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भारत सरकार

PM VISHWAKARMA

Toolkit Booklet

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Tailor (Darji)

“Our aim is to turn today's artisans into big entrepreneurs of tomorrow. For this, sustainability in their business model is essential. Keeping this in mind, we are also working on improving the products they make with attractive designing, packaging and branding.”

Narendra Modi

About this Toolkit Booklet

This Toolkit Booklet for a tailor (Darji) consists of a collection of essential tools and equipment. The traditional practices followed are highly labour intensive and demanding.

This toolkit is designed to facilitate efficient and effective tailoring operations that shall help the Vishwakarmas to develop safer working practices with improved efficiency. These tools are customized for modern tailoring practices, offering convenience, precision, and improved results.

The combination of clear understanding, safe usage, effective maintenance, and continuous skill development shall equip them to harness the full potential of modern tools. This not only allows them to excel in their work but also positions them as adaptable contributors in an ever-changing industry landscape.

This toolkit shall help in understanding how to use each tool correctly, following manufacturer's guidelines, and adapting techniques to maximize the efficiency and quality of a craftsman's work. Using these tools effectively results in precise, well-tailored clothes and safer conditions for the Vishwakarmas.

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Chapter 1: Introduction

Overview of PM Vishwakarma Scheme

Indian Economy includes a number of artisans and craftspeople, who work with their hands and tools, are usually self-employed, and are generally considered to be a part of the informal or unorganized sector of the economy. These traditional artisans and craftspeople are referred to as 'Vishwakarmas'. They are engaged in occupations like blacksmiths, potters, carpenters, sculptors, etc. These skills or occupations are passed down from generation-to-generation following a guru-shishya model of traditional training, both within the families and other informal groups of artisans and craftspeople.

In this context, the PM Vishwakarma scheme emerges as a transformative initiative aimed at enhancing the quality and reach of products and services provided by artisans and craftspeople. The scheme seeks to integrate these skilled individuals into both domestic and global value chains, thereby improving their socio-economic status and quality of life.

The fundamental objective of the PM Vishwakarma scheme is to:

- Enable the recognition of artisans and craftspeople as Vishwakarmas making them eligible to avail the scheme
- Provide skill upgradation to hone the skills of Vishwakarmas and make relevant and suitable training opportunities available to them.
- Provide support for better and modern tools to enhance the capacity, productivity and quality of products.
- Provide the beneficiaries an easy access to collateral-free credit and interest subvention.
- Provide incentives for digital transactions to encourage the digital empowerment.
- Provide a platform for brand promotion and market linkages to help them access new opportunities for growth.

Through this initiative, beneficiaries in the informal sector will have the opportunity to upscale their operations, modernize their tools, and upgrade their businesses for increased productivity and product quality. This transition to formal entrepreneurship is envisioned to contribute significantly to the nation's progress.

The scheme's implementation will be rolled out across rural and urban areas with a phased district-level approach. Special attention will be directed towards empowering women and marginalized groups such as Scheduled Castes, Scheduled Tribes, OBCs, Specially Abled individuals, Transgenders, residents of NER states, Island Territories and Hilly Areas.

After a detailed consultation with Practitioners of the trade, industry and experts, a tool kit has been drawn up for Tailor (Darji). This tool kit is an effort to modernize the operations of Vishwakarmas and improve the productivity. The handling of tools is an essential part of training and the manual will supplement and serve as a reference material thereafter. It is expected that the Vishwakarma's will enjoy their learning journey through this Toolkit Booklet.

