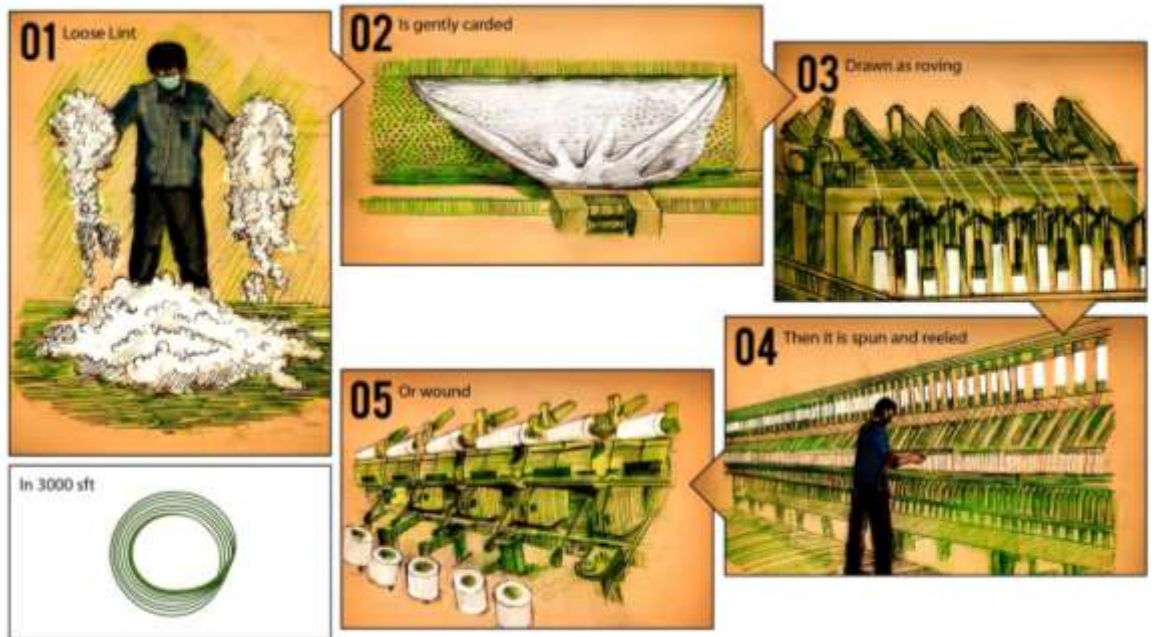


# 2014

## Microspin crafted yarn unit



[www.microspin.co.in](http://www.microspin.co.in)

Microspin Machine Works (P) Ltd.

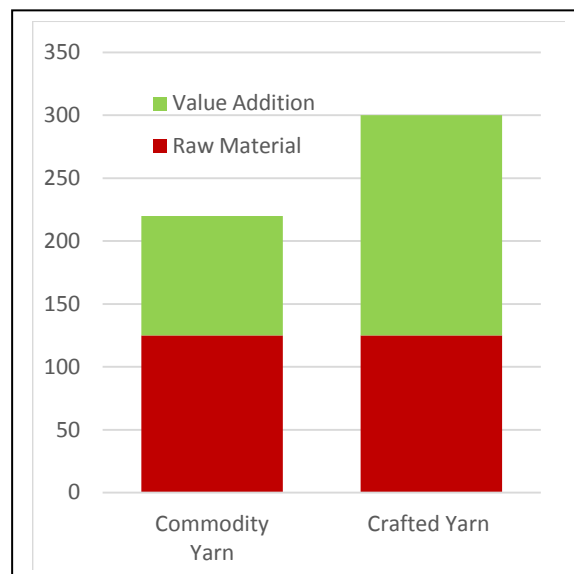
Aug 2014

## Is it khadi? Is it linen? Is it silk-blend?

Microspin Crafted Yarn™ is much sought after for its unique and distinctive features that lead to end-products that are highly valued in the market. Compared to commodity yarn, crafted yarn commands a premium in the market.

