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Shri Narendra Modi
Prime Minister of India

“ Skilling is building a better India.
If we have to move India towards
development then Skill Development
should be our mission. ”



**COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL
STANDARDS**

is hereby issued by the

GEM AND JEWELLERY SKILL COUNCIL OF INDIA
for

SKILLING CONTENT : PARTICIPANT HANDBOOK

Complying to National Occupational Standards of

Job Role/ Qualification Pack: '**Designer CAD**' QP No. '**G&J/Q2303 / NSQF Level 4**'

Date of Issuance: Jan 20th, 2017

Valid up to*: Jan 19th, 2020

*Valid up to the next review date of the Qualification Pack or the
'Valid up to' date mentioned above (whichever is earlier)

P. Umama Kothari

Authorised Signatory

(Gem and Jewellery Skill Council Of India)

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Sincerely,

Prem Kumar Kothari

Prem Kumar Kothari

Chairman, GJSCI

About this book

This Participant Handbook is designed to enable training for the specific Qualification Pack. Each National Occupational (NOS) is covered across Unit/s.

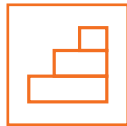
Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS. The symbols used in this book are described below.

- This book is a detailed description on Designer- CAD at basic level.
- This book covers right information from the beginning of introduction of CAD software to basic working on different CAD software's to making finished CAD based Jewellery products.
- This book will help the individual to grow their power in terms of thinking, observing and creating a piece on the CAD software.
- This book contains tips and worksheet at the end of every unit, this will help in understanding the unit deeply.

Symbols Used



Key Learning
Outcomes



Steps



Tips



Notes



Unit
Objectives



Exercise

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सत्यमेव जयते
GOVERNMENT OF INDIA
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& ENTREPRENEURSHIP



N S D C
National
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Transforming the skill landscape



1. Introduction

Unit 1.1 - Gem & Jewellery Sector in India

Unit 1.2 - Objectives of the Course

Unit 1.3 - About Jewellery



Key Learning Outcomes

At the end of this module, you will be able to:

1. Discuss the Gem and Jewellery sector in India, and its sub-sectors.
2. Understand about jewellery and its need of designing.
3. Define your Roles and responsibilities as jewellery CAD designer.
4. Identify tools and equipment required while CAD designing.
5. Demonstrate skills required for the job (behavioural, professional, technical and communication).
6. Maintain a safe, hygienic and secure working environment.

Unit 1.1: Gem and Jewellery Sector in India

Unit Objectives

At the end of this unit, you will be able to:

1. Understand the significance of the gem and jewellery sector in India.

1.1.1 Significance of Gem and Jewellery Sector in India

The Gems and Jewellery Sector plays a major role within the Indian economy, impacting approximately 6-7 % of the country's gross domestic product (GDP) Being one of the quickest growing sectors, it's particularly export directed and labour intensive.

Based on its potential for growth and worth addition, the Government of India has declared the Gems and Jewellery sector as focus industry for export promotion. The Government has recently undertaken various measures to boost investments and to upgrade technology and skills to market 'Brand India' within the international market.

India's Gems and Jewellery sector has been conducive in an exceedingly huge way to the country's foreign exchange earnings (FEEs). The Government of India has viewed this industry as a robust area for export promotion.

- With a market size of just about INR 4,54,100 crores, the industry encompasses a massive share of the gross domestic product at approximately 5.9 %, apart from large-scale employment generation and foreign exchange earnings.
- Market research reveals that jewellery accounts for over a fourth of discretionary expenditure by consumers in India. This combined with rising earning levels in India may be a major growth driver.
- India has a calculable 229 crore women in the age group of 20 to 49. The number of working women in skilled sectors who are considered the amongst the key consumers for jewellery is rising rapidly.
- With over 300 crore individuals falling within the 25-29 age bracket in the period 2011-21, an estimated 150 crore weddings are expected to take place during this period.
- In Tier-3 zones, where landowners and moneylenders are the primary resource of monetary credit, jewellers have emerged as an alternate, providing investment choices through gold jewellery.

