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MSME – Development Institute,
Hyderabad
Director of Industries,
Govt. of Andhra Pradesh

Setting up of Common Facility Centre at Jaggayyapeta Gold Ornament Cluster, Andhra Pradesh under MSE-CDP Scheme

August 2019

DETAILED PROJECT REEPORT

Submitted by
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Executive Summary

A Introduction

Jaggayyapeta Gold Ornament Cluster is undoubtedly one of the major jewellery making regions in the state of Andhra Pradesh. However its unorganized nature, poor growth of micro firms due to lack of infrastructure facilities, limited skill sets of workers in making of high-end jewellery, invasion of major retail chains are adversely affecting the growth of local jewellery making industry.

At present there are around 800 part manufacturing firms (Gold Smiths) in the cluster which are heavily depending on wire & sheet cutting, engraving, drilling and casting units in jewellery making leading to higher production costs and time lines. They lack in terms of Jewellery design and use of technology in manufacturing of Jewellery and are heavy dependent on CAM centres in Mumbai. Also there is no testing or hall marking facility in the vicinity of the cluster and are dependent on the facilities located in Hyderabad which is at a distance of 195 Km or Vijayawada which is at a distance of 100 Km.

Out of 800 odd firms in the cluster 200 firms are registered under Udyog Aadhar. These 200 firms are considered to be part of the Jaggayyapeta Gold Ornament Cluster.

In order to overcome the growth hurdles, it is proposed to set up a Common Facility Centre to cater to the need of the cluster and accordingly 30 Micro firms have come forwards to establish the CFC and have registered a Special Purpose Vehicle under companies act 2013 (Section 8) and named it **Vishwarupa Goldsmith Foundation.** The proposed common facilities are common **Die Moulding centre, testing & hall marking facility and CAD/CAM centre** which will run on self-sustainable mode.

B Nature of activity and Cluster products:

At present there are around 800 part manufacturing (**200 organized** and 600 unorganized) firms (Gold Smiths) which are heavily depending on wire & sheet cutting, engraving, drilling and casting units in jewellery making leading to higher production costs and time lines.

C Critical Gaps and suggested hard interventions drawn from the DSR

The artisans lack basic infrastructure facilities and proper equipment in the cluster and are interdependent on part manufacturing firms for making of various types of gold ornaments. Hence there is a need for establishment of **Common Die Moulding Centre** in the cluster. This facility will have 5700 Dies for making rings, bangles, necklace, earrings and a Sheet and wire drawing machine.

As BIS has made it mandatory for Jewellery Industry to follow hall mark norms and maintain the specified purity, majority of the cluster firms are finding it tough to know purity of the ornament they make. This is resulting

in higher rejection rates and dent in profit margins. Further non availability of Hall Marking facility in the vicinity of the cluster forces the artisan to send jewellery far off distance to comply with the norms, which is costing them higher than the standard industry norms. Thus there is definite need to establish a **common testing cum 3D laser Hall Mark Facility** in the cluster to overcome the gap.

The cluster is also into manufacturing of heavy neckless and jewellery which needs resin protypes and are heavily dependent on facilities in Mumbai. The time, cost and risk of damage involved in getting the prototype from Mumbai is hurdle to the growth of the cluster. Hence a **CAD / CAM centre** is proposed in the cluster.

D Special Purpose Vehicle (SPV)

An SPV namely **"Vishwarupa Goldsmiths Foundation"** was formed and registered under Societies Act 2013. The SPV will have a character of inclusiveness wherein provision for enrolling new members to enable prospective entrepreneurs in the cluster to utilise the facility is provided. In addition to the contributing members of the SPV, the organizers have obtained written commitments from 'users' of the proposed facilities so that its benefits can be further enlarged. No single unit is holding more than 10 per cent in the equity capital of the SPV which is in conformity with MSECDP guidelines.

E Management Structure

The management of the CFC will be a three tier structure for smooth and uninterrupted operations and is as follows:

The Board of Directors: The main governing body for the SPV which is ably assisted by Technical and Secretarial staff. While the Chairman and Managing Director will oversee the entire operations, each Director is entrusted with specific responsibility like marketing, technical, finance, Public relations etc. based on his past experience and qualifications.

The technical staff: Each facility will have its own technical staff which is as per the requirement and guidelines of Bureau of Indian Standards. While the Die Moulding Centre will have 5 operators, 2 helpers and the testing cum hall mark centre will be looked after by one assayer, one chemist, 3 lab technicians and 2 delivery boys. The CAD / CAM centre would be run with support of 2 CAD operator and 2 CAM operator.

The Secretarial Staff: A competent and well qualified person will be appointed as the manager who will look after day to day operations of CFC and is directly reporting to Board of Directors.

F Project Cost & Means of Finance

The total cost of the project is **₹ 790 Lakh** which is inclusive of CFC building (₹ 48 Lakh), plant & machinery (₹ 671.61 Lakh), misc. fixed assets (₹ 5

Lakh), Rental Deposit (₹ 4.00 Lakh) Professional charges for DSR, DPR & PMC (₹ 10.00 Lakh), Preliminary & Preoperative Expenses (₹ 10.85 Lakh), working capital (₹ 6.00 Lakh) and contingencies (₹ 34.54 Lakh). The SPV will contribute 10.13% (₹ 80 Lakhs), State Government will contribute 10.13% (Rs. 80 Lakh) and remaining 79.75% (₹ 630 Lakhs) is sought from DC-MSME as grant in aid.

A part of cost of civil works (CFC Building), entire working capital & Rental Deposit will be Bourne by the beneficiaries as their equity. State Government will contribute part of machinery and Civil Works and GoI is grant is restricted to Plant & Machinery, and Misc fixed assets besides expenses like Consultancy fees for preparation of DSR & DPR and PMC.

G Sustainability of CFC

The proposed project is self-sustainable and generates its revenue from user charges / Job work charges. As per the guidelines there will be separate charges for members and non-members for each facility.

The project will start its operations from 1st April of Financial year 2021-22 and expected to generate a revenue of ₹ 242.79 Lakh during the year. The revenue for the next three year are ₹ 260.44 Lakh, ₹ 278.70 Lakh and ₹ 289.24 Lakh. The profit after tax during the first year of operation is estimated as ₹ 80.15 Lakh and increases to ₹ 99.41 Lakh by 4th year.

The key financial parameters for the project are as tabulated below and are within acceptable norms.

Table E1: Key Financial Parameters

Sl. No.	Parameters	Suggested as per MSE-CDP Guideline	As projected
1	Breakeven at Operating Capacity (1st year) in %	Below 60%	43.15%
2	Return on Capital Employed (RoCE)	Above 25%	33.98%
3	Debt Service Coverage Ratio	>3	Not applicable
4	NPV	Positive	₹ 206.58 Lakh
5	IRR	Above 10%	15.64%

The sensitivity analysis shows the unit can withstand 10% drop in capacity utilization added with 10% decrease in user charges.

Since the project is not having any debt funding, DSCR is not applicable. All parameters are within acceptable limit. The above financial parameters indicate the commercial viability and long term sustainability of the proposed Common Facilities Centre.

H Implementation Schedule

The project is scheduled to be completed to be completed within 12 month of the Sanction of Grant-in-aid by DC-MSME subjected to

- Timely formation of Purchase committee for procurement of Machinery by State Government.
- Timely receipt of funds DC-MSME through State Government.

Activity wise schedule is presented below.

Table E2: Schedule of Implementation

Sl. No.	Activity	Schedule
1	Acquisition of Land	Completed on long term lease basis
2	Sanction of Grant by DC-MSME	March 2020
3	Civil & Building Works	April – July 2020
4	Bidding process of Machinery	April - May 2020
5	Purchase of P&M and Commissioning	June – July 2020
6	Electrical works	Nov – Dec 2020
7	Trial Run	Dec 2020
8	Statutory Approvals (BIS / Trade Lisc.)	Jan 2021 – Mar 2021
9	Commercial operation	April 2021

I Expected performance of the cluster after proposed intervention

The proposed hard interventions will show substantial increase in the tangible parameters like in number of units, employment, production. Besides, intangible aspects like major improvement in quality and increase the domestic sales by minimum of 30 percent and also open up the avenues for export market. The following table substantiates the above points:

Table E3: Performance of the Cluster post intervention

Sl. No.	Parameters	18-19	19-20*	20-21*	21-22	22-23
1	Beneficiary Units	200	205	210	240	285
2	Increase in Employment**	670	685	700	798	960
3	Increase in production (Kg)	1200	1225	1250	1370	1650
4	Domestic Sales	14.89	15.35	15.8	19	25
5	Profit Margin	5%	5%	5%	9%	12%
6	Export Sales	0	0	0.25	1.50	4.00

*Note : Considering Natural growth rate
**Note : Direct Employment in 200 Firms

The number of beneficiary firms are expected show an average growth of 20% with increased awareness and benefits accrued. However the

figure may vary from one facility to another. While Processing Centre is expected to be utilised by all member firms of the society, Hall mark cum testing centre are supposed to be utilised by both members and non-members of the cluster with increase in growth rate varies between 20 to 25% per annum.

The employment and production is expected to grow at the rate of 20% considering increase in production capacities of goldsmiths and part manufacturing firms due to establishment of common processing centre and initiation of direct marketing.

A 30% growth in turnover is expected at cluster level due to increased production levels by cluster firms with processing centre, improved market share due to quality and hall marking besides inflation. The profit are expected to improve by 100% from current level of 5% to 10% to 12% post implementation of the CFC.

The improved quality and hall marking will definitely pave the way for composite manufacturing firms to initiate export marketing.

J Selection of Machinery and Suppliers

The entire machinery was selected based on the requirement of the stake holders, and specifications laid down by the SPV in consultations with technical expert. Suppliers of different machinery were selected based on some of the following parameters

- Adoptability of the machinery by cluster firms
- Presence of all the requisite machinery as per the specifications
- Proximity of the supplier to the proposed site
- Good track record of the bidder and their linkage with cluster firms
- The warranty period and after sales service
- Presence of in house experienced staff to attend any major breakdowns
- Cost Comparisons

K Institutional and Project Monitoring Mechanisms

The expected roles and responsibilities of various Institutions in successful implementation and operation of CFC are :

1. **MSME-DI, Hyderabad:** MSME-DI is the field level agency for implementation of various development programs for Ministry of MSME, GoI. They have been instrumental in motivating and providing guidance to the cluster association in Jaggayyapeta. During the year 2018-19, MSME-DI, Hyderabad played a key role in bringing these artisans to a single platform and helping them understand the benefits of function under single umbrella as a cluster. It also provided necessary support in preparation of DSR of the cluster and DPR of the proposed CFC. It further provided support which structuring and registration of the SPV so as to suite

to the requirement of the project as well as the scheme. It will also provide whatever the support required by SPV while implementing the CFC project.

2. **DC-MSME:** The Office of the Development Commissioner (MSME) will act as the Nodal Agency. The agency will not only provide financial assistance in the form of grant in aid but also act as apex monitoring agency to oversee the progress of the proposed CFC through its regional MSME –DI situated at Hyderabad. After the approval of the diagnostic study report by the State Level Project Steering Committee, Implementation of soft interventions, the detailed project report earlier approved by the State Committee, will be taken up by the **Steering Committee of the MSE-CDP** (under the Chairmanship of Secretary, MSME) for in-principle approval. Proposals accorded in-principle approval will be placed in the **Steering Committee of the MSE-CDP** under the Chairmanship of Secretary (MSME) for final approval after fulfilment of the following conditions:

   - Formation of SPV.
   - Land procured and registered in the name of SPV. In case of leased premises, the lease should be legally tenable for a fairly long duration of 15 years in the name of SPV.
   - Submission of appraised Detailed Project Report (DPR) by SIDBI/ Bank (if bank financing is involved) / independent Technical Consultancy Organization.
   - Details of the Shareholding of the SPV and Project Specific account in Schedule a Bank.

3. **State Level Project Steering Committee:** Government of Andhra Pradesh has Constituted State Level project Steering Committee to ensure satisfactory and time-bound implementation of the activities. The State Level Project Steering Committee will deal with diagnostic study report and soft interventions. It will have the final authority to sanction diagnostic study report and to monitor the implementation of soft interventions. Further the committee will review the Hard Intervention proposed and will recommend the same through a Detailed Project report to National Level Project Steering Committee. The Members of the State Level Project Steering Committee as per Government of Andhra Pradesh GO No. G.O.RT.No. 390, Dated: 16-11-2016 is tabulated below.

Table E4: State Level Project Steering Committee Members

Sl. No.	Member	Designation
1	Director of Industries	Chairman
2	Managing Director or representative of Implementing Agency (IA) (APTPC)	Member Secretary / Convener
3	Representative of Finance Department	Member
4	The Director, MSME-Development Institute, Hyderabad	Member
5	The General Manager, District Industries Centres concerned	Member
6	Additional Director of Industries dealing with subject of MSE-CDP	Member
7	Representative of SLBC	Member
8	Deputy Secretary Industries, dealing with the subject of Clusters	Member
9	Executive Director, MSME of APINVEST	Special Invitee

4. **Director of Industries:** Considering the uneven state of development of collaborative initiatives like formation of Special Purpose Vehicle among small and micro enterprises in the cluster, Director of Industries as monitoring agency will be the prime mover of a proposal for CFC in the initial stages of its conceptualization, design, determination of technical parameters, project preparation and documentation, etc., in consultation with the cluster beneficiaries.
5. **Special Purpose Vehicle (SPV):** The SPV will be the prime Governing body for the proposed CFC. The SPV will gradually take over the role of implementing agency from Director of Industries after becoming self-sustainable with thrust on self-governance which is the main objective of MSECDP.
6. **Cluster Development Coordination Committee (CDCC):** A CDCC will be formed with nominated members from DC-MSME, CoI, DIC, SIDBI, SPV and a related Technical Institution. The CDCC will play the role of an advisor in technical, financial, marketing and management mechanisms for smooth functioning of CFC. It will monitor the progress of the CFC on monthly/ quarterly basis and suggest corrective actions wherever required. The Committee will also ensure procurement of proper machinery as per GoI norms.
7. **Purchase Committee:** Facilitating the SPV in identification of suitable suppliers of machinery, inviting tenders, bid processing and finalizing tenders are some of the important functions of purchase committee. The Committee will be formed for short term duration at the time of purchase of plant and machinery. General Manager – DIC, nominated members from MSME-DI, SPV and a technical institution will be the members in the committee under the chairmanship of Director of Industries.

Project at a Glance

Name of the SPV	Vishwarupa Goldsmith Foundation
Name of the Project	CFC for Common Die Moulding Centre, Testing cum Hall Marking and CAD/CAM Centre
Name of the Cluster	Jaggayyapeta Gold Ornament Cluster
Place/ District / State	Jaggayyapeta Town, Jaggayyapeta District, Andhra Pradesh
Type of Enterprise	Special Purpose Vehicle (Section 8, Indian Companies Act 2013) Not for Profit Company
Installed Capacity (per annum)	10800 job works in Die Moulding 600 Kg of Sheet & Wire Drawing 54000 hall markings 36000 quality tests 2400 Design per annum 30000 CAM jobs per annum
Operation Basis	1 Shift of operation for 300 days a year
Job Work Charges	**Die Moulding** : ₹ 2 per gram for Sheet / Wire Drawing ₹ 50 per Gram of Die Moulding Done **Hall Marking & Testing** Hall Marking ₹ 35 per Job for ₹Members Hall Marking ₹ 45 per Job for Non Members Testing : ₹ 100 per Job for Members Testing : ₹ 120 per Job for Non-Members **CAD / CAM Centre** CAD ₹ 300 per Job for Members CAD ₹ 450 per Job for Non Members CAM ₹ 450 per Job for Members CAM ₹ 600 per Job for Non Members

Project Cost & Means of Finance	Sl. No.	Description	Total Amount	SPV Contribution	State Contribution	GRANT IN AID
	1	Land & Land Dev.	0.00	0.00	0.00	0.00
	2	Civil & Structural Works	48.00	28.00	20.00	0.00
	3	Plant & Machinery	671.61	33.80	60.00	577.81
	4	Lease Deposits	4.00	4.00	0.00	0.00
	5	Misc. Fixed Assets	5.00	0.25	0.00	4.75
	6	Contingencies	34.54	6.91	0.00	27.63
	7	Professional Charges for DSR & DPR & PMC	10.00	0.50	0.00	9.50
	8	Preliminary Expenses	6.00	0.30	0.00	5.70
	9	Pre-Operative Expenses	4.85	0.24	0.00	4.61
	10	Margin Money for WC	6.00	6.00	0.00	0.00
		Total	**790.00**	**80.00**	**80.00**	**630.00**

01

Introduction

1.1 Preamble

Gold has a deep rooted significance in Indian history, alluring people from different parts of the world with its beauty and charm. Its golden glow was visible across seas and borders, evoking emotions from millions of hearts. Over the years India's infatuation with gold has grown stronger and stronger, with Indians accounting for most of the gold consumed globally. Gold, in Indian history is more than an investment, it is a culturally significant metal which has found a place in Indian hearts and homes alike.

It is true that a vast majority of the Indian population survives on meagre resources, but despite this they find ways to buy gold and make it an integral part of their lives, irrespective of gold rates in their city/town. Gold has takers across the length and breadth of our nation, right from Delhi to Chennai and Ahmedabad to Kolkata. There are a few reasons which have propelled gold to a pedestal in India, a spot which it is likely to hold on to for a long time.

Religious Connotations – Gold is an integral part of religious ceremonies in India, regardless of religion. Be it Hinduism, Sikhism, Jainism or Christianity, gold is a prominent asset across all major religions in the country.

Family heirloom – Gold is part of every Indian household and is considered a family heirloom by most Indians. Gold jewellery and ornaments are passed on from generation to generation, in a bid to keep family legacy alive.

Golden Gifts – Gifting gold is considered auspicious in India, with gold gifts forming an integral part of all ceremonies. Gifting gold enables recipients to use it fruitfully, as it is not only a key source of money but is also considered lucky.

Status Symbol – There is no bigger status symbol than gold in India, and Indians are not shy to flaunt it. In a social setting with billions of people, gold is one element which can help people stand out, literally shine in the crowd.

Investment – Gold has been considered the safest investment, a sentiment which Indians live by. It is this property of gold as a protector against bad times which have pushed Indians to buy it as investments.

Jaggayyapeta occupies an important place not only in the state of Andhra Pradesh in terms of historical and cultural heritage. The Archaeological excavation around the town of Jaggayyapeta (Mandal Headquarter) has found Buddhist stupa of 200 BC. Many sculptures and scriptures of Neolithic, Megalithic and medieval periods are also found around the town. It is also known for its Banginapalli and Totapuri varieties of mango, those are even exported to foreign countries. It is one of major industrial corridor in Krishna district and hosts major cement plants in and around like Ramco cements, Madras cements, KCP Cement etc. The town is located on the banks of the Paleru *River* which is a tributary of the Krishna *River*.

Jaggayyapeta Gold Ornament Cluster is undoubtedly one of the major jewellery making regions in the state of Andhra Pradesh. However its unorganized nature, poor growth of micro firms due to lack of infrastructure facilities, limited skill sets of

workers in making of high-end jewellery, invasion of major retail chains are adversely affecting the growth of local jewellery making industry.

At present there are around 800 part manufacturing firms (Gold Smiths) in the cluster which are heavily depending on wire & sheet cutting, engraving, drilling and casting units in jewellery making leading to higher production costs and time lines. The lacks in terms of Jewellery design and use of technology in manufacturing of Jewellery and are heavy dependent on CAM centres in Mumbai. Also there is no testing or hall marking facility in the vicinity of the cluster and are dependent on the facilities located in Hyderabad which is at a distance of 195 Km or Vijayawada which is at a distance of 100 Km. The cluster also lacks in terms of modern machines like, faceting, milling and laser engraving.

In order to overcome the growth hurdles, it is proposed to set up a Common Facility Centre to cater to the need of the cluster. The present document asses the need and justification of the project and evaluates the Techno Economic viability of the proposed CFC and presents it Ministry of MSME government of India for extending financial support under MSE-CDP Scheme.

1.2 Micro & Small Industry Cluster Development Program

The Ministry of Micro, Small and Medium Enterprises (MSME), Government of India (GoI) has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. Clustering of units also enables providers of various services to them, including banks and credit agencies, to provide their services more economically, thus reducing costs and improving the availability of services for these enterprises.

In the present economic environment the fiscal incentives like subsidies/tax relief are no longer feasible, nor are they compatible with the new international trade and investment regimes. Realizing the significance of above aspects, various Government agencies have started Cluster Development schemes. Some of the significant CDP Schemes are Integrated Handloom Cluster Development Programme (IHCDP) of DC- Handlooms and Ambedkar Hasta Vikas Yojana (AHVY) of DC-Handicrafts for Artisanal clusters other than MSECDP Scheme for Industrial clusters.

The primary objective of MSECDP is to improve international competitiveness of the domestic industry. The scheme aims that selecting industrial clusters with high growth potential and upgrade the infrastructure facilities in these clusters to make the entrepreneurs more competitive and enable them to face competition from imports through cost optimization and quality assurance mechanisms.

