.11	2792.11	2552.11	2787.11	3197.11
Deferred Tax Assets	685.31	682.65	320.00	256.67	162.19	58.36	0.00	0.00	0.00	0.00
Other Non-Current Assets	163.23	163.23	150.07	150.07	150.07	150.07	150.07	150.07	150.07	150.07
<b>Current Assets</b>										
Inventories	2,463.35	2,896.78	2,400.00	2,700.00	2,850.00	2,850.00	2,950.00	2,950.00	2,950.00	2,950.00
<b>Financial Assets</b>										
Investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trade Receivables	2069.43	1766.53	1600.00	1950.00	1950.00	1900.00	1900.00	1900.00	1900.00	1900.00
Cash & Cash Equivalent	27.36	85.78	83.44	126.70	148.94	163.18	165.50	215.09	220.88	166.55
Bank & Bank Balances	91.49	96.53	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
Other Financial Assets	9.80	13.33	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Other Current Assets	497.27	480.03	522.00	502.00	502.00	502.00	502.00	502.00	502.00	502.00
<b>Total Assets</b>	<b>11109.31</b>	<b>10926.97</b>	<b>9515.62</b>	<b>9735.55</b>	<b>9423.31</b>	<b>8893.72</b>	<b>8547.68</b>	<b>8357.27</b>	<b>8598.06</b>	<b>8953.73</b>
<b>Equity &amp; Liabilities</b>										
Equity Share Capital	725.73	725.73	725.73	725.73	725.73	725.73	725.73	725.73	725.73	725.73
Other Equity	2312.08	1978.80	1679.86	2038.76	2416.69	2832.00	3225.14	3602.21	3987.96	4380.07
<b>Total Equity</b>	<b>3037.81</b>	<b>2704.53</b>	<b>2405.59</b>	<b>2764.49</b>	<b>3142.42</b>	<b>3557.73</b>	<b>3950.87</b>	<b>4327.94</b>	<b>4713.69</b>	<b>5105.80</b>
<b>Liabilities</b>										
<b>Non-Current Liabilities</b>										
<b>Financial Liabilities</b>										
Borrowing	29.73	719.67	1643.87	1303.05	713.06	373.88	206.40	61.44	25.00	25.00
Other Financial Liabilities	63.48	52.93	52.93	52.93	52.93	52.93	52.93	52.93	52.93	52.93
other Non-Current Liabilities	1750.00	1608.27	1375.00	1350.00	1150.00	700.00	400.00	100.00	100.00	100.00
Provisions	253.36	213.72	200.00	200.00	200.00	285.00	285.00	285.00	285.00	285.00
<b>Current Liabilities</b>										
<b>Financial Liabilities</b>										
Borrowing	2801.97	2674.77	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00
Trade Payable	1576.31	1359.49	1085.00	1085.00	1085.00	1085.00	860.00	760.00	760.00	760.00
Other Financial Liabilities	1030.24	1272.47	508.23	735.08	834.90	594.18	547.48	524.96	416.44	380.00
other Liabilities	513.36	250.98	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00
Provisions	53.05	70.14	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00
<b>Total Equity and Liability</b>	<b>11109.31</b>	<b>10926.97</b>	<b>9515.62</b>	<b>9735.55</b>	<b>9423.31</b>	<b>8893.72</b>	<b>8547.68</b>	<b>8357.27</b>	<b>8598.06</b>	<b>8953.73</b>



