

REPORT ON REVIEW OF PROJECT COST & PRODUCTION CAPACITY OF PROPOSED PRODUCTION FACILITY AT CHENNAI OF GALA PRECISION ENGINEERING LIMITED

Valuation
Investment Banking
Restructuring
Advisory Services

**To,
Board of Directors
Gala Precision Engineering Ltd.**

Dear Sir,

In accordance with the appointment letter dated 2nd November, 2023, we enclose our Detailed Project Report on review of Project cost and Production capacity (hereinafter referred to as 'DPR' or 'Report') of proposed production facility situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India of Gala Precision Engineering Limited.

We RBSA Advisors LLP, have been appointed by Gala Precision Engineering Limited (hereinafter referred to as 'Company' or 'Client' or 'GPEL') as an advisor to review of Project cost and Production capacity of proposed production facility situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India of GPEL for the purpose of proposed IPO.

Gala group offer disc springs with Gala brand and wedge-lock washers with Gallock brand. The company has existing manufacturing facility in Plot No. 295, Gate No. I & II, Village Vadavali at Post Met, Musarne Road, Bhiwandi - Wada Highway, Taluka Wada, Palghar – 421312, India and Plot No. 302, Gate No. I & II, Village Vadavali at Post Met, Musarne Road, Bhiwandi - Wada Highway, Taluka Wada, Palghar – 421312, India offering high tensile fasteners for Industrial & Wind Turbine applications such as Nacelle Fasteners, Tower Connections, Foundation Anchor Studs & Blade Connections.

RBSA Advisors, founded in 1971, is a leading independent Transaction Advisory firm with service offerings including Valuation, Chartered Engineer certification, Investment Banking, Restructuring, Due Diligence, Transaction Tax, Risk Advisory and Litigation Support. With a team of more than 250+ professionals, we are spread across 9 offices in India, Dubai and Singapore. RBSA has been consistently ranked amongst the top 5 M&A advisory firms by both Merger Market and Venture Intelligence.

EXECUTIVE SUMMARY

Review of Project Cost:

The project cost estimation of proposed production facility of GPEL situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India as on 21st December, 2023 is mentioned as under..

Sr. No.	Asset Category	Project Cost (INR in Million)
1	Land and Land Development	44.58
2	Buildings	78.17
3	Plant & Machinery	274.45
4	Electrical Installation	22.13
5	Furniture, IT Equipment and Vehicles	14.35
6	Govt Approvals/Permissions/Clearances	9.97
7	Pre-Operative Expenses	21.92
8	Contingency	17.75
	Total	483.32

- The company has provided us the Letter of Management Representation (MR) dated 4th January, 2024 regarding the estimated pre-operative expenses for proposed production of Studs, Hex Bolts and Nuts and same has been adopted without any further verification. (Refer Exhibit-A for further details)
- The amount of contingency is in-line with normal industry standard.

EXECUTIVE SUMMARY



Review of Production Capacity:

The review of the production capacity of proposed production facility of GPEL situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India as on 21st December, 2023 is mentioned as under..

Sr. No.	Name of Product	Production Capacity per Annum (in Metric Ton)	Quantity per Annum (In Nos.)(Approx.)	Total Turnover/Annum (INR in Million) (Approx.)
1	Stud	2783	477,729	740.00
2	Hex Bolt	1434	154,000	390.00
3	Nut	407	375,000	60.00
	Total	4624 Or Say 4600 MT	1,006,729	1,190.00

- The reported analysis, opinion and conclusion are limited only by the information provided by the company and reported assumptions and limiting conditions in the report.
- The approx. quantity/annum mentioned in above table is envisaged by the company for the proposed production facility.
- The approx. total turnover/annum mentioned in above table is adopted as per the letter of management representation dated 4th January, 2024 provided by Gala Precision Engineering Limited. (Refer Exhibit-A for further details)

For RBSA Advisors LLP

Jigar Kothari
Partner

Ishaan Ayer
Asst. Vice President

Vishal Gajjar
Manager

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12/02/2024

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COMPANY AND PROJECT BACKGROUND

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1. COMPANY AND PROJECT BACKGROUND

- Gala Precision Engineering Limited (GPEL) is a Company incorporated in year 2009 having its registered and corporate office situated at A-801, 8th Floor, Thane One DIL Complex, Ghodbunder Road Majiwade, Thane (West) Maharashtra, India, 400610.
- The company is engaged in the design and manufacture of;
 - Disc & Strip Springs (DSS) including Gallock (Wedge Lock Washers)
 - Coil & Spiral Springs (CSS)
 - Special Fastening Solutions (SFS)
- The company has existing manufacturing facility as under;

Wada Plant	
Plot No. 295, Gate No. I & II, Village Vadavali at Post Met, Musarne Road, Bhiwandi - Wada Highway, Taluka Wada, Palghar – 421312, India.	Plot No. 302, Gate No. I & II, Village Vadavali at Post Met, Musarne Road, Bhiwandi - Wada Highway, Taluka Wada, Palghar – 421312

- The company is planning to set up a new manufacturing facility at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India, similar to the existing facility.



1. COMPANY AND PROJECT BACKGROUND

Proposed Project Background	
Name of the Company	Gala Precision Engineering Limited
Management Team	Mr. Kirit Gala-Chairman & Managing Director Mr. Balkishan Jalan-Executive Director Mr. Satish Kotwani-Director - Business Development Mr. Rajendra Gogri- Non-Executive Director Mr. Snehal Shah-Independent Director Ms. Varsha Galvankar-Independent Director Ms. Neha Gada-Independent Director Mr. Sudhir Gosar- Independent Director
Proposed Project	Setting up a new facility at Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Tamil Nadu for manufacturing high tensile fasteners and hex bolts;
Project Location	Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India
Land Area	1.66 Acres ~ 6,718 SMT
List of Products	Studs, Bolts, Nuts being part of the suite of Specialized Fastening Solutions proposed to be provided by GPEL
Production Capacity	4600 Metric Ton (MT) per Annum or Say Approx. quantity - 1,006,729 nos. per Annum
Duration of Project Implementation	Project will be implemented in phase manner and will be completed by December. 2025.

SCOPE OF WORK AND SOURCE OF INFORMATION

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2. SCOPE OF WORK AND SOURCE OF INFORMATION

- Gala Precision Engineering Limited (GPEL) is a Company incorporated in year 2009 having its registered and corporate office situated at A-801, 8th Floor, Thane One DIL Complex, Ghodbunder Road Majiwade, Thane (West) Maharashtra, India, 400610.
- Gala Precision Engineering Limited is raising the funds through IPO partly for establishing the new project for production of Special Fastening solution in the state of Tamil Nadu.
- GPEL has approached RBSA Advisors LLP (“RBSA”) to review Project cost & Production capacity of proposed production facility of special fastening solution situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India for the purpose of proposed IPO.

2. SCOPE OF WORK AND SOURCE OF INFORMATION

The detailed scope of work is as under;

Review of Project cost and production capacity of proposed production facility at Chennai

- Collection of data pertinent to the construction plan proposed by the Management of the company;
- Comment on status of Approvals/clearances from Tamil Nadu Pollution Control Board (TNPCB), State Industries Promotion Corporation of Tamil Nadu (SIPCOT), Directorate of town and country planning (DTCP) various regulatory authorities; CRISIL, HDFC Bank, Yes Bank
- Review and comment on cost of proposed land development;
- Review and comment on cost of proposed civil structure;
- Review and comment on cost of proposed plant & machinery;
- Review and comment on cost of utilities and other misc. fixed assets;
- Comment on the reasonableness of overall project cost.
- Review and comment on proposed production capacity.
- Preparation of a DPR (“deliverable”) outlining our comment on project cost for proposed production facility at Chennai.

2. SCOPE OF WORK AND SOURCE OF INFORMATION

This Report has been prepared on the basis of the following sources of information as provided by the Management:

General Information:

1. A copy of certificate of incorporation consequent upon conversion to public company
 2. A copy of Lease Deed
 3. A copy of receipt of initial deposit, caution deposit and payment for leased Land
 4. Approved Factory building Plan and Elevation
 5. Approved Site Layout
 6. Good for Construction (GFC) drawing of Compound wall
 7. Structural drawing of the compound wall on shivpad factory side
 8. Cost estimates for construction of building
 9. Cost estimates for land development
 10. Cost estimates for plant & machinery along with the supporting quotations
 11. Cost estimates electrical installation, furniture, IT equipment and vehicles along with the supporting quotation
 12. Standard capacity calculation for each product of proposed production facility
 13. List of approvals and its status to run the proposed production facility
 14. Process flow chart and process description
- **Discussions with the following personnel of the Company:**
 - Mr. S. Giridhar (Chief Financial Officer)
 - Mr. Sunil Pathak (Associate Vice President-Projects)
 - Mr. Mahesh Patil (Vice President – Wada Unit)
 - Some of the clarifications were provided by the Management personnel verbally, without further confirmations in writing. We have assumed that such verbal information or clarifications provided to us is reliable, accurate and complete in all respects.
 - For our analysis, we have relied on published and secondary sources of data, whether or not made available by Management. We have not independently verified the accuracy or timeliness of the same.

FACTS, ASSUMPTIONS & LIMITING CONDITIONS

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3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

- Any matters related to legal title and ownership are outside the purview and scope of this exercise. Further, no legal advice regarding the title and ownership of the proposed land, buildings and machinery/equipment has been obtained while conducting this exercise. The reader is advised to take appropriate legal opinion on the matter while taking any decision on the basis of this report. Further, we have assumed that the proposed land, buildings and machinery/equipment have requisite planning approvals and clearances from appropriate local authorities, and they comply with local development control regulations.
- This exercise may be significantly influenced by adverse legal, title or ownership and/or encumbrance issues. We reserve our right to change the conclusion should any such issue is brought to our notice at a later date.
- We have acted as an independent third party and, as such, shall not be considered an advocate for any concerned party for any dispute. This exercise has been carried out independently to provide the advisory services. We have no present or planned future interest in company or any of its group companies and the fee for this report is not contingent upon outcome of the transaction. Our exercise/advisory service should not be construed as investment advice; specifically, we do not express any opinion on the suitability or otherwise of entering into any transaction with company.
- We have made certain assumptions in relation to facts, conditions or situations affecting the subject of, or approach to, this exercise that has not been verified as part of the engagement rather, treated as “a supposition taken to be true”. If any of these assumptions prove to be incorrect then our reported estimate will need to be reviewed.
- In the course of this exercise, we were provided with both written and verbal information. We have however, evaluated the information provided to us by the Company through broad inquiry, analysis and review but have not carried out a due diligence or audit of the information provided for the purpose of this engagement. Our conclusions are based on the assumptions, forecasts and other information given by/on behalf of the Company.
- The subject exercise is based on prevailing market dynamics as on the date of the exercise and does not take into account any unforeseeable developments which could impact the same in the future.
- This Report forms an integral whole and cannot be split in parts. The outcome of the exercise can only lead to proper conclusions if the Report as a whole is taken into account.
- This report is further governed by our standard terms and conditions of professional engagement; offer or contract.
- Other observations, assumptions and limiting conditions, as appropriate, are also mentioned in respective sections of this report and annexures.
- Possession of the report or any copy thereof shall not carry with it right of publication. No portion of the report shall be disseminated to third parties through prospectus, advertising, public relations, news or any other means of communication without the written consent and approval of RBSA. However, looking to the purpose of this exercise, the client can disclose the outcome of this exercise in DRHP filing with SEBI.

