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Study on different types of knitting faults occur in knitted fabric.

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Advance in Fabric Manufacturing Technology

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Declaration

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Acknowledgment

My university has given me the wonderful opportunity to play out my endeavor work. From the start, I need to loosen up regard to Prof. Muninnul haque, Head of the Textile Department and professor, Dr Mahabubul Haque of the college, to give me the exceptional opportunity to fulfill of this endeavor work. Extraordinary much appreciation goes to Textile experts of Industries APS sew composite ltd from which I accumulate the example. I need to perceive my significant commitment to all instructors of my University and especially of 'Surface Manufacturing Technology' office for their help and kind inspiration, Finally, I like to get a kick out of the opportunity to recognize that I remain responsible for the inadequacies, deficiency and errors, which surely remain.

ABSTRAC

On this assessment was done particular sorts of single and twofold pullover machine issues and this article are loped around wastage and how such a deficiencies can be diminished. I similarly focused about different sort of issue those are face to done by the machine running. I get some issue. The main problem of such machine are wastage. I get some shortcoming in coloring and some other in completing which I discover and doing create of that flaws .I plate how I decline the wastage of surface. Investigate the particular kind of existing strategy and making method of that shortcomings. It was exceptionally hard to discover that issues and creating them similarly. However, in this exploratory work I realize how to do it and on the off chance that I face any difficult how to defeat that. For this examination I gathered distinctive example of normal weave texture issue and some quality investigation sheet done in 4 point framework technique from two rumored material industry. From the outset examination the information from the quality assessment sheet and afterward dissected how changing the line length impacts on the expanding or diminishing of significantly happened deficiencies on dim knit fabric.

Keywords: single jersey, double jersey and rib faults.

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Chart of fault existing and developing process

Pie chart of finishing faults

CHAPTER 1

INTRODUCTION

INTRODUCTION

In the area of material movements there has been stores of undertaking proceeding to discover persuading replacements regarding various materials to meet the essential requesting of garments. Material is the most improvement capable bit of the world. Bangladesh is the second most noteworthy pieces of articles of clothing surface passing on nation of the world. Bangladesh essentially passed on 2 kinds of surface weave surface, woven surface. Eventually Bangladesh all around passed on denim thing. Denim is one sort of woven surface. Bangladesh trade 60% sews thing and 40% woven thing. Sew thing are two sorts single shirt and twofold pullover.

Before long right now world market progression made very much arranged. Similarly, every body of the world should be quality full thing. Additionally, those nation things like this thing. Client is pulling in of them.

In sewing machine, the way toward passing on surface by moving reliable yarn into interlocking circles, each line of float hanging from the one quickly going before it. There are principally one bundle of yarn are utilized in sewing. Bangladesh make perpetual thing. By and large two kinds of

weaving thing are passing on in this nation. They are single pullover and twofold shirt.

There are different issue of passing on sewing thing. The important issue of passing on sewing thing is wastage. A huge extent of weaving thing are wastage in Bangladesh are each year. The vital explanation of wastage are bumbling work , old machine, machine imperfection , machine capacity , dust on machine and different other explanation . in the event that we defeat such an issue, we should produce our capability and we increment our preferred position . That is way we need to think the machine. movement of our work authority and quality. Furthermore, other than attempt to utilize credible

Objective of the Study

Textile is the primary earnable division in our nation. In this reason we should be endeavor to know everything about in this part. The target of our examination is discovering the distinctive sorts of flaws in sewing machine and to know how to those kinds of machine deficiencies are diminished.

To finish this point i know numerous flaws, which i get in single jersey m/c and Double jersey machine.

1. To discover single pullover and twofold shirt round weaving m/c blame.
2. To know what number of wastage of single pullover and twofold shirt round weaving m/c and how might we decrease whose kinds of wastage.
3. Whether the weave texture deficiencies increment or decline with the difference in m/c DIA, Gauge, and GSM.

4. TO lessen existing deficiencies and increment creating process.

CHAPTER 2

LITERATURE REVIEW

Knitting:

knitting is the procedure of creation texture by moving persistent yarns into interlocking circles, where each line of circle dangling from the one quickly going before it.

Knitting can be divided into 2 classes. These are-

1. Circular Knitting
2. Flat Knitting

Circular knitting are also classified into 2 ways.

The main Forms of Knitting are

1. Weft Knitting
2. Warp Knitting

Weft Knitting:

Weft knitting is the cycle by which 1 set on yarn is utilizing. Weft weaved texture structure string runs level way and circle created by one string. It has profoundly flexible and exceptionally wrap attributes structure. It has appropriate for under and external articles of clothing. It tends to be both level and cylinder structure

Weft knitted fabric can be classified into two classes. These are

1. Single Jersey or Plain Jersey Fabric

2. Double Jersey

There are some important and most popular characters of single jersey fabrics are given below:

- 100% single jersey.
- Single Pique
- Single Lacoste
- Polo Pique/Double Pique
- Terry Fleece
- Fleece etc.

