

## R 37 – Outstanding Performance With 100% Virgin Cotton Knitting Yarn



Xiajin Taibai Textile Co., Ltd is located in Xiajin County, Shandong Province, China. The company has been collaborating with Rieter since it was founded in 2005. Xiajin Taibai recently bought two semi-automated rotor spinning machines R 37 to extend its mill which already consisted of two BT 923, two R 923 and one R 36. Today they have around 2 500 spinning positions in total. Xiajin Taibai focuses on the production of top-quality cotton knitting yarn. The main yarn counts are Ne 10, Ne 16, Ne 21 and Ne 32, which are used to produce fabric for T-shirts and sweaters. The company produces up to 500 tons of yarn every month. It plans to expand its production capacity to 5 000 positions in the next few years and needs high-quality semi-automated rotor spinning machines.

### The Challenge

Xiajin Taibai is mainly positioned at the top end of the 100% cotton knitting yarn market. It faces the following challenges which have led the company to invest in new machinery. 1. The recent increase in raw cotton prices requires control of raw material and operating costs. 2. Further improvement of yarn quality requires stability and consistency. This is important to maintain the company's position at the top end of the knitting yarn market. 3. React to lower prices of yarn from cotton growing areas. 4. Compared with weaving, the demand for rotor yarn for knitting is still small. It needs time to develop this market.

### The Solution

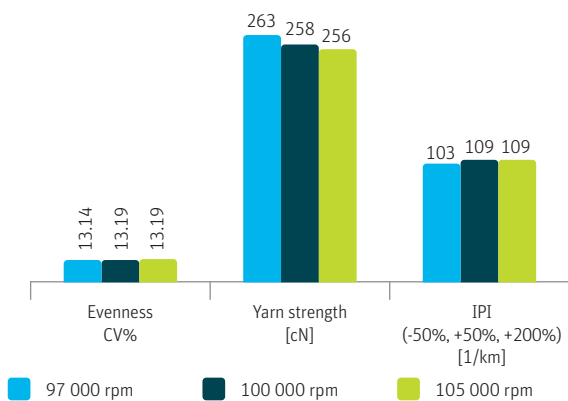
The semi-automated rotor spinning machine R 37 is the right solution to meet these challenges. The opening area of the spinning box is optimized to remove impurities and at the same time improves fiber guidance in the feeding and opening area. These performance improvements help to achieve high yarn tenacity while making full use of the good fibers in the sliver. Thanks to the high tenacity, the yarn twist can be reduced, resulting in a super soft yarn. This is perfect for knitting and expands the range of applications. At the same time, the more efficient impurity removal of the R 37 means that the cotton noil or waste mixing ratio can be increased. The R 37 has low energy consumption thanks to its design concept and efficient motors. The piecing technology AMIspin and the comfortable machine height improve work efficiency and reduce labor intensity.

## The Customer's Benefits

The R 37 produces 100% cotton knitting yarn with a yarn count of Ne 21 and a yarn delivery speed of 125 meters per minute. There are few ends down, the yarn quality is stable, and the machine has an efficiency of 99.4%. Xiajin Taibai also experienced that the R 37 is better at removing impurities. Compared to the R 36, it can adapt more easily to raw materials with a high trash content. The cotton noil or waste mixing ratio can be increased accordingly while maintaining the yarn quality. This effectively reduces raw material costs. At the same time, the spinning box supports stable spinning and consistent quality which additionally allows to increase the rotor speed. This increases the output and reduces the production and operating costs.

Customers in the downstream process praise the high-quality knitting yarn spun on the R 37. It delivers excellent performance in the knitting process with fewer ends down and high efficiency. The knitted T-shirt fabric has clean lines, is soft to the touch and comfortable to wear. For the customers of Xiajin Taibai, rotor spun knitting yarn has great potential and can become an alternative to ring spun knitting yarn in the future.

**Yarn Quality with the R 37**  
100% cotton, Ne 21, knitting yarn



Consistently high yarn quality even at higher rotor speeds.

**Rieter Machine Works Ltd.**  
Klosterstrasse 20  
CH-8406 Winterthur  
T +41 52 208 7171  
F +41 52 208 8320  
machines@rieter.com  
aftersales@rieter.com



## The Customer's Statement

*"Rieter and Taibai have collaborated for over 15 years. We are not only partners, but family too. The performance of the semi-automated rotor spinning machine R 37 is great for top-quality 100% virgin cotton knitting yarn."*

**Mr. Sun Jiafu**

General Manager of Xiajin Taibai Textile Co., Ltd.



The knitted T-shirts and sweaters made from rotor yarn have clean lines and are soft to the touch.

## Xiajin Taibai Textile Co., Ltd.

Luanzhuang Village  
Nancheng Town  
Xiajin County 253200  
Shandong Province  
China  
Phone: +86 534 3597168

The data and illustrations in this brochure and on the corresponding data carrier refer to the date of printing. Rieter reserves the right to make any necessary changes at any time and without special notice. Rieter systems and Rieter innovations are protected by patents.

3466-v1 en 2203

[www.rieter.com](http://www.rieter.com)