3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

- No soil analysis or geological or other technical studies were made in conjunction with the report, nor was any water, oil, gas or other subsurface mineral and use rights or conditions investigated by RBSA. However, the company has provided us the copy of geotechnical investigation report issued by Josmar Consulting Engineers dated 11th April, 2023.
- The subject exercise is based on prevailing market dynamics as on the date of the estimation and does not take into account any unforeseeable developments which could impact the same in the future.
- In the approvals/permission certificates provided by the company, the name of the company is Gala Precision Engineering Private Limited. However, the copy of certificate of incorporation for the name change from Gala Precision Engineering Private Limited to Gala Precision Engineering Limited has been provided to us and as per verbal information provided by company officials, the name change process in the approvals/permission certificates is under progress.
- The Report assumes that the Company complies/ complied fully with relevant laws and regulations applicable in all its areas of operations unless otherwise stated and will be managed in a competent and responsible manner. Further, except as specifically stated to the contrary, this Report has given no consideration to matters of a legal nature, including issues of legal title and compliance with local laws, and litigation and other contingent liabilities that are not recorded in the audited / unaudited balance sheet of the Company. We have made no investigation of, and assume no responsibility for the title to assets or liabilities against Company. No consideration has been given to liens or encumbrances against the assets, beyond the loans disclosed in the accounts.
- Our services are not designed to and are not likely to reveal fraud or misrepresentation by the Management or by external parties. Accordingly, we cannot accept responsibility for detecting fraud (whether by the Management or by external parties) or misrepresentation by the Management or any other person. While performing this assignment, we have assumed the genuineness of all signatures and the authenticity of all documents and/ or copies of documents shown to us. We have also relied upon the veracity of the representations made, and the information provided to us by/ on behalf of the Management. In no event shall we be liable for any loss, damages, cost or expenses arising in any way from fraudulent acts, misrepresentations or wilful default on part of the Client, Company, their directors, employees or agents. In no circumstances shall the liability of RBSA, its partners, its directors or employees, relating to the services provided in connection with the engagement set out in this Report will exceed the amount paid to such advisory in respect of the fees charged by it for these services.

3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

- Our report can be used by the Client only for the purpose, as indicated in this report, for which we have been appointed and cannot be used or relied by the Client for any other purpose or by any other party for any purpose whatsoever. We are not responsible for the unauthorized use of this Report. We are not responsible to any other person for any decision of such person based on this report. Any person intending to provide finance / invest / divest in the shares / business of the Company or its other group companies, if any, shall do so after seeking their own professional advice and after carrying out their own due diligence procedures to ensure that they are making an informed decision. If any person (other than the Client) choose to place reliance upon any matters included in the report, they shall do so at their own risk and without recourse to RBSA. We shall not assume any responsibility to any third party to whom the Report is disclosed or otherwise made available. In no event, regardless of whether consent has been provided, shall we assume any responsibility to any third party to whom the Report is disclosed or otherwise made available.
- The fee for our services is not contingent upon the results conclusion of the engagement. This Report is subject to laws of India.

3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

Specific to Review of Project Cost:

- The Company has furnished us the copies of quotations of suppliers/vendors/developers/consultants for proposed project and same has been considered for the purpose of the proposed project cost estimation. Further the said quotations are valid as on date of issuance of this report.
- We have considered the list of machinery as per details provided by the company for the purpose of the proposed project cost estimation.
- We have not considered any subsidy or government benefits for the purpose of the proposed project cost estimation.
- RBSA has vetted the quotations provided by the company and considered appropriate discount on basic quotation price of buildings, plant & machinery, electrical installation, furniture, IT equipment for the proposed project cost estimation.
- We have considered basic custom duty at 7.5 % for the imported machinery i.e. Thread Rolling Machine and CNC Screw Press Hot Forging during for the proposed project cost estimation.
- We have considered the cost towards loading and unloading, freight, transportation, erection, commissioning, foundation etc. as per normal industry practice for the proposed project cost estimation.
- As informed by company officials, the company will out source the die grinding process for the dies of thread rolling machines.
- As informed by company officials, the company will procure new machinery/equipment for the proposed project and no second-hand or used machinery/equipment are proposed to be purchased.
- We have considered machinery name/description and its technical specifications as per the details given in the list of machinery as well as details mentioned in the supporting documents such as quotation / purchase order.
- Generally, the company gets a taxation benefits for GST on capital expenditure related to plant & machinery hence, the GST have been not considered for the estimation of the proposed project cost for plant & machinery.
- The RBSA estimated project cost of main buildings along with allied structures and infrastructures for land development is including GST.
- We have considered conversion rate for 1 USD = 83.2729 INR as on 21st December, 2023 for the purpose of this exercise.
- We have not verified the title deeds of the properties with the records of registrar's office as this is beyond the agreed scope of our services stated in our engagement letter.
- The list of building containing built-up area has been provided by the company and same have adopted for the purpose of this exercise. The technical specifications of the buildings and miscellaneous civil structures considered based on the verbal discussion with the representative of the company.
- The layout of campus and the buildings, Built up Areas of structures and the technical specifications are finalized by the company in consultation with the Architect.
- As per the information given by the company officials, the company is not going to construct the Security and workers room having Built up area of 31.80 SMT (as mentioned the approved plan).

3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

Specific to Review of Proposed Production Capacity:

- In the course of this exercise, we have relied upon the hardcopy, softcopy, email, documentary, and verbal information provided by the client without further verification. We have assumed that the information provided to us is reliable, accurate, and complete in all respects. We reserve our right to alter our conclusions at a later date, if it is found that the data provided to us by the company was not - reliable, accurate or complete.
- We have been provided with the list of machinery proposed to be required for the production of Studs, Hex Bolts and Nuts with asset description.
- It is assumed that the production rates remain relatively stable throughout the designated time frame considered for calculating the proposed production capacity. This assumes a consistent demand for the studs, hex bolts and nuts and a steady workflow without significant fluctuations.
- The information relating to the proposed installed capacity are based on various assumptions and estimates that have been taken into account for calculation of the proposed installed capacity. These assumptions and estimates include the standard capacity calculation practice of fasteners industry after examining the calculations and explanations provided by the Company for thread rolling capacities, hot forging press capacities and other ancillary equipment to be installed at the facilities. Further, the manufacturing process and cycle time to produce stud at existing facility of the company is also taken into account while reviewing the proposed production capacity. The assumption is also based on the three (3) shifts that the Company is running for eight hours a day. The assumptions and estimates taken into account include the following: (i) Number of working days in a fiscal year – 300; (ii) Number of days in a month – 25; (iii) Number of shifts in a day - 3; (iv) Number of daily hours – 16.8 for cutting process and facing & chamfering process, 15.6 for thread rolling process in case of Stud and 14.4 in case of Hex Bolts & Nuts (we understood from the technical person of the company that the process machinery are available for 24 hours a day but the machinery downtime on account changes of dies, effectiveness of manpower which reduced the daily effective hours for the operation) and (v) Schedule preventive maintenance days - 12.
- It is assumed that the production capacity calculations are based on continuous operation, assuming that the manufacturing facility operates for the full duration without any significant interruptions or downtime.
- The calculations assume that the production capacity is based on optimal operating conditions, where all equipment and machinery are functioning at their highest efficiency levels and the workforce is working at their maximum productivity.
- The calculations assume standardized production processes and product mix.
- The calculations may assume that the production capacity takes into account planned maintenance schedules and regular downtime for maintenance, repairs, and adjustments. This helps account for the time required for upkeep without impacting the overall capacity.

3. FACTS, ASSUMPTIONS AND LIMITING CONDITIONS

- It is assumed that the necessary resources, such as raw materials, components, and energy supply, are readily available to support the production process. Adequate supply chain management and coordination are presumed to ensure uninterrupted production.
- The calculations may assume specific work shifts, such as standard eight-hour shifts or multiple shifts per day, to determine the production capacity. The assumptions consider the working hours available within the designated time frame for manufacturing operations.
- The calculations assume that the production processes are optimized and efficient, with minimal waste and high production yields. This assumes that the company will be implemented measures to enhance production efficiency and minimize defects or rework. The production is also based on the demand for each product which is manufactured by the Company. The efficiency assumed at 70% in case of Studs and 60% in case of Hex Bolts & Nuts which is adjusted in total working hours in a day for the estimation of proposed production capacity.
- The company has provided us the Letter of Management Representation (MR) dated 4th January, 2024 regarding the approx. total turnover/annum and estimated pre-operative expenses for proposed production of Studs, Hex Bolts and Nuts and same has been adopted without any further verification.