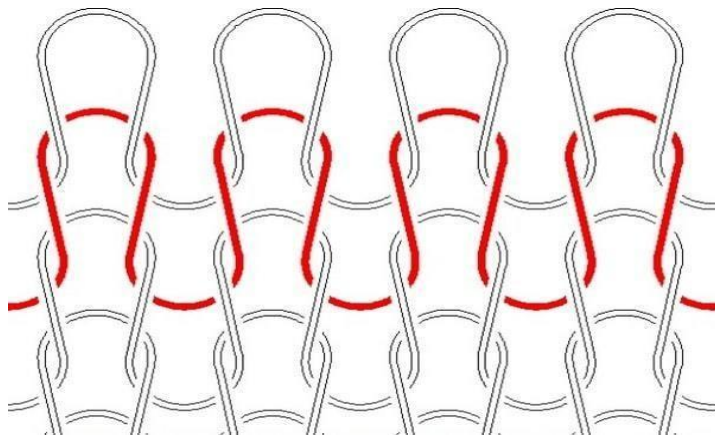


Fig 1: courses and wales'

Double jersey fabric can be classified into two classes. These are

- a. Rib Fabric
- b. Interlock Fabric

Warp Knitting:

If there should be an occurrence of twist weaved structure, the work is advanced by length astute, through the intermeshing of circles toward rib. Each circle the even way produced using distinctive string in twist sewed structure. The benefit of this texture structure that it isn't effortlessly unroll. In this way, it has less flexibility qualities from weft

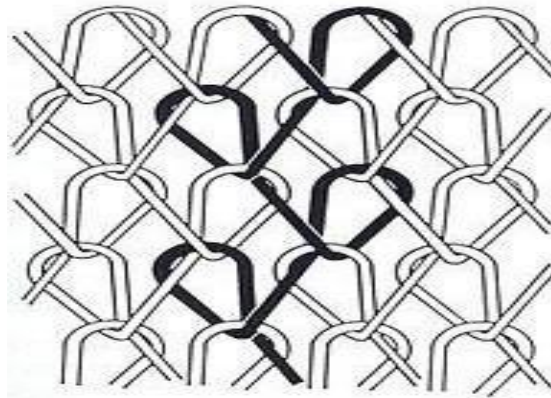


Fig 2: Warp Knitting

Terminology & Definition

Course and Wales's

. knit fabric are made by 2 way. These are called course and Wales. Ribs is produce by vertical yarn and Course is delivered by even yarn.

The ribs line are fixed by the machine measure. This are fixed and the coarse lines can be changed by changing in the machine. It's called Texture

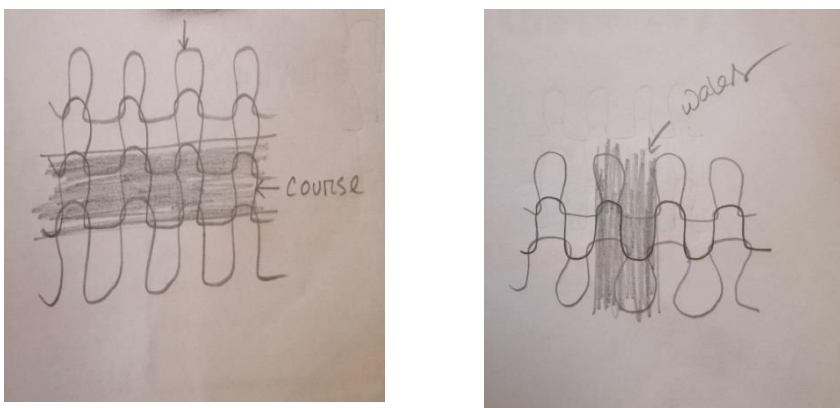


Fig 3: Course and Wales lines of Knitted Structure

2.2.2 Course per inch

it is counted by placing an inch glass (counting glass) on the fabric and counting the number of courses are contained within the area. These values may be vary if the fabric is distorted.

Wales per inch

Wales per inch are measured by placing an inch glass (counting glass) on the fabric and counting the number of Wales, which are contained within the area. These values may be vary if the fabric is distorted.

Needle Gauge

Needle Gauge is indicated by the Number of needle contained in per one inch of the needle bed in weaving machine.

All out number of needles can decide by the assistance of needle dressing. The recipe is given beneath

$$\text{Number of Needle} = \Pi \times \text{machine diameter} \times \text{machine gauze}$$

Machine Gauge

Machine gauge are communicated by the quantity of needles in a unit length of the needle bed. The needle bed may level or roundabout. If there should arise an occurrence of round twofold sewing machine it utilized for chamber just as dial. It is meant by letters in order "E". The equation is given beneath

$$\text{Machine Gauge} = \text{No of needle/inch}$$

Study of Knitting Machine

Circular knitting machine

Circular knitting machines, which make the surface for internal and over wear purposes. These sort machines are commonly used for weaved surface makers to address the issues of clothing and material industry. Round weaving machine is the fundamental choice all through the sewing industry for its effectiveness and usability. Round weaving machine has yarn creel, which is used to put the yarn cone, where the yarn is given to the machine, through line. By then the yarn the experiences moving needles by yarn direct which are constrained by chamber and cams. Cam are delivered in consistence with suggested quality rules using high-audit material. It has been made and arrangement.