1.3 Jaggayyapeta Gold Ornament Cluster

The units in Jaggayyapeta Gold Ornament Cluster are artisan type and located within 20 Km radius in the heart of the Jaggayyapeta Town. There are 800 composite and part manufacturing firms who constitutes the core. These firms are in to making of Chains, Rings, Bangles, Black Bit Chains, Bracelets, Long Chains, Necklaces, Matis, Ear chains, Tikkas, lockets, Belts, bajubandis, nose pins etc.

Out of 800 odd firms in the cluster 200 firms are registered under Udyog Aadhar and others fall under unorganized sector. These 200 firms are considered to be core part of the Jaggayyapeta Gold Ornament Cluster and are considered under the present proposal.

The total turnover during FY19 for the cluster (200 Firms) was ₹ 14.89 crores. All the cluster firms falls under Micro Units category of MSME Act. The cluster is providing direct employment to 670 persons and indirect employment through support firms to 242 persons. The average earnings of the skilled employees ranges from ₹ 15000 to ₹ 25000 per month whereas for semi-skilled it is ₹ 15000 to ₹ 18000 and for unskilled range is between ₹ 9000 to ₹ 10000. Most of the manufacturers are semi-literate and third/ fourth generation entrepreneurs.

Sri Kamakshi Suvarna Rachita Vastu Nirmana Sangam, Jaggayyapeta is the association formed by the artisans in the year 1979 for addressing common issues. The association helped the artisans obtaining artisan card from DC-Handicraft and is now exploring the possibility of setting up of common facility centre. The association has also visited CFC set up at Vijayawada Gold ornament cluster under MSE-CDP Scheme. Post formation of the SPV they also have taken up exposure visit to Chennai for exploring possibility of Setting up of Common Facility Centre.

During the year 2018-19, MSME-DI, Hyderabad played a key role in bringing these artisans to a single platform and helping them understand the benefits of function under single umbrella as a cluster. The Diagnostic Study conducted by DSLR Consultancy Pvt. Ltd. identified the intervention to be made to overcome the bottleneck in growth of the cluster. Motivated by the interaction during this period the Cluster firms joined hand to form a Special Purpose Vehicle (SPV) in order to set up a common facility centre and named it as **Vishwarupa Goldsmith Foundation**. Same was registered as a Section 8 company under companies act 2013 on 31st August 2018. The CIN of the firm is U93090AP02018NPL109084.

The proposed Common facilities include Die Moulding Centre, testing & hallmarking facility and CAD/CAM Centre.

1.4 About DSLR Consultancy Pvt. Ltd.

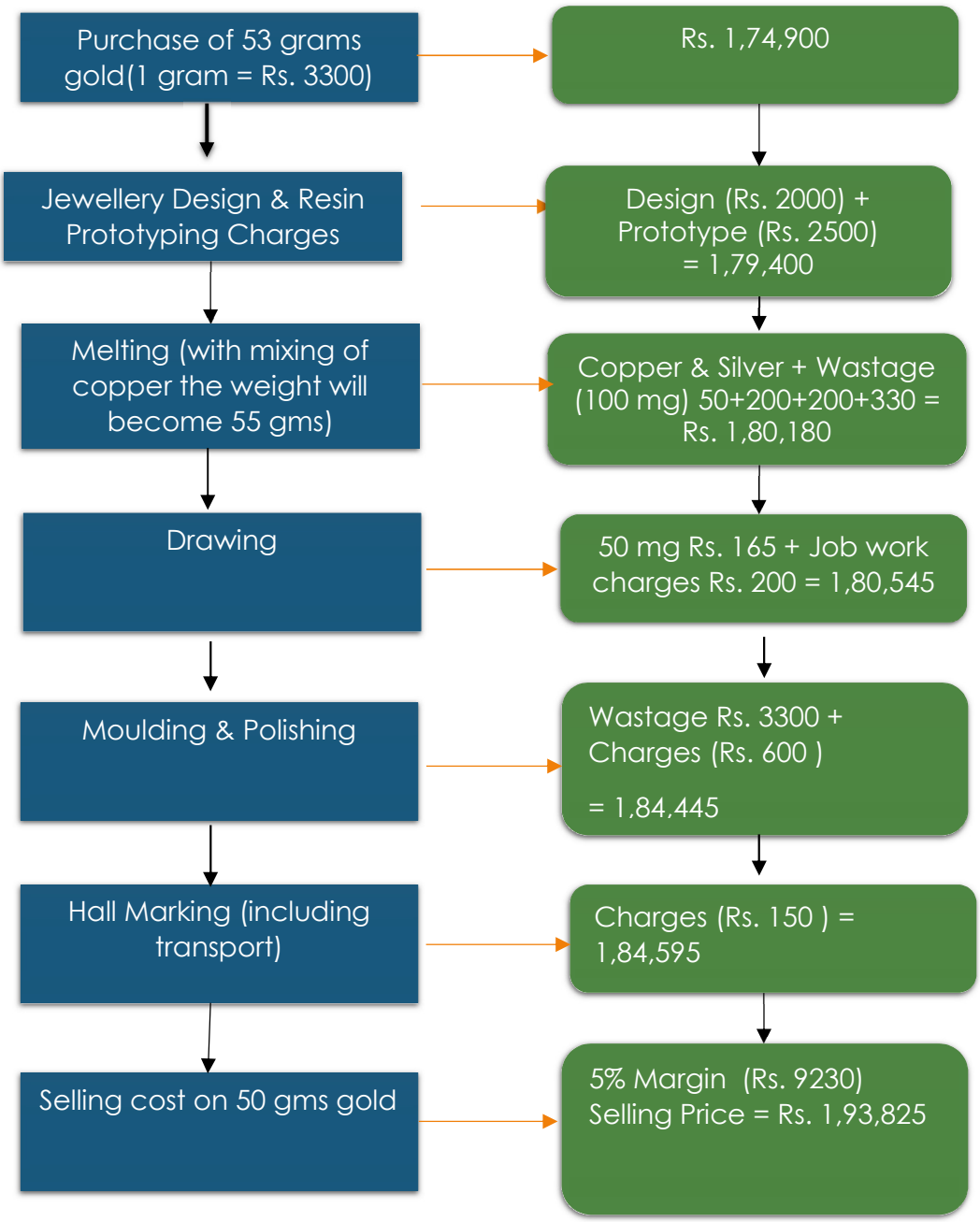
DSLR Consultancy is multidimensional consulting organization led by three young and dynamic professionals with cumulative experience of over four decades in the field of Banking & Project Finance, Cluster Development, Engineering, Technical and Management consulting. The management team is supported by highly experienced professionals and subject experts from the field of Engineering, Cluster Development, Management, operations, Finance etc.

1.5 Gap Assessment/ Rationale for Setting up of Common Facility Centre

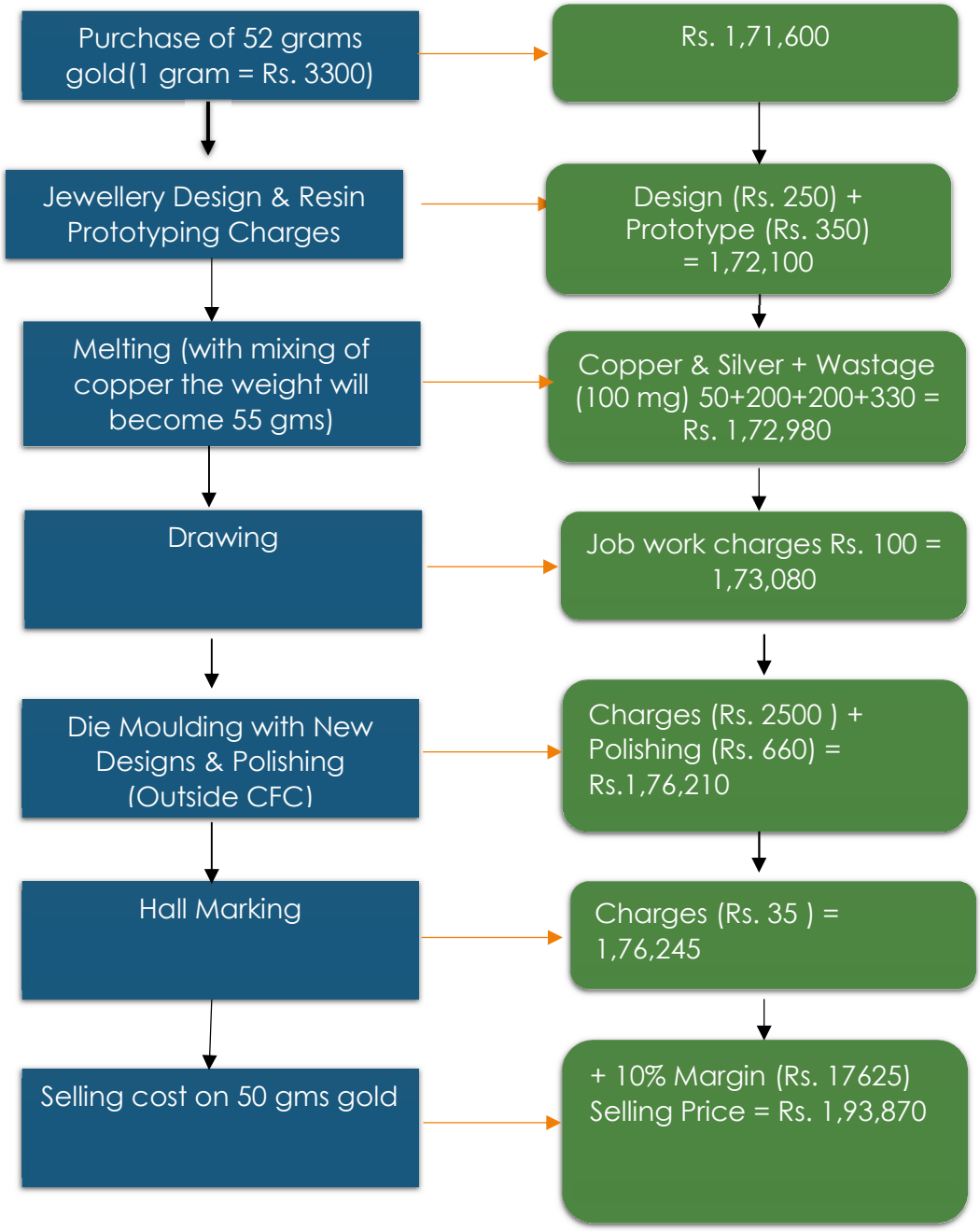
The chart below highlights the gap in the cluster. The gaps are in form of lack of hall marking facility in the cluster leading to higher expenses (Hall marking charges and transportation) in utilizing facilities at Hyderabad, lack of proper testing facility for raw material and finished goods, obsolete machinery for processing not meeting hall marking standard, artisans not able to afford high cost machinery. Age old design and lack of use of computer aided manufacturing is another hurdle for the growth of the cluster. Keeping this in view a Common Facility Centre is proposed with the above mentioned facilities for overall benefit of the cluster. All the cluster firms may utilize the machinery for which they will be charged on job work basis ensuring economic viability of the CFC.

Value Chain analysis of the pre and post intervention are presented below.

Value Chain Analysis 50 Gm Necklace (Pre-CFC)



Value Chain Analysis 50 Gm Chain (Post-CFC)



The above value chain analysis identifies the following advantages.

- Reduction in wastages by 25 to 30%
- Increase in Profit Margin by 5% **(from 5% to 10%)**
- Opens the option of direct marketing
- Increase scope for export

1.6 Summary of Stakeholders View

The Stakeholder meetings were held on two different occasions. The preliminary discussions were held during the month of March 2018. Subsequently after

formulation of the draft CFC proposal the stakeholders meeting was conducted on October 2018. The concerns and observations of the stakeholders were duly incorporated in the final CFC proposal before submission for request of approval.

1.7 Financial Assistance

The Common Facility Centre project is proposed to be funded with mix of beneficiary contribution , state government contribution and financial assistance from Ministry of MSME, Government of India under MSE-CDP Scheme. As all the cluster firms are under the category of Micro Enterprises, financial assistance of 80% of the project is sought, balance 20% will be brought in by as state government and beneficiary contribution.

1.8 Structure of the CFC Proposal

The present report deals with the following topics in subsequent sections. A detailed proposal on common facility centre is given in Chapter 2. The detailed management structure along with individual roles & responsibilities, share holding pattern are presented in 3rd Chapter. The project profiles along with need assessment, detailing the requirements for each facility, process flow and unit operations, the merits and demerits / advantages and disadvantages, selection of appropriate technology, cost implications, facility configuration and layout comprising of each technology concepts are given in Chapter 4, 5 and 6 (Die Moulding, Testing cum Hall mark facility, CAD / CAM Centre). Chapter 7 deals with the project economics and financial analysis. Alternative user costs have been considered, as also variation in capacity utilization in order to understand the sensitiveness of these parameters for understanding the viability of the project. The institutional mechanisms and Implementation schedule, Parameters for performance monitoring are given in Chapter 8 to 9. Chapter 10 briefs the implementing agency and the final chapter, Chapter 11 talks about the conclusions of the proposal in view of its successful execution. All supporting documents are enclosed thereafter.

02

The Proposal

2.1 Name & Location of the Cluster

The Jaggayyapet Gold Ornament Cluster are Micro Units type and the Cluster has about 800 units scattered in a radius of 20 Km, with about 200 units are concentrated within a radius of 6 km. **Out of 800 odd firms within Jaggayyapet Town 200 firms in the cluster are registered under Udyog Aadhar and others fall under unorganized sector. These 200 firms are considered to be core part of the Jaggayyapet Gold Ornament cluster and are considered under the present proposal**.

More than a century old the rise of the cluster can be observed from early 50's of 20th Century, owing to growing demand in domestic market. More than 95% of Gold ornaments craftsmen based units started by goldsmiths Cluster radius spread in 20 Kms.

Jaggayyapeta town is also the Mandal headquarter and is located on the banks of the Paleru River which is a tributary of the Krishna River.

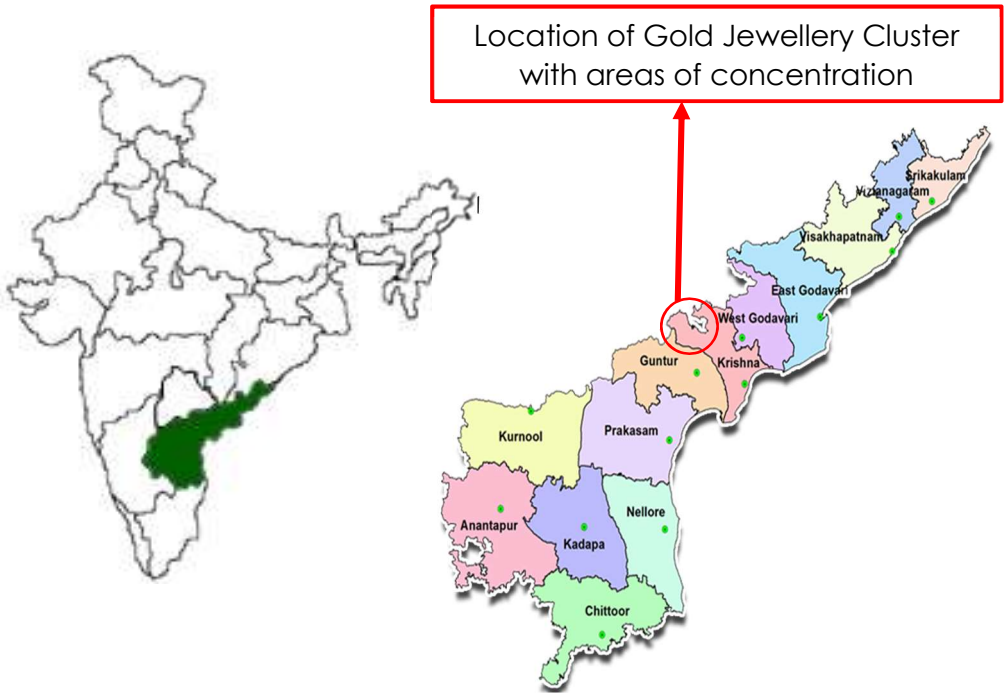
Jaggayyapeta is 100 Kms from Vijayawada, which is metropolitan city of Andhra Pradesh.

It is around 100 KM from Amaravati, State Capital of Andhra Pradesh.

Anumanchipalli (5 KM), Dechupalem (6 KM), Balusupadu (7 KM), Takkellapadu (7 KM), Mangollu (7 KM) are the nearby Villages to Jaggayyapeta.

CHAKRAVARTIN FROM JAGGAYYAPETA STUPA.

Jaggayyapeta is surrounded by Vatsavai Mandal towards East, Kodad Mandal towards west, Penuganchiprolu Mandal towards East, Mella Chervu Mandal towards west. Jaggaiahpet, 195 Kms from Hyderabad, and Kodad, Khammam, Miryalaguda are the nearby Cities to Jaggayyapeta.



The estimated number of units are 800 and out of these 200 odd firms in the cluster are registered under Udyog Aadhar and others fall under unorganized sector. These 200 firms are considered to be core part of the Jaggayyapet Gold Ornament cluster and are considered under the present proposal.

The turnover is estimated at Rs 14.89 crores during last financial year (2018-19) with no visible exports.

Around 100 Jewellery Show Rooms cum Trading Centres function in this cluster. The micro cottage units and also the Artisans depend on the traders for raw materials and sale of their products. Although there exists good scope to capitalize the synergies and potentialities available in the cluster, factors like price oscillation, poor modernization efforts, lack of product diversification. quality improvement, process, designs, R & D facilities, testing, absence of an integrated marketing approach, over-dependence on traders etc. have adversely affected the growth and development of this sector.

However, owing to the changed buying behaviour of customers, who look for new designs and multiple usage of gold, precious stones and other fashioned products, abundant scope exists for development in this sector. Setting up of Quality Testing cum hall mark Centre, establishment of common production Centre and evolving other measures to mitigate shortcomings etc are to be taken seriously to protect the interests of the industry.

Jaggayyapeta to Hyderabad by Road : 195 KM
Jayyayyapeta to Vijayawada by Road : 100 KM
Nearest Railway Station (Junction) : Vijayawada
Nearest Airport : Vijayawada, 120 KM

Image: Artisans of the Cluster working in their Units

2.2 Nature of activity and products; number and size (also in terms of installed capacity) of units and number of units:

a) Nature of Activity: Manufacturing

b) Products: Gold Ornaments like Chains, Rings, Bangles, Necklace, Bracelets, Long Chains, Necklaces, Nallapusalu (Black Bead Chains), Studs, Matis, Ear chains, Tikkas, lockets, Belts, bajubandis, Nose pins etc.

c) No. of Units and size: The number of units are 200 which provide direct employment to more than 670 artisans. All these 200 units who form the cluster are registered under Udyog Aadhaar and are located within 6 Km radius. With reference to size all the firms falls under category of micro enterprises with investments less than ₹ 25 lacs.

d) Installed Capacity: Since the activity does not involve much of machinery for manufacture of final product, there is no defined installed capacity. The production depends upon the market demand and financial capability of individual enterprises.

Traditional Necklace Sets

Traditional Bangles

Earrings





Rings




Pendants





2.3 Scale of investment (also in terms of net fixed and important current assets):

The scale of investment in 85% firm is upto ₹ 5 Lakh. Only around 15% firms have investment above ₹ 5 Lakh. Most of them are job workers, hence no current assets like raw material and finished goods stock is applicable. Details of the investments are presented below.

Table 2.1: Scale of Investment in different category of firm

Sl. No.	Type of Firm	No of Firms	Average Investment range	Employment	
				Direct	Indirect
1	Micro	170	Upto ₹ 5 Lakh	550	208
2	Micro	30	5 to 8 Lakh	120	34
3	**TOTAL**	**200**		**670**	**242**

2.4 Information on value of output in the last 3 years (different enterprise segment - wise), including export output:

The total estimated value of output was ₹ 14.00 crores in the year 2016-17, ₹ 14.40 Crores in the year 2017-18 and reached a turnover of ₹ 14.89 Crores by the year 2018-19. Thus the annual growth is increasing at the rate of 3% which is primarily due to inflation. The production figures for the gold smiths category are calculated on job work basis. The following table substantiates the variations.

Table 2.2: Past performance of the cluster

Sl. No.	Nature of firm	No of firm	Turnover 2016-17	Turnover 2017-18	Turnover 2018-19	Annual production in Tons for 2018-19

1	Micro firms	200	14.00 Cr.	14.40 Cr.	14.89 Cr.	1200 Kgs.

The turnover during the year 2019-20 is expected to reach ₹ 15.35 Cr.

2.5 Proposed Intervention

Other that setting up of CFC (which is primary Intervention) it is proposed to have few soft intervention. A provision of ₹ 5.00 Lakh has been made towards soft intervention activity in the Preliminary expenses. The suggested Intervention and the cost thereof is presented below.