REVIEW OF APPROVALS/ PERMISSIONS/CLEARANCES

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4. REVIEW OF APPROVALS/PERMISSIONS/CLEARANCES

We have been furnished with copy of Certificates, Approvals and Applications required before establishment of the proposed project of the company and same has been reviewed for the purpose of this exercise. Based on the documents and information furnished to us, the current status of Certificates, Registrations and Approvals is summarized as under:

Sr. No.	Particulars	Authority	Status	Remarks
Pre-Establishment Approvals				
1	Consent to Establish	Tamil Nadu Pollution Control Board	Available	As per the copy of consent to establish, the company has obtained the consent to establish from Tamil Nadu Pollution Control Board vide consent Order No. 2301154489025 Dated 25 th September, 2023. The consent to establish is valid for establishing the facility for the manufacture of products i.e Stud, Bolt, Nut at Plot No. G18/2, SF No. 37pt & 62pt, Vadakal ABC Block Village, Sriperumbudur Taluk, Kancheepuram District. This consent to establish is valid till 31 st March, 2028
2	No Objection Certificate	Tamil Nadu Fire & Rescue Service Department	Available	As per copy of No Objection Certificate, the company has obtained the NOC from Tamil Nadu Fire & Rescue Service Department vide letter no. 6678/A/2023 dated 22th September, 2023. This NOC is to construct an Industrial building (Ground floor Only) on the total plot area is 6718 Sqr mtrs and Proposed buildup area is 3027.42 sqr mtrs with the height of 12 mtrs. The proposed building is classified as Group-G Industrial building sub division DI Low hazard Industrial buildings as per national building code of India 2016 Part-IV, Fire and life safety. There is no objection to accord planning permission to construct the Industrial buildings.
3	Building Plan Permission	Asst. Director/Deputy Director, District of Town And Country Planning Office, Kancheepuram	Available	As per copy of online building plan application-technical approval, the company has obtained technical approval for the proposed industrial building drawings and numbered as SWP/B.P (Industry)/D.D.T.C.P (KPM) No. 19/2024 (02 sheet) vide SWP application no. SWP/BPA/050883/2023 dated 2 nd February, 2024.
4	Industrial Safety	Directorate of Occupational Safety and Health	Available	As per copy of approval letter from Directorate of Occupational Safety and Health vide reference no. 19522/2023 dated 8 th August, 2023, the company has obtained an approval on drawing to construct the industrial building as per Factory Act.

4. REVIEW OF APPROVALS/PERMISSIONS/CLEARANCES

Sr. No.	Particulars	Authority	Status	Remarks
5	Public Health and Preventive Medicine	Department of Public Health and Preventive Medicine	Available	As per copy of approval letter from Deputy Director of Health Services, Kancheepuram vide its reference no. 7618/2023/A3 dated 18 th August, 2023, the company has obtained an approval on plan for construction of industrial building and installation of 2369 HP electrical motors for manufacturing of Studs, Bolt and Nut at Plot No. G18/2, SF No. 37pt & 62pt, Vadakal ABC Block Village, Sriperumbudur Taluk, Kancheepuram District.
6	Temporary electrical connection of 5 KW	Tamil Nadu Electricity Board	Available	---

Following are the list of approvals to be required during and post construction phase of the project and the getting approvals is under process.

Sr. No.	Particulars	Authority
1	Single Line Electrical Drawing for demand of 750 KVA electrical power	Chief Electrical Inspectorate of Government
2	Electrical Load Sanction	TNEB and TANGEDCO
3	Hazardous Waste Authorization	Tamil Nadu Pollution Control Board
4	Fire License	Fire and Rescue Services
5	As Build Drawing	Directorate of Industrial Safety and Health (DISH)
6	Building stability Certificate	Competent Person
7	Factory license	Directorate of Industrial Safety and Health (DISH)
8	Registration of Contractor(RC)	Directorate of Industrial Safety and Health
9	Obtaining Machinery running license	BDO
10	Sanitary and Suitability Certificate	Health & Preventive medicine
11	Registration for Professional Tax	BDO

In the approvals/permission certificates provided by the company, the name of the company is Gala Precision Engineering Private Limited. However, the copy of certificate of incorporation for the name change from Gala Precision Engineering Private Limited to Gala Precision Engineering Limited has been provided to us and as per verbal information provided by company officials, the name change process in the approvals/permission certificates is under progress.

PROJECT IMPLEMENTATION SCHEDULE

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5. PROJECT IMPLEMENTATION SCHEDULE

The company is proposing the following implementation schedule for proposed project and same has been represented here:

Sr. No.	Particulars	Phase - I		Phase - II	
		Actual / Estimated Commencement Date	Expected completion date	Actual / Estimated Commencement Date	Expected completion date
1	Land acquisition	License Agreement executed as on December 28, 2022	Completed	---	---
2	Land Development Cost	September, 2023	October, 2024	---	---
3	Buildings	December, 2023	April, 2024	---	---
4	Buildings- Mezzanine floor	---	---	April, 2025	June, 2025
5	Plant and machinery	February, 2024	September, 2024	January, 2025	June, 2025
6	Electrical Installation	January, 2024	June, 2024	---	---
7	Furniture and miscellaneous	April, 2024	September, 2024	June, 2025	September, 2025
8	Government approvals, permissions and clearances	October, 2023	September, 2024	February, 2025	September, 2025
9	Plant Commissioning & Trial run	August, 2024	October, 2024	September, 2025	November, 2025
10	Commercial Production	October, 2024	---	November, 2025	---

REVIEW OF PROJECT COST

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6. REVIEW OF PROJECT COST

The approach and methodology adopted by RBSA in order to review & ascertain the reasonableness of the estimate of quantity and cost of the project is as follows:

- The usual practice to carry out the scope of the work is to review quotations provided to the company by suppliers/ vendors/ developers / contractors / consultants for the items mentioned in the estimate. We have adopted the same approach to carry out the verification of the cost estimate for which we have been provided with the copy of detailed breakup of the quantities.
- The rate per unit quantity (which includes cost of materials. labour, plant, overheads and profit, taxes etc.) of each item is obtained through the quotations provided to the company by contractors, material suppliers, consultants etc. However, for miscellaneous items/activity, we have adopted the rate as provided in the Bill of Quantity (BOQ) considering the normal industry practice / Company's / developers cost for similar projects.
- Process to carry out the review of project cost is mentioned hereunder;
 - Collection of Proposed Project Documents from Client such as Quotations, Purchase Orders, etc.
 - Review of quotations provided to the company by suppliers/ vendors/ developers / contractors / consultants etc.
 - Estimation of Replacement Cost for New Plant & Machinery and New Building Structures using Quotations / Purchase Orders and other backup documents provided by company.

6. REVIEW OF PROJECT COST

Land and Land Development Cost

- The proposed project of production of stud, bolts and nuts will be implemented at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India on land area admeasuring 6718 sq.mt.
- As per copy of Lease deed executed between State Industries Promotion Corporation of Tamil Nadu Limited (“Lessor” or “SIPCOT”) and Gala Precision Engineering Pvt. Ltd. (“Lessee” or “GPEPL”) dated 28th December, 2022, the lessor has allotted said plot of land to lessee on lease for the period of 99 years from the date of allotment i.e. 14th November, 2022 for setting up an Industrial Unit for the manufacture of Fasteners. The lease deed has an option to renew the lease period for further period of 99 years.
- The demarcation of subject plot of land is as under;

North : Pond	South : 18m wide road with 3m green belt on both side of SIPCOT road
East : Plot No. H-16/1	West : Plot No. G-18/1

- The total payment made towards the land are as under;

Sr. No.	Description of Payment	Amount in Rs.	Date of Payment	Receipt No.	Remarks
1	Land Cost	2,85,91,000/-	12/12/2022	POVA2022RCPT1779	One Time
2	Lease Rent in Advance	100/-	13-12-2022	POVA2022RCPT1785	For entire period of lease
3	Caution Deposit	14,29,550/-	13-12-2022	POVA2022RCPT1783	Refundable upon completion of project with stipulated time i.e. 36 months from the date of allotment.
4	Processing Fees	11,800/-	23-09-2022	POVA22231124	One time
5	Stamp duty and Registration Fees	6,21,443/-	28-12-2022	REG2022122777593 22	One Time
	Total	2,92,24,343/- Or say 29.22 Million			Excluding Caution Deposit

6. REVIEW OF PROJECT COST

Land and Land Development Cost

- The cost estimation of land development cost of the proposed project of the company is as under;

Sr. No	Description of Structure	Technical Specification	Cost Estimation (In INR)
1	Retaining and Compound Wall on Front (South) side – 42.0 m	Pile Foundations with RCC Frame Superstructure and MS Fencing on top and 2nos. of Main Gates . Total Height above FGL. Is 3.15m.	1,037,000
2	Retaining and Compound Wall on Back (North) side – 97.0 m	Pile Foundations with RCC Frame Superstructure and MS Fencing on top. Total Height above FGL. Is 4.15m	1,255,000
3	Retaining and Compound Wall on the west side – adjoining to the westside plot of Shivpad .	RCC Frame structure with Blocks	1,080,000
4	RCC Culverts	RCC Culverts of 8 Mtr. Wide - 2 Nos.	811,000
5	Land Development Works - Earth Filling, Tree & Bushes Cutting.	Cutting approx. 1600 cmt of existing earth, using the same for filling the approx. 450 cum. Clearing the Tress, bushes and removing the debris from the premises.	995,000
6	Underground Sump with Fire Pump House – 100 KL capacity	Underground RCC structure (3m. Depth) with RCC slab on Pump house. (3m. Height)	1,630,000
7	Roads	RCC Roads with kerbing and pavers.	6,209,000
Total			13,017,000
GST @ 18%			2,343,060
Grand Total			15,360,060
Or Say			15.36 Million

6. REVIEW OF PROJECT COST

Land and Land Development Cost

- The company invited quotation from 6 different vendors for the land development in proposed plot and have issued part work orders (excluding roads), with remaining to be issued after the completion of Buildings.
- For Roads, the company has provided the quotation obtained from the vendor.
- We have considered these quotes and Purchase order for the cost estimation of the civil structures mentioned at previous page.
- As per the information given by the company officials, the company has mutual understanding with the Shivpad Engineers on cost sharing basis for the cost of Retaining cum Compound Wall on the western side of the plot – adjoining the plot of Shivpad Engineers, whereby 30% of the total cost finalized (INR 36.0 lacs) for the construction of this wall will be beared by Gala Precision. We have been provided with the drawing of the wall to be constructed. The same has been adopted for the cost estimation.
- The cost estimation of Land and Land development is summarized as under;

Sr. No.	Description of Structure	Cost Estimation (In INR)
1	Land	29,224,343
2	Land Development	15,360,060
	Total	44,584,403
	Or say	44.58 Million

- Land cost estimated by RBSA is based on the documents provided by the company i.e. 1) Lease Deed 2) Receipt of cost of plot 3) Receipt of advance lease rent 4) Stamp duty and registration fees.
- The cost estimated herein above for land development is including GST.

