

CASE STUDY



ALGODONERA AVELLANEDA

Argentina



Why Marzoli?

“Marzoli, has greatly contributed to the outstanding results that we have achieved”

Mr. Fidel Roda states



Mr. Tourne Daniello,
General maintenance manager
and Mr. Fidel Roda,
General plant manager

- TOP QUALITY AND OUTSTANDING EFFICIENCY LEVELS
- EXCELLENT TECHNOLOGY
- COMPETENT AND RELIABLE PARTNER

Algodonera Avellaneda is an Argentinian leader for the production of textile products. The company, with branches located in the provinces of Chaco, Formosa, Santiago del Estero and Santa Fe, integrates the processes of harvesting, ginning, spinning and weaving, having full control on the raw material and the processes of the production chain.

The vertical integration strategy, aimed at controlling all the resources to guarantee top quality and outstanding efficiency levels, has led to the success of this company that today represents one of the major international textile players in South America. Number one ginner of

national cotton, Algodonera Avellaneda produces more than 2,000 tons of raw fiber per day which is then partly processed, along with man-made fibers, in its spinning mills to produce 100% cotton, 100% viscose, blends of cotton and polyester, carded, combed and open-end yarn. 40% of the yarn is then processed in its weaving plant to produce over 400 tons of top-quality fabric per month.

In this fully integrated production chain, turning the raw material into yarn represents one of the most critical processes as Mr. Fidel Roda, General plant Manager of Algodonera Avellaneda, explains: *“Spinning represents a crucial part of the production chain for the effects it has on the quality of the end product and the efficiency of the downstream processes. Marzoli, with the support of the agent Chilicote S.A., has greatly contributed to the outstanding*

results that we have achieved, not only for the excellent technological level of its machines, but also by proving to be a competent and reliable partner”.



Our solution

"We think the MTR is one of the most reliable transport systems we have ever come across"

Mr. Fidel Roda says

- MARZOLI ROVING AND SPINNING FRAME: A WIDELY PROVEN TECHNOLOGY
- MARZOLI BOBBIN TRANSPORT SYSTEM MTR WITH IBC

Algodonera Avellaneda has historically relied on Marzoli technology. Blow room lines, draw frames, roving frames, spinning frames,... machines supplied by Marzoli that have effectively contributed to the company's success and growth. In 2015 the company decided to increase its production capacity by adding a 7th spinning module. The six spinning modules in the plant of Santa Fe comprise one BCX16 A of 120 spindles and 4 NSF3 ring spinning frames of 1,056 spindles. The seventh module comprises one FT6D roving frame of 192 spindles, five MPTN spinning frames of 1,056 spindles and Marzoli closed-loop bobbin transport system, the MTR, with a bobbin stripper integrated

on the exchanger, the IBC. *"With our seventh spinning module we decided to rely on Marzoli not only for what concerned roving frame and spinning frames, a widely proven technology, but also to install its bobbin transport system, which, to our knowledge, had never been installed before. After start up, Marzoli technologists visited our plant with great regularity to watch the bobbin transport system. After four years, we think the MTR is one of the most reliable transport systems we have ever come across"* Mr. Fidel Roda, General plant Manager states.



IBC - bobbin stripper integrated on the exchanger



Marzoli integrated spinning section



- EXCELLENT EFFICIENCY AND PRODUCTION RATES
- HIGH SPEED AND LOW ENERGY CONSUMPTION
- EFFICIENT INTERNAL LOGISTICS

The seventh spinning module installed in Algodonera Avellaneda is daily processing over 4 tons of top-quality Ne26 yarn. Its excellent performances and reliability are effectively described by Mr. Fidel Roda, words: *"Marzoli roving and spinning frames' performances are well-known in the industry.*

Our spinning machines, linked with Savio Pulsar cone winders, have substantially overcome the productivity of the older modules. Since start up they have constantly reached efficiency rates over 95% while working at 16,500 rpm".

The MPTN is a fully electronic spinning machine, with all technological parameters settable by touch screen. It can draw on a solid tangential belt system which can work at high speed with low

energy consumption and noise. The quality of the yarn is securely preserved through a drafting system designed to minimize vibrations and torsion forces and a reliable spindles-drive which reduces the variability of speed among spindles to almost zero. The plant of Algodonera Avellaneda was the first to install Marzoli closed-loop bobbin transport system. Full automation, efficient and continuous supply of roving bobbins to the spinning frames, no poor handling of the bobbins and an overall easier management of internal logistics have been just some of the advantages Algodonera Avellaneda has benefitted from. The MTR has been designed to reduce the number of components subject to wear, the frame supports with adjustable brackets with screws allow to easily adjust the height of the rail and correct any misalignment and the overall design requires a moving force of the chain of only 1% to 4% of the lifted weight.