Table 2.3: Soft Intervention Activity

Sl. No.	Activity	Budget (INR Lakh)
1	Exposure Visit to Chennai	1.00
2	Exposure Visit to Mumbai Machinery Exhibition	1.00
3	Validation Program for DSR	0.50
4	Validation Program for DPR	0.50
5	Gold appraiser program	1.00
6	Management Development Program	0.50
7	Interaction meet with BIS	0.50
8	**TOTAL**	**5.00**

2.6 Projected economies of scale and growth potential, expected performance of the cluster after proposed intervention (in terms of production for domestic and export markets in volumetric and nominal financial terms-export/domestic sales and direct/indirect employment, etc.):

2.6.1 Firm / Enterprise Level

- An estimated 1600 artisans (Both organized and Unorganized) who do not have units / proper facility of their own will benefit from the proposed common Die moulding centre which results reduction in production costs by 20% to 30%, improve the profitability in rage of 10% to 12% from current profit margin of 5%.

- The Common Testing cum Hall Mark Facility is expected to be utilised by 800 firms (Organized and Unorganized) there by improving the quality of ornaments produced and reducing rejection rates. The hall marking will enable part manufacturing firms to go for direct marketing.

- Export marketing will be initiated by at least 10 firms.

- Increased productivity and sales will have direct impact on employment which is expected to increase by 20% in the cluster.

- Strengthening of forward and backward linkages and local institutions, provision of linkages with public & private support institutions,

strengthening of local infrastructure through public-private partnerships will benefit at least 30% of the existing firms indirectly, within 3 years.

2.6.2 Cluster Level

The performance indicators at cluster level are given as below:

Table 2.4: Post Intervention performance Indicators

Sl. No.	Indicator	Current Status (2018-19)	Post Intervention (2nd Year 2022-23)
1	Total Domestic Turnover INR Cr.	₹ 14.89 Cr.	₹ 25.00 Cr.
2	Export in INR Cr.	Nil	₹ 5 Cr.
3	Investment INR Cr.	₹ 9.01 Cr.	₹ 12.84 Cr.
4	Profitability (%)	5%	10-12%
5	Employment	670	960
6	Capacity Utilization %	55% to 60%	75% to 80%

2.7 Diagnostic study/comparative advantage benchmark survey (main findings); information on nature of critical gaps identified (such as poor storage facility, poor testing and quality control facilities-item-wise cost estimates):

Critical Gaps drawn from the Diagnostic Study Report (DSR) are given below:

More than 1600 artisans (Organized and Unorganized) lack basic infrastructure facilities and proper tools in the cluster and are depending on part manufacturing firms for making of various types of gold ornaments. Further the die used by them are old with redundant design. Hence there is a need for establishment of **Die Moulding Centre** in the cluster. It will also have sheet and wire drawing facility which will reduce the wastage as compared to the existing machines in the cluster. The proposed facility will cater to the needs of 800 (Both Organized and Unorganized) firm in the cluster The estimated cost of the proposed Common Processing Plant is ₹ 3.63 crore.

As BIS has made it mandatory for Jewellery Industry to follow hall mark norms and maintain the specified purity, majority of the cluster firms are finding it tough to know purity of the ornament they make. This is resulting in higher rejection rates and dent in profit margins. Further non availability of Hall Marking facility in the vicinity of the cluster forces the artisan to send jewellery far off distance to comply with the norms, which is costing them higher than the standard industry norms. Thus there is definite need to establish a common testing cum **3D laser Hall Mark Facility** in the cluster to overcome the gap. The estimated cost of the proposed Common Processing Plant is ₹ 1.55 crores.

The cluster is also into manufacturing of Necklace, which needs proper designing and prototyping for casting. The cluster do not have a CAD / CAM facility and are dependent on facilities in Mumbai. The time and

cost involved for utilizing CAD / CAM in Mumbai is high and is hampering the growth of the cluster. Hence a **CAD/ CAM** facility is proposed as CFC and is estimated to Cost **₹. 1.56 Cr.**

Further details are provided Annexure 1A, 1B

2.8 Elaboration on gaps, if any, to be filled through assistance from schemes of other Ministries (e.g., technology up-gradation under TUFS, MoFPI schemes):

As all the units in the cluster falls under Micro Enterprise, the proposed CFC is eligible for 80% Grant and the balance 20% will be raised by the members of the SPV and contribution of State Government. The land for the CFC will be leased and the Grant received from DC-MSME will be utilized for the purpose of Plant and Machinery only, adhering to the Scheme Guideline. The working capital required being less will also be brought in by the SPV members, hence no Gap funding is sought from any other Ministry or Scheme.

2.9 Implementation schedule; structuring of the SPV, such as copy of certificate of incorporation, articles of association and letter of agreement with stakeholders:

During Stakeholders meeting held during March 2018 cluster member were appraised about importance of SPV formation for operational management of proposed CFC. All the members were also sensitized about MSECDP Scheme and role of SPV in establishment of CFC.

An SPV namely "**Vishwarupa Goldsmith Foundation** " was formed and registered under Company's Act, 2013 as a Section 8 Company. Copy of Certificate of incorporation and articles of association are enclosed as **Appendix 1**.

A letter of agreement among stake holders about the executive committee, financial and operational management is signed. A copy of the same is enclosed as **Appendix 2**.

2.10 Revenue generation mechanism for sustainability of assets (service/user charges to be levied, any other-to be specified):

All the SPV members and other principle cluster firms have expected to utilise the services of various facilities proposed to be established on user charge basis for sustainability of its operations. Separate charges will be levied for members and non – members which is as per the guidelines of MSECDP. All the charges proposed are highly competitive and less than prevailing local market prices. These charges were finalized after due consultations with stakeholders balancing both commercial as well as social viability of the CFC. The Facility wise and activity wise charges are given in the following table:

Table 2.5: User Charges in CFC

Sl. No.	Facility	Activity	User Charges		Prevailing Market Rates
			Members	Non-Members	
1	Die Moulding Centre	Sheet Drawing	₹ 2 per gram	₹ 2 per gram	₹ 5 per Gram
		Die Moulding	₹ 50 per gram	₹ 50 per gram	₹ 62 per gram
2	Hall Marking & Testing	Hall Marking	₹ 35	₹ 45	₹ 125 – ₹ 150
		Testing	₹ 100	₹ 120	₹ 150
3	CAD / CAM	CAD	₹ 300	₹ 450	₹ 800 - ₹1000
			₹ 450	₹ 600	₹ 1500 - ₹ 2000

All facility will be open for use for members as well as non-members.

2.11 Project Implementation Schedule and completion period

The project is scheduled to be completed to be completed within 12 month of the Sanction of Grant-in-aid by DC-MSME subjected to

- Timely formation of Purchase committee for procurement of Machinery by State Government.
- Timely receipt of funds DC-MSME through State Government.

Activity wise schedule is presented below.

Table 2.6: Activity wise Schedule of Implementation

Sl. No.	Activity	Schedule
1	Acquisition of Land	Completed on long term lease basis
2	Sanction of Grant by DC-MSME	March 2020
3	Civil & Building Works	April – July 2020
4	Bidding process of Machinery	April - May 2020
5	Purchase of P&M and Commissioning	June – July 2020
6	Electrical works	Nov – Dec 2020
7	Trial Run	Dec 2020
8	Statutory Approvals (BIS / Trade Lisc.)	Jan 2021 – Mar 2021
9	Commercial operation	April 2021

The CFC will need approval from BIS after completely setting up of the CFC and before commencing its operation and hence a provision of 3 month have been made in the schedule of implementation of the project. The CFC will also need trade licence before operation. Activity wise bar chart is presented separately as **Appendix 9.**

2.12 Monitorable targets in terms of year-wise number of beneficiary units, increase in employment, increase in production, domestic sales, exports, others (specify):

The proposed hard interventions will show substantial increase in the tangible parameters like in number of units, employment, production. Besides, intangible aspects like major improvement in quality may increase the domestic sales by minimum of 10 percent and also open up the avenues for export market. The following table substantiates the above points:

Table 2.7: Year wise Monitorable targets

Sl. No.	Parameters	18-19	19-20*	20-21*	21-22	22-23
1	Beneficiary Units	200	205	210	240	285
2	Increase in Employment**	670	685	700	798	960
3	Increase in production	1200	1225	1250	1370	1650
4	Domestic Sales	14.89	15.35	15.8	19	25
5	Profit Margin	5%	5%	5%	9%	12%
6	Export Sales	0	0	0.25	1.50	4.00

*Note : Considering Natural growth rate
**Note : Direct Employment in 200 Firms

The number of beneficiary firms are expected show an average growth of 20% with increased awareness and benefits accrued. However the figure may vary from one facility to another. While Processing Centre is expected to be utilised by all member firms of the society, Hall mark cum testing centre are supposed to be utilised by both members and non-members of the cluster with increase in growth rate varies between 20 to 25% per annum.

The employment and production is expected to grow at the rate of 20% considering increase in production capacities of goldsmiths and part manufacturing firms due to establishment of common processing centre and initiation of direct marketing.

A 30% growth in turnover is expected at cluster level due to increased production levels by cluster firms with processing centre, improved market share due to quality and hall marking besides inflation. The profit are expected to improve by 100% from current level of 5% to 10% to 12% post implementation of the CFC.

The improved quality and hall marking will definitely pave the way for composite manufacturing firms to initiate export marketing.

2.13 Sustainability of SPV and project highlights-total cost of project, contribution from cluster enterprises/stakeholders, average contribution

by individual enterprises, grant in aid under MSECDP, term loans , debt-equity ratio in this context, repayment schedule and estimated debt service coverage ratio (DSCR) (where debt finance is availed of), annual estimated income, expenditure, gross and net profit at expected/optimal levels of operations, breakeven (BE)/internal rate of return (IRR) calculations, payback period, etc.:

The total cost of the project is **₹ 790 Lakh** which is inclusive of CFC building (₹ 48 Lakh), plant & machinery (₹ 671.61 Lakh), misc. fixed assets (₹ 5 Lakh), Rental Deposit (₹ 4.00 Lakh) Professional charges for DSR, DPR & PMC (₹ 10.00 Lakh), Preliminary & Preoperative Expenses (₹ 10.85 Lakh), working capital (₹ 6.00 Lakh) and contingencies (₹ 34.54 Lakh).

Table 2.8: Project Cost and Sources of fund

Sl. No.	Description	Total Amount	SPV Contribution	State Contribution	GRANT IN AID
1	Land & Land Dev.	0.00	0.00	0.00	0.00
2	Civil & Structural Works	48.00	28.00	20.00	0.00
3	Plant & Machinery	671.61	33.80	60.00	577.81
4	Lease Deposits	4.00	4.00	0.00	0.00
5	Misc. Fixed Assets	5.00	0.25	0.00	4.75
6	Contingencies @ 5%	34.54	6.91	0.00	27.63
7	Professional Charges for DSR & DPR & PMC	10.00	0.50	0.00	9.50
8	Preliminary Expenses	6.00	0.30	0.00	5.70
9	Pre-Operative Expenses	4.85	0.24	0.00	4.61
10	Margin Money for WC	6.00	6.00	0.00	0.00
	Total	**790.00**	**80.00**	**80.00**	**630.00**

As the land of CFC is leased on long term basis the cost of land and is not considered.

The SPV will contribute 10.13% (₹ 80 Lakhs), State Government will contribute 10.13% (Rs. 80 Lakh) and remaining 79.75% (₹ 630 Lakhs) is sought from DC-MSME as grant in aid.

The cost of civil works, working capital, Rental Deposit and preoperative expenses will be Bourne by the beneficiaries and state government as their contribution and GoI is grant is restricted to Plant & Machinery, and Misc fixed assets besides Preliminary expenses like Consultancy fees for DPR preparation.

An SPV was formed and registered under Company Act 2013 for operational management of proposed CFC. The SPV will have a character of inclusiveness wherein provision for enrolling new members to enable prospective entrepreneurs in the cluster to utilise the facility is provided. In addition to the contributing members of the SPV, the

organizers have obtained written commitments from 'users' of the proposed facilities so that its benefits can be further enlarged.

Care has been taken while preparing Memorandum of Articles about:

- All the SPV members are independent in terms of their financial stakes and management.
- No single unit is holding more than 10 per cent in the equity capital of the SPV.

The proposed project is self-sustainable and generates its revenue from user charges / Job work charges. As per the guidelines there will be separate charge for members and non-members for each facility.

The project will start its operations from 1st April of Financial year 2021-22 and expected to generate a revenue of ₹ 242.79 Lakh during the year. The revenue for the next three year are ₹ 260.44 Lakh, ₹ 278.70 Lakh and ₹ 289.24 Lakh. The profit after tax during the first year of operation is estimated as ₹ 80.15 Lakh and increases to ₹ 99.41 Lakh by 4th year.

The key financial parameters for the project are as tabulated below and are within acceptable norms.

Table 2.9: Key Financial Indicators

Sl. No.	Parameters	Suggested as per MSE-CDP Guideline	As projected
1	Breakeven at Operating Capacity (1st year) in %	Below 60%	43.15%
2	Return on Capital Employed (RoCE)	Above 25%	33.98%
3	Debt Service Coverage Ratio	>3	Not applicable
4	NPV	Positive	₹ 206.58 Lakh
5	IRR	Above 10%	15.64%

The sensitivity analysis shows the unit can withstand 10% drop in capacity utilization coupled with 10% decrease in user charges. However unit is more sensitive to drop in capacity utilisation than drop in user charges.

(The detailed sensitivity analysis is given in **Chapter 6** of the Report).

Since the project is not having any debt funding, DSCR is not applicable. All parameters are within acceptable limit. The above financial parameters indicate the commercial viability and long term sustainability of the proposed Common Facilities Centre.

2.14 Previous track record of co-operative initiatives pursued by SPV members need to be highlighted with support documentation.

Sri Kamakshi Suvarna Rachita Vastu Nirmana Sangam, Jaggayyapeta is the association formed by the artisans in the year 1979 for addressing common issues. The association helped the artisans obtaining artisan card from DC-Handicraft and is now exploring the possibility of setting up of common facility centre. The association has also visited CFC set up at Vijayawada Gold ornament cluster under MSE-CDP Scheme. Association members have taken up exposure visit to Chennai (April 2018) and Hyderabad (2018) for exploring possibility of Setting up of Common Facility Centre.

Image: Validation Program for DPR

2.15 Benchmarking impact of CFC with regard to international competition (one section of the proposal should be devoted to highlight the impact of the project on beneficiary enterprises vis-à-vis exports/global competition, particularly with regard to tradable (any product that may be conventionally exported or imported) :

The purity of gold is measured in Carats. Caratage is an important factor in buying gold jewellery as it indicates how pure the metal is. The gold Carat (ct) tells how many parts of gold and how many parts of other metal are in the gold alloy. Jewellery standards specifies the benchmarks for gold to ascertain its fineness i.e., parts per thousand. For example 24 Carat gold is considered to be 999.999 parts per thousand. One carat is one part of 24, or 41.66 parts of a thousand.

The basic problem for the cluster firms is lack of testing facilities to know the Caratage of jewellery thus hindering it to venture in to export market. By establishing a common testing facility with XRF machine the purity of

alloy can be easily calculated and thus beneficiary firms can venture in to exports.

Hallmarking of Gold

Hallmark is a purity certification of gold articles in accordance with Indian Standard specifications. India Bureau of Indian Standard (BIS) was named as the sole agency in the country for Hallmarking of gold jewellery under the provisions of the BIS Act, 1986. BIS is primarily engaged in the preparation and promotion of standards and operation of different quality certification schemes. A hallmark comprises five elements as follows.

- BIS Mark
- The fineness number (corresponding to given Caratage)
- Assaying and Hallmarking Centre's mark
- Jeweller's mark
- Year of marking denoted by a code letter and decided by BIS (e.g. code letter 'A' was approved by BIS for year 2000, 'B' being used for the year 2001 and 'C' for 2002 and so on).

Majority of the cluster firms are being exploited in the cluster as only one recognized Hall Mark Shop is available within Vijayawada town which is charging exorbitant prices. Thus at present the cluster firms are either avoiding hall marking and their by limiting their market share or using the only facility available which is effecting their economics of scales.

Thus reaching hall mark standards through common hall mark facility is very important for cluster firms to tap organized market like retail chains across the country besides export market in Middle East and Latina American Countries.

Similarly Indian Gold Chains and bangles have very good export market potential in Middle East, France, USA. However to tap these markets the jewellery must be made out of high precision CNC machinery to get required finishing. Similarly Designs and patterns in global ornament market are ever changing and if cluster firms cannot develop designs as per the changing trends it is very difficult to meet export standards. The proposed common processing and design development facilities will definitely help the firms to meet these changing demands.

2.16 CFC may be utilised by SPV members as also others in a cluster. However, evidence should be furnished with regard to SPV member ability to utilise at least 60 per cent of installed capacity.

All the 200 firms which form the core cluster are going to use the facility and for which they already signed a letter of agreement (Copy enclosed as **Appendix 3**).

The Common Die Moulding centre will be totally utilized both by members and non-members. Based on its success facility is proposed to the expanded with own fund.

The capacity of testing facility is 36000 tests per annum out of which the members firms alone need at least 18000 tests @ 60 tests per firm per year which itself is on conservative side. The facility can conduct over 54000 hall marking per annum, however the hall marking is required by the entire cluster firms and thus exact percentage utilisation for this facility is very difficult to calculate. However the non-members share in utilisation of this facility is expected to be more than 50%.

CAD / CAM centre is also proposed to be utilized by members and non-members of the SPV with different user charges.

03

Management & Shareholding Pattern

3.1 Management

The Proposed Common Facilities will be managed by Special Purpose Vehicle namely "**M/s Vishwarupa Goldsmith Foundation** " Company Limited by Shares and Not For Profit Incorporated under Section 8 of Companies Act, 2013 on 31ST August 2018. The CIN of the firm is U93090AP02018NPL109084.

The SPV will oversee the following functions:

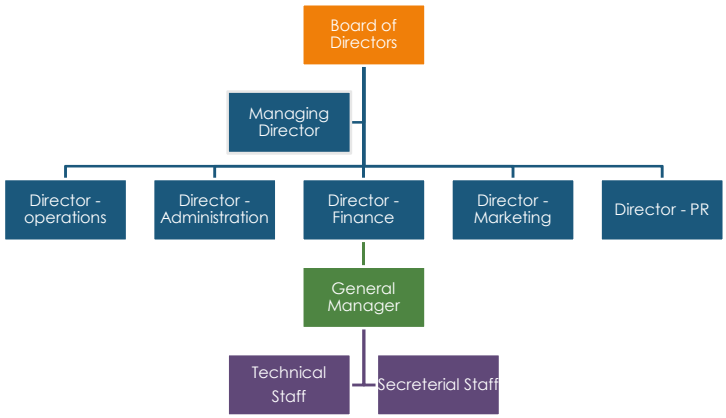
- Establishing, operating and maintaining all common facilities as mentioned in the DPR.
- Collection of user charges from SPV members and other users of the facilities so as to meet the recurring expenses and future expansions
- Preparation and submission of progress reports to Director of Industries and DC-MSME as per the guidelines

The management of the CFC will be a three tier structure for smooth and uninterrupted operations and is as follows:

The Board of Directors: The main governing body for the SPV which is ably assisted by Technical and Secretarial staff. While the Chairman and Managing Director will oversee the entire operations, each Director is entrusted with specific responsibility like marketing, technical, finance, Public relations etc. based on his past experience and qualification.

The technical staff: Each facility will have its own technical staff which is as per the requirement and guidelines of Bureau of Indian Standards. While the Die Moulding centre will have 5 operators and 2 helpers and the testing cum hall mark centre will be looked after by one assayer, one chemist, 3 lab technicians and 2 delivery boys. The CAD / CAM centre will have 2 CAD and 2 CAM operators.

The Secretarial Staff: A competent and well qualified person will be appointed as the General manager who will look after day to day operations of CFC and will directly reporting to Board of Directors All the accounting and financial management will be looked after by a highly experienced Accounts officer. As the Facility is dealing with precious metal like gold, two security persons will be deployed for safety and security of establishment.



3.2 Bio-Data of the Promoters

Sri Ramakrishna Mamillapalli aged about 36 years and is having 17 years of gold jewellery manufacturing experience, specialized in rings, diamond ear rings and other gold ornaments. He is qualified in gemmology and diamond grading at 4C gem institute, Secunderabad. He is also valuer for HDFC bank from the last 10 years. At present he is running Sri Balaji Jewellery works. He will be acting as Director in Sri Viswarupa Goldsmith Foundation and he is instrumental in the proposed development of CFC.

Sri Bellankonda Hanumantha Rao aged about 43 years and is having 23 years' experience in making of Bangles and Necklaces. At present he is running Sri Kamakshi Jewellery Works. He will be acting as Director in Sri Viswarupa Goldsmith Foundation and will look after welfare of Foundation.

Sri M Srinivasa Chary aged about 37 years and is having 19 years' experience in making of Wedding ornaments, specialized in chains and Necklaces. He did his diploma course for valuation of gold to banks. At present he is running Srinivasa Jewellery works. He will be acting as Director in Sri Viswarupa Goldsmith Foundation and will look after implementation of project.