There are different sorts of round sewing machines utilized in material industry. For example,

* **Single** jersey circular knitting machines.

* **Double** jersey -

1. Rib

Machine

2. Interlock

Machine

* Flat bed-knitting machine-

Parts of knitting machine and their function:

Table 1: Parts of knitting machine and their function:

Serial No	Parts Name	Function
1	Needle	To expand the string and making new circle in like manner pass the new sliced through the old circle.
2	Sinker	The essential limit is to hold the old circle and help to course of action of new circle.
3	Creel	It is use to hold the yarn package.
4	Yarn guide	The guideline limit of this is to control the yarn real way.
5	Knot catcher	To hold the buildup and other extra degradations in like manner tie. Simply grant yarn experience this.
6	Positive wheel	To support the express proportion of yarn keeping genuine strain and assurance even yarn feed.
7	Sensor	To stop the yarn in the wake of breaking a single yarn as result machine will stop.
8	Indicator light	The limit of this device is to recognize the feeder or wheel put where yarn break.
9	Ceramic yarn guide	To guide the yarn properly to the feeder.
10	Yarn feeder	To sustain the yarn to the needle for circle.
11	Sinker Bed	This is making to hold/place the sinker.
12	Sinker Cam	To make sinker path also give up and down motion properly.
13	Cylinder	To catch and place the needle in right position.

14	Base plate	To catch and place the cylinder properly.
15	Needle Cam	To clear a way for needle for quickening through in the chamber as per the texture development..
16	Nozzle	To throw the oil into the cylinder for better movement also reduce friction.
17	Blower Fan	Removing dust from the cylinder and feeder wheel by air blowing.
18	VDQ pulley	To control the GSM also change the stitch length.
19	Take up roller	To winding the fabric after producing in even direction.
20	Tensioner Roller	Maintain the tube fabric tension during winding.
21	Lycra feeder	To nourish Lycra to the machine with proper direction.
22	Toothed Belt	To transfer the motion from the VDQ pulley to the positive feeder.
23	Cylinder Brush	To clean dust from the surface of the cylinder.
24	Fabric detector/sensor	To check any kind of split in the texture in the event that it is found in the machine, at that point machine will stop.
25	Wastage oil pot	To store additional and wastage oil.
26		To set the motion of take up properly.
27	Fabric spreader	To make strain width insightful way of texture during make an up move.
28	Off switch	To halt the machine.
29	Start switch	To launch the machine
30	Jog switch	To rotate the machine slowly
31	Handle	To control the cylinder.
32	Tension pulley	To maintain the tension of toothed belt.

CHAPTER 3

MATERIALS AND METHOD

3.1. Materials:

Cotton (100%) and Gray Mélange (5%) yarn was utilized for delivering Rib and Interlock, s/j texture. These texture were gathered from Jaybird Composite Material Ltd businesses and gathered texture flaws from s/j, rib, interlock

Method:

Knitting faults are produced by 3 ways we know about them below:

: Issue occur during knitting in horizontal line

1. Barrenness
2. Imperfection
3. Contamination
4. Snarls
5. Spiraled

: Issue occur during knitting in vertical line

1. Hole
2. Sinker line.

: Faults occur by machine

1. Drop stitch
2. Broken ends
3. Fabric press off

: Issue occur when knitted fabric dye

1. Uneven dye
2. Dye spot
3. Pilling
4. Soda spot.

: Issue occur during finishing

1. Skew,
2. Slitting fault,
3. Crease mark,
4. Oil mark,
5. Line mark,
6. Burning effect,
7. Chemical spot,
8. Sewing fault

Drop stitch:

Drop Stitches are aimlessly giving off an impression of being near nothing or enormous openings of the, same or different size, which show up as imperfections, in the Knitted surfaces.



Fig7: Drop stitch

Causes:

1. High Yarn Tension
2. Yarn Overfeed or Underfeed
3. High Fabric Take Down Tension

4. Deterrents in the yarn segment, due to the ceasing up of eyelets, yarn aides and weight plates, with wax and pad, etc.
5. Deformities like; Slobs, Naps, Knots, etc.
6. Erroneous gap between the Dial and Cylinder rings.

Cures:

1. Guarantee uniform yarn weight on the entirety of the feeders, with a Tension Meter.
2. Pace of yarn feed should be out and out regulated, as shown by the necessary Stitch Length.
3. The surface chamber should be a lot of identical to a completely broadened inflatable, not tight or pointlessly slack.
4. Eyelets and the Yarn Guides, ought not have, any strands, help and wax, and so on stuck in them..
5. The yarn being utilized, ought to have no blemishes, similar to; Slobs, Naps and enormous gatherings, etc.
6. The opening between the Cylinder and the Dial should, be effectively changed, as shown by the sewed circle measure.

