

# J 26 – Producing Excellent Air-Jet Yarns for Weaving



With an installed capacity of 150 000 spindles and 568 air-jet looms the Rieter-customer Pee Vee Textiles Ltd is one of the largest manufacturers of gray fabric in India. The family-owned company exports 40% of its fabrics. In their own spinning mill they produce man made fiber/cotton blends and 100% cotton compact yarns for their own consumption. The company has a well-established position in the market and is known for having the capability for delivering high volumes at short notice.

# The Challenge

In the spinning sector, Pee Vee Textiles' focus is to spin quality yarns for their fabric production in order to meet the expectations of their customers. To utilize the spinning section in a best way they target a high productivity without loosing quality. Motivation to invest in air-jet technology for Pee Vee is the uniform appearance of an air-jet yarn in a fabric.

The key requirement is to produce quality warp and weft yarns for their high speed air-jet looms. While air-jet yarn brings many advantages, it always remains a challenge to spin Indian cotton with high trash content of 2.5 - 3.0%, high short fiber content and considerable contamination with foreign fibers on air-jet spinning machines.

# The Solution

Since Rieter is the only system supplier that has state-ofthe-art technology machines for all four types of yarns, Pee Vee has confidence in Rieter's know-how. Supported by the known advantages of air-jet yarn production they ordered a first air-jet spinning machine J 26 in 2019. Thanks to its unique yarn forming technology the J 26 is able to deliver high quantity, at low conversion costs and with defined quality. These yarns show their full potential in warp and weft in the downstream process. The weaving machines were running smooth with stable high production efficiency, delivering excellent fabrics.

Convinced by the performance and encouraging results, Pee Vee placed a repeat order after one-month experience with the J 26 for their further expansion of air-jet spinning technology to supply the yarns to their weaving section.

# The Customer's Benefits

## • Higher Productivity

The fully automated, double-sided air-jet spinning machine J 26 offers the highest number of spinning units per machine and hence requires less floor space for the same output compared to competition. With this advantage Pee Vee was able to achieve 64% more output within their existing setup.

### Consistent Quality

Requirement to produce weaving fabrics with uniform appearance was achieved with Com4jet yarns of higher strength, lower IPI, better elongation and CVm%. Special technology components on the J 26 ensured smooth spinning of 100% cotton combed yarn for the weaving looms.

## • Higher Raw Material Utilization

Optimized air-jet technology of the J 26 ensures better fiber yield resulting in major raw material savings of more than 3% absolute. This advantage enables Pee Vee to produce air-jet yarns with lower conversion costs.

#### • Lower Power Consumption

The drive concept of the J 26 is based entirely on individual drives for spinning and winding units. Additionally, the zoning suction system achieves a uniform level of suction along the complete machine length with lowest power consumption (2.07 UKG).

### • Better Downstream Performance

The quality of the yarn is decisive for a fault free weaving preparation and weaving process. This finally reflects in the fabric appearance. Pee Vee achieved an enhanced weaving performance with 1.2 weft breaks/ cmpx and 0.3 million per meter warping breaks.

Yarn Quality Parameters:			
Count Ne	41	RKM (Breaking-Kilometer)	15.3
Count CV%	1.2%	Strength CV%	4.9%
CVm%	15.44%	Elongation	4.38%
Total IPI	239.6		

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## The Customer's Statement

"Pee Vee Textiles is well known for producing quality yarn and fabric by adopting latest technology available in the market. As a channel partner of Rieter, we have selected the air-jet spinning machine J 26 for producing yarn with higher productivity, less production costs and less machine space requirement. The state of art facility for downstream weaving application, the experience of Pee Vee Textiles and the Rieter know-how lead to high quality weaving yarn out of 100% Indian combed cotton."

> Mr. S K Gupta Assistant Vice President Spinning

#### **Pee Vee Textiles Limited**

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