Sri Chitturi Lakshmana Kumar aged about 47 years and is having 28 years' experience in making of gold idols. At present he is running Kumar Works. He will be acting as Director in Sri Viswarupa Goldsmith Foundation and will take the responsibility of training on technology advancement, importance of hallmarking etc..

3.3 List of SPV Members & Shareholding Pattern

The Proposed Common Facilities will be managed by Special Purpose Vehicle namely "**M/s Vishwarupa Goldsmith Foundation** ". Details of the 27 members of the SPV is presented in the table below.

S.No	Name of the Unit	Details of the cluster beneficiaries or entrepreneurs or artisans (i.e. name, address, phone no., firms name etc.)	Turnover (Rs. In lakhs)	Udyog Aadhar.	Shareholding pattern
1	M/S.Mamillapalli rama krishna gold works	M.ramakrishna,propriteor,D.N;13-29, jaggayyapeta, bharamanabazar, mob;9247879511	8.5	AP06A0005269	8.00%
2	M/S. Bellamkonda Hanumantharaogoldwork	B.Hanumantharao,propriteor,D.NO7-230,Torraguntapalem ,jaggayyapeta,mob;9347247289	8.5	AP06A0005450	2.00%
3	M/S.divya jewellers	A.sai krishna,proptiteor,D.no;113-38,bharamana bazar,jaggayyapeta,mob;9666006090	7.2	AP06A0005427	5.00%
4	M/S .dugra priya jewellery works	T.ramakrishna,propriteor,D.NO;12-86/2,alasapuri vari vidhi,jaggayyapeta,mob;9989984523	8.5	AP06A0005529	3.50%
5	M/S.Suma gold works	k.ramakrishna,propriteor,D.NO;14-91,rangaswami bazar ,jaggayyapeta,mob;9676608050	5.0	AP06A0005252	3.50%
6	M/S.SALEEM GOLD WORKS	SK.saleem,propriteor,D.no;13-290,nagamaiah,jaggayyapeta mob;837499476	5.5	AP06A0005185	4.00%
7	M/S,.KUMAR GOLD WORKS	CH.LAKSHMANA KUMAR,PROPRITEOR,D,NO;11-145mittigudem jaggayyapeta,mob,8500513023	9.0	AP06A0005191	4.00%
8	M/S.Nanharala narasimha rao gold works	N.narasimha rao,propritepr,D.no4-700,garikapadu ,jaggayyapeta,mob;7095683029	6.0	AP06A0005251	5.00%
9	M/S.Motukuri srinivasa chary gold works	m.srinivasa chary,propriteor,D.NO;13-229,jaggayyapetabharamanabazar,mob;9247230615	7.0	AP06A0009435	5.00%
10	M/S. chittoju srinu gold works	c.srinu,D.NO;3-172-1,alasapuri veedi,jaggayyapeta,mob;	6.0	AP06A0005223	5.00%
11	M/S.Purna chandra rao GOLD WORKS	M.KRISHNA manohar,propriteor,D.no;12-69/2,karmuri vari veedi ,jaggayyapeta,mob;7207335465	5.0	AP06A0005620	2.00%
12	M/S.Mamillapalli kiran gold works	m.kiran,propriteor,D.NO;13-27, jaggayyapeta, mob,984888811	7.0	AP06A0005435	5.00%

13	M/S.alex gold works	n.alexander ,propritror, D.no;108/1, willampeta,jaggayyapeta,mob;9848147277	6.0	AP06A0012994	4.00%
14	M/S.SRI balaji jewellers	m.viswa rupa chari,propriteor,D.NO;13-29, Bharamana bazar, jaggayyapeta, mob;9948233267	7.0	AP06A0013725	3.00%
15	Niharika Jewellery Works	11/25, Muttayala Road, Shivalam Street Jaggayyapeta 521175	4	AP06A0014243	3.00%
16	M/S.JAI gold moulding machines	a.suresh kumar,propriteor,D.NO;13-29,bharamana bazar, jaggayyapeta, mob;9032038886	5.5	AP06A0005436	3.00%
17	M/S PARAMESWARA GOLD WORKS	c.narsimha chari.propriteor,D.no;1-37,amaravaram,allipuram,nalogonda	8.5	AP06A0005451	3.00%
18	M/S.kumba eswar gold works	k.eswar,propriteor,D.NO;11-325/2, mittagudem,jaggayyapeta.mob;8179705705	7.0	AP06A0005263	2.00%
19	M/S.SRI viswa rupa chari gold works	s.viswa rupa chari,propriteor,D.NO;11-23,bharamana vedi, jaggayyapeta, mob;9885095765	8.5	AP06A0005805	2.00%
20	Beaula silver works	n.beaula ,propriteor.D.NO;15-108,williampeta,jaggayyapea,mob;9247879511	6.0	AP06A0013026	2.00%
21	PRUDHVI JEWELLERY WORKS	12-77 MUKYALA ROAD JAGGAYYAPETA	8.5	AP06A0005455	2.00%
22	M/S.AMEER GOLD AND POLISH WORKS	SK.ameer,propriteor,D,NO;13-290,NAGAMAIH BAZAR ,Jaggayyapeta,mob;9640261305	7.0	AP06A0005197	1.50%
23	M/S.Saraswahi gold works	A.srinivasa chary,propriteor,D.no 13-38,bhramana bazar,jaggayyapeta,mob;9032059908	6.5	AP06A0005326	1.50%
24	M/S.Dasoji sankara chari gold works	d.sankarachari,propriteor,D.no;1-102,takkellapadu,mo;9963909304	7.0	AP06A0005212	1.00%
25	M/S.Asaravalli prasanthi silver works	A.prasanthi,propriteor,DNO13-29, Bharamana bazar, jaggayyapeta,mob;7207252228	11.0	AP06A0005188	1.00%
26	RAMANA JEWELLERY WORKS	2-32 MUKTYALA ROAD JAGGAYYAPETA	7	AP06A0009368	1.00%

27	GOVINDACHARI GOLD WORKS	12-137/2 BUKKAVARAI STREET JAGGAYYAPETA	8.5	APO6A005429	1.00%
28	SHANKARAMMA SILVER WORKS	13-29 BRAHMINA BAZAR JAGGAYYAPETA	6	AP06A0013182	1.00%
29	M/S.Sri Naga Sai Jewelry Gold works	s.anand kumar,propriteor,D,no12-53/2,jaggayyapeta alasapuri vari veedi,jaggayyapeta,mob;9290977799	7.0	AP06A0005272	1.00%
30	M/S.KRISHNA gold and silver works	m.murali krishna.propriteor,D.NO;13-29,BHARAMANA BAZAR JAGGAYYAPETA,MOB;9010311411	7.0	AP06A0005190	1.00%
31	M/S.Mamillapalli prathyusha silver works	m.prathyusha,propriteor,D.no;13-29,bharamana bazar,jaggayyapeta,mob;9879879877	6.5	AP06A0005434	1.00%
32	PAVANI SILVER AND GOLD WORKS	13-29 BRAHMINA BAZAR JAGGAYYAPETA	11	AP06A0005437	1.00%
33	M/S.sri bhavani mukteswara gold works	T Satyanarayanacharii,propriteor,D.NO;2-31,rachhabandabazar,jaggayyapeta,mob;9247956717	7.0	AP06A0005313	0.75%
34	M/S.Vishal Gold works	v.venkateswarao,propriteor,D,NO;1-42 markandeyabazar, jaggayyapeta, mob;9399901896	7.0	AP06A0005804	0.75%
35	M/S.Basavoju Anand Kumar gold works	B.anand kumar,propriteor,D.NO12-350,bharamana bazar, jaggayyapeta,mob;9912197790	5.5	AP06A0005202	0.50%
36	M/S ,Rambabu gold works	m.rambabu,propriteor,D.no;1-294/4,markendava bazar,jaggayyapeta,mob;9989562554	8.5	AP06A0005217	0.75%
37	M/S .satyanarayana chari gold works	t.satyanarayana chari,propriteor,D.NO;5-334/2,Vidya nagar, jaggayyapeta, mob;9963663848	5.0	AP06A0005388	0.75%
38	SHAIK RAMTHI JEWELLARY WORKS	3-267/1 KAGITALA BAZAR JAGGAYYAPETA	6.8	AP06A0005428	0.50%

39	M/S.Enugula vijaya sai gold works	e.vijayasai,propriteor,D.NO14-2001,ranganayakaswamy bazar,jaggayyapeta,mob;9951059109,	6.6	AP06A0005268	0.50%
40	M/S.Vijetha jewellers and plastic works	d.jagadesh,propriteor,D.no;8-87/1, torragunapalem,jaggayyapeta,mob;9247879511	1.5	AP06A0005426	0.75%
41	M/S. Sri srinivasa gold enamel works	s.saish,propriteor,d,no;2-45,cheruv bazar,jaggayyapeta,mob;8008858683	10.5	AP06A0005402	0.50%
42	M/S .GOVIND GOLD WORKS	S.RAMA GOVINDA RAO,PROPRITEOR,D,NO.;5-92,B COLONY	9.0	AP06A00013337	0.50%
43	M/S.Ravi kumar gold works	t.ravi kumar,propriteor,D.NO;14-236,CHAKALI bazar,jaggayyapea,mob;9989977249	8.5	AP06A00013717	0.75%
44	purna chandra rao gold works	12-69/2 karumuri veedhi jaggayyapeta	8	ap06a0005316	0.75%
45	CHITTURI LAKSHMI GOLD WORKS	11-145 MIAGUDEM JAGGAYYAPETA	14	AP06A0012913	0.75%
46	M/S.Venkana gold works	g.venkanna babu,propriteor,d.no;11-325/2,sundharamma street ,jaggayyapeta,mob;9494475336	10.2	AP06A0013718	0.75%
47	m/s .babu gold works	g.babu ,propriteor,D.NO;b-42,vsp township,jaggayyapetta mob;9247879511	6	AP06A0013817	0.50%
48	M/S.Prudhvi raj gold works	d.prudhvi raj,propriteor,D,NO;p-70,ksr nagar jaggayyapeta mob;	8	AP06A0013727	0.75%
49	M/S.Sri Lakhsmi Jewelry Works	k.krishna,propriteor,D.NO;13-37,jaggayyapeta,bharamanabazar,mob;9848346548	9.5	AP06A0005735	0.75%
50	M/S.siva gold works	p.srinivasa rao,propriteor,D.NO;1-21,markendaya bazar ,jaggayyapeta,mob;9866256657	9	AP06A0005208	0.75%
		Total			**100.00%**

04

Die Moulding Centre

4.1 Need & Market for the Proposed Facility

More than 1600 craftsman in 800 odd units are lacking basic tools and machinery in the cluster and are interdepending on part manufacturing firms for making of various types of gold ornaments. This is mainly because of their unplanned growth and dearth of affordable and cost effective technology. Their large number and diverse trade have further aggravated the problem. Under these constraints, setting up of an individual manufacturing plant is no longer feasible. Moreover even the part manufacturing firms with their obsolete machinery, tools and manufacturing process are unable to meet quality and standards there by incurring heavy losses and limited market penetration.

Hence the desirable option is of shared or combined Die Moulding facility where in managerial and operational aspects are collectively addressed and the cost of manufacturing becomes affordable. Such common facilities also facilitate proper management of quality standards. The facility will cater to the needs of 1600 such craftsmen who are in need of processing facilities in Jaggayyapeta town and serve as a model for other areas of concentration to emulate in future.

4.2 Applications

The Die Moulding centre would cater to the following requirements of stakeholders :

- Gold Sheet and wire drawing
- Die Moulding

The machinery proposed in the CFC are value adding machinery and do not support the entire process of making gold ornaments. The step by step process of explained below.

Table 4.1: Gold Ornament making process and utilization of CFC

Sl. No.	Task	CFC / Cluster Unit	Cluster Unit
1	Purchase of Gold		Only Cluster Unit
2	Design	Both CFC & Cluster unit	
3	Prototyping	Only in CFC if Required	
2	Melting		Only Cluster Unit
3	Die Moulding	Both CFC & Cluster Unit	
4	Profiling & Engraving		Only Cluster Unit
5	Polishing & Stone Studding		Only Cluster Unit
6	Testing & Hall Marking	Only CFC as there is no alternate facility	
7	Packaging & Selling		Only Cluster Unit

4.3 Land and Building

The proposed CFC facilities including the Die Moulding Facility, CAD/CAM centre and testing & hall marking facility would be commissioned in the Building facility which will be constructed on a land taken on lease by SPV. The lease of the land is for a period of 33 years. The rent for the land is ₹ 5000/- per month and increases by 5% every year. The lease agreement is enclosed as **Appendix 4.** The layout of the buildings is Enclosed as **Appendix 8**. The proposed layout shows the configuration of various elements of the CFC.

A built-up area of about 3475 sq.ft is considered for the proposed common processing centre. There will be 11 rooms of various sizes in three floors to accommodate the machineries. Other than the processing machinery this facility will also accommodate office, reception and waiting hall. All the 11 rooms will be separated by wall partitions.

4.4 Raw Material Requirement

The raw material required like Gold will be brought in by the users of the CFC.

4.5 Utilization Process

The user will bring in the required raw material in to the Die Moulding Centre. Based on his requirement the operators will complete the job work and give back the finished/ semi-finished product to the user. Some of the users may come for partial job works like sheet drawing, wire drawing or to use the Dies. Thus the user will be levied based on quantum of work involved.

4.6 List of Machinery

List of Machinery in the processing centre is tabulated below.

Table 4.1: List of Machinery for Processing centre at CFC

S.No.	Name of the machinery	Capacity	hp	details	qty
1	Sheet Drawing Machine		2	Sheet & Wire - Half Round "V" Shape Gr4oove and also Special Design on Request	1
2	DIES 2200 Nos - High Grade HSS		0	Make Panjab & Gujarat Brand	2200
3	DIES 3500 Nos - High Grade Bronze Metal		0	Make Panjab & Gujarat Brand	3500

4	Generator - 62 kVA			Kirloskar Brand Model No. 4R810TAG1 62 kVA Silent Generator	1 Set
5	Jewellery Security Safe Locker	2.4 to 5.0 KG	0	Mild Steel Inside dimension: 64"x25"x17" Outside dimension: 60"x33"x27" Weight 1550 Kg	2

Images of the Proposed Machineries are presented below.

Sheet & wire Drawing Machine

Typical Dies

Typical Dies

Typical Dies

4.7 Other Equipment's

No other technical equipment's required for the processing centre. Furnitures suiting the core equipment's have been proposed separately.

4.8 Power & Utility

The total motor capacity of Die Moulding Centre is coming to 2 hp. Thus the power requirement per day of operations will come to 15 units considering 10 working hours at 100% utilization. Water is required only for potable purpose and the requirement is estimated at 500 litres per day for the entire CFC.

4.9 List of Major Supplier of the Machineries

List of Major Supplier of the Machinery is tabulated below.

Table 4.2: List of Machinery Suppliers for processing centre

Sl. No.	Supplier
1	**M/s Hema Machinery Traders** Door No: 12-15-30, Tarapet, TIN Road, Vijayawada – 520001 Phone No: 0866-2421619 Cell No: 0939342169
2	**Stokerconcast Private Limited** No. 7-H, NIT Industrial Area, Faridabad, Haryana - 121 001, **Phone:** +(91)-(129)-6562171 **Fax:** +(91)-(129)-4106171 **Website:** http://www.stokerconcast.com/jewellery-makingmachines.html
3	**Amol Dies Maker** **Address:** No. 216, 219 2nd Floor, Veena Dalwai Industrial Estate, Near Ajit Glass, S. V. Road, Jogeshwari West, Mumbai, Maharashtra - 400 102, India **Phone:** +(91)-(22)-26781098 **Fax:** +(91)-(22)-26781098 **Mobile / Cell Phone:** +(91)-9821668349 **Website:** http://www.amoldiesmaker.net/jewellery-makingmachines.html

4.10 Justification for selection of the Supplier:

After initial screening of the above list **M/s Hema Machinery Traders** was selected as the preferred bidder due to following reasons:

- Proximity of the supplier to the proposed site there by reduction in travel costs.
- Presence of all the requisite machinery as per the specifications
- Good track record of the bidder as they have already supplied some of the machines to Vijayawada Gold Ornament cluster.
- One year warranty and free after sales service which is essential for a processing centre
- Presence of in house experienced staff who can immediately attend to any major breakdowns
- The cost of machinery is also reasonable as per market rates.

05

Common Testing Cum Hall Mark Facility

5.1 Need & Market for the Proposed Facility

A hallmark is an official mark or series of marks struck on items made of precious metals — platinum, gold, silver and in some nations, palladium. In a more general sense, the term *hallmark* can also be used to refer to any distinguishing characteristic or trait. Historically, hallmarks were applied by a trusted party: the 'guardians of the craft' or nowadays by an assay office. Hallmarks are a guarantee of certain purity or fineness of the metal as determined by formal metal (assay) testing.

Quick Gold Hallmark Guide
.999 = 24 carat = 99.9%
.916 = 22 carat = 91.6%
.750 = 18 carat = 75%
.583 = 14 carat = 58.3%
.375 = 9 carat = 37.5%

24 carat gold is pure gold. Therefore .575 or 57.5% = 13.8 carat gold.

Laser marking
A new method of marking using lasers is now available, which is especially valuable for delicate items and hollowware, which would be damaged or distorted by the punching process. Laser marking also means that finished articles do not need to be re-finished. Laser marking works by using high power lasers to evaporate material from the metal surface. Two methods exist, 2D and 3D laser marking. 2D laser marking burns the outline of the hallmarks into the object, while 3D laser marking better simulates the marks made by punching.

As BIS has made it mandatory for Jewellery Industry to follow hall mark norms and maintain the above specified purity, majority of the cluster firms are finding it tough to know what the purity of the ornament they made is. Majority of the cluster firm are today selling article without Hallmark resulting in higher rejection rates and dent in profit margins. Few of the firm send article to Hyderabad for hall marking where the cost are higher with additional transportation cost and are also vulnerable to theft. Thus there is definite need to establish a common testing cum 3D laser Hall Mark Facility which will cater to the need of all cluster firms.

The Testing Cum Hall mark facilities are estimated to be utilised by 500 (Organized & organized) micro firms from within the cluster plus artisans from adjoining districts are also expected to utilize the facility.

5.2 Applications

The Hall Mark Cum Testing Unit would cater to the following requirements of stakeholders :

- Testing of raw material (Gold, Cadmium, Copper) for their purity
- Testing of alloy (gold, cadmium and/ or copper) used for making of jewellery

- Testing of finished goods with reference to Caratage
- Hall Marking of purchased and sold gold ornaments

5.3 Land and Building

The proposed CFC facilities including the Die Moulding Facility, CAD/CAM centre and testing & hall marking facility would be commissioned in the Building facility which will be constructed on a land taken on lease by SPV. The lease of the land is for a period of 33 years. The rent for the land is ₹ 5000/- per month and increases by 5% every year. The lease agreement is enclosed as **Appendix 4.** The layout of the buildings is Enclosed as **Appendix 8**. The proposed layout shows the configuration of various elements of the CFC.

A built-up area of about 3475 sq.ft is considered for the proposed common processing centre. There will be 11 rooms of various sizes in three floors to accommodate the machineries. Other than the processing machinery this facility will also accommodate office, reception and waiting hall. All the 11 rooms will be separated by wall partitions.

5.4 Raw Material Requirement

The raw material required per month are 2 to 3 litres of concentrated Nitric Acid, 1 litre of Sulfuric Acid and Hydrochloric Acid, 1KG of Ammonium Sulphate and Silver Nitrate besides 50 litres of distilled water for the purpose of testing of gold. The required raw materials are available locally.

5.5 Utilization Process

The user will bring in the material which may be raw material, semi-finished or finished goods to the testing lab. A small piece of the material will be taken for chemical analysis. Once analysed, the purity will be given in certified format to the user.

Any user who is selling the gold ornaments will bring them to the hall mark centre where marking will be done by laser hall mark machine. The users will be charged on user charge basis. For the testing the charge will be based on testing for each element whereas for hall mark every ornament will be treated as separate entity to levy the charge.

5.6 List of Machinery

List of Machinery in the processing centre is tabulated below.

Table 5.1: List of Machinery for Testing and Hall Marking

Sl. No.	Name of the Machinery	HP	Technical Specification	Qty
1	Laser Marking Machine	1	Karat Mark WIN-Based flexible marking software 3 Meters Optical Fiber and Digital	1

			cable, Operated on 220 VAC Universal Power Requirements. (Length 215mm, Width 287mm, 93mm)	
2	XRF Machine	1	GOLD ALLOY Analyzer Consists Micro-Spot high efficiency X-Ray Tube, Hires Silicon drift (SDD) detector with excellent temp compensation, 40x Video CCD Camera, Digital pulse processor (DPP) for Fast measurements	2
3	Assay Balance	0.5	0.001 Mg accuracy	1
4	Sartorius Analytical Balance Machine	0.5		1
5	Sartorius Precision Balance Machine	0.5		2
6	50 Gm, 100 Gm, 200 Gm, E2 Class Wire Weigh with display attachment	0.5		1 Set
7	Tools & Equipment for sampling	0	Balling Pliers, couples, scrapping tools, tongs, forceps, rolling ill etc.	1 Set
8	Furnaces, Scrubber, Parting Tray etc.	0		1 Set
9	Safety Equipment	0	CCTV system, Air Conditioning Unit, Computer & UPS system, Generator etc.	1 Set
10	Certified Reference Material		Material for Gold Testing and Melting, Machinery Assembled and Fitting Charges	

Assay Balance Machine

XRF Machine

Laser Marking Machine

5.7 Other Equipment's

No other technical equipment's required for the processing centre. Furnitures suiting the core equipment's have been proposed separately.