Barrenness:

Causes:

1. High Yarn Tension.
2. Count Variation.
3. Mixing of the yarn parts.
4. Package hardness assortment.



Fig 8: Barrenness

Cures:

1. Ensure uniform Yarn Tension on the entirety of the feeders.
2. The commonplace Count arrangement in the part, ought not be more than ± 0.3
3. Assurance that the yarn being utilized for Knitting is of a similar Lot/Merge no.
4. Assurance that the hardness of, all the yarn packs, is uniform, utilizing a hardness analyzer.

Streakiness:

Causes:

1. Yarn slippage on the IRO Pulley, because of the yarn sneaking in and out from underneath the IRO Belt, because of an inclined IRO Pulley.
2. Worn out IRO belts, yarn associates and eyelets, and so forth
3. Faulty twisting of the yarn gatherings

4. Yarn coming up short on the belt, on the IRO Pulley.

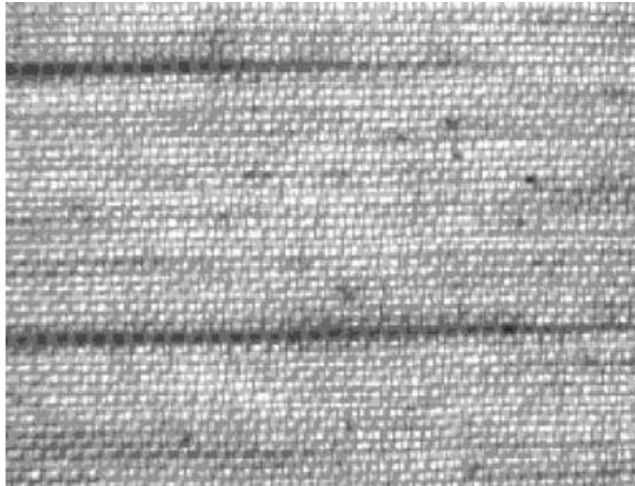


Fig 9: Streakiness

Cures:

1. Ensure exceptionally smooth, clean and prevention free portion of the yarn, through the eyelets, yarn and strain circles, and so on
2. No cuts or ruthless surfaces, in the Porcelain Eyelets, Yarn Guides and the Yarn Feeder openings, and so forth
3. Flawless twisting of the, Yarn Package (The yarn circles should deliver up easily, with no check)
4. The yarn should keep running added to the IRO assortment, between the belt and around the IRO pulley.

Snarls:

Snarls appear on the surface, as enormous circles of yarn getting twisted, as a result of the high bend in the yarn (Unbalanced turn yarn).

Causes:

1. High, curve in the, yarn.
2. Hosiery yarns are delicate bent. High, turn in the yarn, is the reason for growling.
3. (Snarls reason, texture surrenders and needle breakages).



Fig 10: snarls

Cures:

1. Ensure utilizing Hosiery Yarns, of the proposed T.P.M. in a way.
2. (Hold a couple gouches of the yarn in both the hands, as a 'U'.
3. The yarn has a reasonable bend, on the off chance that it doesn't will when everything is said in done pivot or turn, as a growl.
4. (Such yarn can be utilized for Hosiery applications.).

Contamination:

Causes:

1. Closeness of dead strands and other far off materials, for example, concealed filaments, husk and planned filaments, and so on
2. Dead Fibers show up in the surface, due to the, closeness of superfluous youthful Cotton strands, in the Cotton fiber trim.
3. Dead strands don't get concealing amidst Dyeing.
4. Presence of the external materials, in the, staple fiber blending
5. (Kitty, Husk, Broken Seeds, tinted filaments and strands like Poly Propylene, Polyester, Viscose, and so forth)
6. Dyed and different kinds of strands flying from the neighboring Knitting machines stick, to

the yarn being utilized for sewing and get, installed in the Gray Fabric.



Fig 11: Contamination

Spirally

Causes:

1. Use rich fiber blending for the yarns, to be utilized for Knitting, to have less dead strands, showing up in the surface.
2. Rigid control measures in the Blow Room, to keep the blending of far off issues in the Cotton blending.
3. Segregate the Spinning and Knitting Machines, with Plastic Curtains or Mosquito Nets, to keep the strands flying from the neighboring machines, from getting presented in the yarn/surface.



Fig 12: spirally

Cures:

1. Use the Hosiery yarns of the suggested TPM level for Knitting
2. (Hosiery yarns are delicate turned, alternately with the Warp yarns)
3. Fabric force or the Take Down strain, on the contrary sides of the dull surface chamber, on the weaving machine, should be similar.
4. Ensure uniform pace of feed of the concealed surface, on both the edges, while strengthening the surface to the Calendar, Compactor or Stented machines.

Needle line:

Cause:

1. Bent Latches, Needle Hooks and Needle stems
2. Tight Needles in the territories
3. Wrong Needle confirmation (Wrong movement of needles, placed in the Cylinder or Dial).



Fig 13: needle line

CAUSES

1. Inspect the faint surface on the weaving machine for any Needle lines.
2. Replace all the lacking needles having, bowed jolts, gets or stems.
3. Remove the filaments assembled in, the Needle traps (grooves).
4. Replace any bended Needles, running tight in the gadgets.
5. Check the Needle filling gathering in the Cylinder/Dial grooves (traps).