This unique and rich quality is thanks to the patent-pending technology employed by Microspin.

The technology is readily amenable to backward integration (ginning, farming) and forward integration (dyeing, weaving, textile products) at an affordable scale.



## Endorsements

Leading brands and buying houses have successfully launched a range of fabrics and garments made from Microspin crafted-yarn in global markets. Below is feedback from some of them:

*Wow! The look of linen with the feel of cotton.*

*The Microspin fabric is very innovative and very rich in look. The characteristic aspect of the yarn with slubs and neps gives the fabric an ethnic and vintage look.*

*...an excellent collection which suits our Japanese brands... very unique and Indian feel which no other region produces! ...adding much to the premium look... a good drape too.*

*The fabric has a unique slub texture and a soft hand-feel.*



## End-to-end Support

Microspin supports the yarn producing units with a range of services from launch-stage to sustaining profitable operations. These include:

- Developing DPR (Detailed Project Report) specific to each project
- Supply of all machinery, equipment and accessories
- Build-Operate-Transfer model including training, operations and marketing-support
- SOP (Standard Operating Procedures) for all processes critical to profitability
- Support in forward integration to make fabrics and apparel

## Overview of Profitability

<i>Rs./Kg</i>		<i>Per year</i>	
Raw material	121	Gross Production (Kg)	86400
Wages	21	Gross Profit (Rs. L)	104
Power	23	Overheads	16
Pkg & Cons	15	EBITDA	88
COST	180	Investment	212
Sale Price	300	EBITDA/Investment	42%
Contribution	120		

## Project cost break-up

<i>Rs. L</i>	
Machinery & equipment (incl taxes, installation)	185
Misc. Fixed Assets	12
Pre-op exp, margin money	15
Investment	212



## Technical Specs

### General Specs

<p><b>Input</b> Cotton (loose-lint or baled) Staple length: 28+ mm preferred</p>	<p><b>Productivity</b> 80 Kg-yarn/8-hr</p>
<p><b>Output</b> 20s to 40s Ne yarn</p>	<p><b>Floor Space</b> 75' x 80' OR 150' x 40'</p>

### Machine Specs

<p><b>Integrated Blow-card (Two nos)</b> Sliver hank: 0.12 to 0.15 Ne Delivery speed: 25m/min</p>	<p><b>Ring Frame</b> No. of spindles: 1080 Spindle speed: upto 15,000rpm TPI: 22 to 29 Ring dia: 38/42mm Lift: 7" Pneumafil: available Drafting system: spring-loaded Speed control: Variable-frequency drive</p>
<p><b>Draw Frame (Breaker + Finisher)</b> Single delivery Output sliver hank: 0.12 to 0.15 Ne Delivery speed: 100m/min Input: upto 8 slivers Draft: 6 to 9.9</p>	<p><b>Add-ons</b> Hank reeler (160-pegs) OR Cone winder (48-drum)  Bale opener Overhead Travelling Cleaner (OhTC)</p>
<p><b>Flyer Frame</b>  No. of spindles: 48 Spindle speed: upto 750 rpm Bobbin size: 12" Flyer: 6" closed type TPI: upto 2 Draft: 7 to 9.9</p>	<p><b>Power</b> Three Phase 415V Connected Load: 60 HP</p>

### About Microspin

Microspin is a private limited company founded in 2011, based on prior research conducted under Fractal Foundation – an R&D institution. This innovative technology is patent-pending in India and the US, and was awarded the prestigious “**Innovation for India Award**” in 2012. (Other awardees included social initiatives like Akshaya Patra; companies like Red Bus and Indigo Airlines; and public initiatives like Aadhaar). Microspin is incubated by **IIT Madras’ RTBI** and is a business partner of **NSDC (National Skills Development Corporation)**, to promote skill-development through its innovative technology.