

The development of Solospun

Mr Martin Prins

CSIRO

Sirospun

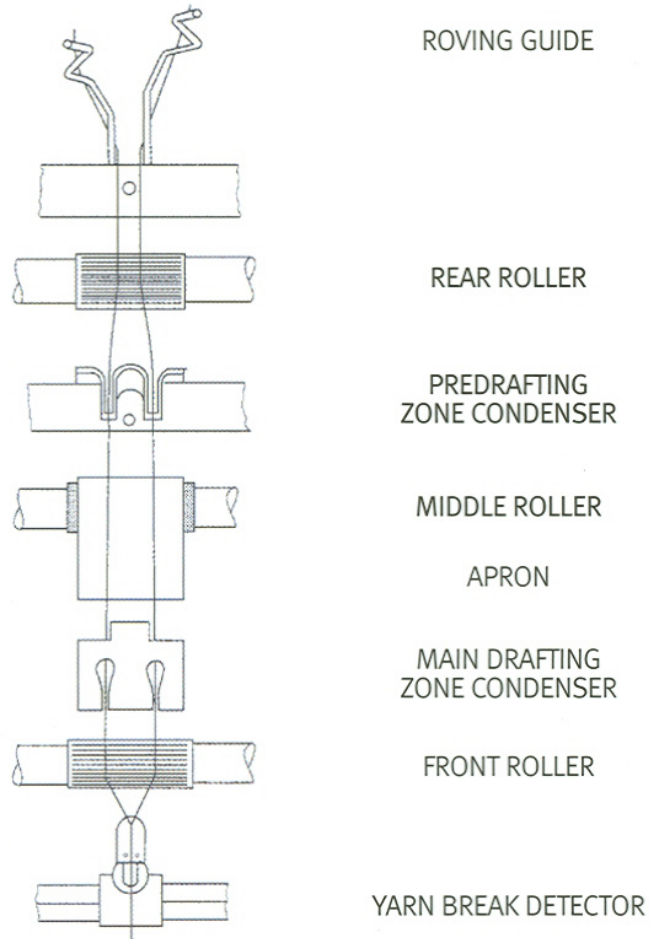
- Sirospun, in essence, is the combination of spinning and two-folding in a single step on the spinning machine.
- Sirospun is suited to the production of lightweight, trans-seasonal Cool Wool fabrics.

Sirospun

Two major advantages:

- cost of two-folding is eliminated
- productivity per spindle on the spinning frame is effectively doubled.