5.8 Power & Utility

The total motor capacity of processing is coming to 4.5 hp. Thus the power requirement per day of operations will come to 34 units considering 10 working hours at 100% utilization. Water is required only for potable purpose and the requirement is estimated at 500 litres per day for the entire CFC.

5.9 List of Major Supplier of the Machineries

List of Major Supplier of the Machinery is tabulated below.

Table 5.2: List of Machinery supplier for Testing and Hall Marking

Sl. No.	Supplier
1	**M/s Hema Machinery Traders** Door No: 12-15-30, Tarapet, TIN Road, Vijayawada – 520001 Phone No: 0866-2421619 Cell No: 0939342169
2	**Citizen Scale (I) Private Limited** E-2, WICEL, Opp: Seepz, Andheri (East), Mumbai – 400093 Phone: 022-42437777, Fax: 022-42437800 Email: east@jewellerytool.com Website: www.jewellerytool.com
3	**Saffron Electronics Scales (For XRF)** 1; Grd Flr, Sahyog Chamber, Varacha Road, Near Sardar Chowk,Surat339500 Phone : 0261-2503285 Website: http://www.saffronscales.com
4	**Gold Meter Corporation (For Testing Equipment)** 958, Dhamani Street, Chaura Rasta Jaipur, Rajasthan , Pin No: 302006 Telephone: 91-902-4885545
5	**Spectro Lab Equipment Pvt Ltd (For Testing Equipment)** E-41, Okhla Industrial Area, Phase-II New Delhi – 110048 Telephone: 0091-11-9873571517 Website: http://www.spectro.in

5.10 Justification for selection of the Supplier:

After initial screening of the above list **M/s Hema Machinery Traders** was selected as the preferred bidder due to following reasons:

- Proximity of the supplier to the proposed site there by reduction in travel costs.
- Presence of all the requisite machinery as per the specifications
- Good track record of the bidder as they have already supplied some of the machines to Vijayawada Gold Ornament cluster.
- One year warranty and free after sales service which is essential for a processing centre
- Presence of in house experienced staff who can immediately attend to any major breakdowns
- The cost of machinery is also reasonable when compared to other bidder

06

CAD / CAM Centre

6.1 Need & Market for the Proposed Facility

CAD (computer aided design) drawing and drafting systems are widely used in general industry for designing models for mass production. Their advantage lies in the speed of organization of very accurate components or elements and then their rapid translation into working 'blueprint' diagrams for the workshop. As well one only has to do the work once for a repetitive component and so there is an increase in efficiency as previously prepared standardized parts of a design may be re-used.

For certain kinds of very exact translation of design into three dimensions an investment in a CAD/CAM system for 3-D prototyping may make sense. Large manufacturers in the jewelry industry have used CAD and in some cases CAD/CAM (Computer aided design and manufacturing) for some time. Computers are starting to be used in similar ways in the jewelry industry in smaller scale establishments and we will see this more and more

The designer need not necessarily have technical knowledge concerning how the object is actually made as the CAD/CAM (computer aided design, computer aided manufacturing) system can take care of many of those concerns. As 3-D prototyping systems become more commonplace it will be even less of a worry to the designer. So the actual 'creation' of a physical object is now possible for a designer who may not know 'how' to actually make an object in the time honoured hand methods that goldsmiths pride themselves on. Most current 3D prototyping systems make the object in some kind of plastic (or carve it in wax) which for jewellery purposes can either be moulded from directly or burned out and cast just like an ordinary wax model.

Jaggayyapeta Gold Cluster is one such cluster which uses CAD / CAM frequently but do not have the infrastructure of its own or in its vicinity and are totally dependent on facilities in Mumbai. The cost and time involved are high and is a hurdle for its growth.

6.2 Applications

The CAD/CAM Unit would cater to the following requirements of stakeholders :

- Designing of Jewellery using computers
- Creating prototype using CAM which will be used further for making of jewellery

6.3 Land and Building

The proposed CFC facilities including the Die Moulding Facility, CAD/CAM centre and testing & hall marking facility would be commissioned in the Building facility which will be constructed on a land taken on lease by SPV. The lease of the land is for a period of 33 years. The rent for the land is ₹ 5000/- per month and increases by 5% every year. The lease agreement is enclosed as **Appendix 4.** The layout of the buildings is Enclosed as **Appendix 8**. The proposed layout shows the configuration of various elements of the CFC.

A built-up area of about 3475 sq.ft is considered for the proposed common processing centre. There will be 11 rooms of various sizes in three floors to accommodate the machineries. Other than the processing machinery this facility will also accommodate office, reception and waiting hall. All the 11 rooms will be separated by wall partitions.

6.4 Raw Material Requirement

No raw material is required for CAD , however CAM will need wax raisins, which are available in the domestic market.

6.5 Utilization Process

The user can either get own designs or get the designs from the CFC. Same designs will be used for manufacturing of prototype using CAM. The material required for the prototype will be provided by CFC.

User will be have to pay the user charges for the designing and / or prototype manufacturing depending on the size of the design.

6.6 List of Machinery

List of Machinery in the CAD / CAM centre is tabulated below.

Table 6.1: List of Machinery for Testing and Hall Marking

Sl. No.	Name of the Machinery	HP	Technical Specification	Qty
1	CAD / CAM Centre	2	TECHNICAL DATA:- 1. Laser (Solid State USA). a) Type of Machine : Solid State b) Wavelength : 354.7nm. c) Laser	1

			Warranty : 7500Hours of 12 Months(Whichever is First) 2. Recoating System: a) Process : Vaccum-sorb b) Build layer Capability : Min 0.04mm c) Typical : 0.1mm 3. Ambient Temperature: Temperature Range : 22-28 degrees and Relative humidity < 40%.	

6.7 Other Equipment's

No other technical equipment's required for the processing centre. Furnitures suiting the core equipment's have been proposed separately.

6.8 Power & Utility

The total motor capacity of processing is coming to 2 hp. Thus the power requirement per day of operations will come to 15 units considering 10 working hours at 100% utilization. Water is required only for potable purpose and the requirement is estimated at 500 litres per day for the entire CFC.

6.9 List of Major Supplier of the Machineries

List of Major Supplier of the Machinery is tabulated below.

Table 6.2: List of Machinery supplier for CAD / CAM

Sl. No.	Supplier
1	**M/s Hema Machinery Traders** Door No: 12-15-30, Tarapet, TIN Road, Vijayawada – 520001, Phone No: 0866-2421619, Cell No: 0939342169
2	**SRS Jewelkon India Private Limited.** 10, Papa Industrial Estate, Suren Road, Near Cinemax Andheri East, Western Express Metro Station, Western

	Express Metro Station, Andheri East, Mumbai-400093, Maharashtra, India

6.10 Justification for selection of the Supplier:

After initial screening of the above list **M/s Hema Machinery Traders** was selected as the preferred bidder due to following reasons:

- Proximity of the supplier to the proposed site there by reduction in travel costs.
- Presence of all the requisite machinery as per the specifications
- Good track record of the bidder as they have already supplied some of the machines to Vijayawada Gold Ornament cluster.
- One year warranty and free after sales service which is essential for a processing centre
- Presence of in house experienced staff who can immediately attend to any major breakdowns
- The cost of machinery is also reasonable when compared to other bidder

07

Analysis of Project Economics

The proposed CFC will work on a self-sustainable model. It will generate revenue from user charges and Job work and meet its recurring expenses. The financial viability of the project is arrived based on following assumptions.

7.1 Project Cost & Means of Finance

7.1.1 Project Cost and Basis for Arriving the same

The project cost, the basis for arriving at the cost and the supporting documents available for the same are presented in the below table.

Table 7.1: Project Cost, Basis for arriving & Supporting documents

Sl. No.	Description	Total Amount	Basis for arriving at cost	Supporting Document if any
1	Land & Land Dev.	0.00	Leased	Lease Document
2	Civil & Structural Works	48.00	Detailed Cost estimation	Appendix 5
3	Plant & Machinery	671.61	Quotation	Appendix 6
4	Lease Deposits	4.00	Lease agreement	Appendix 4
5	Misc. Fixed Assets	5.00	Quotation	Appendix 7
6	Contingencies @ 5%	34.54	@2% of Civil 5% of P&M	NA
7	Professional Charges for DSR & DPR & PMC	10.00	Actuals & estimated	
8	Preliminary Expenses	6.00	Estimated	
9	Pre-Operative Expenses	4.85	Estimated	
10	Margin Money for WC	6.00	Evaluated	Annexure 7
	Total	**790.00**		

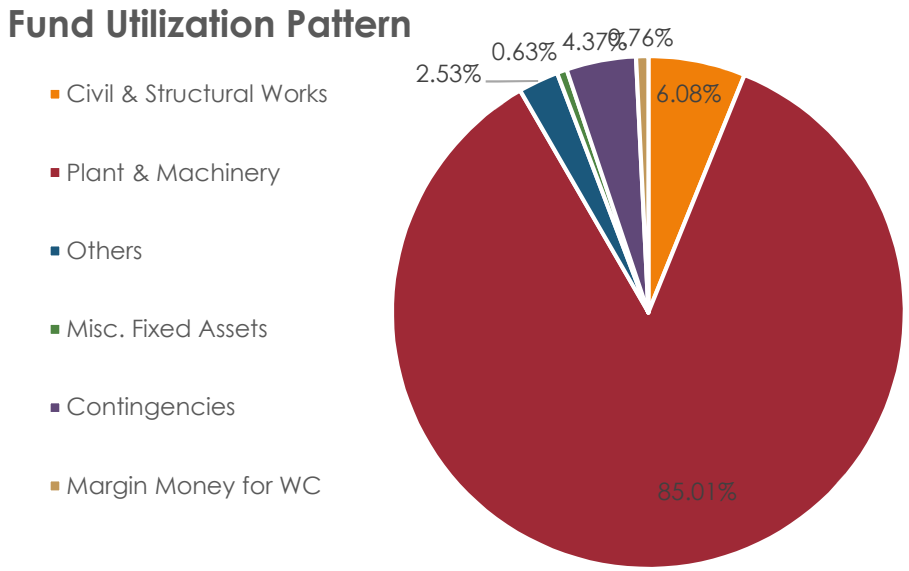


Chart 7.1: Fund utilization Pattern

7.1.2 Means of Finance

As all the enterprise in the cluster are under Micro Enterprise category, the SPV is eligible for 90% grant. Head wise funding is tabulated below. The following chart presentes the head wise fund sharing pattern on an Logarithmic scale.

Table 7.2: Means of Finance

Sl. No.	Description	Total Amount	SPV Contribution	State Contribution	GRANT IN AID
1	Land & Land Dev.	0.00	0.00	0.00	0.00
2	Civil & Structural Works	48.00	28.00	20.00	0.00
3	Plant & Machinery	671.61	33.80	60.00	577.81
4	Lease Deposits	4.00	4.00	0.00	0.00
5	Misc. Fixed Assets	5.00	0.25	0.00	4.75
6	Contingencies @ 5%	34.54	6.91	0.00	27.63
7	Professional Charges for DSR & DPR & PMC	10.00	0.50	0.00	9.50
8	Preliminary Expenses	6.00	0.30	0.00	5.70
9	Pre-Operative Expenses	4.85	0.24	0.00	4.61
10	Margin Money for WC	6.00	6.00	0.00	0.00
	Total	**790.00**	**80.00**	**80.00**	**630.00**

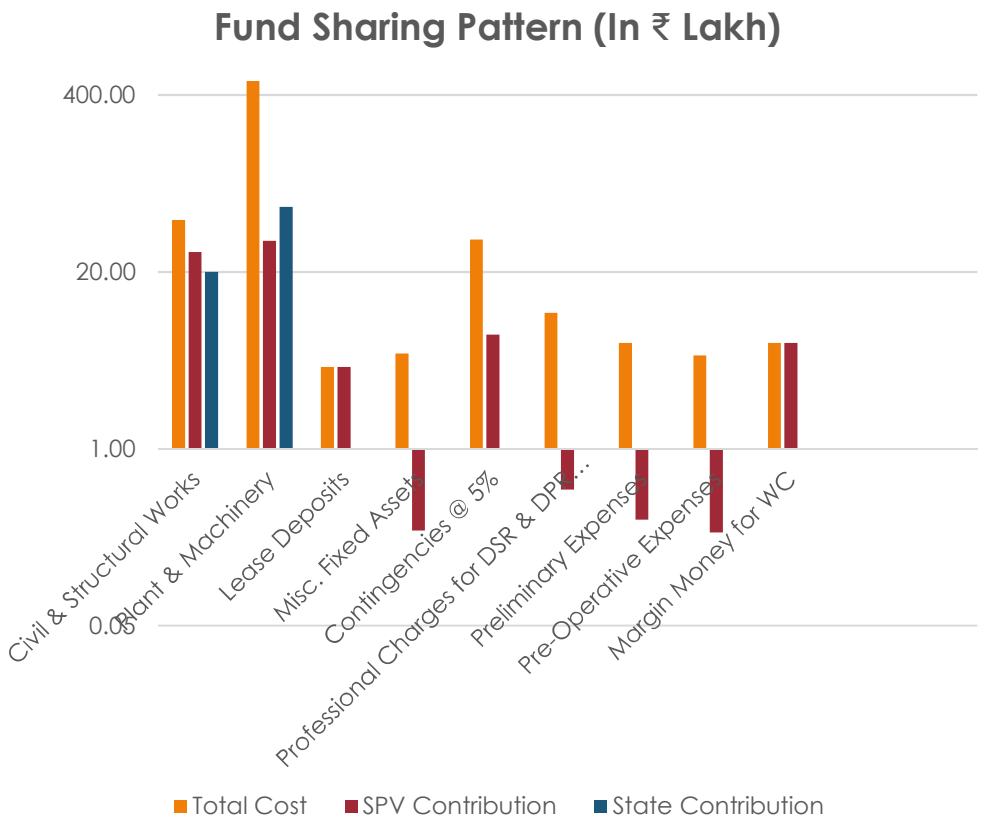


Chart 7.2: Fund Sharing Pattern (Total Cost, SPV Contribution, Grant)
Note: The Chart is in Logarithmic Scale

7.2 Assumptions for Profitability

7.2.1 Assumption for Revenue

The following assumptions are made for the purpose of the estimation of revenue.

- The commercial operation of the CFC will start from April 2021.
- Job Work Charges are considered as mentioned below

10800 job works in Die Moulding
600 Kg of Sheet & Wire Drawing
54000 hall markings
36000 quality tests
2400 Design per annum
30000 CAM jobs per annum

Die Moulding :
₹ 2 per gram for Sheet / Wire Drawing
₹ 50 per Gram of Die Moulding Done

Hall Marking & Testing
Hall Marking ₹ 35 per Job for ₹Members
Hall Marking ₹ 45 per Job for Non Members

Testing : ₹ 100 per Job for Members
Testing : ₹ 120 per Job for Non-Members

CAD / CAM Centre
CAD ₹ 300 per Job for Members
CAD ₹ 450 per Job for Non Members
CAM ₹ 450 per Job for Members
CAM ₹ 600 per Job for Non Members

- In case of **Sheet & wire drawing** the capacity utilization is increased by 5% every year with maximum of 75%
- In case of **Die Moulding Centre** the following consideration have been made with 1% increase in Job every
  @ 4 Necklace per day
  @ 6 Bangle Set per day
  @ 6 Earring Set per day
  @ 20 Rings per day

- In case of **testing cum hall marking** centre the capacity utilization will be 60% during the first year and increase by 5% every year with maximum utilization of 75%
- In case of **CAD/CAM** the capacity utilization will be 60% during the first year and increase by 5% every year with maximum utilization of 75%
- All the charges are as marginally below current market rates.
- Charges are increased by 2% every year.
- Calculation are presented as **Annexure 2 & 2A**

7.2.2 Assumptions for Expenditure

- Chemical consumption for testing is considered as ₹ 1.00 Lakh per month proportionated to capacity utilization.
- Other Operating expenses of ₹ 20000/- per month with 5% increase every year.
- Power tariff is considered as ₹ 7 per unit for 10 HP
- Water Charges are considered as ₹ 70 KL with annual consumption of 500 KL
- Salaries are considered for 24 people with annual increment of 5%. Details are provided in **Annexure 5**.
- Repair & Maintenance expenses are considered as 2% of the sales
- Administrative expenses are considered as 2% of the sales
- Sales and Marketing expenses are considered as 1% of sales.
- Lease rental for Land is ₹ 5000 per month with 5% increment every year.
- Depreciation are calculated as per SLM and WDV method and used appropriately. Details are provided in **Annexure 6.**
- Income tax are calculated as per current rates. Details are provided in **Annexure 5.**
- Preliminary expenses are written off over a period of 6 years and Pre-operative expenses and expenses towards professional

charges are capitalized with assets. The preliminary and pre-operative expenses are ₹ 10.85 Lakh and is 1.37% of the project cost. Details are provided in **Appendix 3.**

7.3 Working Capital Requirement

The working capital requirement during the initial year of operation is ₹ 6.00 Lakh and will be brought in by the SPV members and hence working capital loan is not proposed. Any additional working requirement during operation also will be arranged by the SPV members or through internal accruals. Calculation are presented as **Annexure 7**.

7.4 Depreciation

Depreciation has been worked out in SLM and WDV method. Depreciation under WDV is used for evaluation of Income tax. Calculation are presented as **Annexure 6**.

7.5 Profitability

The project makes profit from very first year of operation. The revenue during first year of operation is ₹ 242.79 Lakh and same increase to ₹ 289.24 Lakh by the end of 4th year of operation. The increase primarily is due to increase in capacity utilization. The profit during for the same years are ₹ 80.15 Lakh and ₹ 99.41 Lakh respectively.

The profitability (Revenue, PBIDT, PAT, Cash Accruals) for the first 5 years is presented in the chart below and the detailed calculation for a period of 10 years are presented in **Annexure 5**.

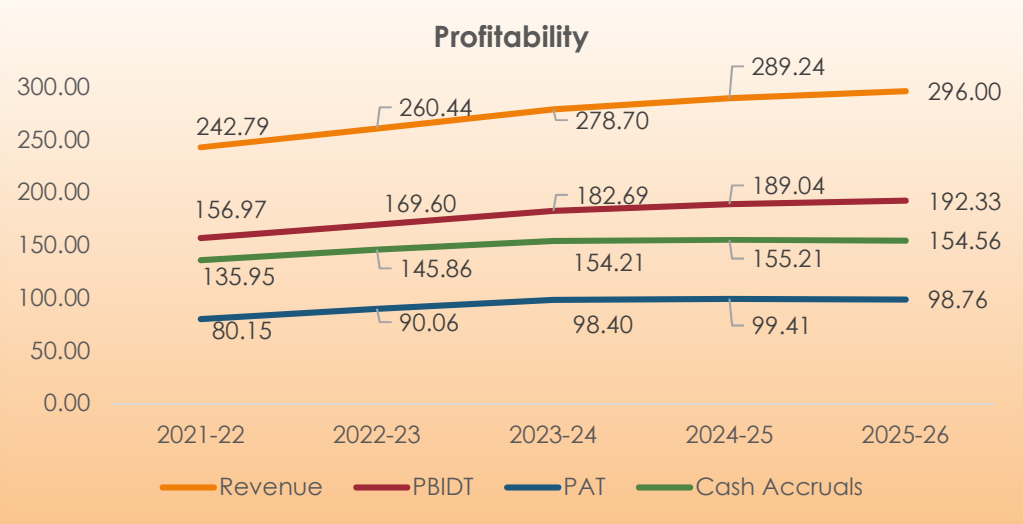


Chart 7.3: Projected Profitability (₹ Lakh)

7.6 Balance Sheet and Fund Flow

Increasing total assets (Fixed & Current assets) in balance sheet shows the strength of the project. The closing balance during the first year of operation is ₹ 135.95 Lakh and increases to ₹ 1517.98 Lakh by the end of 10th year. Since the SPV is registered as a Not for Profit company the profits will not be shared and hence proposed to be utilization of development of the artisans in the cluster and further creation of fixed assets. The detailed calculations are presented in **Annexure 8 & 9**.

7.7 Breakeven Point

The first year breakeven is reached at 43.15% of the operating capacity. The breakeven at operating capacity improves to 37.43% by the end of 5th year. The average is evaluated as 37.97% over a period of 10 Years. The detailed calculations are presented in **Annexure 10**.

