

NSDA Reference
To be added by NSDA

Name and address of submitting body:

Textiles Committee (Ministry of Textiles, Govt. Of India)

P Balu Road, Prabhadevi Chowk,

Mumbai -400025

Name and contact details of individual dealing with the submission

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List of documents submitted in support of the Qualifications File:

1. Career map of Airjet Loom Weaver
2. Airjet Loom Weaver Course Module
3. Format for RFP for Assessment Agency Accreditation from RSA
4. Assessment Protocol developed by RSA
5. Skill gap report for textile sector
6. Assessment Sheet
7. **Photographs and attendance sheets of course validation programs**

SUMMARY

Qualification Title	Airjet Loom Weaver
Qualification Code	TC WVG 04
2Nature and purpose of the qualification	A certificate course under ISDS (A project of Govt. Of India) Purpose: To convert a non worker (layman) into a worker (able to operate a Airjet Loom)
Body/bodies which will award the qualification	Textile committee (RSA) under the Ministry of Textiles
Body which will accredit providers to offer courses leading to the qualification	Ministry of Textiles/ Office of Textile Commissioner/ Resource Support Agency (Textiles Committee)
Body/bodies which will carry out assessment of learners	<ul style="list-style-type: none"> • Andhra Pradesh Productivity Council • Apparel Export Promotion Council • Axis Education Society • Base Research Consultancy services Private Limited • C.K.Skill Research & Development Ltd. • Centre for Recruitment and Selection Pvt Ltd • Crux Mangement Services Pvt Ltd • Eduworld Consultants Pvt Ltd. • Employable Skills Advancement Assessmetn and Certification LLP (ESAAC LLP) • Fashion Futures • Federation of Indian Chamber of Commerce and Industry (FICCI) • Federation of Indian Women Entrepreneurs (FIWE) • Human Potential Development Center • Induslynk Training services Pvt. Ltd. • Itcot Consultancy & Services Ltd. • K S Rangasamy Institute of Technology

- Kapokh Fibers & Industries Ltd.
- Manipal City & Guilds Pvt. Ltd
- Methods Apparel Consultancy India Pvt Ltd.
- Multi Skills Assessors Guild (MSAG)
- National Institute of Fashion Technology (NIFT)
- Nice Education & Welfare Trust
- Northern India Textile Research Association (NITRA)
- PSG College of Technology
- PVR Skill Central Pvt Ltd.
- Quibus Technologies Pvt Ltd
- Skills Training Assessment Management Partners Ltd. (STAMP)
- Sona Cotsyn Pvt Ltd
- Techno Tex Informatics Pvt Ltd.
- The Assessors Guild (TAG)
- The Associated Chambers of Commerce And Industry of India (ASSOCHAM)
- Trendsetters Skill Assessors Pvt Ltd.
- TUV SUD South Asia Pvt Ltd
- University of Calcutta

Remarks: All the above mentioned agencies are authorised to conduct assessment Textile and Clothing sector which includes the said qualification.

Occupation(s) to which the qualification gives access

Airjet Loom Weaver

Licensing requirements

N/A

Level of the qualification in the NSQF

2

Anticipated volume of training/learning required to complete the qualification

Not less than 300 hrs

Entry requirements and/or recommendations	The candidate should be able to read and write in any language)		
Progression from the qualification	From Airjet Loom Weaver to jobber in loom shed department		
Planned arrangements for the Recognition of Prior learning (RPL)	NA		
International comparability where known	N/A-		
Date of planned review of the qualification.	20 th September, 2018		
Formal structure of the qualification			
Title of component and identification code.	Mandatory/ Optional	Estimated size (learning hours)	Level
	Optional	(learning hours)	
Theoretical Knowledge to impart relevant basic technical information of the machines and it's operations	Mandatory	60	2
Practical knowledge of the course to understand the work practises and operating the machines.	Mandatory	210	2
Soft Skills to improve safety, behaviour, hygiene, attitude, etc.	Mandatory	30	2

Please attach any document giving further detail about the structure of the qualification – eg a Curriculum Document or a Qualification Pack.

