

# Government of India Ministry of Textiles O/o Development Commissioner for Handlooms Udyog Bhavan, New Delhi.

# HANDLOOM WEAVING – Multi treadles

1	Name of the training	Handloom Weaving – Multi Treadles
2	Qualification	<ul> <li>Having basic knowledge of weaving</li> <li>To be ascertain by certificate/RPL</li> </ul>
3.	Age Limit	Minimum 16 years
4	No. of trainees per batch	20
5	Duration of Training	<ul> <li>315 hrs (45 days) (Inclusive of 10</li> <li>Hours RPL)</li> <li>*RPL will be conducted in case there is no certification of prior level available.</li> </ul>
6	Nature of Training	Hands-on Practical training

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# **SYLLABUS**

# 1. Knowledge of Looms and Loom Parts

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# 2. Pre-weaving activities

- 2.1 Drafting of warp
- $2.2 \ {\rm Denting} \ {\rm of} \ {\rm warp}$
- 2.3 Gaiting of warp
- 2.4 Piecing and Knotting of warp

# 3. Motions of weaving

- 3.1 Primary motions of weaving
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- 3.3 Auxiliary motions of weaving

# 4. Weaving

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# 5. Quality maintenance

- 5.1 Fabric defects and prevention of defects
- 5.2 Dimensions of fabrics or products

# **6.** Post-loom Activities

6.1 Mending and folding of woven fabrics

### **DETAILED SYLLABUS**

#### **1.1 Various handloom parts and its functions:**

Knowledge of handloom parts viz. warp beam, fabric beam, front rest, back rest, sley, sley race board, shuttle box, picker, short lam, long lam, treadle, tumbler lever/roller for reversing motion, shuttle, heald, reed, temple, lease rod etc. and its functions.

#### 2.1 Drafting of warp:

Learning the process of drafting and drafting orders through healds and/or harness depending on the area of training.

#### 2.2 Denting of warp:

Learning the process of denting through the reed – Denting order for different kind of products – missing dent

#### 2.3 Gaiting of warp:

Learning gaiting of warp sheet before starting the weaving process with uniform tension throughout width of the fabric

# 2.4 Piecing and Knotting of warp:

Learning piecing and knotting of warp

#### **3.1 Primary motions of weaving:**

Learning proper operation of primary motions viz. shedding, picking and beating-up - Leveling of heald shafts and adjustment of depth of shed to get optimum depth of shed – Loading of shuttles with pirn and threading through the shuttle eyes to get proper tension – Proper picking without flying away of shuttle – Adjustment of picking rope and picker - beating up of weft uniformly to the fell of the cloth

#### **3.2 Secondary motions of weaving:**

Learning proper operation of Let-off motion and Take-up motion – Release of optimum length of warp – Maintaining proper tension of cloth

#### **3.3 Auxiliary motions of weaving:**

Temple motion – removing and fixing of temples properly – lease rod motion – purpose of lease rods – insertion of lease rods – shuttle changing as per the design and patterns

# 4.1 Weaving using Multi treadles

Weaving of fabrics by proper sequencing of various operations using multitreadles- mending of broken ends - weaving with optimum speed - treadling orders to weave different weaves viz. plain, twill, satin, diamond etc or making designs by hand using extra weft or by cut shuttle technique or by interlock technique or by Ikat technique.

# 5.1 Fabric defects and prevention of defects

Common fabric defects in weaving viz. missing end, double end, missing pick, double pick, floats, uneven selvedge, pulled-in selvedge, slack selvedge, crack, reediness, loose ends, wrong draw etc.

# 5.2 Dimensions of fabrics or products

Measurement of fabric width and length of product woven – Importance of maintaining the dimension - Shrinkage of fabrics – Tolerances for the dimensions.

# 6.1 Mending and Folding of woven fabrics

Unwinding the woven fabrics from the fabric beam - Cropping of loose ends and picks – cropping of extra length of picks at the selvedges – proper folding of products

TOTAL PERIOD OF TRAINING : 315 hrs (45 DAYS)