

Development of Classification and Assortment of National Average Fabrics and Technology of Manufacture of HON-ATLAS Tissue using the New Structure of the Battan Mechanism

P.S. Siddicov, Yu. A. Maxmudov, Sh.X.Madraximov. S.I.Urinova

Doctor of technical Sciences Tashkent Institute of textile and light industry, Tashkent,Uzbekistan
PhD Tashkent Institute of textile and light industry, Tashkent,Uzbekistan
PhD Tashkent Institute of textile and light industry, Tashkent,Uzbekistan
Aspirant Tashkent Institute of textile and light industry, Tashkent,Uzbekistan

ABSTRACT:In article are brought designed categorization national avrova fabrics type "Hon-atlas", "Adras", "Snipe", "Banoras", raised by demand used in republic of the Central Asia and for his(its) limit. Broughted technology and particularities of the fabrication fabrics "Hon-atlas" as well as calculation amount processes of the dyeing depending on amount colour on drawing.

KEYWORDS:Natural silk, Avrband, Avrova drawing, «Hon-atlas», «Adras», «Beqasam», «Banoras», libit, Avrova thread, threads of the warp, libitlibit-warping drum, Avrovadraving in ffrbrics, Avrova fabrics.

Fabrics pertain to avrovafabrics, beside which threads of the base and duck are painted before weaving moreover dyeing of the threads of the base is produced avrband by way [1]. This way allows to get in fabrics bright, juicy, ornament drawing with fluent lancet by transition along base from one colour to the other.

Produced avrova fabrics Republics to Central Asia depending on applicable cheese for base and duck possible to divide into the following groups:

- fromnatural silk (NSH);
- warp from NSH, weft from rayon silk (RSH);
- warp from NSH, weft from cotton wool yarn (C/W) yarn;
- warp - silk yarn (SHY), weft from C/W yarn;
- warp end weft from RSH;
- warp end weft from C/W yarn.

In table - 1 is brought waping by sections to factors fabrics for the first, vtoroy, the third and sixth groups. From table - 1 is seen that maximum width worked out avrova fabrics 93 cm to. The Width some type fabric, provided in table, forms 40-55 cm. to. Increase the width renders the negative influence upon quality and exterior these fabric. The Width fabrics is connected with length of the technological process. . This is explained that that at fabrication of the threads of the base, she is subjected to the avrband a way around bunch threads libits on program for dyeing and receptions its figurative drawing fabrics. Increase report a drawing is connected with amount of the threads of the base. Also, the increase pattern drawing influences upon exterior fabrics.

The Categorization avrovafabrics depending on applicable cheese is brought on fig. 1. a).

Table -1.

Leading-in to factors for first, third, fourth and heel of the groups fabrics

№	Factors	Unit. meas.	Namefabricsandarticles			
			1-t	30-t	Adras	Alras
1	2	3	4	5	6	7

1.	Width of the leading in fabrics	cm.	78	93	48	45
2.	The Raw material: Warp Weft	tex	NSH 3,23x2	NSH 16,6	NSH 3,23x3	C/W 25
		tex	NSH 3,23x2	RSH 3,23x2	C/W 25x2	C/W 25
3.	Amount of the threads of the warp on 10cm	Thread	720	480	160	150
4.	Amount of the threads of the weft on 10cm	Thread	400	330	120	150
5.	Amount of the threads of the warp: background edge	threadthread	5544	4416	746	663
			108	64	12	12
6.	The Amount of the threads penetrated in teeth reead: background edge	threadthread	4	3	2	1
			6	4	2	2
7.	Nambe reed	Teeth/dm	180	160	80	150
8.	Entanglement	-	Atlas	Atlas	Linen	Linen
9.	Amontheddle frama	Amount	8	5	2	2

The Categorization avrovых fabric (the rice. 1.a) shows that fabrics "Hon-atlas" изготавливаются from threads NSH. Fabrics "Adras" are basically made from threads NSH in warp, from torsion C/W yarns in weft. At the last years determined groups fabric "Adras" make and from purely C/W yarns.