THE SIROSPUN™ PROCESS



ROVING GUIDE

REAR ROLLER

PREDRAFTING
ZONE CONDENSER

MIDDLE ROLLER

APRON

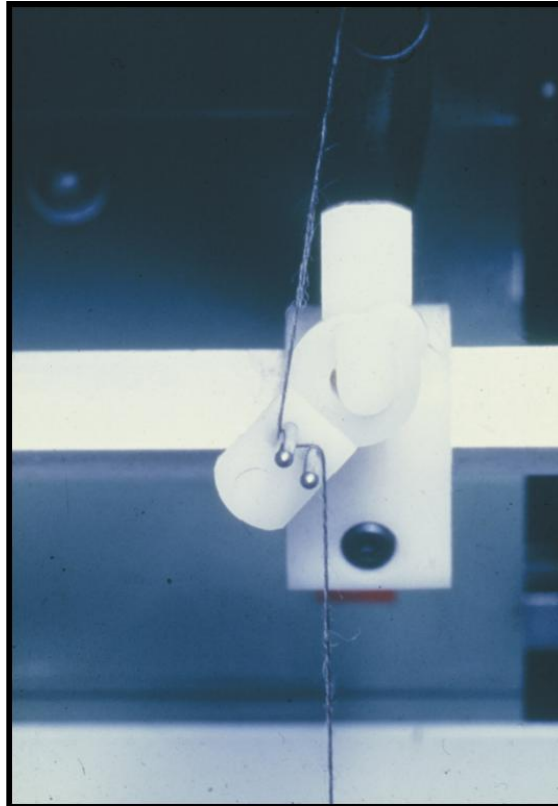
MAIN DRAFTING
ZONE CONDENSER

FRONT ROLLER

YARN BREAK DETECTOR

WORSTED RING SPINNING MACHINE

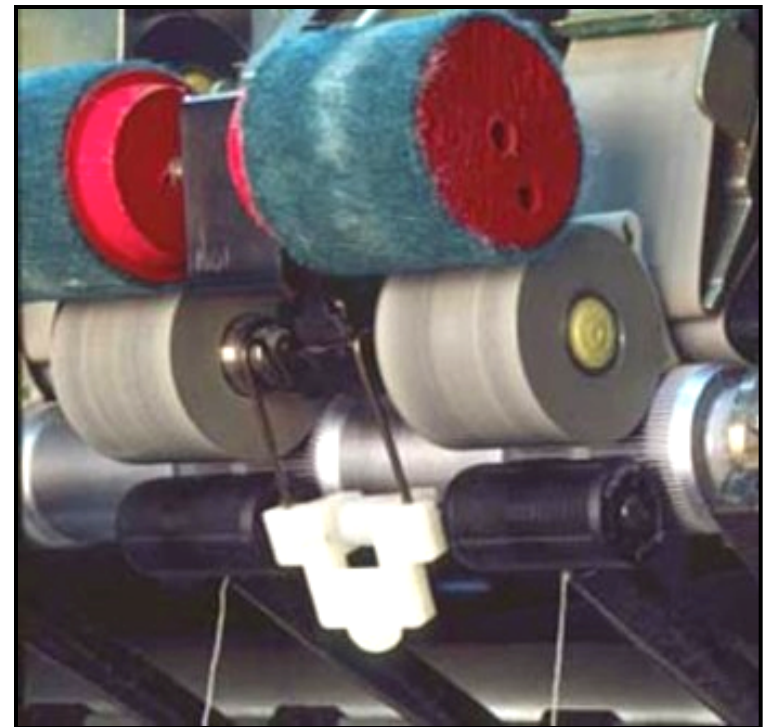
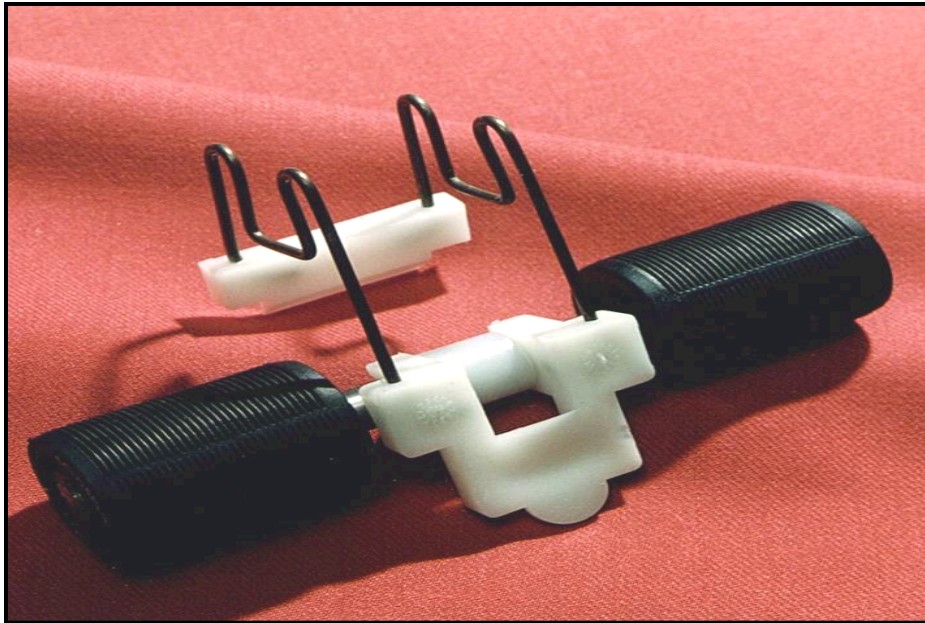
Sirospun



Solospun

- A spinning technology that produces a weavable singles yarn in a single step from a single roving.
- A simple, inexpensive, clip-on attachment to standard long-staple spinning frames.