**C). FUND FLOW STATEMENT:**

Particulars (Rs. in lakhs)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
<b>SOURCES:</b>										
Net Profit/Loss (after income tax)	(224.63)	(333.28)	(298.94)	358.90	377.93	415.31	393.14	377.07	385.75	392.11
Depreciation	419.95	402.34	390.00	390.00	390.00	390.00	390.00	390.00	390.00	390.00
Share/warrant Application Money	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in Share Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in Unsecured Loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Decrease in -										
Fixed Assets & Others	8.56	13.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other non-current assets	0.00	2.66	375.81	63.33	94.48	103.83	58.36	0.00	0.00	0.00
Others:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Deferred Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in term liabilities	0.00	498.02	677.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>h) TOTAL:</b>	<b>203.88</b>	<b>583.10</b>	<b>1144.08</b>	<b>812.23</b>	<b>862.41</b>	<b>909.14</b>	<b>841.50</b>	<b>767.07</b>	<b>775.75</b>	<b>782.11</b>
<b>USES</b>										
Net Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Decrease in Term Liabilities	166.47	0.00	0.00	365.82	789.99	704.18	467.48	444.96	36.44	0.00
(Including Public Deposits)										
Increase in: Fixed Assets	21.60	55.74	0.00	0.00	0.00	0.00	0.00	150.00	625.00	800.00
Capital Work in progress	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other non-current assets	89.14	0.00								
Dividend payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Payment of Unsecured Loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL:</b>	<b>277.21</b>	<b>55.74</b>	<b>0.00</b>	<b>365.82</b>	<b>789.99</b>	<b>704.18</b>	<b>467.48</b>	<b>594.96</b>	<b>661.44</b>	<b>800.00</b>
Long Term Surplus (+)/Deficit (-) (Sources-Uses)	<b>-73.33</b>	<b>527.36</b>	<b>1144.08</b>	<b>446.41</b>	<b>72.42</b>	<b>204.96</b>	<b>374.02</b>	<b>172.11</b>	<b>114.31</b>	<b>-17.89</b>
Increase/decrease in current assets *										
(As per details given below)	(193.23)	180.28	(645.54)	673.26	172.24	(35.76)	102.32	49.59	5.79	(54.33)
Increase/decrease in current										
Liabilities other than Bank borrowings.	(219.45)	(219.88)	(1114.85)	226.85	99.82	(240.72)	(271.70)	(122.52)	(108.52)	(36.44)
Increase/decrease in Working Capital gap.	26.22	400.16	469.31	446.41	72.42	204.96	374.02	172.11	114.31	(17.89)



Particulars (Rs. in lakhs)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Net Surplus (+)/Deficit (-) (Difference of Long-Term Surplus & Increase/decrease in Working Capital gap.)	(99.55)	127.20	674.77	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00
Increase/decrease in Bank borrowings	99.55	(127.20)	(674.77)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INCREASE/DECREASE IN NET SALES:	(6999.44)	(664.69)	2344.62	1875.00	1795.00	0.00	0.00	0.00	0.00	0.00
*Break-up of Current Assets										
Increase/Decrease in raw materials	(141.78)	141.28	245.86	150.00	150.00	0.00	100.00	0.00	0.00	0.00
Increase/Decrease in Stocks-in-Process.	342.39	169.08	-299.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase/Decrease in Finished Goods	141.35	80.51	(423.00)	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase/Decrease in Receivables:										
(a) Domestic	-319.76	-302.02	-281.61	300.00	0.00	(50.00)	0.00	0.00	0.00	0.00
(b) Export	-70.12	-0.88	115.08	50.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase/Decrease in Stores & Spares	-41.13	42.56	(20.31)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase/Decrease in other current assets.	(104.18)	49.75	17.77	23.26	23.24	14.24	2.32	49.59	5.79	-54.33
<b>TOTAL</b>	<b>-193.23</b>	<b>180.28</b>	<b>-645.54</b>	<b>673.26</b>	<b>172.24</b>	<b>(35.76)</b>	<b>102.32</b>	<b>49.59</b>	<b>5.79</b>	<b>-54.33</b>

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#### D). DEBT SERVICE COVERAGE RATIO (DSCR):

Particulars	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
DSCR	2.15	1.37	1.29	1.88	2.71	2.94	4.19
Loan instalments	174.25	530.08	629.90	339.18	167.48	144.96	36.44
Interest	381.89	366.62	319.89	278.89	260.76	249.04	240.44
Total	556.14	896.70	949.79	618.07	428.24	394.00	276.88
EBIDTA	1,194.12	1,229.03	1,229.03	1,160.32	1,160.32	1,160.32	1,160.32

**Conclusion:** The Company have probability of repaying its' outstanding amount of debt as its Average DSCR is well above one.