Fig. 1. b) is brought categorization produced avrova fabrics depending on applicable cheese for weft and warp.

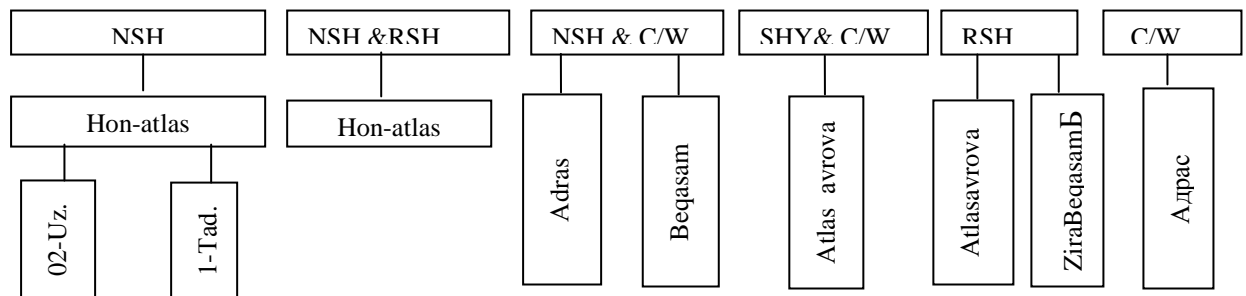


Fig. 1. a) Categorization avrova fabrics depending on applicable cheese.

Fig. 1. b) is brought categorization produced avrova fabrics depending on applicable cheese for weft and warp.

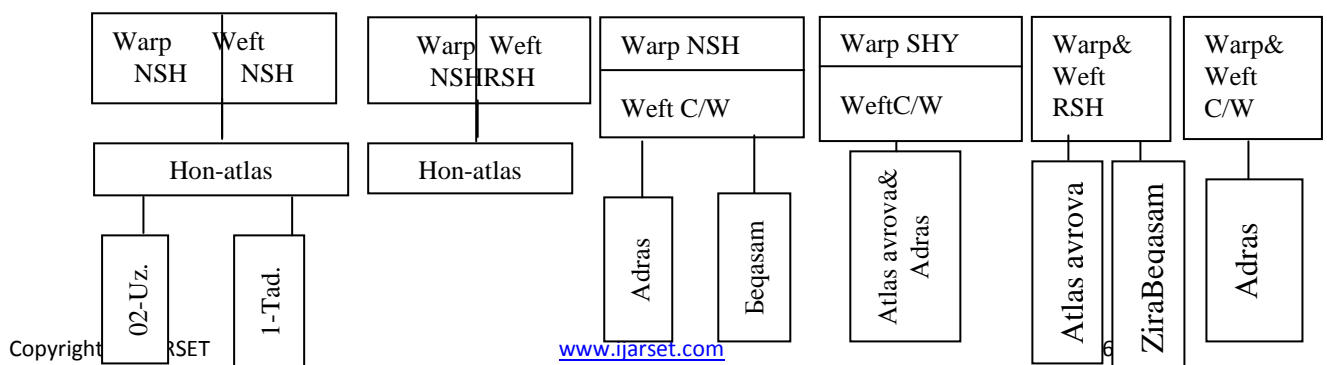


Fig. 1. b) Categorization avrova fabric depending on applicable cheese for warp and weft

Fig.1.6) is seen that, in warp and weft fabrics "Hon-atlas" were used threads from NSH, but at the end XIX age for weft have begun to use the threads of the rayon (RSH). For fabrication fabrics "Adras" and "Beqasam" as threads of the warp is used NSH, but threads weft - C/W yarn.

Avrova fabrics "Atlas" and "Adras" possible work out from silk yarn for threads of the warp and from C/W yarns for threads weft. For production simple Avrova atlas and "ZiraBeqasam" as threads of the warp and weft are used threads from RSH. At the last years for fabrication fabrics "Adras" is used raw material from threads of the clean pat, herewith for threads of the warp use more low linear density, than for threads weft.