6. REVIEW OF PROJECT COST

Buildings

- As per the detailed received from the company, the buildings comprises of following structure;

Sr. No.	Description of Structure	Length (In Mtr)	Width (In Mtr)	Height (In Mtr)	Total Built up Area (In Sq. Mtr)
1	Main Buildings with Pre Engineered Building Type of Building: Plant Building with mezzanine floor Type of Structure: PEB Structure Foundation: Normal Flooring: RCC Flooring Roofing: GI Sheet roofing Wall: Brick wall up to 3000 mm and above sheeting	100.8	28.65	14	2887.92
2	Electrical Room Type of Building: Plant Building Type of Structure: RCC frame Foundation: Normal Flooring: RCC Roofing: RCC Wall: Brick wall	8.96	5.46	4	48.92
3	Security Booth 1 Type of Building: Plant Building Type of Structure: RCC frame Foundation: Normal Flooring: Ceramic Tile Roofing: RCC Wall: Brick wall	2.5	2.5	3	6.25

6. REVIEW OF PROJECT COST

Buildings

Sr. No.	Description of Structure	Length (In Mtr)	Width (In Mtr)	Height (In Mtr)	Total Built up Area (In Sq. Mtr)
4	Security Booth 2 Type of Building: Plant Building Type of Structure: RCC frame Foundation: Normal Flooring: Ceramic Tile Roofing: RCC Wall: Brick wall	2.5	2.5	3	6.25
5	Pump Room for Fire Hydrant Type of Building: Plant Building Type of Structure: RCC frame Foundation: Normal Flooring: RCC Roofing: RCC Wall: Brick wall Depth: 3 Mtr.	8.4	5.4	3	45.36
6	Effluent treatment Plant & Sewage Treatment Plant. Type of Building: Plant Building Type of Structure: RCC in substructure. Foundation: Normal	15	3.5	3.5	52.5
7	Transformer Yard Type of Structure: Concrete platforms with MS Fencing , Gravels and RCC cable trench.	12.8	5	-	64
8	DG Platform Type of Structure: Concrete platforms with MS	5	1.6	-	8

6. REVIEW OF PROJECT COST

Buildings

- The company has issued Purchase order to the Civil Vendor/Contractor 'Shaks Associates' for the construction of Main Factory Building along with its Plumbing Sanitation works, whereas for PEB Structure, the Purchase order is issued to Shaks projects India Pvt Ltd.
- For Mezzanine Floor, the company has provided the quotation of the vendor Shaks Associates.
- For Utility Buildings – Electrical Panel Room, DG Platform @Transformer Yard, Security Building – 2nos, Fire Fighting Pump Room, the company has provided the quotation of the vendor Shaks Associates.
- For Civil and Plumbing Works related to Office structure within the Main Plant Building, company has provided quotation of the vendor 'Testa'.
- We have estimated cost on the basis of these quotations and layout provided by the company. An addition of GST@18% is applied on the total estimated cost.
- The estimated construction cost of buildings and misc. civil structures for the proposed project of the company is as under;

Sr. No.	Name of Buildings	Total Built up Area (In Sq. Mtr.)	Cost Estimation In INR
1	Main Factory with Pre-Engineered Building	2887.92	39,868,000
2	Mezzanine Floors	1207.73	11,300,000
3	Plumbing and Sanitation Works	Lump Sum	3,776,000
4	Civil Work for Office on Ground Floor	Lump Sum	2,600,000
5	Civil Work for Office on First Floor	Lump Sum	4,400,000
6	Electrical Panel Room	48.92	1,600,000
7	Security Building – 2nos.	12.5	900,000
8	Pump room for Fire Hydrant	45.36	850,000
9	DG Platform/Transformer Yard	72	950,000
Sub-total			66,244,000
GST@18%			11,923,920
Grand Total - (A+B)			78,167,920
Or Say			78.17 Million

6. REVIEW OF PROJECT COST

Plant & Machinery - Stud

- The estimated cost of Plant & Machinery to produce Stud for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Bandsaw Machine	Model: ACS-220 DFA	3	Accuarte Cutting systems Pvt. Ltd.	2,175,000
2	Facing & Chamfering	Model: FCM 80 SC 800 Max/Min Dia of Shaft: 20/80 Max/Min Length of Shaft: 150/800	2	Precitec Precision Machineries Pvt. Ltd.	6,640,000
3	Dot Pin Marking	Model: PPLL-120 Marking window: 120 X 30 mm	3	Perfect Mark Technology	444,000
4	CNC Polygon Machine	Model: TPT-2s-60H	1	Trishul Machine Tools Pvt. Ltd.	1,725,000
5	Thread Rolling Machine	Model: UM-50A Main Motor: 15 HP	3	Kim Union Industrial Co., Ltd.	11,238,000
6	Thread Rolling Machine	Model: UM-75A Main Motor: 30 HP	2	Kim Union Industrial Co., Ltd.	14,626,000
7	Thread Rolling Machine	Model: UM-100 Main Motor: 40 HP	2	Kim Union Industrial Co., Ltd.	25,864,000
8	Thread Rolling Machine	Model: UM-120 Main Motor: 50 HP	1	Kim Union Industrial Co., Ltd.	16,053,000

6. REVIEW OF PROJECT COST

Plant & Machinery - Stud

- The estimated cost of Plant & Machinery to produce Stud for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
9	Lathe Machine	Model: Panther GLEH/2 Bed Length: 9' Centre Height: 400 Admit Betn. Centres: 1370	3	Gujarat Lathe Mfg. Co. Pvt. Ltd.	1,851,000
10	Thread rolling dies, tools & accessories	Thread Size: M30X3.5, M36X4, M64X6	80 Pair	Precomp Tools Pvt. Ltd.	7,680,000
Total					88,296,000
Or Say					88.30 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Hex Bolt

- The estimated cost of Plant & Machinery to produce Hex Bolt for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Circular cutting machine	Model: Sonic FANC 80 Cutting Capacity: 15 - 80 mm 20-65 mm	1	Zeal Tech Automation	3,718,000
2	Bandsaw Machine	Model: ACS-220 DFA	1	Accuarte Cutting systems Pvt. Ltd.	725,000
3	Drilling machine	Model: MAG-3 Capacity: 50 mm	1	Santoshi Machine Tools	804,000
4	Digital Controlled IGBT Induction Heating furnace	Capacity: 100KW/6KHz	1	Plasma Induction (India) Pvt. Ltd.	1,483,000
5	Digital Controlled IGBT Induction Heating furnace	Capacity: 200KW/3KHz	1	Plasma Induction (India) Pvt. Ltd.	2,553,000
6	CNC Screw Press Hot Forging	Capacity: 630 Ton Model: EP-630 Min. Tool Height: 800 mm Max Bolt Length: 450 mm	1	Infinite Forgetech Pvt. Ltd.	15,935,000
7	CNC Screw Press Hot Forging	Capacity: 400 Ton Model: EP-400 (Customized) Min. Tool Height: 700 mm Max Bolt Length: 400 mm	1	Infinite Forgetech Pvt. Ltd.	12,466,000
8	Shot Blasting	1W Single Manual Door 36" turn table Load Capacity: 500 Kgs Size: W 900 mm X L 900 mm X H 500 mm	1	Surface Preparation Solutions and Technologies Pvt. Ltd.	1,337,000
9	Trimming machine	Model: N30 GMP	1	National Pneumatic Systems	842,000

6. REVIEW OF PROJECT COST

Plant & Machinery – Hex Bolt

- The estimated cost of Plant & Machinery to produce Hex Bolt for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
10	CNC Turning Machine	Model: LR30TL7 - Fanuc 45 Degree slant bed	2	Lakshmi Machine Works Limited	7,276,000
11	Heat Treatment (Hardening/tempering)	Chamber Size: 4/2M - 70/85/130 Capacity: Max. gross charge weight-1000 KG	1	Aichelin Unitherm Heat Treatment Systems India Pvt. Ltd.	28,133,000
12	Thread Rolling machine TRM100	Model: UM-100 Main Motor: 40 HP	1	Kim Union Industrial Co., Ltd.	12,932,000
13	Thread Rolling machine TRM120	Model: UM-120 Main Motor: 50 HP	1	Kim Union Industrial Co., Ltd.	16,053,000
14	Sleeve Cutting machine	---	1	TKS Industries	149,000
15	Thread rolling dies, tools & accessories	'Thread Size: M30X3.5, M36X4, M64X6	16 Pair	Precomp Tools Pvt. Ltd.	1,536,000
16	Lathe Machine	Model: Panther GLEH/2 Bed Length: 9' Centre Height: 400 Admit Betn. Centres: 1370	3	Gujarat Lathe Mfg. Co. Pvt. Ltd.	1,851,000
17	CNC EMD Wire Cut Machine	Model: Job Master DZIRE Main Table Travel: 400 X 300 mm Z Axis Travel: 250 mm Max. Job Weight: 250 mm	1	Electronica Hitech Machine Tools Pvt. Ltd.	3,242,000
Total					111,035,000
Or Say					111.04 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Nut

- The estimated cost of Plant & Machinery to produce Nut for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Automatic robot hand to moving the products	--	1	GuangZhou ZhongQiao Machinery co., ltd	2,312,000
2	Automatic feeding machine	--	1	GuangZhou ZhongQiao Machinery co., ltd	535,000
3	Induction furnace	Capacity: 250 Kw	1	GuangZhou ZhongQiao Machinery co., ltd	1,191,000
4	Cooling tower	Capacity: 30 Tons	1	GuangZhou ZhongQiao Machinery co., ltd	491,000
5	Press machine including one set of mould	--	1	GuangZhou ZhongQiao Machinery co., ltd	3,153,000
6	Moulds for press machine	--	1 set	GuangZhou ZhongQiao Machinery co., ltd	391,000
7	CNC Turning Machine	Model: LR30TL7 - Fanuc 45 Degree slant bed	1	Lakshmi Machine Works Limited	3,638,000
Total					11,711,000
Or Say					11.71 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Hot Dip Galvanizing (HDG)

- The estimated cost of Hot Dip Galvanizing for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Hot Dip Galvanizing	Process: Fastener Galvanising Plant for 3.24 mtr. long item with production capacity of 0.5 MT/Hr. Galvanizing Bolts size: M16 to M56 Length: 150 mm to 3240 mm	1	Unique Galvanizing Solutions Pvt. Ltd.	30,972,000
Total					30,972,000
Or Say					30.97 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – QA/QC Equipment