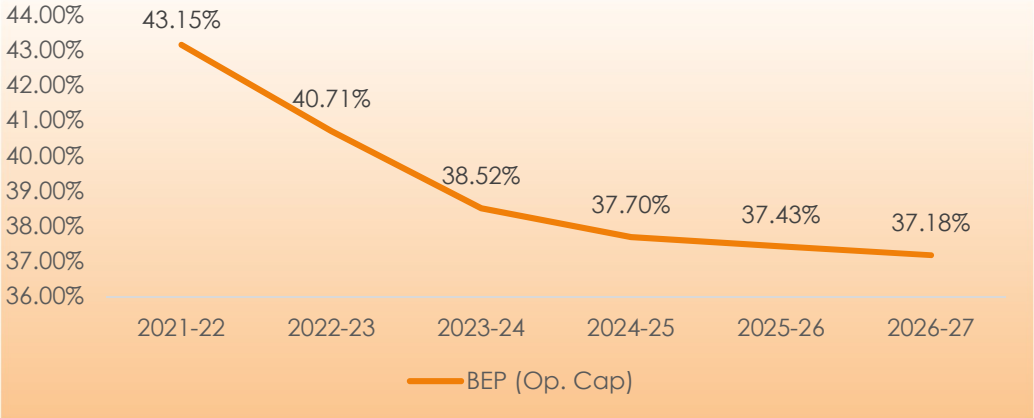


Chart 7.4: Breakeven Point in %

7.8 Internal Rate of Return & Return on Capital Employed

The project's IRR works out to 15.64% and RoCE is calculated as 33.98%, which indicates a comfortable return on investment made in the project particularly with a Common Facility Centre proposed to be set up in a cluster.

7.9 Sensitivity Analysis

The financial projections presented here have been worked based on practical assumptions; however it will be very important to assess the economic viability of the project under sensitive conditions. The ability of the project to be economically viable and self-sustainable under three sensitive scenarios has been worked out and the key financial indicators are tabulated below.

Case 1: Normal
Case 2: Decrease in Sales Price by 10%
Case 3: Decrease in Capacity Utilization by 10%
Case 4: Combination of Case 2 & Case 3

The key financial indicators of base case model and sensitivity models (pertaining to third year of projections) are presented in the following table:

Table 7.3: Key Financial Indictor under Sensitive Condition (3rd Year)

Sl. No.	Indicators	Case 1	Case 2	Case 3	Case 4
1	Revenue	278.70	250.83	245.18	220.67
2	PAT	98.40	79.55	77.58	59.31
3	Breakeven (Op. Capacity)	38.52%	43.88%	44.44%	50.90%
5	Breakeven (In. Capacity)	26.96%	30.71%	26.66%	30.54%
6	IRR	15.64%	12.65%	12.33%	9.55%
7	RoCE	33.98%	27.00%	26.33%	20.18%

7.10 Risk & Uncertainty

- For the Hall Marking the SPV need to depend more on non-members to meet recurring expenditure and make it commercially viable. Thus the CFC has to be prompt in operations and need to provide quality service
- Self-Governance of the CFC by SPV needs cohesiveness among members and other stakeholders
- Optimal Utilisation of all the Facilities is most important factor for viability of the project. Any deviation in the working hours as assumed in the financial analysis would run in to lower RoCE.
- SPV also can market the CAD / CAM centre beyond the state of Andhra Pradesh and Telangana.

08

Stakeholders Consultation & Meeting

8.1 Focused Group Discussion with Stakeholders

A team of professionals of DSLR Consultancy has formed as focus group and conducted meeting and held discussions with key players of the cluster. In these discussions, the team has covered the issues of CFC requirements; site location and contribution form stake holders and grant in aid to be sought form DC-MSME.

The group has also held discussions with Public Service Providers like DIC, CoI, MSME-DI and other State Government agencies related to major gaps in the cluster as perceived by them, their contribution in the proposed intervention and monitoring mechanism after commissioning of proposed intervention.

8.2 Individual Meeting with stakeholders

The DSLR Consultancy team met key players of the cluster. They also met all the supporting units like raw material suppliers, machinery suppliers in the backward integration and retail marketing out lets in the forward integration.

8.3 Stake Holder Concern and their Mitigation

The stake holder's concern of the existing gaps and proposed CFC with regard to the design, construction and implementation are tabulated as below:

Table 8.1: Stakeholders Concern & Mitigation

Sl. No.	Concerns	Mitigation
1	Quality of the Product	Establishment of a Common Die Moulding Centre
2	Lack of finance for purchase of Dies for making, rings, bangles, necklace, earrings, pendent etc by individual Entrepreneur	
3	Lack of recognized Testing Lab in the Cluster	Establishment of a Common Testing cum Hall Mark entre for quality control
4	Lack of recognized hall marking facility in the cluster	
5	Lack of Prototyping centre & poor jewellery design	Establishment of CAD / CAM Centre as CFC
6	Lack of knowledge and procedures involved in SPV formation	DSLR Consultancy will help the association in formation of SPV and registering it as legal entity
7	How to meet recurring expenditure on proposed CFC and make self-sustainable	By levying Service charges on members and non-members of SPV upon usage of facilities in CFC
8	Lack of land and building for proposed CFC with the association and high land prices to purchase	Taking a land on lease basis and construct the building with financial support of state government

9	Apprehensive about DPR preparation and submission to DC-MSME	DSLR Consultancy will prepare and facilitate the SPV to submit the DPR to SIDBI and steering Committee.

09

Institutional, Project Monitoring & Financial Mechanism

9.1 Institutional Arrangements

9.1.1 During the implementation of the Common Facilities Centre (CFC), the proposal involves the following key activities.

- CFC Building Works
- Electrical works
- Purchase of machinery & commissioning
- Trial production
- Commercial production

The successful implementation of above activities will depends on the following aspects:

- Implementation of above within the time frame
- Supervising and overseeing the implementation of the proposals and fine-tuning and advocating more measures, if needed depending on the site conditions
- Project level monitoring indicators to evaluate the implementation of the CFC proposal at recommended intervals
- Suitable purchase mechanisms for proposed plant & Machinery
- Periodical reporting of the status of implementation and monitoring of the results of key performance indicators, and
- Constant evaluation of the measures implemented based on the data available from project level monitoring and status reports and providing directions accordingly

These activities have to be carried out by various agencies those who would be involved in the implementation of the CFC. It is also to be noted that all these activities will be carried out concurrently or at regular intervals. This makes it pertinent to all agencies involved work within a pre-defined set-up.

The agencies identified and their sphere of activities is presented in the following paragraphs.

9.1.2 MSME – DI, Hyderabad

MSME-DI is the field level agency for implementation of various development programs for Ministry of MSME, GoI. They have been instrumental in motivating and providing guidance to the cluster association in Jaggayyapeta. During the year 2018-19, MSME-DI, Hyderabad played a key role in bringing these artisans to a single platform and helping them understand the benefits of function under single umbrella as a cluster. It also provided necessary support in preparation of DSR of the cluster and DPR of the proposed CFC. It further provided support which structuring and registration of the SPV so as to suite to the requirement of the project as well as the scheme. It will also provide whatever the support required by SPV while implementing the CFC project.

9.1.3 DC-MSME

The Office of the Development Commissioner (MSME) will act as the Nodal Agency. The agency will not only provide financial assistance in the form of grant in aid but also act as apex monitoring agency to oversee the progress of the proposed CFC through its regional MSME –DI situated at Hyderabad. The nodal agency will also appraise the implementation and progress of the CFC to the Steering Committee headed by Secretary, Ministry of MSME.

After the approval of the diagnostic study report by the State Level Project Steering Committee, Implementation of soft interventions, the detailed project report earlier approved by the State Committee, will be taken up by the **Steering Committee of the MSE-CDP** (under the Chairmanship of Secretary, MSME) for in-principle approval. Proposals accorded in-principle approval will be placed in the **Steering Committee of the MSE-CDP** under the Chairmanship of Secretary (MSME) for final approval after fulfilment of the following conditions:

- Formation of SPV.
- Land procured and registered in the name of SPV. In case of leased premises, the lease should be legally tenable for a fairly long duration of 15 years in the name of SPV.
- Submission of appraised Detailed Project Report (DPR) by SIDBI/ Bank (if bank financing is involved) / independent Technical Consultancy Organization.
- Details of the Shareholding of the SPV and Project Specific account in Schedule a Bank.

9.1.4 Director of Industries

Considering the uneven state of development of collaborative initiatives like formation of Special Purpose Vehicle among micro enterprises in the cluster, Director of Industries as monitoring agency will be the prime mover of a proposal for CFC in the initial stages of its conceptualisation, design, determination of technical parameters, project preparation and documentation, etc., in consultation with the cluster beneficiaries. However, as per the guidelines of MSECDP it is necessary that an SPV will be formed at the earliest possible. CoI through its concerned District Industries Centre will also help the unit holders in formation, adaptation and Self Governance of Special Purpose Vehicle as they are the real stake holders for proposed CFC.

9.1.5 District Industries Centre

On behalf of the CoI and Govt. of Andhra Pradesh, District Industries Centre plays a crucial role in successful implementation of the project. The DIC with the help of and periodically submit the progress made by the proposed CFC through Special Purpose Vehicle. It also acts as facilitator in smooth governing of CFC in long run.

9.1.6 Local Association

The association will guide the SPV in pre and post establishment stages of CFC besides advocating its members to utilize the services of the proposed facilities.

9.1.7 Special Purpose Vehicle

A Special Purpose Vehicle namely "**Vishwarupa Goldsmith Foundation "** with a clear legal entity (as Company under company act 2013) will be the prime applicant of the proposed CFC and assures sound operational and financial management. 50 cluster firms will together have majority stake in such an entity, with no single unit having financial share of more than 10 per cent in the equity capital (or equivalent capital contribution) of the SPV. It is the prime Governing body for the proposed CFC. The SPV will gradually take over the role of implementing agency from Director of Industries after becoming self-sustainable with thrust on self-governance which is the main objective of MSECDP.

9.2 Committees

9.2.1 Cluster Development Coordination Committee (CDCC)

A CDCC will be formed with nominated members from DC-MSME, CoI, DIC, SIDBI, SPV and a related Technical Institution. The CDCC will play the role of an advisor in technical, financial, marketing and management mechanisms for smooth functioning of CFC. It will monitor the progress of the CFC on monthly/ quarterly basis and suggest corrective actions wherever required. It will a catalyst committee between SPV and other concerned Central/ State institutions for smooth coordination.

9.2.2 Purchase Committee

Facilitating the SPV in identification of suitable suppliers of machinery, inviting tenders, bid processing and finalizing tenders are some of the important functions of purchase committee. The Committee will be formed for short term duration at the time of purchase of plant and machinery. General Manager – DIC, nominated members from MSME-DI, SPV and a technical institution will be the members in the committee under the chairmanship of Director of Industries.

9.3 Financial Mechanisms

The total financial outlay required for the proposed CFC is ₹ 790 Lakhs, out of which ₹ 671.61 Lakhs is required for plant and machinery and remaining ₹ 118.39 lakhs for misc. fixed assets, civil works, preliminary and preoperative expenses and other contingencies.

The Special Purpose Vehicle will contribute 10.13% (₹ 80 Lakhs). Matching financial support will be given by State Government. The SPV is seeking a

grant in aid of remaining 79.75% of the project cost (₹ 630 Lakhs) from DC-MSME.

The SPV will generate revenue in the form of User Charges from members and also from non-members to meet the recurring expenditure requirement.

10

Profile Implementing Agency

10.1 Profile of Implementing Agency

APTPC (formerly APSTC) was incorporated as AP State Export- Import Corporation Limited in the year 1970 under the Companies Act 1956. The name of the corporation has been changed to AP Trade Promotion Corporation Ltd in the year 1977.

A.P. Trade Promotion Corporation Ltd (APTPC) is a Government of Andhra Pradesh undertaking mandated to catalyze trade in the state. Its main objective is to promote trade from the state of Andhra Pradesh and create logistic and trade promotional infrastructure.

APTPC is having experience in establishment of logistic facilities like Container Freight Stations, Warehouses Air cargo operations, etc. APTPC is appointed as the Implementing Agency for Cluster Development Programme in Andhra Pradesh by Govt. of Andhra Pradesh during the month of June, 2013.

APTPC, being Implement Agency, has successfully established a Common Facility Centre (CFC) in Gold Ornaments Cluster at Vijayawada. The Project is Successfully completed in the year 2017 and running successfully with a Turnover of Rs.10.00 lakhs per month.

11

Conclusion

11.1 Conclusion

The following conclusions can be drawn after deliberations with the stake holders and cluster analysis

- There is a need to improve the quality of the finished products through establishment of a testing lab to know the purity of the gold and gold alloy used so as to expand cluster market and make it export driven
- The Dies used by the cluster members are old and obsolete resulting in poor product, hence 5700 dies are proposed to be purchased.
- Owing to the demand of CAD / CAM by the local artisans and in order to avoid high cost and time involved in using facilities in Mumbai, it is proposed to have CAD / CAM facility in the cluster as CFC.
- The individual entrepreneurs cannot afford to buy the above said machines due to financial constraints and lack of enough space.
- To capture organized market like retail outlets the cluster needs to establish a common hall mark facility of its own
- There is need of forming Special Purpose Vehicle to run the CFC on commercial lines
- As the SPV cannot afford to invest the entire project cost on its own and there is a need of financial assistance from Central/ State Government Agencies
- Since individual SPV members are micro entrepreneurs whose individual investment is not exceeding ₹ 25 lakhs the DC-MSME may consider GoI grant up 80% of the project costs.
- To make the CFC self-sustainable and meet the recurring expenditure the SPV will charge the members on user charge/ Fees basis
- The Consultant will facilitate the stake holders in the formation of SPV, CFC Detailed project report preparation and submission to DC-MSME
- The CoI and MSME-DI through a coordination committee need to oversee the smooth transition of CFC to the SPV.

ANNEXURE - 1
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PROJECT COST AND MEANS OF FINANCE

A. PROJECT COST

(Rs in Lakhs)

Description	Detaiiled Breakup Provided in	Total Amount	% of the Project Cost
1. Land & Land Development		0.00	0.00%
2. Civil & Structural Works		48.00	6.08%
3. Plant & Machinery	Annexure 1A, 1B, 1C	671.61	85.01%
4. Lease Deposits		4.00	0.51%
5. Misc. Fixed Assets	Annexure 1D	5.00	0.63%
6. Contingencies @ 5%		34.54	4.37%
7. Professional Charges for DSR & DPR & PMC		10.00	1.27%
8. Preliminary Expenses	Annexure 1D	6.00	0.76%
9. Pre-Operative Expenses	Annexure 1D	4.85	0.61%
10. Margin Money for Working capital		6.00	0.76%
Total		**790.00**	**100.00%**

(Rs in Lakhs)

SPV CONTRIBUTION	State Contribution	GRANT IN AID	TOTAL	% of Grant on the Cost
0.00	0.00	0.00	0.00	0.00%
28.00	20.00	0.00	48.00	0.00%
33.80	60.00	577.81	671.61	86.03%
4.00	0.00	0.00	4.00	0.00%
0.25	0.00	4.75	5.00	95.00%
6.91	0.00	27.63	34.54	80.00%
0.50	0.00	9.50	10.00	95.00%
0.30	0.00	5.70	6.00	95.00%
0.24	0.00	4.61	4.85	95.00%
6.00	0.00	0.00	6.00	0.00%
80.00	**80.00**	**630.00**	**790.00**	**79.75%**

B. MEANS OF FINANCE

(Rs in Lakhs)

Description	Total Amount	% of the Project Cost
1. Equity From SPV	80.00	10.13%
2. State Contribution	80.00	10.13%
2. Grant Under MSE-CDP (CFC)	630.00	79.75%
3. Term Loan	0.00	0.00%
Total	**790.00**	**100%**

ANNEXURE 1A
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PLANT & MACHINERY

Die Moulding Centre

S.No.	Name of the machinery	Capacity	hp	details	qty	Rate	Total Basic Price	GST @ 18%	Insurance (1% or actuals)	Frieight Charges (2% or actuals)	Total Amount	Name of the Supplier
1	Sheet & Wire Drawing Machine, Vekaria Brand Model No. HRX-8580 , 2HP 3Phase Motor Auto reversing switch of		2	Sheet & Wire - Half Round "V" Shape Gr4oove and also Special Design on Request	1	550,000	5.50	0.99	0.055	0.11	6.655	Hema Machinery
2	DIES 2200 Nos - High Grade HSS With Various Models as per Nucleus, Bangles and Rings		0	Make Panjab & Gujarat Brand	2200	Various Rates	129.60	23.328	1.296	2.592	156.816	----DO----
3	DIES 3500 Nos - High Grade Bronze Metal, With Various Models as per Nucleus, Bangles and Rings		0	Make Panjab & Gujarat Brand	3500	4,500	157.50	28.35	1.575	3.15	190.575	----DO----
4	Generator - 62 kVA Kirloskar Brand Model No. 4R810TAG1 62 kVA Silent Generator		0	Kirloskar Brand Model No. 4R810TAG1 62 kVA Silent Generator	1	640,000	6.40	1.152	0.064	0.128	7.744	----DO----
5	Jewellery Security Safe Locker	2.4 to 5.0 KG	0	Jewellery Security Safe Safe Material:Mild Steel Brand:Meet Inside dimension:64"x25"x17" Outside dimension:60"x33"x27" Weight 1550 Kg	2	90,000	1.80	0.324	0.018	0.036	2.178	----DO----
Sub Total - 1			**2**				**300.80**	**54.14**	**3.01**	**6.02**	**363.97**	

ANNEXURE 1B
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PLANT & MACHINERY CONTINUE

Testing Cum Hall Mark Centre

S.No.	Name of the machinery	capacity	hp	details	qty	Rate	Total Basic Price (In Rs. Lakh)	GST	Insurance	Frieight Charges	Total Amount	Name of the Supplier
1	Laser Marking Machine		1	Karat Mark	1	2,325,000	23.25	4.185	0.2325	0.465	28.1325	Hema Machinery
2	XRF Machine		2	MISTRAL SDD	2	2,950,000	59.00	10.62	0.59	1.18	71.39	----DO----
3	Calibration / Standard											
3a	Assay Balance		0.5	0.001 Mg accuracy	1	966,000	9.66	1.7388	0.0966	0.1932	11.6886	----DO----
3b	Sartorius Analytical Balance		0.25	With Standard Acessories	1	125,000	1.25	0.225	0.0125	0.025	1.5125	----DO----
3c	Sartorius Precision Balance		0.25	With Standard Acessories	2	85,000	1.7	0.306	0.017	0.034	2.057	----DO----
3d	50Mg. E-2 Class Wire Weight		0	with NABL Calibration Certificate	1	5,800	0.058	0.01044	0.00058	0.00116	0.07018	----DO----
3e	100Mg. E-2 Class Wire Weight		0	with NABL Calibration Certificate	2	6,000	0.12	0.0216	0.0012	0.0024	0.1452	----DO----
3f	200Mg. E-2 Class Wire Weight		0	with NABL Calibration Certificate	1	5,800	0.058	0.01044	0.00058	0.00116	0.07018	----DO----
3g	Additional Display attachement		0		1	5,600	0.056	0.01008	0.00056	0.00112	0.06776	----DO----
4	Tools & Equipment for sampling		0	Balling Pliers, couples, scrapping tools, tongs, forceps, rolling ill etc.	1	750,000	7.5	1.35	0.075	0.15	9.075	----DO----
5	Furnaces, Scrubber, Parting Tray ets.		0	Encludes Parting Tray & Other Equipments as per Gold Finishing and Testing Material Etc	1	850,000	8.5	1.53	0.085	0.17	10.285	----DO----
6	Safety Equipment		0.5	CCTV system, Air Conditioning Unit, Computer & UPS system, Generator etc.	1	850,000	8.5	1.53	0.085	0.17	10.285	----DO----
7	Certfied Reference Material		0	Material for Gold Testing and Melting, Machinery Assembled and Fitting Charges	1	860,000	8.6	1.548	0.086	0.172	10.406	----DO----
Sub Total - 2			**4.5**				**128.25**	**23.09**	**1.28**	**2.57**	**155.18**	

ANNEXURE 1C
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PLANT & MACHINERY CONTINUE

CAD / CAM CENTRE

S.No.	Name of the machinery	capacity	hp	details	qty	Rate	Total Basic Price	GST	Insurance	Frieight Charges	Total Amount	Name of the Supplier
1	CAD / CAM Centre		2		1 Set	12600000	126.00	22.68	1.26	2.52	152.46	Hema Machinery

Sub total 1	300.80	54.14	3.01	6.02	363.97	
Sub total 2	128.25	23.09	1.28	2.57	155.18	
Sub total 2	126.00	22.68	1.26	2.52	152.46	
TOTAL	**555.05**	**99.91**	**5.55**	**11.10**	**671.61**	

ANNEXURE 1D
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
MISC. FIXED ASSETS

Sl. No.	Item	Quantity	Rate	Cost (INR)
1	Furniture	1 Set		500000
2	**TOTAL**			**500000**