**E). KEY FINANCIAL RATIOS:**

Particulars	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue	8391.5	7726.8	10057.5	11946.5	13741.5	13741.5	13741.5	13741.5	13741.5	13741.5
EBITDA	527.62	455.8	447.15	1194.12	1229.03	1229.03	1160.32	1160.32	1160.32	1160.32
EBITDA Margin (%)	6.3%	5.9%	4.4%	10.0%	8.9%	8.9%	8.4%	8.4%	8.4%	8.4%
EBIT	107.7	53.48	57.15	804.1	839.0	839.0	770.3	770.3	770.3	770.3
EBIT Margin (%)	1.3%	0.7%	0.6%	6.7%	6.1%	6.1%	5.6%	5.6%	5.6%	5.6%
PAT	-264.7	-378.5	-298.9	358.9	377.9	415.3	393.1	377.0	385.7	392.1
PAT Margin (%)	-3.2%	-4.9%	-3.0%	3.0%	2.8%	3.0%	2.9%	2.7%	2.8%	2.9%
Interest Coverage Ratio	-	-	1.26	3.13	3.35	3.84	4.16	4.45	4.66	4.83
CURRENT RATIO	-	-	1.22	1.32	1.33	1.40	1.53	1.60	1.66	1.65
Long Term Debt/EBIDTA	-	-	-	1.51	1.07	0.56	0.30	0.16	0.03	-
DSCR	-	-	-	2.15	1.37	1.29	1.88	2.71	2.94	4.19

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**PART J**

**CONCLUSION**

M/s G.S Auto International Ltd. was enjoying credit facility of Rs.39.61 Crores from PNB which comprises of fund based facility of Rs.27.25 Crores and non-fund based facility of Rs.5.50 Crores since year 2005. Due to surge of Covid pandemic and business disruptions due to the country wide lockdown, the company started facing financial stress and is finding difficult to service debt for the existing loan facility. To rescue industries and businesses especially MSME sector which got greatly impacted by Covid, Govt. of India and RBI has come up with several relief measures which included **(MSME) sector – Restructuring of Advances, Resolution Framework for COVID-19-related Stress, Guaranteed Emergency Credit Line (GECL) under Emergency Credit Line Guarantee Scheme (ECLGS).**

Due to widespread Covid pandemic economic disruption, G.S Auto International Ltd. was also no exception and started facing cash flow issues in early 2020 and for this company has already availed 39.61 Crores Covid financial assistance facilities earlier last year. Now due to continued business disruption from Covid especially from Covid wave 2.0, company is still under cash flow stress and wants to further avail the relief under **Resolution Framework 2.0 – Resolution of Covid-19 related stress of Micro, Small and Medium Enterprises (MSMEs) floated by RBI dated: 05.05.2021** under which the restructuring of the borrower account has to be invoked by September 30, 2021. Scheme has the following eligibility criteria:

S.No.	Eligibility	Company's status
1.	The borrower should be classified as a micro, small or medium enterprise as on March 31, 2021 in terms of the Gazette Notification S.O. 2119 (E) dated June 26, 2020.	Yes, company is classified as MSME. The company is registered as Medium Manufacturing Unit vide registration No UDYAM-PB-12-0003474 dated 09-09-2020 of Ministry of Micro, Small and Medium Enterprises.
2.	The borrowing entity is GST-registered on the date of implementation of the restructuring. However, this condition will not apply to MSMEs that are exempt from GST-registration. This shall be determined on the basis of exemption limit obtaining as on March 31, 2021.	Yes, company is registered with GST since July 2017 and GST Registration No is 03AAACG6090R1Z9
3.	The aggregate exposure, including non-fund based facilities, of all lending institutions to the borrower does not exceed ₹50 Crores as on March 31, 2021.	Total exposure as on March 31, 2021 stands at Rs.39.61 Crores including non-fund based facilities which are less than Rs.50 cr. as required as per the scheme.