Innovations in blow room machinery

- BIGGER CARDING SURFACES AND HIGHER NUMBER OF CARDING SEGMENTS
- INNOVATIVE FEED DEVICES WITH PRE-OPENING ROLLERS
- OUTSTANDING RESULTS IN TRASH REMOVAL AND FIBER SELECTION
- MORE GENTLE TREATMENT AND THOROUGH CLEANING OF THE RAW MATERIAL

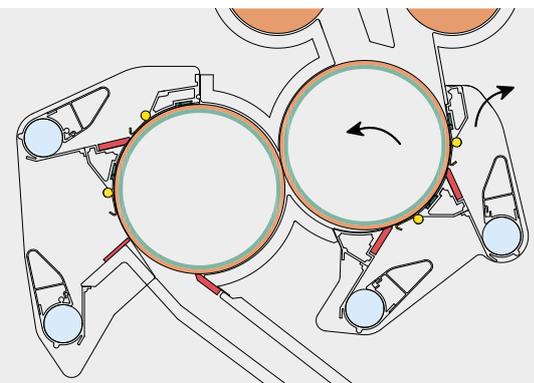
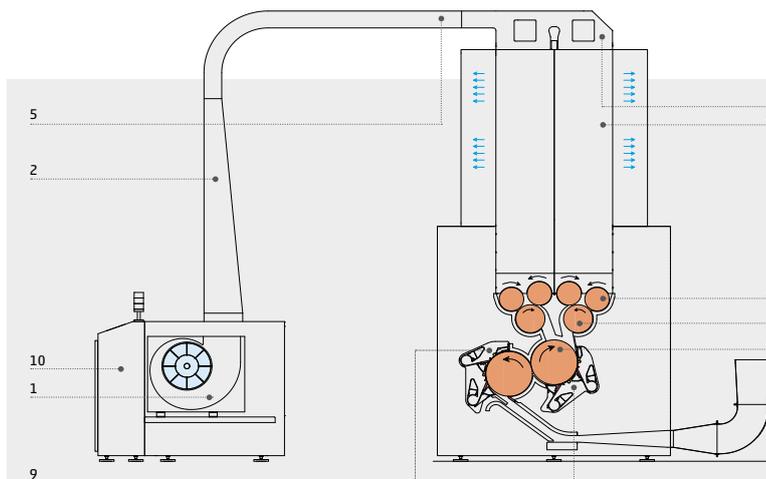
substituting the common nipping devices are just some of the innovations introduced by Marzoli.

"The tests undertaken with the B380L fine opener in Marzoli with our raw material disclosed outstanding results in terms of trash removal and fiber selection"

Mr. Fidel Roda.

Since the first quarter of 2017 Algodonera Avellaneda started upgrading its blow room line by ordering a B380L fine opener and other Marzoli's machines for this section. *"It is well known how opening and cleaning of the raw material play a major role on the quality of yarn and the efficiency of the process. We believe that Marzoli has introduced great innovations with its new line of blow room machines that effectively respond to modern production requirements"* Mr. Fidel Roda, General plant Manager states. Bigger carding surfaces, a higher number of carding segments, accelerating pre-opening rollers

The B380L, unlike other openers, has two consecutive beaters surrounded by 4 carding segments followed by mote knives with adjustable flaps to undertake a progressive opening and cleaning action. This allows a more-gentle treatment but at the same time a thorough cleaning of the raw material. The result is a lower loss of good fiber and a more open and clean output which can be processed with higher quality-production results at the cards.



TECHNICAL DESCRIPTION - LEGEND

- | | | |
|---------------------|-----------------------|-------------------|
| 1 Motorfan B152 | 5 Pressure transducer | 9 Opening grids |
| 2 Feed duct | 6 Delivery rolls | 10 Microprocessor |
| 3 Distributing duct | 7 Preopening rolls | |
| 4 Blending chambers | 8 Beaters | |

- KNIVES
- DEFLECTORS
- SEGMENTS

MARZOLI
INTERNATIONAL, INC.
USA

MARZOLI MACHINES
TEXTILE SRL
Italy

MARZOLI INDIA
MTMM PVT. LTD.W
India

ALGODONERA AVELLANEDA

Legend

- Marzoli premises
- Sales & service network
- Sales affiliates

Algodonera Avellaneda S A

Parque Industrial Reconquista
3560 Reconquista - Santa Fe
Argentina
Tel. +54 - 3482 - 428341 / 428643
danielo.tourne@vicentin.com.ar

Marzoli Machines Textile S.r.l.

Via Sant'Alberto, 10
25036 Palazzolo sull'Oglio (BS)
Italy
Tel. +39 030 73091
sales@marzoli.it

MARZOLI SALES & SERVICE
PARTNERS FOR ARGENTINA

Chilicote S.A.

Av. Julio A. Roca (C1067ABN)
Buenos Aires
Argentina
Tel. +54 (11) 4331 6610 - 4342 7611
chilicote@chilicote.com.ar


MARZOLI

Textile Engineering

A Camozzi Group Company
www.marzoli.com

