

SHIVPRIYA TEXCHEM · KNOWLEDGE SERIES

Slub & Fancy Yarn. Irregularity, engineered on purpose.

For a century every spinner's job was to eliminate thick and thin places. Then fashion decided it wanted them back. Fancy yarn is the deliberate, controlled manufacture of the exact faults the industry spent decades learning to remove.

Servo

the drive that turned a random fault into a programmable effect

3 variables

slub length, slub thickness and the pause between them

Repeat

the pattern length that decides whether a fabric looks designed or defective

Bridging world-class spinning mills and your needs, since 2003.

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CHAPTER 01

A fault, made on purpose

A slub is a short thick place in a yarn. Historically it was a defect caused by a drafting fault. Fancy yarn spinning produces the same thing deliberately, at a controlled length, thickness and spacing.



Momentarily reducing the draft produces a controlled thick place

01 The draft is varied

Servo motors on the drafting rollers change the draft ratio momentarily and precisely.

02 Less draft, more mass

Reducing draft for a fraction of a second leaves more fibre per unit length — a thick place.

03 Three parameters

Slub length, slub thickness and the base yarn length between slubs. Every effect derives from these.

04 Randomisation

The controller varies parameters within limits so the pattern does not repeat visibly in the fabric.

05 Twist follows

Twist is inserted normally; it distributes differently over thick and thin sections, adding to the effect.

Why servo drives changed everything. Mechanical slub attachments produced crude, repetitive effects. Servo control made slub **programmable** — length, thickness and spacing set independently, and randomised deliberately. That is what turned fancy yarn from a novelty into a design tool.

CHAPTER 02

The three numbers that define a slub

Every slub yarn specification comes down to three figures and how much they are allowed to vary. Understanding them lets you describe an effect precisely instead of sending a sample and hoping.

PARAMETER	TYPICAL RANGE	WHAT IT CONTROLS
Slub length	2 – 100 mm	How long each thick place runs. Short reads as texture, long reads as a stripe
Slub thickness	1.5 – 5× base	How much thicker than the base yarn. The visual intensity of the effect
Base length	10 – 500 mm	The normal yarn between slubs. Sets how densely the effect appears
Randomisation	± a set %	Variation applied to all three so no visible pattern forms in the fabric
Repeat length	Metres	The distance before the sequence repeats. Critical to avoid banding

The repeat trap. If the slub sequence repeats at a length related to the fabric width or the knitting machine circumference, the slubs **line up** and produce a visible diagonal or vertical band. Repeat length must be set deliberately against the fabric, not left at a default.

CHAPTER 03

The fancy yarn family

Slub is the best known effect but far from the only one. Each type is produced by a different mechanism and reads differently in fabric.

TYPE	HOW IT IS MADE AND HOW IT READS
Slub yarn	Draft varied on the ring frame. Thick places in a base yarn — the mainstream effect
Injection slub	A second fibre injected at intervals. Allows a colour or fibre contrast in the slub itself
Multi-count	The base count itself changes along the length, giving broad soft variation rather than discrete slubs
Multi-twist	Twist level varied along the length, producing alternating lustre and handle without thickness change
Loop / bouclé	An effect yarn overfed against a core on a fancy twister, forming surface loops
Snarl / spiral	Two components at different tensions twisted so one spirals around the other

- **Knop yarn** gathers the effect fibre into discrete bunches at intervals rather than a continuous loop.
- **Chenille** traps short fibres between two twisted core yarns to form a soft velvet-like pile.
- **Marl and mélange** create colour variation rather than thickness variation — a different family of effect entirely.

CHAPTER 04

Where fancy yarn is made

Different effects need different machines. Slub is a ring frame effect; loop and bouclé need a fancy twister; some effects need both.

RING FRAME	FANCY TWISTER	PREPARATION STAGE
Slub	Loop / bouclé	Marl
Multi-count	Snarl	Mélange
Multi-twist	Knop	Injection blends
Injection slub	Spiral	Colour effects

Servo drives

Independent control of the drafting rollers. Without them, programmable slub is not possible.

Pattern controller

Stores the effect programme and randomises within limits. The real design tool.

Overfeed control

On fancy twisters, sets loop size and density for bouclé and knop effects.

Clearer settings

Electronic clearers must be told to accept the slubs and still reject genuine faults.

The clearer problem. A yarn clearer is designed to cut out thick places. On fancy yarn it will happily cut out **every slub you deliberately made**. Clearer channels must be reprogrammed to distinguish the intended effect from a real fault — a step that is skipped surprisingly often.

CHAPTER 05

How slub reads in cloth

A slub yarn on a cone tells you almost nothing about the fabric. The effect only becomes real when the yarn is laid into a construction, and the construction changes it substantially.