Also, to improve the fabrication conditions for the weaving loom, a new design of the crane mechanism was developed [2]. Technology production avrova fabrics labour-consuming: comprises of itself more than 20 main labour-consuming technological processes. Depending on underlying hardware are at present used different technologies of the fabrication avrova fabrics. Each of afore-cited type fabric has its specific particularity and is made on different technology. The Technological process of the fabrication avrova fabrics type "Hon-atlas" is brought on fig. 2. and fabrics is brought on fig. 3.

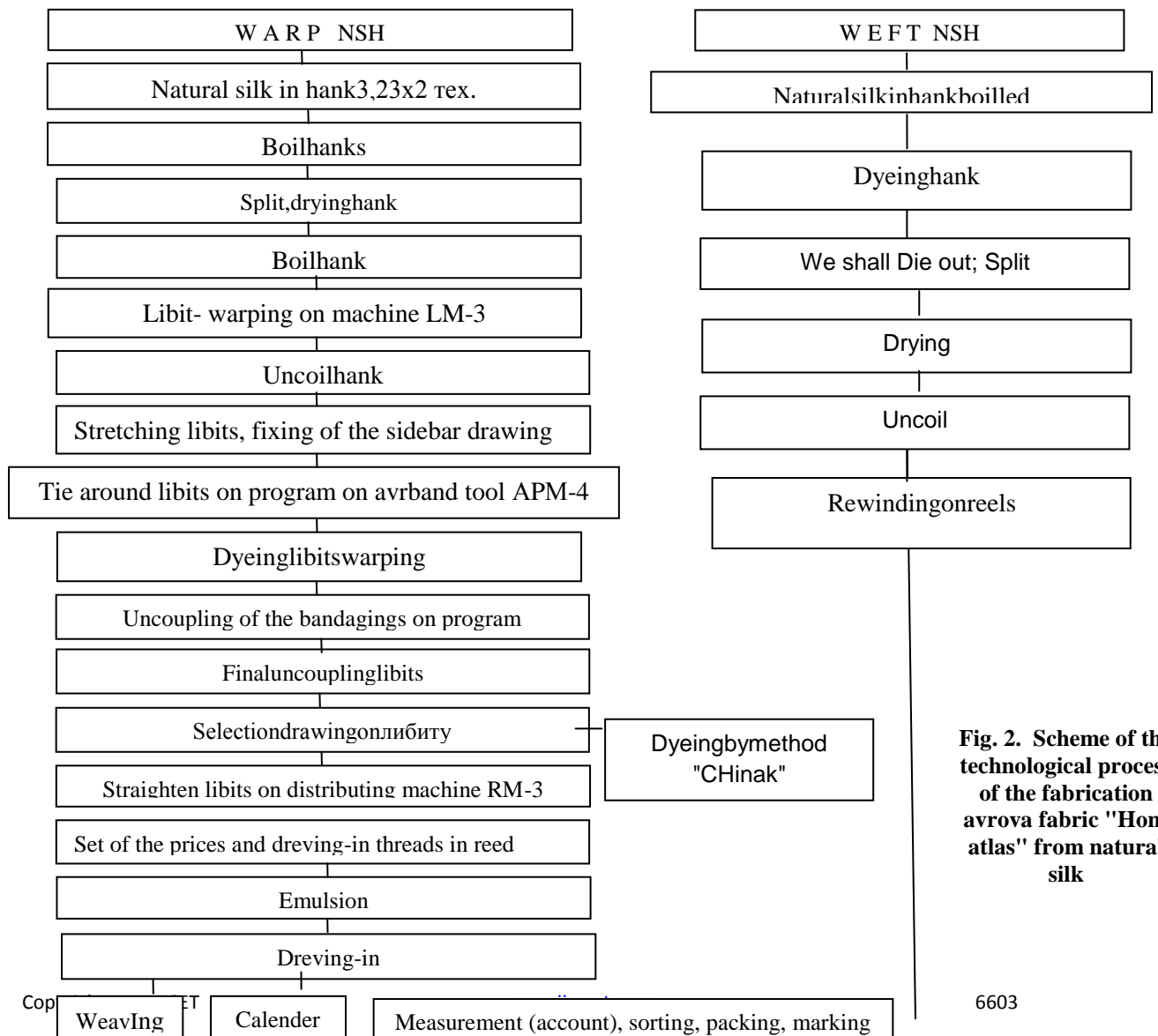


Fig. 2. Scheme of the technological process of the fabrication avrova fabric "Hon-atlas" from natural silk