- The estimated cost of QA/QC equipment for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Post MPI machine	Model: MF 5000 S Current Out-put: 5000 Amps	2	Magnafield Electronics & Engg. Pvt. Ltd.	1,856,000
2	De-Mag Machine	Current Out-put: 6000 Amps	1	Magnafield Electronics & Engg. Pvt. Ltd.	459,000
3	Salt Spray Chamber	Capacity: 1000 Lit. Size: 2300 mm L X 600 mm W X 700 mm D	1	Servo Enterprises	591,000
4	Contour Tracer Machine	Model: Contourecord 1600G-14 Max Loading Capacity: 50 KG	1	Carl Zeiss India (Bangalore) Pvt. Ltd.	1,763,000
5	Belt Grinder Machine	Model: BAINLINE - GP Working Space: 100 mm X 190 mm	1	Chennai Metco	35,000
6	Abrasive Cutting Machine	Model: BAINCUT - L Motor: 7.5 HP, 3 Phase Spindle Speed: 1850 RPM Cut-off wheel Dia 14"	1	Chennai Metco	467,000
7	Automatic Specimen Mounting Machine	Model: BAINMOUNT - P AUTO With interchangeable 1.5, 30 mm & 40 mm mould sizes Size: L 530 X B 600 X H 470 mm	1	Chennai Metco	198,000
8	Double Disc Polishing machine	Model: BAINPOL - VTD 8" Double Disc Polisher Variable speed from 50-1000 RPM	1	Chennai Metco	67,000
9	Microscope with system	Model: Metagraph I (Special)	1	Omai Tech	713,000
10	Vicker Hardness testing machine (Computerised)	Model: VM50-TS HV 5 KG to 50 KG	1	Blue star Engineering & Electronics Limited	583,000
11	Digital Rockwell Hardness Tester	Model: RESNET-3 Test Load: 15 KG to 150 KG	1	Blue star Engineering & Electronics Limited	241,000

6. REVIEW OF PROJECT COST

Plant & Machinery – QA/QC Equipment

- The estimated cost of QA/QC equipment for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
12	Surface Table	Size:1000 X 1000 X 150	2	Guindy Machine Tools Limited	88,000
13	Ring gauges	Size: M24-M72	1 set	Universal Gauges Pvt. Ltd.	135,000
14	Plug gauges	Size: M24-M72	1 set	Universal Gauges Pvt. Ltd.	58,000
15	WCP Master gauges	Size: M24-M72	1 set	Universal Gauges Pvt. Ltd.	103,000
16	WCR Master gauges	Size: M24-M72	1 set	Universal Gauges Pvt. Ltd.	235,000
17	Digital Vernier Caliper	Make: Baker Size: 0-150MM, 0-300MM, 0-600MM & 0-1000MM	1 set	Galaxy Tools International	103,000
18	Digital Micrometer	Make: Baker Size: 0-25MM, 25-50MM, 50-75MM, 75-100MM & 100-125MM	1 set	Galaxy Tools International	56,000
19	Digital Pitch Micrometer	Make: Mitutoyo Size: 0-25MM, 25-50MM, 50-75MM, 75-100MM & 100-125MM	1 set	Galaxy Tools International	160,000
20	Digital Height gauge	Make: Baker Size: 0-600MM & 0-1000MM	1 set	Galaxy Tools International	113,000
21	Bench Center	Size: 1000 mm X 200 mm	1	Huzefa Engineering	70,000
Total					8,094,000
Or Say					8.09 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Utility Machinery/Equipment

- The estimated cost of Utility machinery/equipment for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Racks for Dies & Tools Storage	'Model: Mighty K-roller 600 X 300 No. of Bays/Pillars: 4 No. of Trays: 8 + 1 Total Loading Capacity: 30 + 2 Tons Length of Material: 6 Mtr.	1	Fledon Engineering Works	708,000
2	Diesel Generator	Make: Cummins Model: QSB6.7-G23 Capacity: 250 KVA 306.9 BHP at 1500 RPM	1	Powerica Limited	2,259,000
3	Diesel Generator	Make: Cummins Model: QSM15-G1 Capacity: 380 KVA 594 BHP at 1500 RPM	1	Powerica Limited	3,693,000
4	Compressor	Model: CSD 85 SC - 8.5 barg Capacity: 292 CFM/7.5 Bar	2	Kaeser Compressors (India) Pvt. Ltd.	2,612,000
5	Effluent Treatment Plant (ETP)	Plant Design: 500 Liters Per Hr. Plant Design: 2,500 Liters Per Day	1	Karuna Enviro Services	1,582,000
6	Sewage Treatment Plant (STP)	Plant Design: 5,000 Liters Per Day	1	Karuna Enviro Services	1,570,000
7	Fire Hydrant System	--	1	Integrated Design Solutions	3,738,000
8	Drinking Water Reverse Osmosis (RO) Plant	Capacity: 2 KL/D Feed Flow Rate: 2000 LPH	1	Karuna Enviro Services	197,000
Total					16,359,000
Or Say					16.36 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Store Equipment

- The estimated cost of store equipment for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Racks for material storage	Model: Mighty K-roller 600 X 300 No. of Bays/Pillars: 4 No. of Trays: 8 + 1 Total Loading Capacity: 30 + 2 Tons Length of Material: 6 Mtr.	1	Fledon Engineering Works	708,000
2	Sleeve Cutting machine	--	1	TKS Industries	149,000
3	Auto Strapping machine	--	1	Global Packaging Automation LLP	198,000
Total					1,055,000
Or Say					1.06 Million

6. REVIEW OF PROJECT COST

Plant & Machinery – Material Handling Equipment

- The estimated cost of material handling equipment for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Technical Specifications	Qty.	Name of Vendor	Cost Estimation In INR
1	Mono Crane	Manual Portable Single Girder Gantry Crane Capacity: 2.5 Ton Rail Span: 3 Mtrs. Height of Lift: 3.5 Mtrs.	2	S. Crane Engg. Works	2,364,000
2	Forklift	OM Brand Model: EVX30MAXACHVT2100-72V Capacity: 3 Ton	1	KION India Pvt. Ltd.	1,103,000
3	Battery operated Stackers	OM Brand Model: VVECB15 HVT4500 Capacity: 1.5 Ton	2	KION India Pvt. Ltd.	1,442,000
4	Jib Crane	Capacity: 3 Ton Lift Height: 4.5 Mtr. Boom: 4 Mtr.	2	Balkrishna Lifting Equipment	2,020,000
Total					6,929,000
Or Say					6.93 Million

6. REVIEW OF PROJECT COST

The estimated cost of plant & machinery for the proposed project by RBSA is summarized as under;

Sr. No.	Asset Category	Cost Estimation (INR in Million)
1	Stud Machinery/Equipment	88.30
2	Hex Bolt Machinery/Equipment	111.04
3	Nut Machinery/Equipment	11.71
4	Hot Dip Galvanizing (HDG)	30.97
5	QA/QC Equipment	8.09
6	Utility Machinery/Equipment	16.36
7	Stores Equipment	1.06
8	Material Handling Equipment	6.93
	Total	274.45

6. REVIEW OF PROJECT COST

Electrical Installation

- The estimated cost of electrical installation for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Name of Vendor	Cost Estimation In INR
1	HT Panel Works	Arunai Power Infra Pvt. Ltd.	1,324,800
2	Transformer	Arunai Power Infra Pvt. Ltd.	3,288,400
3	LT Panels	Arunai Power Infra Pvt. Ltd.	4,563,097
4	Internal Electrical Works		
4.1	Distribution Boards	Arunai Power Infra Pvt. Ltd.	272,750
4.2	Cables/Terminations/Cable Tray	Arunai Power Infra Pvt. Ltd.	4,311,784
4.3	Point Wiring	Arunai Power Infra Pvt. Ltd.	172,186
4.4	Earth & Earth Connection	Arunai Power Infra Pvt. Ltd.	700,682
4.5	External Lighting	Arunai Power Infra Pvt. Ltd.	379,076
4.6	Luminaries	Arunai Power Infra Pvt. Ltd.	451,530
4.7	Lightning Conductor	Arunai Power Infra Pvt. Ltd.	207,140
4.8	Design & Consulting Fees	Arunai Power Infra Pvt. Ltd.	627,855
5	Electrical Work of Office		
5.1	Electrical Work of Office - Ground Floor	Testa	1,894,000
5.2	Electrical Work of Office - First Floor	Testa	3,933,000
Total			22,126,300
Or Say			22.13 Million

6. REVIEW OF PROJECT COST

Furniture, IT Equipment and Vehicles

- The estimated cost of furniture, IT equipment and vehicles for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Name of Vendor	Cost Estimation In INR
1	Furniture of Office		
1.1	Ground floor furniture	Testa	2,293,000
1.2	First floor furniture	Testa	5,756,000
	Sub-total – A		8,049,000
2	IT Equipment		
2.1	Cabling and Switches + 5 AP's + rack + UPS 6KVA:	Datasoft Network Solutions Pvt. Ltd.	972,000
2.2	File Server + 4 TB SAN box.	Datasoft Network Solutions Pvt. Ltd.	855,000
2.3	6 TB NAS drive	Datasoft Network Solutions Pvt. Ltd.	171,000
2.4	20 Laptops with Windows 11 pro (Regular configuration)	Datasoft Network Solutions Pvt. Ltd.	990,000
2.5	Fortigate 60F firewall + 3 years bundle	Datasoft Network Solutions Pvt. Ltd.	131,000
2.6	MS office License - 20 Nos	Datasoft Network Solutions Pvt. Ltd.	612,000
2.7	Trend Micro Antivirus : 25 Nos	Datasoft Network Solutions Pvt. Ltd.	41,000
2.8	Barcode printer. 1 Nos.	Datasoft Network Solutions Pvt. Ltd.	14,000
2.9	Laser Printer black and White (All in One Duplex)	Datasoft Network Solutions Pvt. Ltd.	38,000
	Sub-total – B		3,824,000

6. REVIEW OF PROJECT COST

Furniture, IT Equipment and Vehicles

- The estimated cost of furniture, IT equipment and vehicles for the proposed project is as under;

Sr. No.	Name of Machinery/Equipment	Name of Vendor	Cost Estimation In INR
3	Vehicles		
3.1	Maruti Suzuki Ertiga Car Model: Ertiga VXI	Aher Autoprime LLP	1,247,685
3.2	Maruti Suzuki Brezza Car Model: Brezza VXI	Aher Autoprime LLP	1,231,556
	Sub-total – C		2,479,241
		Total (A+B+C)	14,352,241
		Or Say	14.35 Million

6. REVIEW OF PROJECT COST

Government authorities' Approvals/Permissions/Clearances

- As per the details received from the company, the estimated cost of Government authorities' approvals/permissions/clearances for the proposed project is as under;