Sinker line:

Causes

1. Bent or Worn out Sinkers
2. Sinkers being tight in, the Sinker Ring grooves.



Fig 14: sinker line

Cures:

1. Replace, all the depleted or bowed sinkers, causing Sinker lines in the surface.
2. Sinker lines are fine and powerless vertical lines, appearing in the surface.
3. Remove the fibers, plugging up the Sinker traps (Grooves).

Oil line:

Causes:

1. Fibers and pad assembled in the needle traps, which remain sprinkled with oil.
2. Excessive oiling of the, needle beds.



Fig 15: oil line

Cures:

1. Fibers, gathered in the needle traps, cause the oil to sprinkle the Fabric.
2. Some lubing up oils are not wash skilled and can't be killed in the midst of Scouring.
3. Oil lines appear in the surface, in the long way course, regardless, following to hiding.
4. Remove the aggregate of the Needles and the Sinkers of the machine, fitfully. Pilling



Fig 16: pilling

Cures

Try not to use the Tumble Dryer.

- 1.(Control shrinkage by most obvious surface unwinding up and over feed in the getting ready)
- 2.Consistently glance at the surface contact spins around the whole of the machines, for any horrendous and sharp surfaces.

3.(Correct, at whatever point found savage)

4.Maintain a fundamental division from kept reprocessing of the surfaces.

5.Utilize threatening to pilling compound medications for the surfaces, slanted to pilling.

Bowing

Causes:

1. Uneven course of weights, over the surface width while, shading or finishing the surface.



Fig 17: bowing

Cures

1. Bowing can be corrected, by reprocessing the surface engaging it from the far edge.
2. A brilliant machine (MAHLO) is moreover open for, altering the bowing in the weaved surfaces.Shade variation

Cause

1. Shade arrangement might be happen by goodness of various fiber combining.
2. Shade grouping is caused due to variety in cycle limit like time, temperature, speed of surface roller, etc



Fig 18: shade variation.

Cures

1. Ensure the dim texture is utilized for one shade for same sewing item.
2. Ensure a similar cycle boundary like width, length.

Pin Hole damage

Causes:

1. Oxidization of weaving oil/oil in the surface amassing for a long haul.
2. Presence of sharp metallic part.
3. Presence of overpowering metal particles in peroxide shower



Fig 19: pin hole

Cures

1. Check the machine parts.
2. Provide magnetic filter in water.

Crease mark

Causes:

1. In sew shading wrinkle stamp is ordinary shading lack.
2. More cycle span.
3. Faulty plaiting contraption.
4. Incorrectly set bowed-expander.
5. Variation of warming and cooling rate.
6. Improper advancement of surface.



Fig 20: crease mark

Cures

Anti-creasing agent can protect crease mark.

Dye spot

Cause

1. These are as often as possible brought about by executives not precisely mixing and totally dissolving the shading stuff, in the ideal proportion of water
2. Color shower hardness.
3. Not aggravation of dyestuff.



Fig 21: dye spot

Cures

1. Use satisfactory sum sequestrate to bring down shower hardness
2. Legitimate unsettling.

Dead cotton dye

Cause

1. Absorption during process.
2. Poor quality cotton used.



Fig 22: dead cotton dye

Cures

1. Use good quality cotton.
2. Reduce absorption time.

Lycra burn

causes

1. Overflow warmth on the texture amid hit sitting.
2. Incorrect speed of stented m/c amid warmth setting.



Fig 23: Lycra burn

Cures

1. Provide correct temperature in setter m/c.
2. To keep correct speed of setter m/c.

Lycra out

Causes

1. Fail to catch the Lycra yarn by needle.
2. Lycra yarn breakage.
3. Faulty auto stop motion

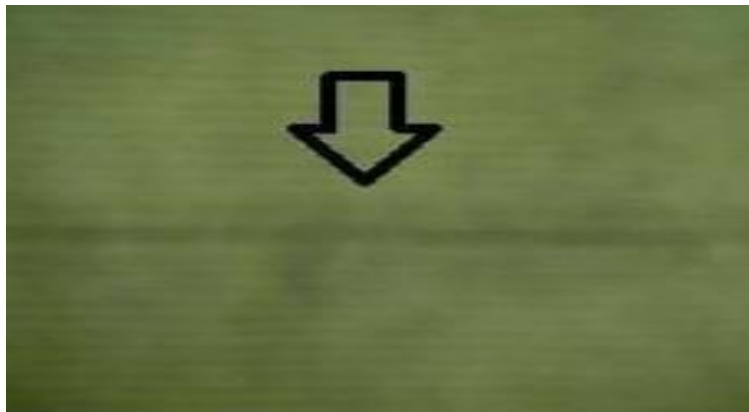


Fig 24: Lycra out

1. Ensure the feed of Lycra yarn to each needle.
2. The pressure of Lycra yarn should be uniform.
3. Auto stop movement should work appropriately.