ANNEXURE 1E
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PRELIMINARY & PRE-OPERATIVE EXPENSES

Particulars		Months	Rate Rs.	Value Rs. Lakhs
PRELIMINARY EXPENSES				
Admin Expenses				1.00
Soft Intervention				5.00
TOTAL				**6.00**
PRE-OPERATIVE EXPENSES				
Salaries during construction	2 Persons	9	200000	3.60
Misc. Expenses (Administrative, Stationary, Postage & Telegraphic)		10	12500 / month	1.25
TOTAL				**4.85**
GRAND TOTAL				**10.85**

ANNEXURE - 2
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
REVENUE PROJECTIONS

(Rs in Lakhs)

Description	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
No of Operating Months	12	12	12	12	12	12	12	12	12	12
Head of Income										
Die Moulding Centre										
Die Moulding & Sheet / Wire Drawing	94.20	97.58	101.07	104.67	107.74	110.89	114.14	117.48	120.93	124.47
Testing Cum Hall Marking										
Testing	23.76	26.25	28.84	31.52	32.15	32.79	33.45	34.12	34.80	35.49
Hallmarking	14.58	16.11	17.70	19.34	19.73	20.12	20.52	20.93	21.35	21.78
Testing Cum Hall Marking										
CAD	47.25	51.64	56.18	57.31	58.45	59.62	60.81	62.03	63.27	64.53
CAM	63.00	68.85	74.91	76.41	77.94	79.49	81.08	82.71	84.36	86.05
Total Sales (Rs. Lakhs)	**242.79**	**260.44**	**278.70**	**289.24**	**296.00**	**302.92**	**310.01**	**317.27**	**324.71**	**332.33**

ANNEXURE - 2A1
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
REVENUE PROJECTIONS - DIE MOULDING CENTRE

(Rs in Lakhs)

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Capacity Utilization (%)	60%	65%	70%	75%	75%	75%	75%	75%	75%	75%
No of Operating Month	12	12	12	12	12	12	12	12	12	12
I. Die Cutting Centre										
A. Sheet Drawing	@ 2 Kg per Day									
Installed Capacity (Grams) per annum	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000
Service (No. of Works) per annum	360000	390000	420000	450000	450000	450000	450000	450000	450000	450000
Jobwork (Rs/Gram)	2	2	2	2	2	2	2	2	2	2
Revenue(Rs lakhs)	**7.20**	**7.96**	**8.74**	**9.55**	**9.74**	**9.94**	**10.14**	**10.34**	**10.54**	**10.76**
B. Dies	@ 120 Pcs. Per day									
Jobs per Annum										
@ 4 Necklace per day	1200	1212	1224	1236	1249	1261	1274	1287	1299	1312
@ 6 Bangle Set per day	1800	1818	1836	1855	1873	1892	1911	1930	1949	1969
@ 6 Earring Set per day	1800	1818	1836	1855	1873	1892	1911	1930	1949	1969
@ 20 Rings per day	6000	6060	6121	6182	6244	6306	6369	6433	6497	6562
Average Weight of Aarticle (In Gram)										
Necklace	60	60	60	60	60	60	60	60	60	60
Bangle Set	30	30	30	30	30	30	30	30	30	30
Earring Set	10	10	10	10	10	10	10	10	10	10
Ring	5	5	5	5	5	5	5	5	5	5
TOTAL PROCESS PER ANNUM (In Gram)	174000	175740	177497	179272	181065	182876	184705	186552	188417	190301
Charges Per Gram (Rs. Per Gram)	50.00	51.00	52.02	53.06	54.12	55.20	56.31	57.43	58.58	59.75
Revenue (Rs lakhs)	**87.00**	**89.63**	**92.33**	**95.12**	**98.00**	**100.95**	**104.00**	**107.14**	**110.38**	**113.71**
TOTAL REVENUE FROM PROCESSING CENTRE (Rs. Lakh)	**94.20**	**97.58**	**101.07**	**104.67**	**107.74**	**110.89**	**114.14**	**117.48**	**120.93**	**124.47**

ANNEXURE - 2A2
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
REVENUE PROJECTIONS - TESTING & HALL MARKING CENTRE

(Rs in Lakhs)

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
II. Testing Cum Hall Marking										
Capacity Utilization (%)	60%	65%	70%	75%	75%	75%	75%	75%	75%	75%
A. Hall Marking										
For members	@ 60 Pcs per Day									
Installed Capacity (Nos.) per annum	18000	18000	18000	18000	18000	18000	18000	18000	18000	18000
Service for members per annum	10800	11700	12600	13500	13500	13500	13500	13500	13500	13500
JobWork (Rs/No)	35.00	35.70	36.41	37.14	37.89	38.64	39.42	40.20	41.01	41.83
Revenue (Rs lakhs)	**3.78**	**4.18**	**4.59**	**5.01**	**5.11**	**5.22**	**5.32**	**5.43**	**5.54**	**5.65**
For Non Members	@ 120 Pcs per Day									
Installed Capacity (Nos.) per annum	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000
Service for non-members per annum	21600	23400	25200	27000	27000	27000	27000	27000	27000	27000
JobWork (Rs/No)	50.00	51.00	52.02	53.06	54.12	55.20	56.31	57.43	58.58	59.75
Revenue (Rs lakhs)	**10.80**	**11.93**	**13.11**	**14.33**	**14.61**	**14.91**	**15.20**	**15.51**	**15.82**	**16.13**
B. Testing										
For members	@ 60 Pcs per Day									
Installed Capacity (Nos.) per annum	18000	18000	18000	18000	18000	18000	18000	18000	18000	18000
Service for members per annum	10800	11700	12600	13500	13500	13500	13500	13500	13500	13500
User Charges (Rs/Test)	100.00	102.00	104.04	106.12	108.24	110.41	112.62	114.87	117.17	119.51
Revenue (Rs lakhs)	**10.80**	**11.93**	**13.11**	**14.33**	**14.61**	**14.91**	**15.20**	**15.51**	**15.82**	**16.13**
For Non Members	@ 60 Pcs per Day									
Installed Capacity (Nos.) per annum	18000	18000	18000	18000	18000	18000	18000	18000	18000	18000
Service for non-members per annum	10800	11700	12600	13500	13500	13500	13500	13500	13500	13500
User Charges (Rs/Test)	120.00	122.40	124.85	127.34	129.89	132.49	135.14	137.84	140.60	143.41
Revenue (Rs lakhs)	**12.96**	**14.32**	**15.73**	**17.19**	**17.54**	**17.89**	**18.24**	**18.61**	**18.98**	**19.36**
TOTAL REVENUE FROM TESTING & HALLMARKING (Rs. Lakh)	**38.34**	**42.37**	**46.54**	**50.86**	**51.88**	**52.91**	**53.97**	**55.05**	**56.15**	**57.27**

ANNEXURE - 2A3
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
REVENUE PROJECTIONS - CAD / CAM CENTRE

(Rs in Lakhs)

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
III. CAD / CAM Centre										
Capacity Utilization (%)	70%	75%	80%	80%	80%	80%	80%	80%	80%	80%
A. CAD										
For members	@ 4 Pcs per Day									
Installed Capacity (No. of works) per annum	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Service (No. of Works) per annum	840	900	960	960	960	960	960	960	960	960
Jobwork (Rs/Work)	300	306	312	318	325	331	338	345	351	359
Revenue (Rs lakhs)	**2.52**	**2.75**	**3.00**	**3.06**	**3.12**	**3.18**	**3.24**	**3.31**	**3.37**	**3.44**
For non-members	@ 4 Pcs per Day									
Installed Capacity (No. of works) per annum	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Service (No. of Works) per annum	840	900	960	960	960	960	960	960	960	960
Jobwork (Rs/Work)	450	459	468	478	487	497	507	517	527	538
Revenue(Rs lakhs)	**3.78**	**4.13**	**4.49**	**4.58**	**4.68**	**4.77**	**4.87**	**4.96**	**5.06**	**5.16**
B. CAM										
For members	@ 50 Pcs per Day									
Installed Capacity (No. of works) per annum	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000
Service (No. of Works) per annum	10500	11250	12000	12000	12000	12000	12000	12000	12000	12000
Jobwork (Rs/Work)	450	459	468	478	487	497	507	517	527	538
Revenue (Rs lakhs)	**47.25**	**51.64**	**56.18**	**57.31**	**58.45**	**59.62**	**60.81**	**62.03**	**63.27**	**64.53**
For non-members	@ 50 Pcs per Day									
Installed Capacity (No. of works) per annum	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000
Service (No. of Works) per annum	10500	11250	12000	12000	12000	12000	12000	12000	12000	12000
Jobwork (Rs/Work)	600	612	624	637	649	662	676	689	703	717
Revenue (Rs lakhs)	**63.00**	**68.85**	**74.91**	**76.41**	**77.94**	**79.49**	**81.08**	**82.71**	**84.36**	**86.05**
TOTAL REVENUE FROM CAD / CAM (Rs. Lakh)	**116.55**	**127.37**	**138.58**	**141.35**	**144.18**	**147.06**	**150.00**	**153.00**	**156.07**	**159.19**
TOTAL REVENUE	**249.09**	**267.32**	**286.19**	**296.88**	**303.79**	**310.87**	**318.12**	**325.54**	**333.14**	**340.93**

ANNEXURE - 3
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
COST PROJECTIONS - RAW MATERIALS & CONSUMABLES

(Rs in Lakhs)

Description	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
I. Die Moulding Centre										
Nil										
II Hall Marking & Testing Facility										
Chemicals	**7.20**	**7.80**	**8.40**	**9.00**	**9.00**	**9.00**	**9.00**	**9.00**	**9.00**	**9.00**
III CAD/ CAM Facility										
Consumables	**10.50**	**11.25**	**12.00**	**12.00**	**12.00**	**12.00**	**12.00**	**12.00**	**12.00**	**12.00**
IV Common Expenses										
Power 10 HP (@ Rs. 7 per unit)	0.95	1.02	1.10	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Water	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.52	0.54
Sub Total	**1.30**	**1.39**	**1.49**	**1.59**	**1.61**	**1.63**	**1.65**	**1.67**	**1.70**	**1.72**
TOTAL COST (Rs. LAKH)	**19.00**	**20.44**	**21.89**	**22.59**	**22.61**	**22.63**	**22.65**	**22.67**	**22.70**	**22.72**

ANNEXURE - 4
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
DETAILS OF MANPOWER REQUIRED

(Rs in Lakhs)

Particulars		No.	Salary/ month Rs.	Annual Wages & Salaries Rs. Lakhs
Die Moulding Centre				
Operator		5	12000	7.20
Helper		2	10000	2.40
				0.00
Testing Cum Hall Marking				
Lab Technicians		3	15000	5.40
Chemist & Assayer		2	12000	2.88
Delivery Boys		2	10000	2.40
CAD / CAM Centre				
CAD Operator		2	25000	6.00
CAM Operator		2	30000	7.20
Total		**18**		**33.48**
Add: Fringe Benefits	**@10%**			**3.35**
Total				**36.83**
ADMINISTRATIVE SALARIES				
Manager		1	35000	4.20
Accounts & Purchase		1	20000	2.40
Other Support Staff		2	15000	3.60
Security Staff		2	10000	2.40
		6		**12.60**
Add: Fringe Benefits	**@10%**			**1.26**
Total				**13.86**
TOTAL		**24**		**50.69**

(Rs in Lakhs)

Manpower Cost	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Direct Manpower	36.83	38.67	40.60	42.63	44.76	47.00	49.35	51.82	54.41	57.13
Administrative Salaries	13.86	14.55	15.28	16.04	16.85	17.69	18.57	19.50	20.48	21.50

ANNEXURE - 5
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT
PROJECTED PROFITABILITY STATEMENT

(Rs Lakhs)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Income										
Gross Sales	242.79	260.44	278.70	289.24	296.00	302.92	310.01	317.27	324.71	332.33
Other Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	**242.79**	**260.44**	**278.70**	**289.24**	**296.00**	**302.92**	**310.01**	**317.27**	**324.71**	**332.33**
Expenditure										
Chemical & Consumable	17.70	19.05	20.40	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Other Operating Expenses	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Power	0.95	1.02	1.10	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Water	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.52	0.54
Repair & Maintenance @ 2% of Sales	4.86	5.21	5.57	5.78	5.92	6.06	6.20	6.35	6.49	6.65
Direct wages	36.83	38.67	40.60	42.63	44.76	47.00	49.35	51.82	54.41	57.13
Total Variable Costs	**63.08**	**66.84**	**70.71**	**73.78**	**76.21**	**78.75**	**81.42**	**84.22**	**87.15**	**90.23**
Contribution	179.71	193.60	207.99	215.46	219.79	224.17	228.59	233.05	237.56	242.10
Contribution (%)	74.02%	74.34%	74.63%	74.49%	74.25%	74.00%	73.74%	73.46%	73.16%	72.85%
Cost OF Sales	**63.08**	**66.84**	**70.71**	**73.78**	**76.21**	**78.75**	**81.42**	**84.22**	**87.15**	**90.23**
Fixed & Semi-Variable Expenses										
Admn. Expenses @ 2% of Sales	4.86	5.21	5.57	5.78	5.92	6.06	6.20	6.35	6.49	6.65
Lease Rental	0.60	0.63	0.66	0.69	0.73	0.77	0.80	0.84	0.89	0.93
Sales & Marketing Expenses @ 1% of Sales	2.43	2.60	2.79	2.89	2.96	3.03	3.10	3.17	3.25	3.32
Admin. Salaries	13.86	14.55	15.28	16.04	16.85	17.69	18.57	19.50	20.48	21.50
Pre-Expenses Set off	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Total Fixed Costs	**22.74**	**24.00**	**25.30**	**26.42**	**27.46**	**28.54**	**28.68**	**29.86**	**31.11**	**32.40**
Total Expenditure	**85.82**	**90.84**	**96.01**	**100.20**	**103.66**	**107.29**	**110.10**	**114.08**	**118.26**	**122.63**
PBIDT	156.97	169.60	182.69	189.04	192.33	195.62	199.91	203.19	206.45	209.70
PBIDT (%)	64.65%	65.12%	65.55%	65.36%	64.98%	64.58%	64.49%	64.04%	63.58%	63.10%
Profit/Loss Before Depr.	156.97	169.60	182.69	189.04	192.33	195.62	199.91	203.19	206.45	209.70
Less: Depreciation (SLM)	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81
Profit Before Tax (PBT)	**102.16**	**114.79**	**127.88**	**134.24**	**137.53**	**140.82**	**145.10**	**148.38**	**151.64**	**154.89**
PBT / Net Sales	42.08%	44.08%	45.88%	46.41%	46.46%	46.49%	46.81%	46.77%	46.70%	46.61%
Provision for Tax	22.01	24.74	29.48	34.83	38.77	42.27	45.68	48.47	50.99	53.28
Profit After Tax (PAT)	**80.15**	**90.06**	**98.40**	**99.41**	**98.76**	**98.55**	**99.42**	**99.90**	**100.65**	**101.61**
Cash Accruals	**135.95**	**145.86**	**154.21**	**155.21**	**154.56**	**154.36**	**154.23**	**154.71**	**155.46**	**156.42**

ANNEXURE - 5 Cont...

(Rs Lakhs)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
TAX CALCULATION										
Profit Before Tax (PBT)	102.16	114.79	127.88	134.24	137.53	140.82	145.10	148.38	151.64	154.89
Add: Dep-normal	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81
Total	**156.97**	**169.60**	**182.69**	**189.04**	**192.33**	**195.62**	**199.91**	**203.19**	**206.45**	**209.70**
Less: IT Dep	112.14	95.56	81.45	69.43	59.20	50.48	43.05	36.73	31.33	26.74
Taxable Profits under IT Act	**44.83**	**74.04**	**101.24**	**119.61**	**133.14**	**145.14**	**156.86**	**166.46**	**175.12**	**182.96**
Brought forward losses										
Prov. for Tax @29.12% (25% Tax + 12% SC.+ED Cess 4%) 29.12%	13.05	21.56	29.48	34.83	38.77	42.27	45.68	48.47	50.99	53.28
MAT @ 21.55% (18.50% Tax+12% SC.+ED Cess 4%) 21.55%	22.01	24.74	27.56	28.93	29.64	30.34	31.27	31.97	32.68	33.38
Income Tax payable (MAT or Income Tax whichever is higher)	**22.01**	**24.74**	**29.48**	**34.83**	**38.77**	**42.27**	**45.68**	**48.47**	**50.99**	**53.28**

ANNEXURE - 6
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

DEPRECIATION - SLM METHOD

Description	Cost	Contingencies	Pre-Operative	Professional Charges	TOTAL
Building & Civil Works	48.00	0.96	0.32	0.66	49.28
Plant & Machinery	671.61	33.58	4.50	9.27	709.69
MFA	5.00	0.00	0.03	0.07	5.03
	724.61	**34.54**	**4.85**	**10.00**	**764.00**

(Rs Lakhs)

Description	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Buildings @ 1.58%	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Plant & Machinery	52.66	52.66	52.66	52.66	52.66	52.66	52.66	52.66	52.66	52.66
MFA	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Total	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**	**54.81**

ANNEXURE - 6 (Contd.)

DEPRECIATION - AS PER INCOME TAX ACT, 1962 - WDV METHOD

(Rs. In Lakhs)

	Year	Cost	Dep. Rate	Dep. Amount	WDV
BUILDINGS	Year				
	2021-22	49.28	10%	4.93	44.35
	2022-23	44.35	10%	4.44	39.92
	2023-24	39.92	10%	3.99	35.93
	2024-25	35.93	10%	3.59	32.33
	2025-26	32.33	10%	3.23	29.10
	2026-27	29.10	10%	2.91	26.19
	2027-28	26.19	10%	2.62	23.57
	2028-29	23.57	10%	2.36	21.21
	2029-30	21.21	10%	2.12	19.09
	2030-31	19.09	10%	1.91	17.18
PLANT & MACHINERY & Electrical	Year				
	2021-22	709.69	15%	106.45	603.24
	2022-23	603.24	15%	90.49	512.75
	2023-24	512.75	15%	76.91	435.84
	2024-25	435.84	15%	65.38	370.46
	2025-26	370.46	15%	55.57	314.89
	2026-27	314.89	15%	47.23	267.66
	2027-28	267.66	15%	40.15	227.51
	2028-29	227.51	15%	34.13	193.38
	2029-30	193.38	15%	29.01	164.38
	2030-31	164.38	15%	24.66	139.72
MFA	Year				
	2021-22	5.03	15%	0.76	4.28
	2022-23	4.28	15%	0.64	3.64
	2023-24	3.64	15%	0.55	3.09
	2024-25	3.09	15%	0.46	2.63
	2025-26	2.63	15%	0.39	2.23
	2026-27	2.23	15%	0.34	1.90
	2027-28	1.90	15%	0.28	1.61
	2028-29	1.61	15%	0.24	1.37
	2029-30	1.37	15%	0.21	1.17
	2030-31	1.17	15%	0.17	0.99

TOTAL DEPRECIATION

YEAR	BUILDINGS	P & M	MFA	DEP.AMOUNT
2021-22	4.93	106.45	0.76	**112.14**
2022-23	4.44	90.49	0.64	**95.56**
2023-24	3.99	76.91	0.55	**81.45**
2024-25	3.59	65.38	0.46	**69.43**
2025-26	3.23	55.57	0.39	**59.20**
2026-27	2.91	47.23	0.34	**50.48**
2027-28	2.62	40.15	0.28	**43.05**
2028-29	2.36	34.13	0.24	**36.73**
2029-30	2.12	29.01	0.21	**31.33**
2030-31	1.91	24.66	0.17	**26.74**

ANNEXURE - 7
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

PROJECTED WORKING CAPITAL REQUIREMENT

(Rs Lakhs)

Description	Stock outstanding Period	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Current Assets	IN MONTHS										
Raw Material	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Work in Process	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bills Receivables	0.25	5.00	5.00	6.00	6.00	6.00	6.00	6.00	7.00	7.00	7.00
Total Current Assets (CA)		**6.00**	**7.00**	**8.00**	**8.00**	**8.00**	**8.00**	**8.00**	**9.00**	**9.00**	**9.00**
Less: Sundry Creditors (CL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Working Capital (CA-CL)		**6.00**	**7.00**	**8.00**	**8.00**	**8.00**	**8.00**	**8.00**	**9.00**	**9.00**	**9.00**
Bank Finance	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Promoter's Margin	100.00%	6.00	7.00	8.00	8.00	8.00	8.00	8.00	9.00	9.00	9.00

ANNEXURE - 8
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

PROJECTED BALANCE SHEETS

(Rs Lakhs)

