

MES COURSE MODULES

In

TEXTILES - WEAVING

1. Module Name	Warp Dressing for Tying Machine
2. Sector	Textiles - Weaving
3. Code	WVG 708
4. Entry Qualification	Minimum 7th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to dress the tail ends from the stand and the loom while ensuring that no ends are broken, adjusting the ends evenly and dressing them to facilitate warp tying. Also, he would be able to adjust the warp tying machine as per the counts, straightening the ends and operating the warp tying machine.
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • Understanding the requirements of the beam and loom to be gaited. • Taking the dressing table near the beam doffed or near the stationary frame as the case may be. • To dress the tail ends from the stand or from the loom as the case may be. Adjust the ends evenly and with proper tension. • To take the sheet of yarn from the sized beam and to dress it likewise the tail-end sheet. • Practicing the safety systems by wearing head cover and masks • Collecting the hard wastes • Understanding the requirements of the beam being mounted, the design and draft and its continuity with the running out beam. • Repairing the broken ends if any in the already dressed set, and spraying water or other liquid as required. Adjusting the machine for working. • Fixing the needle for proper count and starting the machine. • Pull the knots through the healds and reed as soon as knotting is over and tie them properly to the beam. • Auditing the parts needed and indenting them. Taking the help of fitter in case of major repairs. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Basics of Beam knotting, gaiting and dressing • Basics of knotting machine and its operations. • <i>Basics of beam gaiting and its operations.</i> • Knowledge about the working of the machines in a safe and hygienic manner • Knowledge about the working of the Knotter in a safe and hygienic manner. • Precautions for using a Knotter for new sort introduction. • Basic disciplines in the Industry • Colour codification followed count wise or material wise • Communication and data presentation • Safety precautions in a weaving mill • First aid and fire fighting.

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Knotter	1
Dressing table	1
Beams for gaiting and the loom with run out beam	As needed
Comb for dressing	20

1. Module Name	Weaver –4 looms – Plain power loom
2. Sector	Textiles - Weaving
3. Code	WVG 709
4. Entry Qualification	Minimum 7th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle four power looms, attending breaks, inserting Pirn into shuttle.
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • Checking the condition of the parts before starting the loom and clean them. • Running the looms, replacing the pirns in the shuttle, attending to breaks and unweave and correct the damages in the fabric. • To maintain optimum possible production with good quality in respect of patterns, proper picks, thick and thin places, broken threads, clear selvedge, cloth cover, starting marks etc. • Doffing the cloth after completing the set length. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Basics of power loom operations. • Knowledge about the working of the power looms in a safe and hygienic manner. • <i>Fabric defects, their causes and remedial measures</i> • Precautions for operating 4 loom system especially with special designs, coarse weft, and dyed yarns • <i>Basic Motions of Power looms</i> • <i>Study of Let-off and Take-up motion</i> • Safety precautions in a weaving mill • First aid and fire fighting

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Looms fitted with weaver's beams	80
Weft Pirns	As needed
Shuttles	160
Drawing hook	20
Waste bag	20

1. Module Name	Weaver –Auto loom
2. Sector	Textiles - Weaving
3. Code	WVG 710
4. Entry Qualification	Minimum 7th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle 8 Auto looms, filling pirns in the battery and attending breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • Checking the condition of the parts before starting the loom and cleaning them. • Running the looms, attending to breaks and un-weave and correct the damages in the fabric. • To fill the weft battery from time to time. • To maintain optimum possible production with good quality in respect of patterns, proper picks, broken threads, clear selvedge, cloth cover, starting marks etc. • Doffing the cloth after completing the set length. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Basics of Auto loom operations. • Knowledge about the working of the Auto looms in a safe and hygienic manner. • Precautions for operating 8 loom system. • <i>Basic motions of Auto looms</i> • <i>Study of Let-off, Take-up, Pirn changing, Weft fork and warp stop motions</i> • <i>Fabric defects, their causes and remedial measures</i> • First aid and fire fighting