Horizontal line

Causes:

1. If the surface wet condition in protracted time span.
2. During drying the surface if any bit of the surface is wet, it happen.
3. Unproper settling in the midst of kicking the pail

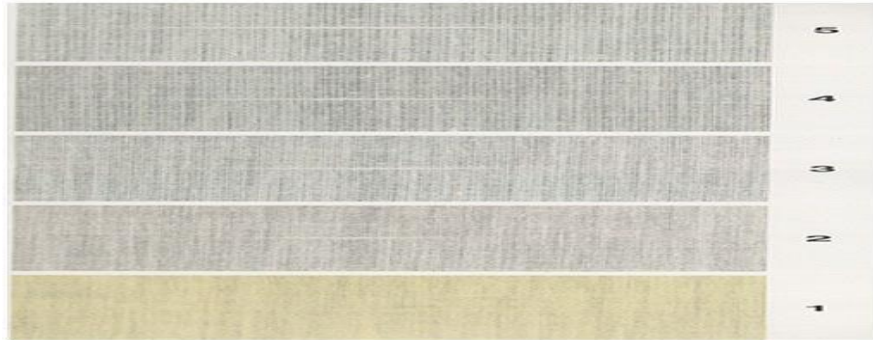


Fig 25: even line.

1. To use short an ideal opportunity for wet trim of surface.
2. Equal drying of the surface.
3. Proper settling in the midst of failing miserably.

Residue

Cause

1. Due to tarnished finishing floor.
2. Unclean the streetcar of finishing floor.
3. Due to messy m/c surface.
4. Drop the step in while surface.



Fig 26: dust

Fixes:

1. To clean the completing floor.
2. Clean the trolley of completing floor.
3. To clean the m/c surface

slub

cause

- 1.usually caused by a thick or overwhelming spot in yarn.
2. by ling getting on to yarn bolsters.



Fig 27: slub

Cures

1. Use good quality yarn.

Lycra drop

Cause

1. Low strain of Lycra yarn.
2. Fail to get the Lycra yarn by needle

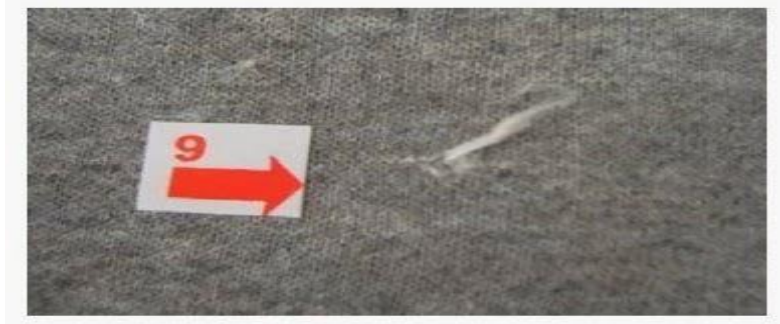


Fig 28: Lycra drop

Cures

1. Ensure the feed of Lycra yarn to each needle.
2. The pressure of Lycra yarn ought to be uniform.

Fabric press off

Causes

Surface press off appears, as a significant or little hole in the surface, caused as a result of the interruption of the circle outlining measure, as an eventual outcome of the yarn breakage or shut needle catches.

1. End breakage on feeders, with all needles weaving.
2. Yarn feeder remaining in lifted up situation, because of which, the yarn doesn't get feed in the



catches of the needles.

Fig 29: fabric press off.

Fixes

1. Needle pointers, should be set properly to recognize the close by needles and keep the surface cylinder from absolutely crushing off.
2. Proper yarn strain should be kept up, on all of the feeders.

Needle break

Causes

1. High yarn strain.
2. Awful setting of the yarn feeders.

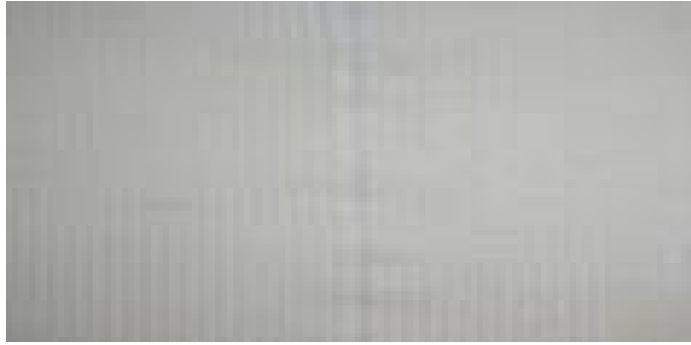


Fig 30: needle break

Fixes

1. Ensure uniform and the correct yarn pressure on all the feeders.
2. Keep the suggested hole between the yarn feeders and the needles.
3. Periodically change the total arrangement of needles.

Good and bad spot



Fig 31: thick and thin place

Causes

Because of yarn issue .expecting great and awful places stay in yarn and surface is weaved with that yarn, by then this issue found in surface.