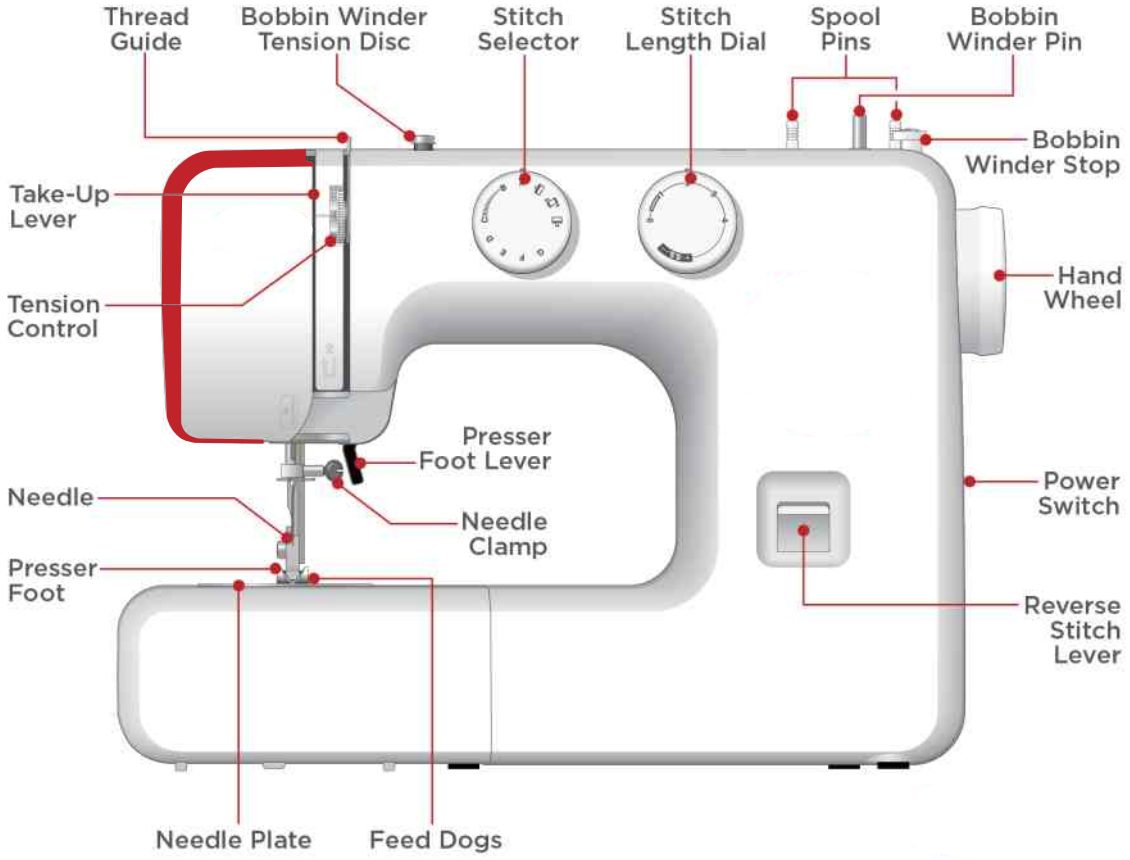
Tools and Equipment

Key Learning Outcomes

1. Identify various components of an automatic single needle lock stitch machine.
2. Elaborate functions of key sewing machine parts.
3. List various supporting tools in stitching processes.

Sewing Machine

An automated electric sewing machine sews fabric with thread without the need for complete manual intervention. Electric sewing machines have greatly increased the productivity of the clothing industry.



SAFETY GUIDELINES

- **Read the Manual:** Start by reading the manual to understand your machine's specific safety instructions.
- **Maintain the Machine:** Regularly inspect and maintain your machine to ensure it's in good working condition.
- **Hands Clear and Proper Posture:** Keep your hands away from moving parts, use a presser foot, and maintain good posture while sewing.
- **Stay Alert and Take Breaks:** Sew when you're alert, and take breaks to prevent fatigue and distraction.
- **Unplug and Keep Children/Pets Away:** Unplug when not in use, and ensure children and pets are at a safe distance from the machine to prevent accidents.

Sewing Machine Parts

1

Power Switch.

It is located in different places depending on the type of sewing machine.

2

Spool Pin

This is a small plastic or metal pin which holds spool of thread.

3

Thread Guide

The thread guide directs thread from the spool on the top of the machine to the bobbin winder.

4

Bobbin Winder

It winds thread onto the bobbin prior to starting sewing.

5

Stitch Adjustment Button

Sewing machine has buttons for stitch type, length, and direction which are typically on the front side with some variations.

6

Thread Take-up Lever

It is located on the front left side of the sewing machines.

7

Tension Dial

The tension dial is a small numbered wheel near the takeup lever. It controls the tension of the thread as you sew

Multiple Choice Questions

Question 1: Where is the power switch typically located on a sewing machine?

A) On the left side of the body.
B) On the top of the body.
C) On the right side of the body.
D) On the front of the body.

Question 2: What is the purpose of the spool pin on a sewing machine?