Sr. No.	Particulars	Cost Estimation In INR
1	Pre-Establishment approvals/permissions/clearances:	
1.1	(i) Directorate of Town and Country Planning (ii) Block Development Office (BDO)	2,857,000
1.2	Guidance Tamil Nadu	620,000
1.3	Tamil Nadu Pollution Control Board (TNPCB)	1,675,000
1.4	Fire and Rescue Services	175,000
1.5	District Public Health department	175,000
1.6	Directorate of Industrial Safety and Health (DISH)	635,000
	Sub-total A	6,137,000
2	Post-Establishment approvals/permissions/clearances:	
2.1	Tamil Nadu Pollution Control Board (TNPCB) CTO	1,675,000
2.2	Tamil Nadu Pollution Control Board (TNPCB) Hazardous Waste Auth	450,000
2.3	Fire and Rescue Services Fire License	175,000
2.4	Directorate of Industrial Safety and Health (DISH) As build drawing approval	275,000
2.5	Directorate of Industrial Safety and Health (DISH) BLDG Stability Certificate	25,000

6. REVIEW OF PROJECT COST

Government authorities' Approvals/Permissions/Clearances

- As per the details received from the company, the estimated cost of Government authorities' approvals/permissions/clearances for the proposed project is as under;

Sr. No.	Particulars	Cost Estimation In INR
2.6	Directorate of Industrial Safety and Health Factory License	219,000
2.7	Directorate of Industrial Safety and Health	180,500
2.8	Health & Preventive medicine	180,000
2.9	Miscellaneous	650,000
	Sub-total B	3,829,500
	Total	9,966,500
	Or Say	9.97 Million

6. REVIEW OF PROJECT COST

Pre-operative Expenses

- The estimated pre-operative expenses for the proposed project is as under;

Sr. No.	Estimated Pre-Operative Expenses – 2024-25	INR In Million
1	Raw Material Cost	2.65
2	Manufacturing Cost	3.50
3	Personnel Cost	3.00
4	Depreciation on Building & P&M	4.21
5	Interest on Borrowings	8.56
	Total	21.92

- The company has provided us the Letter of Management Representation (MR) dated 4th January, 2024 regarding the estimated pre-operative expenses for proposed production of Studs, Hex Bolts and Nuts and same has been adopted without any further verification.

6. REVIEW OF PROJECT COST

The total estimated cost for the proposed project by RBSA is summarized as under;

Sr. No.	Asset Category	Project Cost (INR in Million)
1	Land and Land Development	44.58
2	Buildings	78.17
3	Plant & Machinery	274.45
4	Electrical Installation	22.13
5	Furniture, IT Equipment and Vehicles	14.35
6	Govt Approvals/Permissions/Clearances	9.97
7	Pre-Operative Expenses	21.92
8	Contingency	17.75
	Total	483.32

- The company has provided us the Letter of Management Representation (MR) dated 4th January, 2024 regarding the estimated pre-operative expenses for proposed production of Studs, Hex Bolts and Nuts and same has been adopted without any further verification.
- The amount of contingency is in-line with normal industry standard.

REVIEW OF PROPOSED PRODUCTION CAPACITY

7



7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Basis and Methodology

1. Manufacturing Infrastructure:
 - Assessment of the manufacturing facility's infrastructure, including factory layout, production area, and equipment.
2. Production Processes:
 - Evaluation of the manufacturing processes;
 - **Studs:** Cutting, Facing/Chamfering, Thread rolling, Shot blasting, Zinc flake coating / Hot Dip Galvanizing(HDG)and Quality Assurance.
 - **Hex Bolt and Nut:** Cutting, Facing/Chamfering, Hot Forging, Trimming, Heat Treatment, Thread Rolling, Shot blasting, Zinc flake coating / Hot Dip Galvanizing(HDG)and Quality Assurance.
3. Availability of Key Resource :
 - Assessment of the availability and utilization of key resources required for production, such as labor, machinery, equipment, and materials.
4. Production Capacity Calculation:
 - Calculation of the proposed production capacity based on factors such as cycle time, throughput, production rate, and effective production time.
 - Assessment of the facility's ability to meet the expected production volume within specified lead times.
5. Quality Control and Assurance:
 - Evaluation of quality control measures, including testing, inspection, and certification processes for the finished goods.
6. Documentation and Records:
 - Review of documentation related to production capacity, including proposed production plans, production of existing facility.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Procedure adopted for exercise

Collection of Data for current business, industry data and Plant & Machinery



Analysis of the information received



Discussion with company personnel concerning the operation of assets



Review & evaluation of various assets through cycle time and other analyses



Determination of Parameters, Methods & Key assumptions



Preparation and Submission of Report

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation

The company has calculated the production capacity for producing the studs is based on assuming the quantity of each type & size of stud to be manufactured. The company has assumed the quantity of studs to be manufactured is based on their past experience of demand & supply of the studs in their existing manufacturing facility.

The production capacity can be calculated using the following standard formula:

Production Capacity = (Available Production Time per Month) / (Cycle Time per Unit)

- Available Production Time per Month:
 - This refers to the total time available for production during a three shift, days in a month, nos. of machines.
 - It is calculated by subtracting any planned downtime (e.g., breaks, meetings, maintenance) from the total shift time.
 - For example, if a shift is 8 hours long and there are 60 minutes of planned downtime, the available production time per shift would be 7 hours (8 hours – 1 hours).
- Cycle Time per Unit:
 - Cycle time refers to the time required to complete one unit of production in each process.
 - It includes all the necessary steps and operations involved in producing the stud of desired type and size.
 - The cycle time can be determined by measuring the time taken for each step in the production process.
 - For example, if the total cycle time for thread rolling process for 30 units is 60 minutes, the cycle time per unit would be 2 minutes.

By dividing the available production time per month by the cycle time per unit, you can determine the production capacity of the respective process. The result will be the number of units that can be produced during a month.

It's important to note that this formula provides an estimate of production capacity and assumes continuous operation without any disruptions or variations in cycle time. Additionally, factors such as efficiency, worker skills, equipment reliability, and variability in demand may affect the actual production capacity achieved in practice. Regular monitoring, analysis, and adjustments are necessary to optimize and maximize the production capacity of the assembly line.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

- Due to heterogenous demand of the products, the company has prepared planning sheet to produce the different type and size of stud per month bases their past experience to estimate the production capacity of stud. The details of proposed planning as provided by the company are as under;

Sr. No.	Type of Product	Qty. in Pc	Weight/ Pc	Total Weight (In Kgs)
1	STUD M64X535	1472	12.3	18,030
2	STUD M64x630	1140	13.7	15,561
3	STUD M64X754	469	17.1	8,016
4	FL STUD M56x430	460	7.5	3,449
5	STUD M48X650-10.9	3963	8.1	32,177
6	FL Stud M48x395	460	5.0	2,299
7	M42x503	1328	4.1	5,469
8	STUD M36X470	2034	3.2	6,447
9	STUD M36X470	3812	2.9	11,018
10	STUD M36X470	185	2.9	535
11	STUD M36X460-10.9	9000	3.1	27,900
12	FL Stud M36x305	393	2.1	825

Sr. No.	Type of Product	Qty. in Pc	Weight/ Pc	Total Weight (In Kgs)
13	M36x480	1168	3.2	3,773
14	STUD M33X386	4994	2.2	11,087
15	STUD BOLT M33X245	671	1.4	946
16	STUD M30X415	126	2.0	246
17	STUD BOLT M30x220	1678	1.1	1,762
18	STUD M30 X 575	785	2.8	2,199
19	STUD M30X285	524	1.5	785
20	STUD M30 X 415	362	2.0	707
21	STUD M30X455	302	2.3	680
22	M30x480	658	2.2	1,467
23	M30x435	299	2.0	597
24	STUD M24x390	745	1.2	857

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Sr. No.	Type of Product	Qty. in Pc	Weight/ Pc	Total Weight (In Kgs)
25	STUD M24x580	168	1.7	287
26	THREADED ROD DIN976 M48X660	516	8.0	4,140
27	Anchor Rod M42x2815	2100	25.0	52,500
	Total	39,811		2,13,759
				Or Say 214 MT

- Hence, the company is proposing to produce the 214 MT of finished products on monthly bases. However, the company is estimating the 10% higher material to be processed to produce the 214 MT of finished products due to wastages, sampling, testing etc. Hence, the proposed production capacity of finished product is arrived at around 2783 MT on yearly bases.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

- To produce the finished products of desired stud, it will pass through the following key processes so need to determine the production capacity of the respective process.

Cutting >> Facing/Chamfering >> Thread Rolling

Estimation of Capacity of Cutting: Bandsaw Cutting Machine

Assumptions

Particulars	Bandsaw Machine
Nos. of Machine	3
Nos. of Working days in a month	25
Nos. of effective working hours in a day	16.8
Total Nos. of available working hours in a month	1260
Process time is varied based on the size of the studs to be produces (Pcs/Hour)	20 to 120

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month	Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month
1	STUD M64X535	1472	20	105.13	6	FL Stud M48x395	460	24	27.37
2	STUD M64x630	1140	20	81.43	7	M42x503	1328	24	79.02
3	STUD M64X754	469	20	33.48	8	STUD M36X470	2034	50	58.11
4	FL STUD M56x430	460	20	32.84	9	STUD M36X470	3812	50	108.92
5	STUD M48X650-10.9	3963	24	235.88	10	STUD M36X470	185	50	5.29

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Cutting: Bandsaw Cutting Machine

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month
11	STUD M36X460-10.9	9000	50	257.14
12	FL Stud M36x305	393	50	11.22
13	M36x480	1168	50	33.37
14	STUD M33X386	4994	80	89.18
15	STUD BOLT M33X245	671	80	11.99
16	STUD M30X415	126	110	1.64
17	STUD BOLT M30x220	1678	110	21.79
18	STUD M30 X 575	785	110	10.20
19	STUD M30X285	524	110	6.80
20	STUD M30 X 415	362	110	4.71
21	STUD M30X455	302	110	3.92
22	M30x480	658	110	8.54
23	M30x435	299	110	3.88

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month
24	STUD M24x390	745	120	8.87
25	STUD M24x580	168	120	2.00
26	THREADED ROD DIN976 M48X660	516	24	30.69
27	Anchor Rod M42x2815	2100	22	136.36
Total				1409.78
Total Nos. of Hours required/month				1410

- The required hours per month is estimated as 1410 for cutting process to produce the desired products of stud however, the total Nos. of available working hours in a month is 1260 only which is lesser than the required hours. However, the company will utilize the excess capacity available in the Hex Bolt production to meet the production of stud.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Facing & Chamfering