Cures

1. Use same count yarn.
2. Use good quality yarn.

Defective selvage

Cause

Selvage is the thickly weave edge of a touch of surface. Routinely used concerning woven surfaces, the selvage should shield the surface from unraveling or fraying. Selvage can be imperfect differently, including cut, waved or wrinkled. Cut selvage may in like manner be insinuated as broken selvage or tore selvage.



Fig 32: defective selvage.

Cures

Precisely modifying the wait and genuinely constructing the edges of the surface should keep this flaw.

CHAPTER 4

EXPERIMENTAL WORK

I am chipping away at some machine like single Jersey, Rib and interlock. and working for discover diverse kinds of sewing flaw and worked by how frequently and get faults from machine and discover some imperative information:

Data collection for single jersey m/c;

Table: 2

Faults of single jersey fabric in 500 m

Type of faults	Size of faults	No. of faults existing process	No. of fault developing process	% of fault existing process	% of faults developing process
Drop stitch	1.1"- 2.5"	25	11	5%	2.2%
Barrenness	2.5"- 5.5"	20	6	4%	1.2%
Streakiness	2.7"- 6"	20	4	4%	0.8%
Snarls	1.12"- 2.30"	25	9	5%	1.8%
Contamination	1"- 2.6"	30	11	6%	2.2%
Spirally	3.6"- 6"	25	9	5%	1.8%
Needle lines	3"- 5.6"	20	7	4%	1.4%
Sinker line	2.5"- 5.7"	0	0	0	0
Oil line	1"- 4"	20	5	4%	1%
Surface hairiness & piling	2"- 6"	25	13	5%	2.6%
Bowing	3.6"- 5"	17	6	3.4%	3.4%

Table 3
Faults of RIB fabric IN (500m)

Name of fault	Size of faults	No of faults existing process	No of faults developing process	% of faults existing process	% of faults developing process
Drop stitch	1.2-2.5"	25	10	5%	2%
Barrenness	2.5-5.5"	20	8	4%	1.6%
Streakiness	2.7-6"	20	8	4%	1.6%
Snarls	1.12-2.30"	30	12	6%	2.4%
Contamination	1-2.6"	30	12	6%	2.4%
Spirally	3.6-6"	20	8	4%	1.6%
Needle line	3-5.6"	17	6	3.4%	1.2%
Sinker line	2.5-5.7"	0	0	0	0
Oil line	1-4'	25	10	5%	2%
Pilling	2-6"	15	6	3%	1.2%
Lycra out	3.6-5"	13	4	2.6%	0.8%

Table 4
Faults of interlock fabric in 500 m

Faults name	Size	No of faults existing process	No of faults developing process	% existing faults	of	%of faults developing process
Hole	1.1-2.5"	25	10	5%		2%
Barrenness	2.5"-5.5"	20	8	4%		1.2%
Streakiness	2.7"-6"	12	6	3.4%		1.2%
Snarls	1.12"- 2.30"	25	10	5%		2%
Contamination	1"-2.6"	30	12	6%		2.4%
Spirally	3.6"-6"	18	8	4.4%		1.6%
Needle line	3"-5.6"	15	6	3%		1.25%
Sinker line	2.5"-5.7"	15	5	3%		1%
Oil line	1"-4"	15	6	3%		1.2%
Pilling	2"-6"	25	10	5%		2%
Bowing	3.6"-5"	12	6	3.4%		1.2%

Table 5

Fleece Grey fabric analysis (4 point system)

M/c no	M/c Dia	G. Dia	GSM	Hole	Oil spot	Lycra loop out	Set off	Fly slub cont.	Wt.	Total point	Point/ 100 length
48(f/dia 68-70)	30/20	39	256	1	4	1	1	4	32	4	2.6
								4	28	8	6.1
								3	21	7	7.1
								3	24	7	6.2
		1					38.5	4	20	8	8.5
								4	13.3	4	6.4
								3	24.5	7	6.1

Table 6

Fleece fabric analysis (4 point system)

m/c no	m/c dial	G. dial	GSM	Hole	Ink/oil Black spot	Lycra loop out	Set off	Fly slub cont.	w.t	Total point	Points/100 length
21 (F/dial 68)	30/20	39	265	01	09	04	01	3	20	11	12.1
								5	23	8	7.7
								4	36	8	4.9
								4	41	8	4.3
								3	30	11	8.1
								4	29	4	2.9
								3	32.5	7	4.7

Table 7

Rib fabric analysis (4 point system)

M/c no	M/c dia	M/c gauge	Gsm	Hole	Loop pc/m	Lycra out	Fly slub cont	Wt.	Total points	Total points/100
41(f/dia 49-51)	44/11	33.5	296	1	6	1	3	8	7	21.5
								12		
							4	14	8	14.14
							4	20.5	8	9.6
							4	17	11	16
							3	15	15	21.8
FULL ROLL L/DROP FOR REJECT.										

Here we see the critical sew insufficiencies rate (%) for various types of weave surface in existing methodology and making measure where we can restrict the current weaknesses rate (%) in a Lot by taking the above fixes which are discussed previously.