1. Airjet Loom Weaver course module – Annexure 2

SECTION 1

ASSESSMENT

Body/Bodies which will carry out assessment:

- Andhra Pradesh Productivity Council
- Apparel Export Promotion Council
- Axis Education Society
- Base Research Consultancy services Private Limited
- C.K.Skill Research & Development Ltd.
- Centre for Recruitment and Selection Pvt Ltd
- Crux Mangement Services Pvt Ltd
- Eduworld Consultants Pvt Ltd.
- Employable Skills Advancement Assesmtn and Certification LLP (ESAAC LLP)
- Fashion Futures
- Federation of Indian Chamber of Commerce and Industry (FICCI)
- Federation of Indian Women Entrepreneurs (FIWE)
- Human Potential Development Center
- Induslynk Training services Pvt. Ltd.
- Itcot Consultancy & Services Ltd.
- K S Rangasamy Institute of Technology
- Kapokh Fibers & Indutries Ltd.
- Manipal City & Guilds Pvt. Ltd
- Methods Apparel Consultancy India Pvt Ltd.
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- Skills Training Assessment Management Partners Ltd. (STAMP)
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- TUV SUD South Asia Pvt Ltd
- University of Calcutta

These assessing agencies have been chosen through a transparent process after thorough scrutiny of the credentials presented in response to the two stage RFPs. All of them have prior experience of minimum 2 years of carrying out similar assessments in the field of textiles. On the directions of ministry, RSA has empanelled agencies from the different sector skill councils viz. Textile Sector Skill Council (TSC) and Apparel and Home Made-ups Sector Skill Councils (AMHSSC). An assessment protocol, in this regard has also been prepared and forwarded to all the assessment agencies so as to standardise the assessment process. The assessors of the above said agencies are approved for assessment only after thorough scrutiny of their (assessor) documents submitted by the agencies. In this regard, the agencies forward the fully filled Know Your Assessor (KYA) form along with requisite documents. The empanelled Assessment Agencies were allotted regions. The above exercise was done on the directions of Ministry of Textiles. Further, to maintain the quality in assessment, RSA occasionally conducts surprise checks to monitor the activities of assessment agencies.

How will RPL assessment be managed and who will carry it out?

NA

Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, consistent and fair and show that these are in line with the requirements of the NSQF:

- a) The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria.
- b) The assessment Sheets are developed by Subject Matter Experts (SME) available with the Resource Support Agency.
- c) The assessments sheets are also checked for the various outcome based parameters such as technical knowledge, soft skills, Practical Knowledge, & equipment requirement, etc.
- d) The assessments are designed so as to assess maximum parts during the practical hands on work. Duties and responsibility of a **Airjet Loom Weaver** are also assessed.

- e) The assessment agencies are instructed to hire assessors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit that they are not associated with any other assessment agencies or any training partner to avoid any conflict of interest, independence from commercial and other interests that would compromise impartiality of the assessments.
- f) The assessment agencies are instructed to Ideally have assessor with right mix of industry experience, academia and these are detailed in Assessment Protocol
- g) The documents of the assessors selected by Assessment Agencies are then forwarded to RSA for further scrutiny.
- h) The selected assessors are provided with unique assessor id by RSA as per the assessment protocol.

The assessment results are backed by evidences collected by assessors.

1. The assessor ensures that the attendances of the trainees are equal to or more than 60%.
2. The assessor needs to verify the authenticity of the candidate by confirming the biometric identity. In case of suspicion, the assessor should authenticate and cross verify trainee's credentials in the enrolment form.
3. The assessor collects the assessment summary sheet with signature of both the assessor and the Implementing Agency's coordinator after successful completion of the assessment.
4. The assessor also needs to carry a photo ID card.
5. The assessor verifies whether the training infrastructure is in compliance to the criteria as set by RSA.
6. The details on assessment are elaborated in the Assessment Protocol developed by RSA.