PLACEMENT	VISUAL RESULT
Weft only	Horizontal texture across the fabric. The most common and most controllable approach
Warp only	Vertical streaks running the length. Harder to control and prone to visible banding
Both directions	A rich all-over texture, with a much higher risk of moiré and interference patterns
Alternating with plain	Deliberate stripe effects; the plain yarn provides contrast and rest
In knitting	Slubs distribute across the loop structure, giving a softer, more diffuse texture
In denim	Slub warp with indigo dyeing is the classic vintage look; the slubs abrade differently in wash

Denim and slub. Slub yarn transformed denim because slubs **wear differently from the base yarn**. After washing, the thick places abrade and lose indigo at a different rate, producing the vertical streaking that the market calls a vintage character. The effect is created in spinning and revealed in the laundry.

CHAPTER 06

Where fancy yarn goes wrong

Fancy yarn fails in ways plain yarn does not, and most of the failures are about pattern rather than about yarn quality.

PROBLEM	HOW IT LOOKS	CAUSE
Banding	Diagonal or vertical stripes in the fabric	Repeat length interacting with fabric width or machine circumference
Effect too weak	Slubs invisible in the finished cloth	Thickness ratio too low for the fabric construction
Effect too strong	Fabric looks defective rather than designed	Thickness or slub length excessive for the count
Slubs cleared out	The delivered yarn has no effect at all	Yarn clearer channels not reprogrammed for fancy yarn
Weak slubs	Yarn breaking at the thick places	Insufficient twist reaching the slub section
Lot mismatch	Two lots look different in the same fabric	Effect programme not identical between runs

The line between **texture and defect** is set entirely by control. The same slub, uncontrolled, is a customer complaint.

CHAPTER 07

What happens downstream

Slub yarn behaves differently in every process after spinning. Planning for that is part of specifying it.

01 Sizing is uneven

Thick places take size differently. Warp slub yarn needs careful sizing recipe adjustment.

03 Dyeing differs

Thicker sections take dye at a different rate, which often enhances the effect attractively.

05 Washing reveals it

In denim especially, the effect strengthens through the wash rather than weakening.

02 Weaving needs tolerance

Slubs pass through the reed and heald differently; loom settings and speed usually need easing.

04 Finishing can flatten it

Aggressive calendaring or compacting can crush slubs and lose the effect you paid for.

06 Inspection standards differ

Fabric inspectors must be briefed, or they will grade the intended effect as a defect.

Tell the inspection team. A four-point inspection system will penalise every slub as a thick place. **The effect must be documented and shared with the inspection house** before the fabric arrives, or a perfectly good roll is graded down to seconds.

CHAPTER 08

Describing an effect precisely

Fancy yarn is usually specified by sending a sample, which works until you need a second lot from a different mill. A numerical specification travels better.

SPECIFY	WHY
Base count and TM	The foundation yarn. Everything else is described relative to it
Slub length range	In millimetres, with the randomisation band
Slub thickness ratio	As a multiple of base yarn diameter, with its variation range
Base length between slubs	In millimetres, with randomisation
Repeat length	In metres, chosen against your fabric width or machine circumference
Reference sample	A physical yarn and, ideally, a woven or knitted swatch showing the intended effect

Always send both. A numerical specification alone can be read differently by two mills. A sample alone cannot be reproduced when the mill changes. **Send the numbers and the swatch together** — that combination is reproducible.

CHAPTER 09

Buying fancy yarn

Fancy yarn is a design product bought through a technical process. The specification discipline matters more here than in almost any other yarn.

01 Send numbers and a swatch

Both. Neither alone reproduces reliably across mills or across time.

03 Confirm clearer settings

Ask the mill to confirm clearer channels are set for fancy yarn, not standard yarn.

05 Archive the programme

Ask the mill to save the effect programme against your reference. Repeat orders depend on it.

02 Set the repeat length

Against your specific fabric width or knitting machine. This prevents banding before it happens.

04 Ask for a fabric trial

The yarn cannot be judged on a cone. Insist on a woven or knitted trial before bulk.

06 Brief the inspection house

Document the intended effect in writing so the fabric is not graded down as defective.

How Shivpriya reads it. For fancy yarn we insist on a **fabric trial and an archived effect programme** before bulk. Fancy yarn is bought on appearance and appearance cannot be judged on a cone — and without the archived programme, the repeat order will not match the first one.

IN CLOSING

A century removing faults. Then selling them back.

Fancy yarn is the most design-led corner of spinning, and the one where the gap between a controlled effect and an apparent defect is narrowest. If you are developing a slub or textured programme, talk to us — we will start with the repeat length and the fabric trial, because that is where these projects succeed or fail.

TALK TO US

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