

## Hanif Increases Productivity by 10% with Guiding Arm Refurbishment and Doffer Maintenance Kit



Key components of the guiding arm refurbishment kit



Key components of the doffer maintenance kit

Hanif Spinning Mills Ltd. is renowned for consistently producing the best Ne 20 to 40 yarn in their segment in Bangladesh. The spinning mill has been manufacturing with ring spinning machines G 33 that are more than 20 years old. Extending machine lifetime and productivity while maintaining consistent performance is key for Hanif. Rieter offered guiding arm refurbishment and doffer maintenance kits for two ring spinning machines G 33. The result: productivity increased by 10%, doffing time was reduced by around 50% and restarting yarn breaks was lowered by around 80%.

### The Challenge

Hanif Spinning Mills Ltd. has been running its ring spinning machines G 33 for over 20 years. Due to the aging of the components in critical areas of drafting and doffing, the customer faced two major issues that affected the machine's performance and the operator's efficiency, resulting in decreased production output:

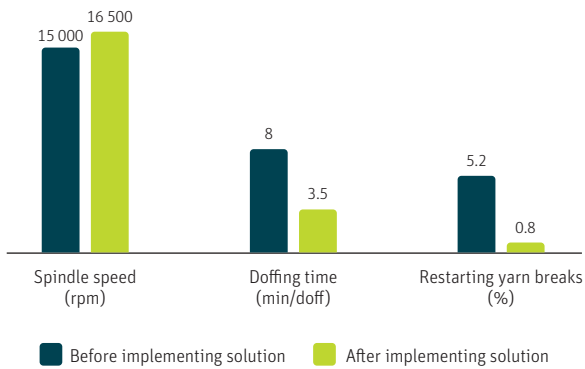
- Load variation and random lifting of guiding arms occurred due to wear out of key components. This led to quality inconsistency between spindles, undrafted roving, fiber lapping on top and bottom rollers and increased yarn breaks during running. To overcome this issue, the customer was forced to maintain a higher drafting load of above 2.6 bar.
- Higher doffing cycle time was observed due to unwanted machine stoppages and manual intervention, resulting in reduced machine efficiency and an increase in restarting yarn breaks. The frequency of the doffer operation is higher due to the coarse yarn count being processed. Hence, the impact of the doffing cycle time is key to machine efficiency.

### The Solution

The Rieter after sales team offered two solutions: the guiding arm refurbishment and the doffer maintenance kit. The guiding arm refurbishment consists of the pressure hose, top levers, pressure saddle and other technological components. This helps restore the original performance of the drafting system by ensuring a uniform load across the machine, resulting in stable drafting and consistent yarn quality.

The doffer maintenance kit consists of key doffer related components that help retain the doffing cycle time to its standard level of 180 seconds without any manual intervention.

Productivity increase and reduction of restarting yarn breaks  
100% cotton, Ne 24 carded knitted yarn, G 33, 1 008 spindles



Machine performance after guiding arm refurbishment and doffer maintenance kit installation

## The Customer's Benefits

After the implementation of these maintenance kits on two machines machine performance improved significantly.:

- The guiding arm refurbishment ensures load uniformity across the machine and performance is ensured as all guiding arms are pressed evenly and the drafting pressure is maintained between the recommended 2.3 and 2.4 bar.
- The doffer maintenance kit delivers the benefits of keeping doffing cycle time consistently low without any intermediate stoppages and always ensuring smooth doffing. To reduce the installation time, the doffer maintenance kit was delivered with pre-assembled parts.

The implementation of these two solutions resulted in an increase of 10% in production due to the higher spindle speed and increased machine efficiency. The spindle speed has been enhanced by 1 500 rpm because of the uniform drafting operations without any undrafted roving, without lapping and reduced restarting and running yarn breaks, which leads to raw material savings. The doffing time has been reduced by around 50% and the restarting yarn breaks by around 80%, resulting in increased machine efficiency.

**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

*"The guiding arm refurbishment and doffer kit solution offered by Rieter helps us increase production by 10%. It improves the working performance of the machine by reducing the operators' intervention significantly. We are planning to implement these conversions for the remaining 26 ring spinning machines."*

**Mohammed Hanif,**  
Managing Director,  
Hanif Spinning Mills Ltd., Bangladesh

**Hanif Spinning Mills Ltd.**  
Mouchak Kaliakair  
Gazipur 1750  
Bangladesh

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.

3675-v1 en 2312

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