1.1.1 Significance of Gem and Jewellery Sector in India

Gem and Jewellery industry classification

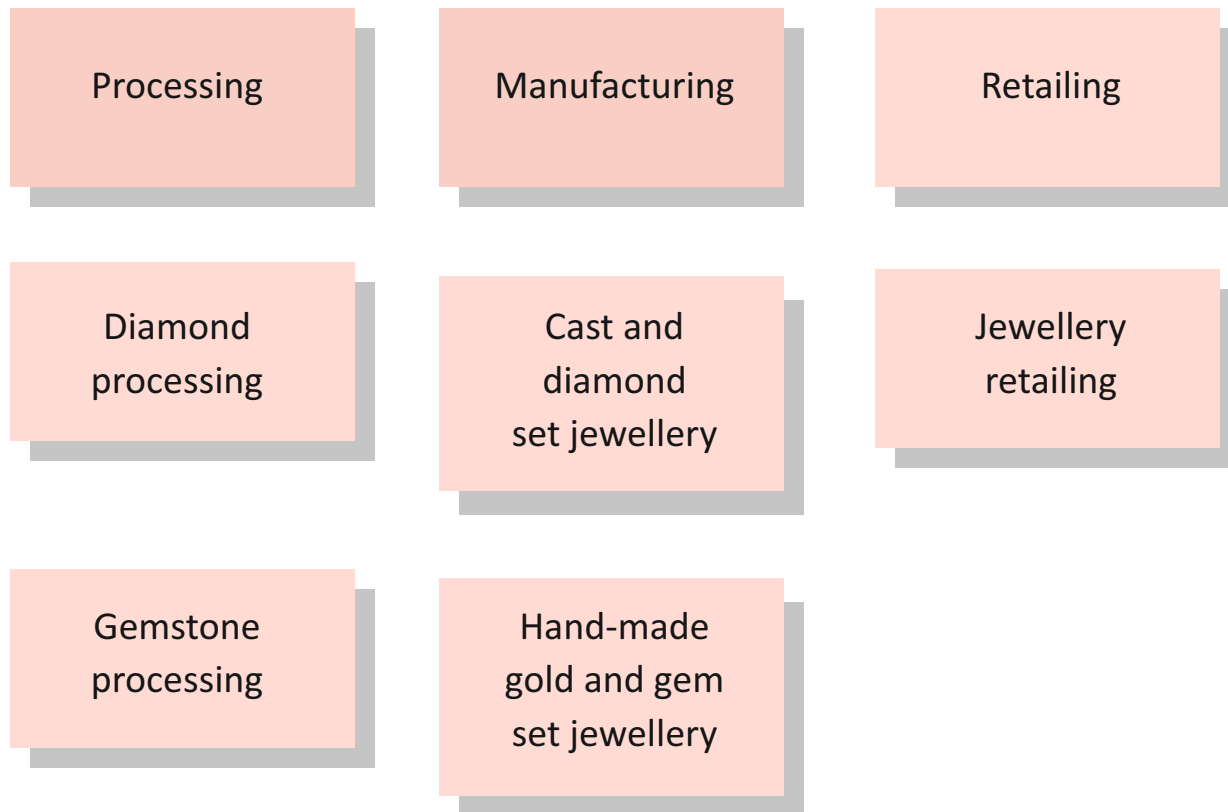


Fig 1.1.1.1
Based on economic activities from NIC-2008, key sub-sectors of sector are: processing (diamond and gemstone), manufacturing (cast and diamond set, and handmade and gem set) and retailing.

1.1.1 Significance of Gem and Jewellery Sector in India

- With a market size of approximately INR 4,54,100 crores, the gem and jewellery segment has a sizeable share of the gross domestic product (GDP) at approximately 5.9%, apart from large-scale employment generation and foreign exchange earnings.
- The highly labour-intensive nature of the sector with large number of employees in the unorganised space, has led to job creation, employing more than 0.464 million people in the country in 2013. This is more than the population of Kolkata, the seventh most populated city in India with a population of 4.5 crore; this indicates the high employment generation capacity of this sector.
- Indian markets for diamond processing — Surat, Ahmedabad; for gemstone processing — Bhavnagar and Jaipur; and for handmade gold jewellery — Kolkata, Thrissur and Coimbatore — are among other areas that are known world over for their products.
- Every region of the country has a different unique style of jewellery. Some examples of these traditional jewellery forms include Bikaneri, Dhokra, Minakari and Filigree.
- India is a source for manufacturing all varieties of products; and its presence in the global gems and jewellery sector is of much importance.