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Looms fitted with weaver's beams	160
Weft Pirns	As needed
Shuttles	160
Drawing hook	20
Waste bag	20

1. Module Name	Weaver – Dobby loom
2. Sector	Textiles - Weaving
3. Code	WVG 711
4. Entry Qualification	Minimum 7th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle the allotted Dobby looms, filling pirns in the shuttle as per the pattern and attending breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • Checking the condition of the parts before starting the loom and cleaning them. • Checking the pattern and the weave, fitting of heald frames in different shafts, pegging to get the required weave or design. • Running the looms, attending to breaks and un-weave and correct the damages in the fabric. • To maintain optimum possible production with good quality in respect of patterns, proper picks, broken threads, clear selvedge, cloth cover, starting marks etc. • Doffing the cloth after completing the set length. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Basics of Dobby loom operations. • Knowledge about the working of the Dobby looms in a safe and hygienic manner. • Knowledge about the shade differences and the weave of the fabric • Pegging the Dobby to get the required design or weave. • <i>Basic motions of Dobby looms</i> • <i>Study of Let-off, Take-up, Pirn changing, Weft fork and warp stop motions, Dobby motions</i> • <i>Fabric defects, their causes and remedial measures</i> • Safety precautions in a weaving mill \ • First aid and fire fighting.

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Dobby looms fitted with weaver's beams	40
Weft Pirns with different shades	As needed
Shuttles	As needed
Drawing hook	20
Waste bag	20

1. Module Name	Weaver – Shuttle-less Rapier Looms
2. Sector	Textiles - Weaving
3. Code	WVG 712
4. Entry Qualification	Minimum 9th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle allotted shuttle less looms, feed the weft, attend breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • To understand the material being woven on the loom and the weft in different positions of the weft feeder. • Attending the breaks and restarting the looms, while removing any half pick or full double pick. • Keeping the machine always clean and periodically cleaning the shed area with a vacuum cleaner. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Knowledge about the working of the Rapier Looms • Knowledge about the shade differences and the weave of the fabric • <i>Basic motions of Rapier looms</i> • <i>Study of Let-off, Take-up, Dobby, Weft selector and warp stop motions, Selvedge motions, etc.</i> • <i>Fabric defects, their causes and remedial measures</i> • Communication and data presentation • Safety precautions in a weaving mill • First aid and fire fighting

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Rapier looms	12
Weft cones	As needed
Drawing hook	20
Vacuum Cleaner	1

1. Module Name	Weaver – Shuttle-less Gripper /Projectile Looms
2. Sector	Textiles - Weaving
3. Code	WVG 713
4. Entry Qualification	Minimum 9 th Standard and 14 years of age.
5. Terminal Competency	After completion of the course, the trained person would be able to handle allotted shuttle less looms, feed the weft, attend breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • To understand the material being woven on the loom and the weft in different positions of the weft feeder. • Attending the breaks and restarting the looms, while removing any half pick or full double pick. • Keeping the machine always clean and periodically cleaning the shed area with a vacuum cleaner. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Knowledge about the working of the Gripper / Projectile Looms • Knowledge about the shade differences and the weave of the fabric • <i>Basic motions of Gripper / Projectile Looms</i> • <i>Study of Let-off, Take-up, weft feeder/ Weft selector and warp stop motions, Dobby motions, selvedge motions, Torsion bar picking, profile reed, guides for grippers, etc.</i> • <i>Fabric defects, their causes and remedial measures</i> • Communication and data presentation • Safety precautions in a weaving mill • First aid and fire fighting

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Gripper / Projectile looms	12
Weft cones	As needed
Drawing hook	20
Vacuum Cleaner	1