Assumptions

Particulars	Facing & Chamfering Machine
Nos. of Machine	2
Nos. of Working days in a month	25
Nos. of effective working hours in a day	16.8
Total Nos. of available working hours in a month	840
The company is planning to do facing in certain size of stud. Process time(Pcs/Hour)	3/20/30

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month
1	STUD M36X470	2034	30	96.85
2	STUD M33X386	4994	30	237.81
3	STUD BOLT M33X245	671	30	31.96
4	STUD M30X415	126	30	6.01
5	STUD BOLT M30x220	1678	30	79.91
6	STUD M30 X 415	362	30	17.26

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Month
7	Anchor Rod M42x2815	2100	20	150.00
Total				619.81
Total Nos. of Hours required/month				620

The required hours per month is estimated as 620 for facing & chamfering process to produce the desired products of stud and the total Nos. of available working hours in a month is 840 only which is higher than the required hours. Hence, the desired capacity can be produced in proposed nos. of Facing & Chamfering machine.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Thread Rolling Machine

Assumptions

Particulars	50 Ton	60 Ton	100 Ton	120 Ton
Nos. of Machine	3	2	2	1
Nos. of Working days in a month	25	25	25	25
Nos. of effective working hours in a day	15.6	15.6	15.6	15.6
Total Nos. of available working hours in a month	1170	780	780	390
Process time is varied based on the size of the studs to be produces (Pcs/Hour)	3/10/20/30	10/20/24/30	3/10/15/20	10/15

Sr. No.	Type of Product	Total Qty. in Pc	50 Ton		60 Ton		100 Ton		120 Ton	
			Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month
1	STUD M64X535	1472	--	--	--	--	--	--	10.0	226.4
2	STUD M64x630	1140	--	--	--	--	--	--	10.0	175.4
3	STUD M64X754	469	--	--	--	--	--	--	10.0	72.1
4	FL STUD M56x430	460	--	--	--	--	10.0	35.4	10.0	35.4
5	STUD M48X650-10.9	3963	--	--	24.0	141.5	15.0	406.4	--	--
6	FL Stud M48x395	460	--	--	--	--	15.0	47.2	--	--
7	M42x503	1328	--	--	--	--	--	--	15.0	68.1

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Thread Rolling Machine

Sr. No.	Type of Product	Total Qty. in Pc	50 Ton		60 Ton		100 Ton		120 Ton	
			Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month
8	STUD M36X470	2034	20.0	--	20.0	156.5	--	--	--	--
9	STUD M36X470	3812	20.0	146.6	20.0	146.6	--	--	--	--
10	STUD M36X470	185	20.0	7.1	20.0	7.1	--	--	--	--
11	STUD M36X460-10.9	9000	20.0	346.2	20.0	346.2	--	--	--	--
12	FL Stud M36x305	393	20.0	15.1	20.0	15.1	--	--	--	--
13	M36x480	1168	20.0	44.9	20.0	44.9	--	--	--	--
14	STUD M33X386	4994	30.0	64.0	30.0	64.0	--	--	--	--
15	STUD BOLT M33X245	671	30.0	8.6	30.0	8.6	--	--	--	--
16	STUD M30X415	126	30.0	1.6	30.0	1.6	--	--	--	--
17	STUD BOLT M30x220	1678	30.0	21.5	30.0	21.5	--	--	--	--
18	STUD M30 X 575	785	30.0	10.1	30.0	10.1	--	--	--	--
19	STUD M30X285	524	30.0	6.7	30.0	6.7	--	--	--	--
20	STUD M30 X 415	362	30.0	4.6	30.0	4.6	--	--	--	--
21	STUD M30X455	302	30.0	3.9	30.0	3.9	--	--	--	--
22	M30x480	658	30.0	8.4	30.0	8.4	--	--	--	--

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Thread Rolling Machine

Sr. No.	Type of Product	Total Qty. in Pc	50 Ton		60 Ton		100 Ton		120 Ton	
			Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month	Pcs/ Hour	Nos. of Hours Required/ Month
23	M30x435	299	30.0	3.8	30.0	3.8	--	--	--	--
24	THREADED ROD DIN976 M48X660	516	2.9	136.7	--	--	2.9	136.7	--	--
25	Anchor Rod M42x2815	2100	10.0	--	10.0	161.5	10.0	161.5	--	--
	Total			830.01		1152.78		787.24		577

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Estimation of Capacity of Thread Rolling Machine

The required hours per month is estimated as 3347 for thread rolling process to produce the desired products of stud however, the total nos. of available working hours in a month is 3120 only which is lesser than the required hours. However, the company will utilize the excess capacity available in the Hex Bolt production to meet the production of stud.

Sr. No.	Capacity of Thread Rolling Machine	Available working hours in a month	Nos. of Hours Required/ Month
1	50 Ton	1170	830
2	60 Ton	780	1153
3	100 Ton	780	787
4	120 Ton	390	577
	Total	3120	3347

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation - Stud

Capacity Estimation Summary

Based on the analysis of the capacities of various processes on the preceding pages, the following represents the overall capacity of the plant:

Sr. No.	Name of Key Process	Available working hours in a month	Nos. of Hours Required/ Month	Remarks on Capacity
1	Cutting	1260	1410	The company will utilize the excess capacity of cutting machine in Hex Bolt production line
2	Facing & Chamfering	840	620	The desired capacity can be produced in proposed nos. of Facing & Chamfering machine
3	Thread Rolling	3120	3347	The company will utilize the excess capacity of thread rolling machine in Hex Bolt production line

Looking to the estimation of capacity of key processes to produce the stud, we are of the opinion that the company will achieve its proposed production of 214 MT of finished products of stud on monthly bases. Further, considering the wastages, sampling, testing etc. the raw material will process 10% higher than the production of finished products. Hence, the proposed production capacity of finished product is arrived at around 2783 MT on yearly bases.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Hex Bolt

- Due to heterogenous demand of the products, the company has prepared planning sheet to produce the different type and size of bolts per year bases their past experience to estimate the production capacity of bolts. The details of proposed planning as provided by the company are as under;

Sr. No.	Type of Product	Qty. in Pc	Weight/ Pc	Total Weight (In Kgs)
1	M36x200	14000	2380	33,320
2	M48x280	14000	5860	82,040
3	M48x260	14000	5560	77,840
4	M64x390	14000	13620	190,680
5	M64x350	14000	12540	175,560
6	M64x370	14000	13080	183,120
7	M56x310	14000	8690	121,660
8	M48x310	14000	6330	88,620
9	M48x310	14000	6330	88,620
10	M64x380	14000	13350	186,900
11	M64x430	14000	14690	205,660
Total				1,434,020 Or say 1,434 MT

- Hence, the proposed production capacity to produce Hex Bolt is estimated by the company is 1434 MT.
- To produce the finished products of desired Hex Bolt, it will pass through the following key processes so need to determine the production capacity of the respective process.

Cutting >> Hot Forging

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Hex Bolt

Estimation of Capacity of Cutting: Circular Cutting Machine

Assumptions

Particulars	Circular Cutting Machine
Nos. of Machine	1
Nos. of Working days in a Year	300
Nos. of effective working hours in a day	14.4
Total Nos. of available working hours in a Year	4320
Process time is varied based on the size of the hex bolts to be produces (Average Pcs/Hour)	120/180

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Year	Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Year
1	M36x200	14000	180	78	7	M56x310	14000	120	117
2	M48x280	14000	120	117	8	M48x310	14000	120	117
3	M48x260	14000	120	117	9	M48x310	14000	120	117
4	M64x390	14000	120	117	10	M64x380	14000	120	117
5	M64x350	14000	120	117	11	M64x430	14000	120	117
6	M64x370	14000	120	117		Total			1244

The required hours per year is estimated as 1244 for cutting process to produce the desired products of hex bolts and the total Nos. of available working hours in a year is 4320 which is higher than the required hours. Hence, the company will be having an excess capacity of cutting in Hex Bolt production which will be utilize for production of Stud wherein the company has deficit in capacity.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Hex Bolt

Estimation of Capacity of Hot Forging

Assumptions

Particulars	Hot Forging Press
Nos. of Machine	2
Nos. of Working days in a Year	300
Nos. of effective working hours in a day	14.4
Total Nos. of available working hours in a Year	8640
Process time is varied based on the size of the studs to be produces (Average Pcs/Hour)	120/180

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Year	Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/ Year
1	M36x200	14000	180	78	7	M56x310	14000	120	117
2	M48x280	14000	120	117	8	M48x310	14000	120	117
3	M48x260	14000	120	117	9	M48x310	14000	120	117
4	M64x390	14000	120	117	10	M64x380	14000	120	117
5	M64x350	14000	120	117	11	M64x430	14000	120	117
6	M64x370	14000	120	117		Total			1244

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Hex Bolt

The required hours per year is estimated as 1244 for Hot forging process to produce the desired products of hex bolt and the total Nos. of available working hours in a year is 8640 which is higher than the required hours. Hence, the company will be having an excess capacity of hot forging press in Hex Bolt production. This is due to demand of different product mix of hex bolts which leads to requirement of additional hot forging press to produce the different kind of hex bolts.

Our analysis of estimation of capacity of different key processes to produce the Hex bolt is revealed that the company is proposed to procure additional machinery in each processes considering the nature of products and bases their past experience which leads to excess capacity in each process. Hence, considering the above facts and bases our analysis of capacity of key processes to produce the Hex bolt, we are of the opinion that the production capacity to produce the Hex bolt of 1434 MT estimated by the company is fair and reasonable.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Nut

- Due to heterogenous demand of the products, the company has prepared planning sheet to produce the different type and size of nuts per year to estimate the production capacity of nuts. The details of proposed planning as provided by the company are as under;

Sr. No.	Type of Product	Qty. in Pc	Weight/ Pc	Total Weight (In Kgs)
1	M36-10-tZn	75000	393	29,475
2	M42-10-tZn	75000	652	48,900
3	M48-10-tZn	75000	977	73,275
4	M56-10-tZn	75000	1420	106,500
5	M64-10-tZn	75000	1980	148,500
	Total			406,650 Or Say 407 MT

- Hence, the proposed production capacity to produce Nuts is estimated by the company is 407 MT.
- To produce the finished products of desired Nut, it will pass through the key processes of Hot Forging so need to determine the production capacity of the hot forging press.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation – Nut

Estimation of Capacity of Hot Forging

Assumptions

Particulars	Hot Forging Press
Nos. of Machine	1
Nos. of Working days in a Year	300
Nos. of effective working hours in a day	14.4
Total Nos. of available working hours in a Year	4320
Process time is varied based on the size of the studs to be produces (Average Pcs/Hour)	180

Sr. No.	Type of Product	Qty. in Pc	Pcs/ Hour	Nos. of Hours Required/Year
1	M36-10-tZn	75000	180	417
2	M42-10-tZn	75000	180	417
3	M48-10-tZn	75000	180	417
4	M56-10-tZn	75000	180	417
5	M64-10-tZn	75000	180	417
	Total			2083

The required hours per year is estimated as 2083 for Hot forging process to produce the desired products of nut and the total Nos. of available working hours in a year is 4320 which is higher than the required hours. Hence, the company will be having an excess capacity of hot forging press in nut production. This is due to demand of different product mix of nuts, the hot forging press will be used in production of hex bolts as well and vice a versa.