All accredited Assessment Agency follow the "Assessment Protocol developed by RSA". Each course module comprises of soft skills, theoretical part and practical and accordingly the assessment sheets are prepared. The marks for the theoretical and practical assessment, in total, are calculated and the candidates acquiring marks equal to or more than 60% are declared pass.

Please attach any documents giving further information about assessment and/or RPL.

Give details of the document(s) here:

1. Format of RFP for AA Accreditation from RSA- Annexure III
2. Assessment Protocol Developed by RSA – Annexure IV

ASSESSMENT EVIDENCE

Learning outcomes would be assessed separately for practical as well as theoretical knowledge by the assessment agency.

Title of Course Module: **Airjet Loom Weaver.**

Learning Outcomes			Total Weightage (in %age)
1. Practical Assessment	Identification of different parts of air jet loom.	4.36	48
	Identification of possible causes for breakage of yarn	4.36	
	Attending warp break.	4.36	
	Attending weft break.	4.36	
	Replacing beam and doffing of cloth roll	4.36	
	Correcting the fabric defects like wrong drawing, wrong denting, end out, double end etc.	4.36	
	Meaning of different signal lights on air jet loom.	4.36	
	Meaning of different parameters in the display of air jet loom.	4.36	
	Weavers Knot	4.36	
	Dos & Don't's in case of fire or any emergency situation.	4.36	
	Different warp and weft related contingencies	4.36	
		Weightage % 48	48

Title of Component: Airjet Loom Weaver

Outcomes to be assessed	Assessment criteria for the outcome
<p>Practical Outcome:</p> <ul style="list-style-type: none"> • Operating the Machine • Understand the signal lamps indications and work accordingly • attending warp and weft breaks • replacing beam • doffing of cloth roll • weaver's knot • correcting different types of fabric defects • drawing in 	<ul style="list-style-type: none"> • It will be observed by the assessor whether he/she is able to operate (switch on and off) the machine in presence of an experienced operator. • The assessor will ask him/her meaning of different signals in the machine by lighting false signals in presence of an experienced operator. • It will be observed by the assessor whether he/she is able to attend the breakages properly in optimum time or not. Example: The assessor will break the yarn and the trainee will be asked to restart the machine after mending the yarn. • After emptying of the beam, if situation comes, the trainee will be asked to replace it with a filled one. • After attaining the required weight and diameter, the trainee will be asked to replace the cloth roll with an empty one. • The trainee will be asked to tie weaver knot on the loom. • The trainee will be asked to remove the foreign particle, a type of defect, from the fabric, correct the double ends using comb etc. • The trainee will be asked to draw warp yarns through eyes of the heald frame.
<p>Theoretical Outcome:</p> <ul style="list-style-type: none"> • Basic textile terms • Knowledge of Different parts of machine and their functions • different types of fabric defects and their causes • different types of motion in an Power loom • Importance of colour coding. 	<ul style="list-style-type: none"> • The trainee will be asked different questions (given in the assessment sheet) about basic textile terms by the assessor. • The trainee will be asked about different parts of the machine like accumulator, purpose of air and their functioning e.g the nozzle, the reed etc. • Questions regarding different kinds of defects and their causes will be asked by the assessor. • The assessor will ask him/her how to operate the machine and different type (without showing him/her the machine). • Questions regarding meaning of different colours codes will be asked.

Safety precautions	Different questions regarding shift change (example: how you will give the charge to the next operator) and safety precautions like how to wear the protective gear properly, use of first aid etc. will be asked by the assessor.
Means of assessment 1 Questionnaire and practical observations (attached as Annexure VI)	
Means of assessment 2 N/A	
Pass/Fail Qualified or Not qualified. Only after qualifying the certificate will be awarded.	