PARTICULARS	Constrn Period	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
SOURCE OF FUNDS											
Own Funds											
Capital (Cluster Units)	74.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
Profit & Loss Account	0.00	80.15	170.20	268.60	368.01	466.76	565.31	664.74	764.64	865.29	966.90
Sub-Total	**74.00**	**160.15**	**250.20**	**348.60**	**448.01**	**546.76**	**645.31**	**744.74**	**844.64**	**945.29**	**1046.90**
Long Term Sources											
Grant in Aid from DC-MSME (Under MSE-CDP Scheme)	630.00	630.00	630.00	630.00	630.00	630.00	630.00	630.00	630.00	630.00	630.00
Term Loan from Bank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Govt. Contribution	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
Sub-Total	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**	**710.00**
Current Liabilities											
Bank Finance - WC	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Current Liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Current Liabilities	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
TOTAL SOURCE OF FUNDS	**784.00**	**870.15**	**960.21**	**1058.60**	**1158.01**	**1,256.77**	**1355.31**	**1454.74**	**1554.64**	**1655.29**	**1756.90**
APPLICATION OF FUNDS											
Fixed Assets											
Gross Block	774.00	774.00	774.00	774.00	774.00	774.00	774.00	774.00	774.00	774.00	774.00
Less: Depreciation	0.00	54.81	109.62	164.42	219.23	274.04	328.85	383.66	438.47	493.27	548.08
Net Block	774.00	719.20	664.39	609.58	554.77	499.96	445.15	390.35	335.54	280.73	225.92
Deposits	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Sub-Total	**778.00**	**723.20**	**668.39**	**613.58**	**558.77**	**503.96**	**449.15**	**394.35**	**339.54**	**284.73**	**229.92**
Current Assets											
Current Assets	0.00	6.00	7.00	8.00	8.00	8.00	8.00	8.00	9.00	9.00	9.00
Cash & Bank Balance	0.00	135.95	280.82	434.02	589.24	743.80	898.16	1052.39	1206.11	1361.56	1517.98
Sub-Total	**0.00**	**141.95**	**287.82**	**442.02**	**597.24**	**751.80**	**906.16**	**1060.39**	**1215.11**	**1370.56**	**1526.98**
Preliminary Expenses	6.00	5.00	4.00	3.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00
TOTAL APPLN. OF FUNDS	**784.00**	**870.15**	**960.21**	**1058.60**	**1158.01**	**1,256.77**	**1355.31**	**1454.74**	**1554.64**	**1655.29**	**1756.90**
Check for Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ANNEXURE - 9
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

PROJECTED FUNDS FLOW STATEMENT

(Rs Lakhs)

PARTICULARS	Constrn. Period	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
A. SOURCES OF FUNDS											
Profit After Tax (PAT)		80.15	90.06	98.40	99.41	98.76	98.55	99.42	99.90	100.65	101.61
Increase in Capital (Custer Unit)	74.00	6.00									
Grant from DC-MSME	630.00										
Increase in Term Loan	0.00	0.00									
Increase in Bank Borrowing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in State Contribution	80.00										
Prel.Expenses W/off	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Depreciation	0.00	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81
Current Liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total A	**784.00**	**141.95**	**145.86**	**154.21**	**155.21**	**154.56**	**154.36**	**154.23**	**154.71**	**155.46**	**156.42**
B. DISPOSITION OF FUNDS											
Capital Expenditure	774.00										
Rental Deposit	4.00										
Increase in Current assets		6.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Increase in other non current assets											
Preliminary Expense.	6.00										
Total B	**784.00**	**6.00**	**1.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**	**0.00**	**0.00**
Surplus A-B	**0.00**	**135.95**	**144.86**	**153.21**	**155.21**	**154.56**	**154.36**	**154.23**	**153.71**	**155.46**	**156.42**
Opening Balance	**0.00**	**0.00**	**135.95**	**280.82**	**434.02**	**589.24**	**743.80**	**898.16**	**1052.39**	**1206.11**	**1361.56**
Closing balance	**0.00**	**135.95**	**280.82**	**434.02**	**589.24**	**743.80**	**898.16**	**1052.39**	**1206.11**	**1361.56**	**1517.98**

ANNEXURE - 10
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

BREAK EVEN ANALYSIS

(Rs Lakhs)

Description	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
SALES	**242.79**	**260.44**	**278.70**	**289.24**	**296.00**	**302.92**	**310.01**	**317.27**	**324.71**	**332.33**
VARIABLE EXPENSES										
Chemical & Consumable	17.70	19.05	20.40	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Other Operating Expenses	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Power	0.95	1.02	1.10	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Water	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.52	0.54
Repair & Maintenance @ 2% of Sales	4.86	5.21	5.57	5.78	5.92	6.06	6.20	6.35	6.49	6.65
Direct wages	36.83	38.67	40.60	42.63	44.76	47.00	49.35	51.82	54.41	57.13
Interest on WC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Variable Costs	**63.08**	**66.84**	**70.71**	**73.78**	**76.21**	**78.75**	**81.42**	**84.22**	**87.15**	**90.23**
TOTAL	**63.08**	**66.84**	**70.71**	**73.78**	**76.21**	**78.75**	**81.42**	**84.22**	**87.15**	**90.23**
Check	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
CONTRIBUTION	**179.71**	**193.60**	**207.99**	**215.46**	**219.79**	**224.17**	**228.59**	**233.05**	**237.56**	**242.10**
Fixed/Semi-variable Expenses										
- Depreciation	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81
- Fixed Costs	22.74	24.00	25.30	26.42	27.46	28.54	28.68	29.86	31.11	32.40
- Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	**77.55**	**78.80**	**80.11**	**81.22**	**82.26**	**83.35**	**83.49**	**84.67**	**85.91**	**87.21**
BEP (Op Cap)	43.15%	40.71%	38.52%	37.70%	37.43%	37.18%	36.52%	36.33%	36.17%	36.02%
BEP (Installed Cap)	25.89%	26.46%	26.96%	28.27%	28.07%	27.89%	27.39%	27.25%	27.12%	27.02%
BE Sales (Operating Cap)	104.77	106.01	107.35	109.04	110.79	112.63	113.22	115.27	117.43	119.71
Cash Break Even Sales	30.73	32.28	33.91	35.46	36.98	38.57	38.89	40.66	42.52	44.48

ANNEXURE - 11
VISHWARUPA GOLDSMITH FOUNDATION
DETAILED PROJECT REPORT

INTERNAL RATE OF RETURN

(Rs Lakhs)

PARTICULARS	Const.Period	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
A. CASH OUTFLOWS											
Outflows	-790.00										
TOTAL ----A	**-790.00**										
B. CASH INFLOWS											
Grant - in - Aid											
Profit After Tax (PAT)		80.15	90.06	98.40	99.41	98.76	98.55	99.42	99.90	100.65	101.61
Depreciation		54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81	54.81
Interest on term loan		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prel. & Pre.op Expense		1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Working Capital Margin											9.00
Salvage Value of Fixed Assets											225.92
TOTAL ----B	**0.00**	**135.95**	**145.86**	**154.21**	**155.21**	**154.56**	**154.36**	**154.23**	**154.71**	**155.46**	**391.34**
CASH FLOWS	-790.00	135.95	145.86	154.21	155.21	154.56	154.36	154.23	154.71	155.46	391.34
EBIT		102.16	114.79	127.88	134.24	137.53	140.82	145.10	148.38	151.64	154.89
Net Block		719.20	664.39	609.58	554.77	499.96	445.15	390.35	335.54	280.73	225.92
ROCE		14.20%	17.28%	20.98%	24.20%	27.51%	31.63%	37.17%	44.22%	54.02%	68.56%

INTERNAL RATE OF RETURN (IRR)	**15.64%**	above 10%	
ROCE	**33.98%**	above 25%	
NPV @ 10%	**206.58**		

Subject to Vijayawada Jurisdiction

GSTIN: 37APUPS9838R1Z6
TIN NO: 37630194529. **Phone: 0866 2421619.**
APGST. VJ1-08-1/3330 Dt/1-6-2002. **Cell : 9393421619.**
C.S.T. VJ1-08-1/2175 Dt/1-6-2002. **Date : 19-07-2019.**

QUOTATION

HEMA MACHINERY TRADERS

Dealers in: WORKSHOP MACHINERY, WOODWORKING MACHINERY, GOLDSMITH MACHINERY AND MACHINERY SPARE PARTS.

D.NO:12-10-44/1A, CONVENT STREET, TARAPET, VIJAYAWADA – 520 001.

TO, **Quotation No:24.**

M/s. VISWARUPA GOLDSMITH FOUNDATION,
D.NO: 2-118, Pogaku Sandhu,
Opp: Sai Ram Fertilizer Line, Muktyala Road,
J A G G A Y Y A P E T – 521 175, Krishna District, Andhra Pradesh.

With reference to your kind enquiry personally, as on dated 18-01-2018, we have the pleasure to quote you our Lowest Prices as under:-

Sl. No.	S P E C I F I C A T I O N	H.P	PER	AMOUNT Rs. Ps.
	MAJOR MACHINERY EQUIPMENTS PACKAGE AS PER B I S HALL MARK REQUIREMENT:-			
1.	**LASER MARKER MACHINE:- Karat Mark Fly-Air Table Laser Marker Unit Fiber Delivery integrated Long Life Laser Diode Source, Double Fast Digital Scanning Head for Quick & Precise Marking, 'Q' Switch pulse operations for fast marking, 'F' Theta Lens with 160mm Focal Length, integrated Power supply for Laser and Scanning Head, Optical Isolation for I/O ports of OEM integration, TE Cooling with Powerful air cooled system, Red aiming beam for Alignment and mark Positioning, 110 X 110mm Marking Field Area, Industrial PC based With all interface, most advanced WIN-Based flexible marking software 3 Meters Optical Fiber and Digital cable, Operated on 220 VAC Universal Power Requirements.**	**1 H.P**	**1No.**	**23,25,000-00**
2.	**XRF KARAT METER (SDD) MACHINE:- MISTRAL SDD Unit of Manufactured by German Technology Model: A1 MH-SD heaving a GOLD ALLOY Analyzer Consists Micro-Spot high efficiency X-Ray Tube, Hires Silicon drift (SDD) detector with excellent tempcompensation, 40x Video CCD Camera, Digital pulse processor (DPP) for Fast measurements, X-Ray Controls & Safety Logic Circuits, Single USB in-terrace, manual z-sample stage and WIN based operating software with pre-loaded gold and all precious calibrations, statistical data control Modules with report printing.**	**2H.P**	**2No.**	**59,00,000-00**
	Contd….2…			
		2H.P		**82,25,000-00**

1. **Prices Quoted above are Subject to Market Fluctuation.**
2. **18% GST Extra.**
3. **Received Order along with 60% Advance Amount, balance before deliver the Machinery.**
4. **Delivery Ex-Godown Vijayawada / in about 4 TO 5 Week from the date of Purchase Order.**
5. **Interest 24% will be charged on all accounts remaining unpaid after the Delivery.**
6. **Quotation Validity 30 days only.**

Thanking you and awaiting for your early favorable Order. **For M/s. HEMA MACHINERY TRADERS.**

Subject to Vijayawada Jurisdiction

GSTIN: 37APUPS9838R1Z6
TIN NO: 37630194529. **Phone: 0866 2421619.**
APGST. VJ1-08-1/3330 Dt/1-6-2002. **Cell : 9393421619.**
C.S.T. VJ1-08-1/2175 Dt/1-6-2002. **QUOTATION** **Date : 19-07-2019.**

HEMA MACHINERY TRADERS

Dealers in: WORKSHOP MACHINERY, WOODWORKING MACHINERY, GOLDSMITH MACHINERY AND MACHINERY SPARE PARTS.

D.NO:12-10-44/1A, CONVENT STREET, TARAPET, VIJAYAWADA – 520 001.

TO, **Quotation No:24.**

M/s. VISWARUPA GOLDSMITH FOUNDATION,
D.NO: 2-118, Pogaku Sandhu,
Opp: Sai Ram Fertilizer Line, Muktyala Road,
J A G G A Y Y A P E T – 521 175, Krishna District, Andhra Pradesh.

With reference to your kind enquiry personally, as on dated 18-01-2018, we have the pleasure to quote you our Lowest Prices as under:-

-:- 2 -:-

Sl. No.	S P E C I F I C A T I O N	H.P	PER	AMOUNT Rs. Ps.
	From……1…	**3H.P**		**82,25,000-00**
	CALIBRATION/STANDARDS Sample.			
3.	**A) ASSAY BALANCE MACHINE: -Export Quality efficiency0.001mg. Accuracy, Digital Display system with Computerized Estimation Analyzer With all Standard Accessories.**	**0.50**	**1Unit.**	**9,66,000-00**
	B) Sartorius Analytical Balance Machine with All Standard Acce.ries.	**0.25**	**1No.**	**1,25,000-00**
	C) Sartorius Precision Balance Machine with All Standard Accessories. (Rs. 85,000/- X 2 Nos. = Rs. 1,70,000/-)	**0.25**	**2No.**	**1,70,000-00**
	D) 50Mg. E-2 Class Wire Weight with NABL Calibration Certificate.		**1No.**	**5,800-00**
	E) 100Mg. E-2 Class Wire Weight with NABL Calibration Certificate.		**2Nos.**	**12,000-00**
	F) 200Mg. E-2 Class Wire Weight with NABL Calibration Certificate.		**1No.**	**5,800-00**
	G) Additional Display Attachment.		**1No.**	**5,600-00**
4.	**TOOL EQUIPMENTS:- For Sampling and assaying: Balling Pliers, Copies, Scrapping Tools, Tongs, Forceps, Rolling ill, Strong Room/ Safe for storage.**	**Nil**	**1Set.**	**7,50,000-00**
5.	**Furnaces, Scrubber, Parting Tray & Other Equipments as per Gold Finishing and Testing Material Etc.,**	**Nil**	**1Set.**	**8,50,000-00**
6.	**F. Safety Measurements as per C C T V SYSTEM, Air Conditioning Units, Computer and UPS System Etc.,**	**0.50**	**1Set.**	**8,50,000-00**
7.	**G. Certified reference Material for Gold Testing and Melting, Machinery Assembled and Fitting Charges for Engineers, Training Period Expenses For each and every Machine.**	**Nil**	**1Set.**	**8,60,000-00**
	Contd….3…			
		4.5hp		**1,28,25,200-00**

1. **Prices Quoted above are Subject to Market Fluctuation.**
2. **18% GST Extra.**
3. **Received Order along with 60% Advance Amount, balance before deliver the Machinery.**
4. **Delivery Ex-Godown Vijayawada / in about 4 TO 5 Week from the date of Purchase Order.**
5. **Interest 24% will be charged on all accounts remaining unpaid after the Delivery.**
6. **Quotation Validity 30 days only.**

Thanking you and awaiting for your early favorable Order. **For M/s. HEMA MACHINERY TRADERS.**

Subject to Vijayawada Jurisdiction

GSTIN: 37APUPS9838R1Z6
TIN NO: 37630194529. **Phone: 0866 2421619.**
APGST. VJ1-08-1/3330 Dt/1-6-2002. **Cell : 9393421619.**
C.S.T. VJ1-08-1/2175 Dt/1-6-2002. **QUOTATION** **Date : 19-07-2019.**

HEMA MACHINERY TRADERS
Dealers in: WORKSHOP MACHINERY, WOODWORKING MACHINERY, GOLDSMITH MACHINERY AND MACHINERY SPARE PARTS.
D.NO:12-10-44/1A, CONVENT STREET, TARAPET, VIJAYAWADA – 520 001.

TO, **Quotation No:24.**

M/s. VISWARUPA GOLDSMITH FOUNDATION,
D.NO: 2-118, Pogaku Sandhu,
Opp: Sai Ram Fertilizer Line, Muktyala Road,
J A G G A Y Y A P E T – 521 175, Krishna District, Andhra Pradesh.

With reference to your kind enquiry personally, as on dated 18-01-2018, we have the pleasure to quote you our Lowest Prices as under:-

-:- 3 -:-

Sl. No.	SPECIFICATION	H.P	PER	AMOUNT Rs. Ps.
	PROCESSING UNIT **From…2..**	4.5hp		1,28,25,200-00
8.	**SHEET & WIRE DRAWING MACHINE: - Best Indian Make Export Quality Heavy Duty I S I Standard VEKARIA BRAND Model No: HRX – 8580 Heaving a 2 H.P. Three Phase Motor Auto reversing Switch of AMRX7525C-05 Model and Combined Roller Head Dimensions of 7.1/16 X 3.3/8" – 180mm X 85mm with Rollers make with High alloy steel, hardened and ground, special transmission joints, transmit full power to the rollers when opening to maxim. Temperature at same torque. Gear System and Reduction Gear with Round and Half Round 'V' Shape Groove and also Special designs on request.**	2H.P	1 Set.	5,50,000-00
9.	**Best Indian Make Punjab & Gujarat Brand Various Sizes DAIS as per Gold and Silver Dais Make with High Grade HSS with Various Models as per Nucleus, Bangles and Rings Etc. (500x2500/-=Rs.12,50,000/-, 500x3500/-=Rs.17,50,000/-,300x6000/-=Rs.24,00,000/-, 300x5200/-=15,60,000/-, 300x7500/-=22,50,000/-,300x12500/-=37,50,000/)**	Nil	Set.	1,29,60,000-00
10.	**Best Indian Make Punjab & Gujarat Brand Various Sizes DAIS as per Gold and Silver Dais Make with High Grade Bronze Metal Various Models as per Nucleus, Bangles and Rings Etc. (Rs.4, 500/- X 3,500Nos. = Rs.1,57,50,000/-)**	Nil	Set.	1,57,50,000-00
11.	**GENERATOR: - Best Quality KIRLOSKAR BRAND Model No: 4R810TAG1 Salient GENERATOR System 62KVA Capacity with All Standard Accessories.**	Nil	1No.	6,40,000-00
12.	**LOCKERS: - 4'Ft. And 5'Ft. SAFTY LOCKERS for Jewelry & Silver Lockers, Total 2 Lockers in different Specifications and each Room. (Rs. 90,000/- X 2 Nos. = Rs. 1, 80,000/-).** **Cont….4…**	Nil	2Nos.	1,80,000-00
		6.5hp		4,29,05,200-00

1. **Prices Quoted above are Subject to Market Fluctuation.**
2. **18% GST Extra.**
3. **Received Order along with 60% Advance Amount, balance before deliver the Machinery.**
4. **Delivery Ex-Godown Vijayawada / in about 4 TO 5 Week from the date of Purchase Order.**
5. **Interest 24% will be charged on all accounts remaining unpaid after the Delivery.**
6. **Quotation Validity 30 days only.**

Thanking you and awaiting for your early favorable Order. **For M/s. HEMA MACHINERY TRADERS.**

Subject to Vijayawada Jurisdiction

GSTIN: 37APUPS9838R1Z6
TIN NO: 37630194529. **Phone: 0866 2421619.**
APGST. VJ1-08-1/3330 Dt/1-6-2002. **Cell : 9393421619.**
C.S.T. VJ1-08-1/2175 Dt/1-6-2002. **Date : 19-07-2019.**

QUOTATION

HEMA MACHINERY TRADERS

Dealers in: WORKSHOP MACHINERY, WOODWORKING MACHINERY, GOLDSMITH MACHINERY AND MACHINERY SPARE PARTS.

D.NO:12-10-44/1A, CONVENT STREET, TARAPET, VIJAYAWADA – 520 001.

TO, **Quotation No:24.**

M/s. VISWARUPA GOLDSMITH FOUNDATION,
D.NO: 2-118, Pogaku Sandhu,
Opp: Sai Ram Fertilizer Line, Muktyala Road,
J A G G A Y Y A P E T – 521 175, Krishna District, Andhra Pradesh.

With reference to your kind enquiry personally, as on dated 18-01-2018, we have the pleasure to quote you our Lowest Prices as under:- **-:- 4 -:-**

Sl. No.	S P E C I F I C A T I O N	H.P	PER	AMOUNT Rs. Ps.
	From……3…			**4,29,05,200-00**
13.	**CAD/CAM DESIGN MACHINE: - SPS250 J RAPID PROTOTYPING 3 D VYPER DISIGNING MACHINE it uses photosensitive resin as the material, adopts material-increase principal-le to rapidly fabricate any complex-shaped models of new design directly from three-dimensional computer-aided design (CAD) data without the need of any mold, cutter and tooling. The prototype is the ideal choice for directly lost wax casting and rubber mold, SPS 250J achieve the ideal leap "from concept to prototype", it is an effective weapon industry.** **Applications of the this machine:-** **a) Product Design.** **b) Design verification.** **c) Master pattern for lost wax casting and rubber mold fold Fast Design rendering.** **e) Packing Design.** **Technical Advantages:-** **a) Making complicated thin walled and hollowed structure** **b) High precision and excellent surface finish** **c) 100% utilization ration of materials.** **d) Provide the optimal resin for lost wax casting and rubber mold.** **TECHNICAL DATA:-** **1. Laser (Solid State USA).** **a) Type of Machine : Solid State** **b) Wavelength : 354.7nm.** **c) Laser Warranty : 7500Hours of 12 Months(Whichever is First)** **2. Recoating System:** **a) Process : Vaccum-sorb** **b) Build layer Capability : Min 0.04mm**	**6.5hp**	**1 Set.**	**1,26,00,000-00**
	T O T A L…			**5,55,05,200-00**
	ADD: - 18% GST….			**99,90,936-00**
	GRAND TOTAL……			**6,54,96,136-00**
	(Six Crore Twenty Lakh Fifteen Thousand One Hundred Thirty Six)			**----------**

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Thanking you and awaiting for your early favorable Order. **For M/s. HEMA MACHINERY TRADERS.**