A) To hold sewing needles.
B) To control the sewing speed.
C) To hold the spool of thread.
D) To adjust the tension of the thread.

Question 3: What is the function of the thread guide on a sewing machine?

A) To cut the thread.
B) To sew in reverse.
C) To direct thread from the spool to the bobbin winder.
D) To control the presser foot pressure.

Answers: 1) C; 2) C; 3) C

Recap

- Power switch is typically on the right side of the machine, to turn it on.
- The spool pin holds the spool of thread.
- Thread guide directs the thread from the spool to the bobbin winder.
- Bobbin-winder can be found to the right of the spool pin.
- Stitch adjustment buttons control stitch type, length, and direction.
- Thread take-up lever is on the front left side of the machine.

Sewing Machine Parts

1

Needle Clamp Screw

This is a metal piece that holds the needle in place while sewing.

2

Pressure Foot

It is located under the arm of the sewing machine.

3

Presser Foot Lever

Presser foot lever controls the presser foot's up and down movement.

4

Needle Plate

Needle plate supports fabric as stitches are formed.

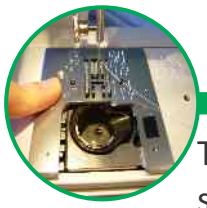
5

Feed Dog

Feed dog moves fabric through the machine during sewing.

6

Bobbin Cover & Bobbin Release



The bobbin is a small spool of thread that is supplied from the bottom of the sewing machine.

7

Reverse stitch lever

Reverse stitch lever engages reverse stitching for backstitching and reinforcement.

Multiple Choice Questions

Question 1: What is the primary function of the Needle Clamp Screw?

A) Controls the presser foot
B) Holds fabric in place
C) Secures the needle in place
D) Adjusts stitch length

Question 2: The Pressure Foot on a sewing machine is responsible for:

A) Winding the bobbin
B) Controlling thread tension
C) Holding fabric in position for sewing
D) Adjusting presser foot pressure

Question 3: Which sewing machine component is operated by the Presser Foot Lever?

A) Needle Plate
B) Feed Dog
C) Presser Foot Lever
D) Reverse Stitch Lever

Question 4: What does the Needle Plate do in a sewing machine?

A) Supports fabric as stitches are formed
B) Controls the bobbin tension
C) Adjusts thread tension
D) Winds the bobbin

Answers: 1) C; 2)D; 3) C; 4) A

Recap

- Needle clamp screw secures the needle in place.
- Pressure foot holds fabric in position for sewing.
- Presser foot lever controls the presser foot's up and down movement.
- Needle plate supports fabric as stitches are formed.
- Feed dog moves fabric through the machine during sewing.
- Bobbin cover and bobbin release covers the bobbin and provides access for loading or removing it.
- Reverse stitch lever engages reverse stitching for backstitching and reinforcement.

Industrial Sewing Machine

Specifications:
Type of Machine - Lockstitch Machine
Max Sewing Speed - 5000 (stitch/min)
Machine Type - Motor Operated
Number Of Needles - 1
Number Of Threads - 2

Usage & Benefits:
To stitch different kinds of garments at a faster speed as compared to the manual sewing machine.

Step 1. Familiarize yourself with the machine's controls and buttons
Step 2. Thread the machine.
Step 3. Adjust the thread tension.
Step 4. Adjust the stitch length.
Step 5. Test the machine.
Step 6. Sew your garment.
Step 7. Finish your garment.

Bobbin & Bobbin Case

Specifications:
A high-quality bobbin case and durable aluminum bobbins.

Usage & Benefits:
Bobbin holds lower thread, and stitches form by looping it with the top thread from the needle.

Scan the QR code to watch a video on how a bobbin functions

Tailoring Scissors

Specifications:
Plastic handled stainless steel scissor for cutting fabric.

Usage & Benefits:
Tailoring scissors are essential cutting tools for fabric, known for their precision in creating clean and accurate cuts.

Seam Ripper

Specifications:
Large Size : (LxW):30 x 5 mm,
Small Size(LxW): 60 x 5 mm,
Handle Length (in mm) : 35, 98

Usage & Benefits:
Removing stitches and seams.

Tracing wheel

Specifications:
length:- 15.2cm, and wheel gear diameter:- 2.2cm.

Usage & Benefits:
A tracing wheel is a pointed tool with a serrated edge used to transfer markings from patterns onto fabric accurately.