Fig.3. Sample avrova fabrics "Hon-atlas" from natural silk

When preparing the threads of the warp and weft beforehand are subjected to the boil for the reason removing sericin. Threads of the base are subjected to libit- warping, under which bunch of the threads(20-100 threads in one libit), named libit, are reeled on drum, which perimeter forms 4-5m.

Amount либитов in base is defined:

$$K_{lib.} = n_{warp} / n_{thr.lib.}, \quad (1)$$

where $K_{lib.}$ - an amount in libit; n_{warp} - an amount of the threads in warp; $n_{thr.lib.}$ - an amount of the threads in libit.

In the world exists 5 types of warping threads of the warp: 1- party warping, 2-band, 3-sectional, 4- full, 5- tibits-warping. For all type warping it is received formulas for determination volume threads under warpings on warping drum except libit-warping. The Relationship with this us it is received are offered formula [3] for determinations of the volume of the threads on libit-warping drum.

The Volume of the threads libit is defined on formula,

$$V = 4R \cdot a \cdot h, \quad (2)$$

where R - a radius of the drum libit-warping of the machines; a - a width libit; h - a height wind libit.

In the work [4] are considered not springy features of the threads of the natural silk in libit.

After libit warping on threads of the warps are inflicted sidebars avrova drawing. For this several groups of ten libits, forming one base, place on manual avrband tool and inflict the sidebars a drawing, beforehand sprained libits. After fixing of the sidebar drawing libits enter in avrband shop, where area libits, not subjecting to dyeing, are insulated around.

Around and dyeing libits are repeated as much once as colour in avrova drawing. After final dyeing in necessary colour libits come untied. Is selected and is completed base on drawing.

Libits take seats on straighten to machine, where is formed drawing, and are reeled on intermediate platen. Is it Then produced set of the prices and penetrate threads in reed. Then warp passes the process of the driving (yorma), is reeled on weaver's platen with division of each threads. Weft also is subjected to the отпарке, is painted in necessary colour and unwinds on elaborate package

For increasing of wear capability base emulsion, then threads steal in галева heddle frama, teeth reed, are reeled on weaver's platen. Production fabrics is produced on automatic or manual looms. Worked out fabrics is subjected to calender, but preparing fabrics is subjected to the process measurement, (the account), sorting, packing and marking.

CONCLUSIONS:

1. They are organized analysis assortment avrova fabrics изготавливаемых in region of the Central Asia and designed categorization avrova fabrics depending on applicable cheese and threads of the warp and weft.
2. It is brought scheme and particularities to technologies of the fabrication fabrics "Hon-atlas" from threads NSH.
3. It is brought particularities of the calculation amount libits and volume of the threads libit on existing drum libit-warping of the machines.



ISSN: 2350-0328

**International Journal of Advanced Research in Science,
Engineering and Technology**
Vol. 5, Issue 8, August 2018

REFERENCES:

1. Pathullo Siddiqov, Nodira Yusupova. National avrova fabrics and peculiar production technologies. Innovation for sustainability- harmonizing science, technology and economic development with human and natural environment Tashkent. «Ilmiy texnika axboroti-press nashriyoti». 2016, pp. 87-92.
2. Siddikov P.S., Madrakhimov Sh.H., etc. "Batan mechanism of the loom" Patent Uzbekistan Republic FAP 01193, April 28, 2017, Bul., №. 4.
3. Patkhillo Siddikov. Оптимизация технологических процессов и параметров при изготовлении национальных авровых тканей. Дисс. ... докт. техн. наук. – Ташкент, 2017. – С. 48-75 .
4. Patkhillo Siddikov. Defining hard wearing characteristics of threads with permanent coefficient. Seattle, USA. Icet international center for education & technology. 2014, pp. 116-118.