Considering the above facts and bases our analysis of capacity of key processes to produce the Nuts, we are of the opinion that the production capacity to produce the Nut of 407 MT estimated by the company is fair and reasonable.

7. REVIEW OF PROPOSED PRODUCTION CAPACITY

Capacity Estimation Summary

Based on the analysis of the capacities of various products on the preceding pages, the following represents the overall capacity of the plant:

Sr. No.	Name of Product	Production Capacity per Annum (in Metric Ton)
1	Stud	2783
2	Hex Bolt	1434
3	Nut	407
	Total	4624 Or Say 4600 MT

Note:

The information relating to the proposed installed capacity are based on various assumptions and estimates that have been taken into account for calculation of the proposed installed capacity. These assumptions and estimates include the standard capacity calculation practice of fasteners industry after examining the calculations and explanations provided by the Company for thread rolling capacities, hot forging press capacities and other ancillary equipment to be installed at the facilities. Further, the manufacturing process and cycle time to produce stud at existing facility of the company is also taken into account while reviewing the proposed production capacity. The assumption is also based on the three (3) shifts that the Company is running for eight hours a day. The assumptions and estimates taken into account include the following: (i) Number of working days in a fiscal year – 300; (ii) Number of days in a month – 25; (iii) Number of shifts in a day - 3; (iv) Number of daily hours – 16.8 for cutting process and facing & chamfering process, 15.6 for thread rolling process in case of Stud and 14.4 in case of Hex Bolts & Nuts (we understood from the technical person of the company that the process machinery are available for 24 hours a day but the machinery downtime on account changes of dies, effectiveness of manpower which reduced the daily effective hours for the operation) and (v) Schedule preventive maintenance days - 12.

CONCLUSION

8



8. CONCLUSION

Gala Precision Engineering Limited is raising the funds through IPO partly for establishing the new project for production of Springs and Special Fastening solution in the state of Tamilnadu.

This Report is to review of Project Cost and Production capacity of proposed production facility situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India. The conclusion of the project based on document/data/information provided by company and our professional judgement is as under...

Review of Approvals/Permissions:

- The company has obtained the pre-establishment approvals. The remaining approvals/ permissions will be taken at the time of during the implementation of the project as such approval are related to the construction activities and the certain approvals/permission will be taken post implementation of the project as such approvals are related to post construction of the project. For detailed status of various approvals and permissions please refer the chapter no. 4 of this report.

8. CONCLUSION

Review of Project Cost:

The project cost estimation of proposed production facility of GPEL situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India as on 21st December, 2023 is mentioned as under..

Sr. No.	Asset Category	Project Cost (INR in Million)
1	Land and Land Development	44.58
2	Buildings	78.17
3	Plant & Machinery	274.45
4	Electrical Installation	22.13
5	Furniture, IT Equipment and Vehicles	14.35
6	Govt Approvals/Permissions/Clearances	9.97
7	Pre-Operative Expenses	21.92
8	Contingency	17.75
	Total	483.32

- The company has provided us the Letter of Management Representation (MR) dated 4th January, 2024 regarding the estimated pre-operative expenses for proposed production of Studs, Hex Bolts and Nuts and same has been adopted without any further verification. (Refer Exhibit-A for further details)
- The amount of contingency is in-line with normal industry standard.

8. CONCLUSION

Review of Production Capacity:

The review of the production capacity of proposed production facility of GPEL situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India as on 21st December, 2023 is mentioned as under..

Sr. No.	Name of Product	Production Capacity per Annum (in Metric Ton)	Quantity per Annum (In Nos.)(Approx.)	Total Turnover/Annum (INR in Million) (Approx.)
1	Stud	2783	477,729	740.00
2	Hex Bolt	1434	154,000	390.00
3	Nut	407	375,000	60.00
	Total	4624 Or Say 4600 MT	1,006,729	1,190.00

- The reported analysis, opinion and conclusion are limited only by the information provided by the company and reported assumptions and limiting conditions in the report.
- The approx. quantity/annum mentioned in above table is envisaged by the company for the proposed production facility.
- The approx. total turnover/annum mentioned in above table is adopted as per the letter of management representation dated 4th January, 2024 provided by Gala Precision Engineering Limited. (Refer Exhibit-A for further details)

DISCLAIMER

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9. DISCLAIMER

- a) RBSA has been appointed as an independent advisor by Gala Precision Engineering Limited for review of Project Cost & Production capacity of proposed production facility situated at Plot No. G-18/2, SIPCOT, Sriperumbudur, Chennai.
- b) RBSA has carried out analysis of the project cost and production capacity based on the information provided by/ on behalf of the management of the Company (the "Management") and other pertinent information available either in public domain. Such information has been relied upon by RBSA for the assessment of the Assets of the Company. *These data points have been enlisted in our Sources of Information section.*
- c) 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. We have relied upon the representations of the owners/clients, their management and other third parties concerning the financial data, operational data and maintenance schedule of all plant machinery-equipment-tools-vehicles, real estate investments and any other investments in tangible assets except as specifically stated to the contrary in the report. We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the companies, their directors, employee or agents.
- d) The Report assumes that the Company complies/ complied fully with relevant laws and regulations applicable in all its areas of operations unless otherwise stated and will be managed in a competent and responsible manner. Further, except as specifically stated to the contrary, this Report has given no consideration to matters of a legal nature, including issues of legal title and compliance with local laws, and litigation and other contingent liabilities that are not recorded in the audited / unaudited balance sheet of the Company. We have made no investigation of, and assume no responsibility for the title to assets or liabilities against Company. No consideration has been given to liens or encumbrances against the assets, beyond the loans disclosed in the accounts.
- e) Our services are not designed to and are not likely to reveal fraud or misrepresentation by the Management or by external parties. Accordingly, we cannot accept responsibility for detecting fraud (whether by the Management or by external parties) or misrepresentation by the Management or any other person. While performing this assignment, we have assumed

the genuineness of all signatures and the authenticity of all documents and/ or copies of documents shown to us. We have also relied upon the veracity of the representations made, and the information provided to us by/ on behalf of the Management. In no event shall we be liable for any loss, damages, cost or expenses arising in any way from fraudulent acts, misrepresentations or wilful default on part of the Client, their directors, employees or agents.

Our report can be used by the Client only for the purpose, as indicated in this report, for which we have been appointed and cannot be used or relied by the Client for any other purpose or by any other party for any purpose whatsoever. We are not responsible for the unauthorized use of this Report. We are not responsible to any other person for any decision of such person based on this report. Any person intending to provide finance / invest / divest in the shares / business of the Company or its other group companies, if any, shall do so after seeking their own professional advice and after carrying out their own due diligence procedures to ensure that they are making an informed decision. If any person (other than the Client) choose to place reliance upon any matters included in the report, they shall do so at their own risk and without recourse to RBSA. It is hereby notified that usage, reproduction, distribution, circulation, copying or otherwise quoting of this report or any part thereof, except for the purpose as set out earlier in this report, without our prior written consent, is not permitted, unless there is a statutory or a regulatory requirement specifically pronounced in the report to do so. We shall not assume any responsibility to any third party to whom the Report is disclosed or otherwise made available. In no event, regardless of whether consent has been provided, shall we assume any responsibility to any third party to whom the Report is disclosed or otherwise made available.

EXHIBIT A

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10. EXHIBIT A

Letter of Management Representation provided by Gala Precision Engineering Limited



Date: 04-01-2024

RBSA Advisors LLP
912, Venus Atlantis Corporate Park,
Anandnagar Main Road,
Prahlanadnagar,
Ahmedabad – 380 015

Subject: Letter of Management Representation

Dear Sir,

This is in reference to your appointment for providing advisory service on review of project cost and production capacity of proposed production facility of Gala Precision Engineering Limited situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India.

We understand that for the aforesaid exercise, you are relying on the following representations which we made to you and which, by way of this letter, we are confirming to you to be correct, complete and having made appropriate enquiries, in all material aspects to the best of our knowledge and belief:

1. The projected turnover to be achieved from the proposed production facility of Gala Precision Engineering Limited situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India by the management of Gala Precision Engineering Limited (hereinafter referred to as 'Company' or 'Client' or 'GPEL') is as under.

Sr. No.	Name of Product	Gross Weight (In MT/Year)	Total Turnover/Annum (INR in Million)(Approx.)
1	Stud	2783	740
2	Bolt	1434	390
3	Nut	407	60
	Total	4624	1190

2. The pre-operative expenses proposed to be incurred in the lead upto commercial production & actual Invoicing to customers from the proposed production facility of Gala



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Gala Precision Engineering Limited
A-801, 8th Floor, Thane One, DIL Complex
Ghodbunder Road, Majiwada, Thane West, Pincode - 400 610
www.galagroup.com
CIN No. U29268MH2009PLC190522

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Precision Engineering Limited situated at Plot no G-18/2, Vallam-Vadagal Industrial Park, SIPCOT, Sriperumbudur, Kancheepuram, near Chennai, Tamil Nadu, India by the management of Gala Precision Engineering Limited (hereinafter referred to as 'Company' or 'Client' or 'GPEL') is as under:

Estimated Pre-Operative Exps-2024-25	INR in Million
Raw Material Cost	2.65
Manufacturing Cost	3.50
Personnel Cost	3.00
Depreciation on Building & P & M	4.21
Interest on Borrowings	8.56
Total	21.92

By this letter of Management Representation, we confirm that, to the best of our knowledge, we are not aware of any material misstatement of fact or any other information that should be disclosed in your preparation of report. We agree that we shall indemnify and hold harmless your firm and employees from any claims by parties to whom this exercise is presented / submitted, arising out of any material misstatement or omission in any material or information supplied by us.

Yours faithfully,

For Gala Precision Engineering Limited

S. Girdhar
S. Girdhar

Chief Financial Officer

Date: 04/01/2024

Place: Thane



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