4.	The borrower's account was a 'standard asset' as on March 31, 2021.	Yes company's account was a "standard asset" as on March 31, 2021.
5.	The borrower's account was not restructured in terms of the circulars DOR.No.BP.BC/4/21.04.048/2020-21 dated August 6, 2020; DOR.No.BP.BC.34/21. 04.048/2019-20 dated February 11, 2020; or DBR.No.BP.BC.18/21.04.048/2018-19 dated January 1, 2019 (collectively referred to as MSME restructuring circulars) or the circular DOR.No.BP.BC/3/21.04.048/2020-21 dated August 6, 2020 on "Resolution Framework for COVID-19-related Stress."	The company account has not been restructured ever since January, 2019.
6.	That the borrower is registered in the Udyam Registration portal, before the date of implementation of the restructuring plan for the plan to be treated as implemented.	Yes company is registered under Udyam Registration.
7.	That this scheme shall be contingent on the accounts which are under stress only due to economic fallout from Covid-19.	Yes appears to be based previous financials pre Covid when company's EBIDTA was positive with no signs of stress in the account.

Company's account status was standard & regular and was generating positive EBIDTA before the Covid period, it signifies that the company's financial stress is appearing only due to Covid stress. Also based on the above eligibility criteria, company appears to be fulfilling the eligibility criteria for applying under **Resolution Framework 2.0**.

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Company's product is an important and widely used generic ancillary item like nut, bolt, bracket, bearing, spring required by the auto Industry and is still in continuation and will remain so in future as well with unlikely any major changes in the technology, model or replacement of these items with any other product or model. Company's major clients are the trusted groups in auto manufacturing sector and therefore from supply side also the product and the company appears to be safe.

Also considering the other factors such as current and estimated market scenarios, expected industry growth recovery post Covid period, company's future plans shared with us for undergoing process & product re-engineering and improvements for achieving high productivity, efficiency and achieving cost saving benefits in the shape of product mix, expected additions of new generation machines thereby reducing operational costs like labour and power costs, rejections and improvement in quality parameters, extensive testing of raw materials and finished products to improve quality of products and reduction in rejections, the financial projections of the company seems to be achievable based on the futuristic logical & scientific assumptions considered in the projections subject to the market & economy stability factors, judicious business operations proper



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& timely implementation of its process & product re-engineering & improvements plans for achieving high productivity, efficiency and achieving cost saving benefits. As per financials projections for the period up to FY 2029 extrapolating based on historical financials, ADSCR comes out to be **2.01**.

Hence based on the above factors, assumptions taken and future plan of the company in terms of implementing process & product re-engineering and improvements for achieving high productivity, efficiency and achieving cost saving benefits *as per current scenario*, the company's proposal under Resolution Framework 2.0 appears to be technically and economically viable.



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<b>Declaration</b>	i. The undersigned does not have any direct/indirect interest in the above property.	
	ii. The information furnished herein is true and correct to the best of our knowledge, logical and scientific assumptions.	
	iii. This TEV Report is carried out by our Financial Analyst team on the request from M/s. GS Auto International Limited.	
	iv. Meeting of Financial projections will be subject to subject to the market & economy stability factors, judicious business operations and proper & timely implementation of its process & product re-engineering & improvements plans for achieving high productivity, efficiency and achieving cost saving benefits.	
	v. We have submitted TEV report to the Client.	
<b>Name &amp; Address of consultant company</b>		<b>Signature of the authorized person</b>
M/s. R.K. Associates Valuer & Techno Engineering Consultants Pvt. Ltd. D-39, 2 <sup>nd</sup> Floor. Sector-2, Noida- 201301		
<b>Enclosed Documents</b>	Disclaimer & Remarks 52-55	
<b>Number of Pages in the Report</b>	55	
<b>Financial Analyst Team worked on the report</b>	<b>PREPARED BY: Mr Gaurav Kumar</b> VALUERS & TECHNO ENGINEERING CONSULTANTS (P) LTD. <b>REVIEWED BY: HOD Project</b>	

For R.K Associates Valuer & Techno  
Engineering Consultants (P) Ltd.