Scan the QR code to watch a video on how to use a seam ripper

Scan the QR code to watch a on how to use a scissors

Scan the QR code to watch video a video on how to use a tracing wheel

Multiple Choice Questions

Question 1: What are tailoring scissors primarily used for?

A) Removing seams
B) Cutting fabric
C) Tracing patterns
D) Hemming garments

Question 2: What is the main purpose of a seam ripper?

A) Tracing patterns
B) Hemming garments
C) Removing stitches and seams
D) Cutting fabric

Question 3: What is the primary function of a tracing wheel in sewing?

A) Cutting fabric
B) Hemming garments
C) Transferring pattern markings onto fabric
D) Removing seams

Answers: 1) B; 2) C; 3) C

Recap

- Tailoring scissors are essential cutting tools for fabric, known for their precision in creating clean and accurate cuts.
- A seam ripper is a handy tool for undoing stitches and removing unwanted seams in sewing projects.
- A tracing wheel is a pointed tool with a serrated edge used to transfer markings from patterns onto fabric accurately.

Tailor's chalk

Specifications:
Tailor's chalk is a chalk-like substance used to mark fabric temporarily for sewing and pattern-making.

Usage & Benefits:
Tailor's chalks are used for temporary guide markings on fabric to indicate where it needs to be cut or left out

Safety Pins

Specifications:
Steel safety pins of medium (3.5cm) and large sizes (5.5cm)

Usage & Benefits:
Safety pins are mostly used to fasten pieces of fabric or clothing together.

L Scale

Specifications:
Dimensions: 24 inches x 12 inches i.e. 60 x 30 cm

Usage & Benefits:
Drafting equipment is the second step in pattern making, used to create paper patterns based on measurements and garment design.

Scan the QR code to watch a video on how to use a tailor's chalk

Scan the QR code to watch a video on how to use safety _ ball pin

Scan the QR code to watch a video on how to use a L scale

Multiple Choice Questions

Question 1: What is the primary purpose of tailor's chalk?

A) Measuring fabric
B) Cutting fabric
C) Marking fabric for sewing and pattern-making
D) Hemming garments

Question 2: What is the main function of safety pins?

A) Measuring fabric
B) Hemming garments
C) Securing fabric and making temporary adjustments
D) Cutting fabric

Question 3: What is the primary purpose of an L scale in pattern-making?

A) Hemming garments
B) Drafting tool used in pattern making
C) Cutting fabric
D) Securing fabric with safety pins

Answers: 1) C; 2) C; 3) B

Recap

- Tailor's chalk is a chalk-like substance used to mark fabric temporarily for sewing and pattern-making.
- Safety pins are fastening devices with a hinged clasp, commonly used in sewing and for temporary garment adjustments.
- An L scale, also known as an L-square ruler, is a measuring and drafting tool with a 90-degree angle, often used in pattern-making.

Measuring Tape

Specifications:
PVC measuring tape of 60” length & 0.5” width

Usage & Benefits:
Measuring tape is mostly used for the measurements of garments.

French Curve

Specifications:
French Curves Set of 3

Usage & Benefits:
A transparent plastic French Curve aids in marking necklines, armholes, and collars, ensuring precise shaping and garment design.

Hip Curve

Specifications:
Hip Curve of 24 Inches.

Usage & Benefits:
This ruler is designed for smooth curve drawing around hips and waistlines, ensuring flattering silhouettes and precise dart placement.

Scan the QR code to watch a video on how to use a measuring tape

Scan the QR code to watch a video on how to use french curve

Scan the QR code to watch a video on how to use a L scale

Multiple Choice Questions

Question 1: What is the primary function of a measuring tape in sewing?

A) Drawing curves
B) Taking accurate measurements
C) Cutting fabric
D) Hemming garments

Question 2: What is the main purpose of a French curve in sewing and design?

A) Measuring straight lines
B) Drawing smooth and precise curves
C) Taking body measurements
D) Cutting fabric

Question 3: What is the primary use of a hip curve in sewing and pattern-making?

A) Measuring fabric
B) Drawing straight lines
C) Creating accurate hip and waistline curves in patterns
D) Hemming garments

Answers: 1) B; 2) B; 3) C

Recap

- Measuring tape is a flexible tape used for precise measurements in sewing and garment making.
- French curve is a curved template tool used for drawing smooth and precise curves in pattern-making and design.
- Hip curve is a curved ruler designed specifically for creating accurate hip and waistline curves in garment patterns.