1. Module Name	Weaver – Shuttle-less Air Jet Looms
2. Sector	Textiles - Weaving
3. Code	WVG 714
4. Entry Qualification	Minimum 9 th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle allotted shuttle less looms, feed the weft, attend breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • To understand the material being woven on the loom and the weft in different positions of the weft feeder. • Maintaining the air pressure as needed • Attending the breaks and restarting the looms, while correcting any half pick or full double pick. • Keeping the machine always clean and periodically cleaning the shed area with a vacuum cleaner. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Knowledge about the working of the Air Jet Looms • Knowledge about the shade differences and the weave of the fabric • <i>Basic motions of Air-jet looms</i> • <i>Study of Let-off, Take-up, Weft selector and warp stop motions, Dobby motions, selvage motions, air-pressure controls, relay nozzles, main nozzle, profile reed, etc.</i> • <i>Fabric defects, their causes and remedial measures</i> • Communication and data presentation • Safety precautions in a weaving mill \ • First aid and fire fighting.

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Air Jet looms	12
Weft cones	As needed
Drawing hook	20
Vacuum Cleaner	1

1. Module Name	Weaver – Shuttle-less Water Jet Looms
2. Sector	Textiles - Weaving
3. Code	WVG 715
4. Entry Qualification	9th Std and minimum 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to handle allotted shuttle less looms, feed the weft, attend breaks
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • To understand the material being woven on the loom and the weft in different positions of the weft feeder. • Maintaining the Water pressure as needed • Attending the breaks and restarting the looms, while correcting any half pick or full double pick. • Keeping the machine always clean • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Knowledge about the working of the Water Jet Looms • Knowledge about the shade differences and the weave of the fabric • <i>Basic motions of Water-jet looms</i> • <i>Study of Let-off, Take-up, Weft selector and warp stop motions, Dobby motions, selvage motions, water-pressure controls, relay nozzles, main nozzle, profile reed, Cloth drying systems, etc.</i> • <i>Fabric defects, their causes and remedial measures</i> • Communication and data presentation • Safety precautions in a weaving mill • First aid and fire fighting.

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Air Jet looms	12
Weft cones	As needed
Drawing hook	20

1. Module Name	Loom fitter
2. Sector	Textiles - Weaving
3. Code	WVG 716
4. Entry Qualification	Minimum 7th Standard and 14 years of age
5. Terminal Competency	After completion of the course, the trained person would be able to attend all types of maintenance activities like loom erecting, overhauling, oiling, repairing and maintaining spares for looms.
6. Duration	500 hours

7. Course content:

Practical Competencies	Under pinning Knowledge (Theory)
<ul style="list-style-type: none"> • To understand the looms in the shed and the salient features and precision needed in their settings and timing. • To erect and level the looms, assemble the parts and tune the loom. • To attend the mechanical repairs as needed. • To audit the machine condition and indent for spares well in advance. • To bring oil and grease from the stores as per gradation and number. • Clean the oil path and oil the parts of the loom • Wipe the surface of the oiled portion with a clean cloth while ensuring that there are no leakages of oils. • Cleaning the floor and the surroundings of the oiled area and the places of keeping oil cans or containers with clean cloths to prevent oil stains on the fabrics. • Maintain the stocks of essential spares in a safe custody and account of them. • Mock drill for fire fighting and first aid. 	<ul style="list-style-type: none"> • Importance of a loom, various mechanisms, and the precision needed in their fitting and timings for producing fabrics of require quality and get trouble free working. • Importance of lubrication and oiling • Precautions to be taken for oiling and lubrication • Standard Maintenance Practices and Productive maintenance, Maintenance schedules • Precautions to be taken during maintenance. • <i>Study of erection, leveling and assembling of loom parts</i> • <i>Study of inventory methods and procedures</i> • Safety precautions in a weaving mill • First aid and fire fighting.

8. Tools and Equipments for a batch of 20 trainees

Description	Quantity
Looms of different types	1 each
Maintenance tools	20 sets
Oils and lubricants	As needed
Clean hard wastes of waste cloths	As needed
Machine catalogue of all looms and equipments	1 set