SECTION 2
EVIDENCE OF LEVEL
OPTION A

Title/Name of qualification/component: Airjet Loom Weaver		Level: 2	
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
Process	A Airjet Loom Weaver - gets work (programme) allotted by his supervisor and is responsible for Operating the Airjet Loom Weaving machine and carrying out all activities on the Airjet Weaving machine like Mending of broken threads, drawing in practices and functions of various part of the machine, in addition, he/she would be able to perform emergency control, etc of machine, and carries out regular cleaning of machine to ensure the proper working and required productivity.	The processes like the drawing in, mending of broken threads, doffing of cloth roll are repetitive and this is done on a regular basis with a little of application of understanding like the operator should draw the yarns as per design. Mending the breaks, doffing etc. require practice so as to work efficiently.	2
Professional knowledge	A airjet Loom Weaver should be able to know the process and material flow, functioning of different parts of machine and their controls and guidelines for operating the machine, etc. Understanding the various kinds of fabric defects, mending of broken threads, reasons for loom stoppages etc. Importance of quality and productivity and importance of proper handing over shift and taking over shift is very important for efficient production. Able to follow the SOP and safety standards, etc. maintained by the company.	After having training in this course the operator will have the knowledge of different types of yarn, drawing in pattern, denting order, different tools like comb, hook to pick the broken ends, cones, drop wires and their applications like why drop wires are used, why hooks are used etc. The operator understands context of work and quality like if there is not proper drawing in or no proper denting it will affect the quality in the final product i.e. in fabric.	2
Professional skill	The operator takes charge of shift and operates the airjet loom machine on routine basis as instructions from supervisor.	Limited service skills used in limited context like operating the machine, doffing of cloth roll etc.; assist in professional works with no variables; differentiates good and bad quality like how to draw the yarn, denting of yarn etc to get the required design	2

Title/Name of qualification/component: Airjet Loom Weaver			Level: 2
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
		in the fabric.	
Core skill	This operator writes clear and short sentences, comprehends written instructions, communicates with the supervisor appropriately and talks to others to convey information effectively.	Receive and transmit written and oral messages like the operator received written instruction from the shift officer and transmit them to the fitter or the lab guy as required. The operator knows basic calculations like addition, subtraction etc. and he uses the same for counting of yarn and other calculations.	2
Responsibility	This operator takes charge of the shift after discussing in the issues faced with respect to the quality, production and safety, reports to his shift superior about issues faced in his shift and leaves the department. He works under instructions with close supervision. He contributes in making the work place healthy, safe and secure and follows the industry & organizational compliances.	As the worker leave the premises after discussing the issues faced during the shift, no responsibility lies on the operator. The shift supervisor takes up the matter and resolves the problem, if any. The operator works under instruction and close supervision. The operator operates the machine and does the waste collection, drawing in, denting etc. as instructed by the supervisor.	2

SECTION 3

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

Different course validation programs were conducted the details of which is mentioned below:

1. Validation program of Spinning and Weaving course modules developed by RSA was conducted at Coimbatore (Ref. RSA fortnightly report as on 29.05.2015 to MoT).
2. Validation program of Processing, Knitting and Apparels course modules developed by RSA was conducted at Tirupur (Ref. RSA fortnightly report as on 29.05.2015 to MoT).
3. Workshop on course content validation was held in New Delhi on 29.06.2015.
4. One day orientation program on course content and assessment on 13th August, 2015 was conducted in New Delhi.
5. Two validation programs were conducted at Ludhiana and Panipat on 2nd June, 2015 and 03rd June, 2015 respectively.
6. Industrial consultation workshop with the stake holders, traders and industry for course content developed by RSA was organized on Saturday. 31.05.2015 at Coimbatore for validation.

Participants from Industry, Implementing Agencies and Assessment Agencies participated in the validation programs. Based on the feedback from participants **suitable modifications in the course module were incorporated and also** some more modules were developed.