1.1.1 Significance of Gem and Jewellery Sector in India

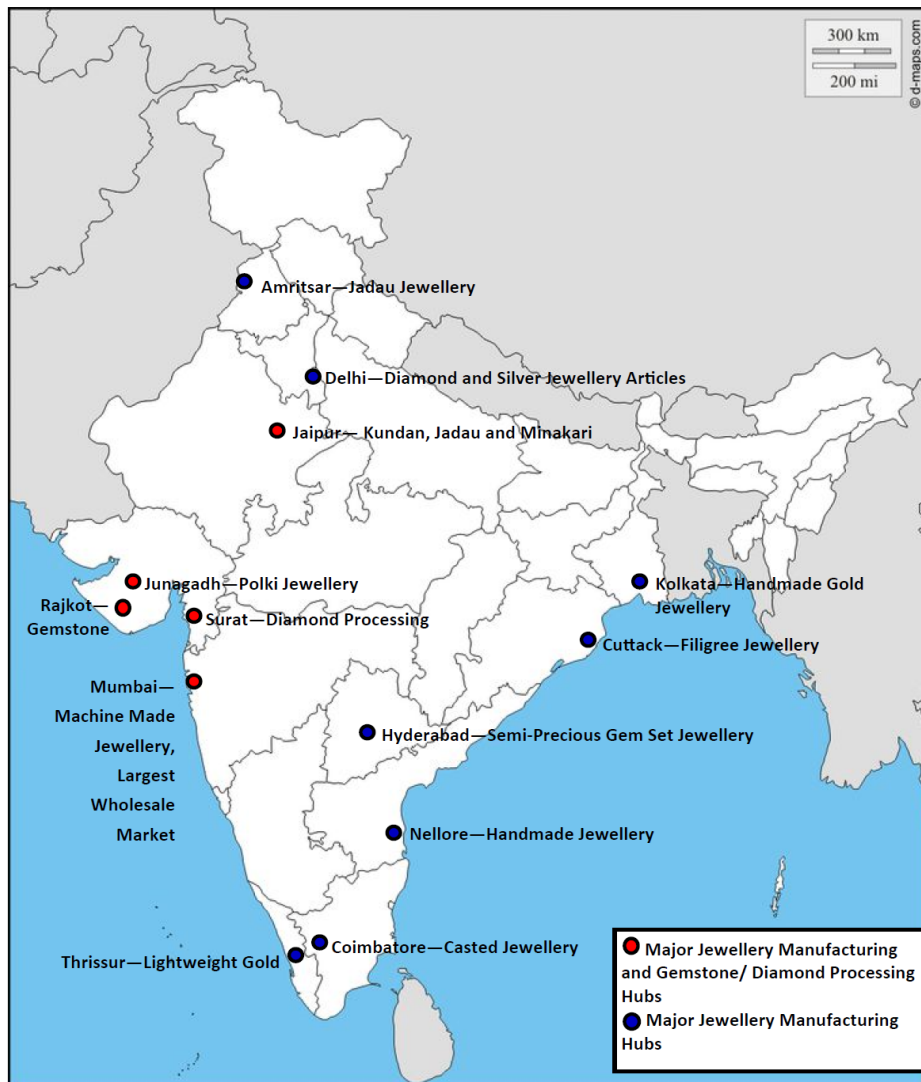


Fig 1.1.1.2 Geographical Markets: Employment Zones in India

- Over two-thirds of the sector work force in India are working in the processing and manufacturing areas of the value chain.
- These workers are employed in certain zones, as indicated in the map above.
- The retailing manpower extends across India ranging from major metro cities in urban areas to the smallest towns in rural areas.

1.1.1 Significance of Gem and Jewellery Sector in India

Processing and Manufacturing Markets:

- Employment is concentrated in the states of Rajasthan, Gujarat, Maharashtra, West Bengal and the Southern states of Kerala and Tamil Nadu.
- Amritsar and Jaipur are well-known for Kundan and Jadau jewellery with Minakari work, while Delhi – NCR is known for silver jewellery. Further, Jaipur is also one of the biggest coloured gemstone cutting and polishing centre in the world.
- Surat is the world's biggest diamond processing centre and processes about 85 percent of the rough diamond imports of India. Surat has a large group of workforce and is also home to the world's leading diamond institute, the Indian Diamond Institute (IDI).
- Besides being the largest trading centre and wholesale market in India, Mumbai, is also a significant centre for cast and diamond set jewellery.
- SEEPZ in Mumbai alone accounts for almost a quarter of the jewellery exports to USA, the world's largest jewellery consuming country.
- Thrissur is a hub for lightweight plain gold jewellery, a style traditional to Kerala, while Coimbatore is known for electroformed jewellery.
- Kolkata is renowned for handmade gold jewellery.
- Its importance also comes from the fact that a large number of skilled artisans in India hail from this region. However, off lately there has been a decline in the number of skilled artisans mainly due to a decrease in inherited talents.