Threads

Specifications:
Threads are long, thin strands used for sewing and are available in various colors and materials, such as cotton, polyester, and silk.

Usage & Benefits:
Threads can be made of cotton, linen, silk, rayon, nylon, polyester. It is used to form the stitches that hold the fabric parts together.

Stationary

Specifications:
Pencil (HB)

Usage & Benefits:
Pencil is used to marking on brown paper and fabric as well.

Thread Cutter

Specifications:
Sharp metallic tool.

Usage & Benefits:
It is used to cut the extra thread from the garment.

Scan the QR code to watch a video on how to use thread

Scan the QR code to watch a video on how to use a pencil

Scan the QR code to watch a video on how to use a thread cutter

Multiple Choice Questions

Question 1: What is the prime objective of threads in sewing?

A) Measuring fabric
B) Cutting fabric
C) Securing fabric parts, creating stitches and seams
D) Hemming garments

Question 2: What is the main purpose of a thread cutter in sewing?

A) Measuring fabric
B) Cutting patterns
C) Tracing patterns
D) Trimming excess thread

Question 3: What does the term "stationary" refer to in sewing?

A) The act of sewing by hand
B) Tools used for measuring fabric
C) Objects or tools that do not move during sewing
D) Trimming excess fabric

Answers: 1) C; 2) D; 3) C

Recap

- Threads are long, thin strands used for sewing and are available in various colors and materials, such as cotton, polyester, and silk.
- A thread cutter is a small, sharp tool used for trimming excess thread during sewing.
- Stationary in sewing refers to objects or tools that do not move or change position during the sewing process, such as a sewing machine table or work surface.

Annexures

Annexure-I

QR Codes

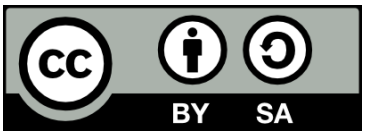
S No.	Topic/Tool	QR Code Title	QR Code
1	Bobbin & Bobbin Case	Scan the QR code to watch a video on how a bobbin functions	
2	Seam Ripper	Scan the QR code to watch a video on how to use Seam Ripper	
3	Scissors	Scan the QR code to watch a video on how to use a scissor	
4	Tracing Wheel	Scan the QR code to watch a video on how to use a Tracing Wheel	
5	Tailor’s Chalk	Scan the QR code to watch a video on how to use a Tailor's Chalk	
6	Safety Pins	Scan the QR code to watch a video on how to use a Safety Pin	

S No.	Topic/Tool	QR Code Title	QR Code
7	L scale	Scan the QR code to watch a video on how to use L Scale	
8	Measuring tape	Scan the QR code to watch a video on how to use a Measuring Tape	
9	French Curve	Scan the QR code to watch a video on how to use a French Curve	
10	Hip Curve	Scan the QR code to watch a video on how to use a Hip Curve	
11	Thread	Scan the QR code to watch a video on how to use a Tread	
12	Pencil	Scan the QR code to watch a video on how to use a Pencil	
13	Thread cutter	Scan the QR code to watch a video on how to use a Tread Cutter	

Annexure - II

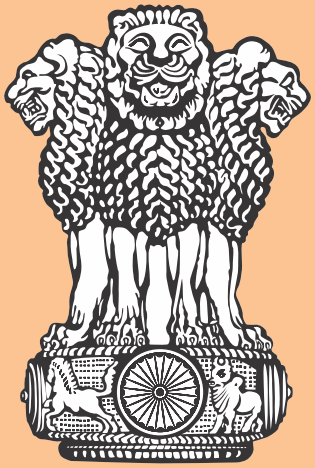
Advance Tool List

S No.	Equipment Image	Equipment Name
1		Over Lock Machine
2		Steam Press



Disclaimer

The information contained herein has been obtained from sources reliable to the relevant trade. The coded boxes in the booklet called Quick Response Code (QR code) will help to access the e-resources linked to the content. The information regarding warranty, including terms of conditions coverage details, and the manufacture’s contact information for warranty claims and support can be referred to the product manual received with the tool. The actual make of the tool provided to you may slightly vary than what is shown in the booklet.



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