List of industries involved in the Validation process:

- SITRA, Coimbatore
- Tasma, Bindigul
- ALPINE Knits India Pvt. Ltd.
- NIFT, Tirupur
- Nitin Textiles Pvt. Ltd., Dindigul
- Saravana Spg. Mills Pvt. Ltd. Dindigul
- Gomathi Spinning Mills, Tirupur
- Quantum Knits
- G K Consultancy
- BRT Spinners Pvt. Ltd.
- Sky Cotex India Pvt. Ltd.
- KCT, Copimbatore
- Raghav Industries limited
- Textile Technology Kumaraguru College
- NIFTTEA College, Tirupur
- CBC Tirupur
- SCM Textiles
- Sri Karthikeya Spg. Mills
- ELLITE Textiles
- Aatharva Garments
- ATDC-ERODE
- ATDC-Tirupur
- Santhosh Spg mills

- Sri Venkateshwara Spg. Mills
- Venilakshmi Mills
- Hi Tech Spg. Mills
- Sunder Textiles
- SISPA
- Bhaskar Foundation
- CMAI-Mumbai
- ALT Kanpur
- RSWM, Banswara
- RSWM, Bhilwara
- Modelama Exports
- Textile Association Delhi
- Matric Clothing Pvt. Ltd (ASDA)
- NEED
- Institute of Jute Technology, DJFT, CU
- Dhruv international pvt. Ltd.
- Shri lakshmi Cotsyn
- NTC- New Delhi
- AMH-SSC
- Laj Exports Ltd, noida
- Technopak Advisors Pvt. Ltd.
- Wazir Advisors
- Golden Trends Pvt. Ltd.
- IL&FS Clusters
- SPINFED Odisha
- Orient Craft Limited
- India Fashion
- U K International
- Shivalik Prints
- Feather Touch
- Sampada tex
- Kapoor Industries panipat
- Paliwal Industries
- Rivira Home Furnishings
- Dashmesh Jacquard and Powerloom
- Mittal Industries
- Anand International
- Harisons Overseas
- Khurana Furnishing Pvt. Ltd.
- R H F Pvt. Ltd.
- ESSKAY Enterprise
- Hometex Design
- Abhishek Textiles
- R P Overseas
- FAZE3

What is the estimated uptake of this qualification and what is the basis of this estimate?

As per the report of NSDC on Human Resource and Skill Requirement in Textile and Clothing Sector (2013-17, 2017-22) (Annexure-5): Currently, 15.23 million people are employed in the textile sub-sector across yarn and fabric, home textiles, technical textiles and readymade garments. Human resource requirement in the sector is expected to reach 21.54 million by 2022 translating into 6.31 million additional employment opportunities during the period 2013-22. Also the National Textile Policy aims to create 35 million jobs and achieve exports worth INR 18 lakh crores by 2024-25 with the help of investments. Draft proposal for the same was submitted by expert panel constituted by the government on 28th July, 2014.

What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF?

QPs for Job Roles of various related SSC's were studied to ensure that there is no duplicity for the claimed levels i.e. level 2. There is no similar qualification at level 2 for making a non-worker to worker. However Textile & Handloom Sector Skill Council (TSC) has similar QP at level three which is namely Shuttle-less loom weaver-airjet

What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be reviewed or updated?

Version 1 of the courses has been prepared and uploaded on Textiles Committee website and next version will be prepared by September 2018. Feedback for the courses will be collected 6 months prior to the revision and format for the said purpose will be prepared and uploaded to TC website for receiving the comments from the stake holder for any change, if required, in the said course. Further, the feedback form will be sent to all the Implementing Agencies under MoT for their necessary comments before taking the exercise of revision of version-1.

After receiving feedback and compiling the same the necessary amendments, if required, will be made and all the course will be revised by the team of experts in the domain field.

Please attach any documents giving further information about any of the topics above.

Give details of the document(s) here:

1. Skill gap report for textile sector_2008-2022– Annexure 5

**SECTION 4
EVIDENCE OF PROGRESSION**

What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?

Please refer to attached career path as per annexure 1 which clearly defines the career path.

Career map of Airjet Loom Weaver:

By acquiring this qualification the operator will be able to operate Airjet Loom machine. After giving some extra training, the operator will be able to operate other Looms like Waterjet Loom, Power Loom (Shuttle loom), Projectile Loom etc.