CHAPTER 5 RESULT AND DISCUSSION

In this examination I gather distinctive data from ,single pullover ,rib ,interlock ,wool texture and investigation diverse information and get distinctive outcome which encourages me to discover in what manner can over come from flaws and decrease blames and get great texture for business reason.

RESULT:For drop stitch

No of fault in 500 m fabric=25

in this way, so no of deficiencies in 100 m fabric= $(25*100)/500=5\%$, According to different flaws will

Barrenness=4%,streaking=4%,snarls=5%,contamination=6%,spirally=5%,needle line=45,sinker line=0,oil line=4%,pilling=5%,bowing=3.45%.

% of flaws in creating measure For drop line

No of issues in 500 m fabric=11

Thus, no of flaws in 100 m texture is = $(11*100)/500=2.2\%$.

Different deficiencies

barrenness=1.2%,streakiness=.8%,snarls=1.8%,contamination=6%,spirally=1.8%,needle line=1.4%,sinker line=0,oil line=1%,pilling=2.6%,bowing=3.4%.

For **rib fabric faults analysis:**

Result

% of shortcomings in existing cycle

For drop strice

No of fault in 500 m texture =25

Thus, no of shortcomings in 100 m fabric= $(25*100)/500=5\%$

Barrenness=4% streakiness=4% snarls=6% contamination=6% spirally=4% needle line=3.4% oil line=5% pilling=3% bowing=2.6%.

% of flaws in creating measure No of shortcomings in 500m fabric=10

Thus, no of shortcomings in 100 m fabric= $(10*100)/500=2\%$

Barrenness=2% streakiness=1.6% snarls=1.6% contamination=2.4% spirally=1.6% needle line=1.2% oil line=2% pilling=1.2% bowing=0.8%.lt:

For interlock fabric faults analysis

Result:

% of faults in existing process

Drop stitch

No of faults in 500 m fabric=25

So, no of faults in 100 m fabric= $(25*100)/500=5\%$

According to other defect, barrenness=45 streakiness=3.4% snarls=5%
contamination= 6% spirally=4.4% needle line=3% oil line=3% pilling=3%
bowing=3.4%.

% of faults in developing process

Drop stitch

No of faults in 500 m fabric=10

So, no of faults in 100 m fabric= $(10*100)/500=2\%$

According to other faults will barrenness=1.6% streakiness=1.6% snarls=2.4%
contamination=2.4% spirally=1.6% needle line= 1.2% oil line=1.2% pilling=1%
bowing=.8%.

Fleece fabric analysis:

Result:

Using 4 point system we get

Oil spot in 2 shift =9, set of =1, fly slub according 3 shift we get (5+6+8) and there wt. are (22.4, and 19, 16.5 .and 23, 20).

Fleece fabric faults analysis

Fig 37: fleece fabric faults analysis

Result:

In 4 point system

Oil spot in 2 shift=9, fly slub in 3 shift (8+8+10) and there wt. (20, 23 and 36, 41 and 30, 29, 32.50).

for rib fabric analysis using 4 point system

Fig 38: Rib fabric faults analysis by 4 point system

Result

Yarn count=295, loop pcs/m for shift $c=6$, fly slub for 3 shift according $(3=4=11)$ and wt. of them (8 and 14 and 20.5, 17, 17).

For fabric faults existing process

Drop stitch=4%

barrenness=3%

streakiness= 2.99%

snarls=3.98%

contamination=6%

needle line= 3.99%

oil line=3.25

pilling=3.98%

bowing=2.98%

sinker line=0

For fault developing process

Barrenness=1.5% streakiness=1.3% snarls=1.7% contamination=1.98% spirally=
1.6% needle line=1.5% oil line=1.5% pilling=1.7% bowing=0.98%.

% of finishing faults

Shrinkage=35%

Gsm variation

=25% Width

variation=8%

Bowing=8%

Skewing=6%

Wet squeezer mark=4%

Other=14%

CHAPTER 6

CONCLUSION

Conclusion

By the accompanying investigation can benefit from outside intervention structure the result got from my examination. The creation cycle of twofold shirt roundabout weaving are investigated and look at between the changed machine existing shortcomings and create of issues are finished. I noticed various kinds of weaving machine and how various sorts of issues delivered. Wastage is serious issue in weaving machine, likewise saw the number of texture are wastage in sewing machine and furthermore concentrate by what method can decreased this wastage. The various sorts of machine are work distinctive way. In the event that we control it appropriately we can get great result. I deal with single shirt, twofold pullover (rib and interlock) and get distinctive kind of shortcomings like drop fasten, Barrenness , growls, pin opening

,good and bad spot ,Lycra out, Lycra consume ,Bowling, wrinkle mark ,pilling, and some different shortcomings which created by texture and dead cotton color, lopsided coloring ,oil spot which are happen because of coloring flaws of fabric.in completing deficiencies I discovered residue, bushiness, defilement ,oil mark ,snoozes and other .here I attempt to discover significant blames and attempt to tackle that issues by creating them requiring little to no effort and increment sew texture creation .In the other hand discover some issue which is utilize 4 direct framework toward discover them and which information is gather from various move in the plant.

CHAPTER 7

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REFERENCE

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