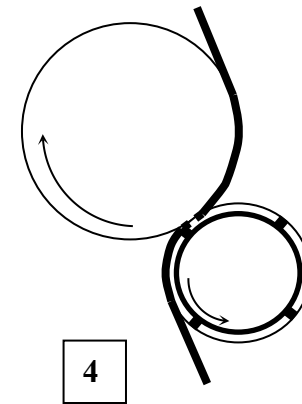
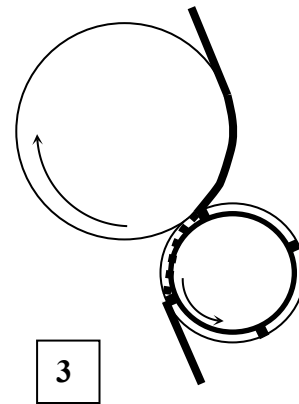
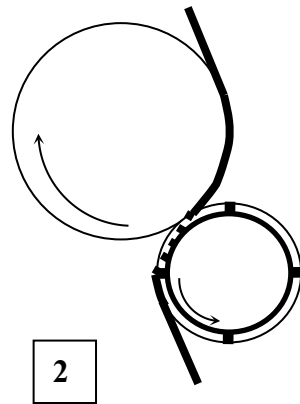
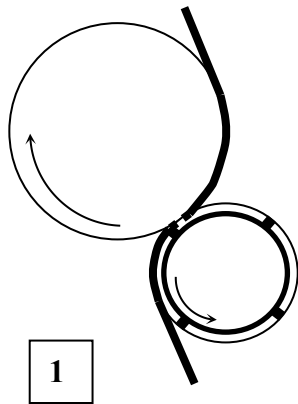
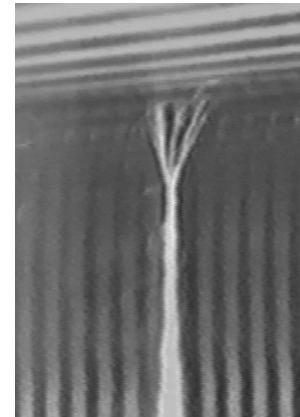
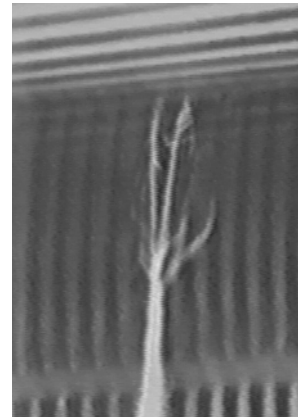
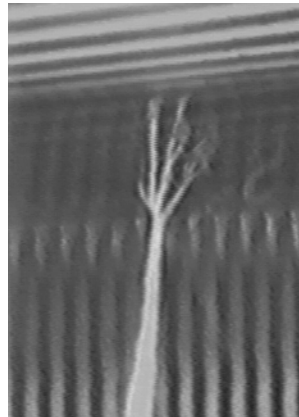
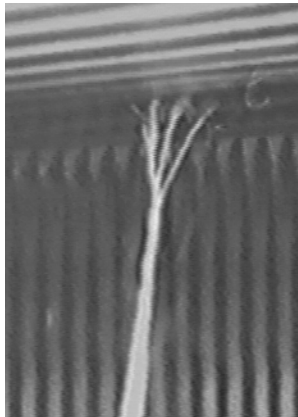
Solospun



Solospun

- Achieves fibre security through the actions of localised twist in sub-strands and fibre migration.

Solospun



Solospun

Economic benefits:

- higher spinning productivity and efficiency
- elimination of twisting and associated processes
- higher winding productivity and efficiency.

Solospun

Product benefits:

- Finer yarns at lower cost
- Softer yarns at lighter weight.

Solospun - benefits

	2/64 Nm Twofold 19.5 µm (US\$/kg)	1/32Nm Solospun™ 19.5 µm (US\$/kg)
Top*	9.81	9.81
Drawing	0.16	0.14
Roving	0.12	0.06
Spinning	3.95	1.97
Steaming	0.04	0.04
Winding	0.46	0.23
Twisting	1.10	0
Steaming	0.04	0
Overheads	0.51	0.26
TOTAL	16.19	12.51
Saving %	-	3.59
Saving \$	-	22%

*Wool top prices @ March 1998