Place: Noida

Date: 17/07/2021

(Authorized Signatory)



**PART K**

**DISCLAIMER | REMARKS**

1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
2. This report is prepared based on the copies of the documents/ information which the Bank/ Company has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. The client/owner and its management/representatives warranted to us that the information they supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. I/We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the owner, company, its directors, employee, representative or agents. Verification or cross checking of the documents provided to us from the originals or from any Govt. departments/ Record of Registrar has not been done at our end since this is beyond the scope of our work. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
3. Legal aspects for e.g. investigation of title, ownership rights, lien, charge, mortgage, lease, sanctioned maps, verification of documents, etc. have not been done at our end and same has to be taken care by legal expert/ Advocate. It is assumed that the concerned Lender/ Financial Institution has satisfied them with the authenticity of the documents, information given to us and for which the legal verification has been already taken and cleared by the competent Advocate before requesting for this report. I/ We assume no responsibility for the legal matters including, but not limited to, legal or title concerns.
4. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document, DPR or Techno feasibility study. All the information gathered is based on the facts seen on the site during survey, verbal discussion & documentary evidence provided by the client and is believed that information given by the company is true best of their knowledge.
5. This Techno Economic-Viability study is prepared based on certain futuristic assumption which are intra dependent on economic, market and sectoral growth condition in future and socio-economic, socio-political condition at macro and micro level.
6. Meeting of assumption and financial ratio will entirely depend on the sincerity and efforts of the company, promoters and it's key managerial performance.



7. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
8. Bank/FII should **ONLY** take this report as an Advisory document from the Financial/ Chartered Engineering firm and its specifically advised to the creditor to cross verifies the original documents for the facts mentioned in the report which can be availed from the borrowing company directly.
9. In case of any default in loans or the credit facility extended to the borrowing company, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
10. The documents, information, data provided to us during the course of this assessment by the client are reviewed only up to the extent required in relation to the scope of the work. No document has been reviewed beyond the scope of the work.
11. This report only contains general assessment & opinion as per the scope of work evaluated as per the information given in the copy of documents, information, data provided to us and/ and confirmed by the owner/ owner representative to us at site which has been relied upon in good faith. It doesn't contain any other recommendations of any sort including but not limited to express of any opinion on the suitability or otherwise of entering into any transaction with the borrower.
12. We have relied on data from third party, external sources & information available on public domain also to conclude this report. These sources are believed to be reliable and therefore, we assume no liability for the truth or accuracy of any data, opinions or estimates furnished by others that have been used in this analysis. Where we have relied on data, opinions or estimates from external sources, reasonable care has been taken to ensure that such data has been correctly extracted from those sources and /or reproduced in its proper form and context, however still we can't vouch its authenticity, correctness or accuracy.
13. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
14. This is just an opinion report and doesn't hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.



15. All Pages of the report including annexure are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.
16. Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within **15 (Fifteen) days** in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client up to their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.
17. Defect Liability Period is **15 DAYS**. We request the concerned authorized reader of this report to check the contents, data and calculations in the report within this period and intimate us in writing if any corrections are required or in case of any other concern with the contents or opinion mentioned in the report. Corrections only related to typographical, calculation, spelling mistakes, incorrect data/ figures/ statement will be entertained within the defect liability period. Any new changes for any additional information in already approved report will be regarded as additional work for which additional fees may be charged. No request for any illegitimate change in regard to any facts & figures will be entertained.
18. R.K Associates encourages its customers to give feedback or inform concerns over its services through proper channel at [valuers@rkassociates.org](mailto:valuers@rkassociates.org) in writing within **15 days** of report delivery. After this period no concern/ complaint/ proceedings in connection with the Techno- Economic Viability Study Services will be entertained due to possible change in situation and condition of the subject Project.
19. Our Data retention policy is of **ONE YEAR**. After this period, we remove all the concerned records related to the assignment from our repository. No clarification or query can be answered after this period due to unavailability of the data.
20. This Techno Economic Viability Study report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of



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this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.

21. R.K Associates never releases any report doing alterations or modifications from pen. In case any information/ figure of this report is found altered with pen then this report will automatically become **null & void**.
22. If this report is prepared for the matter under litigation in any Indian court, no official or employee of R.K Associates will be under any obligation to give in person appearance in the court as a testimony. For any explanation or clarification, only written reply can be submitted on payment of charges by the plaintiff or respondent which will be 10% of the original fees charged where minimum charges will be Rs. 15,000/.



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