

## **A Comparison Study of Yarns Produced by Ring Spinning System, For Native and Foreign Cotton Types**

**Dr. Sahar Mohamed El-blehy**

**PhD at the Higher Institute of Engineering - Department of Spinning and Weaving El  
Mahalla El Kobra**

[drsaharmohamed55@gmail.com](mailto:drsaharmohamed55@gmail.com)

### **Abstract**

The garment's end used depends on the fabric properties, whilst the fabric property depends on the properties of the constituent yarn. Therefore, with the diversification of the market, spinners are forced to produce quality yarn. Hence modern system gradually changed to Ring, Rotor, and compact spinning as widely used as a spinning system. Ring spinning is the universal system covering the widest area of yarn production.

The yarn produced by Ring, Compact, and rotor spinning systems belong to different structures and properties. The present research focused on yarn made as Ne '30s, 100% cotton yarn from five types of cotton materials such as G92, G94, Greek, and American as their properties have been tested. However, the present research focuses on comparing the yarn properties of the different cotton materials. It has been tested by Titan Universal strength tester as well as USTER® HVI 1000 (U%, CVm%, Neps, Strength, elongation, break force and break work) of the ring-spun yarn system. A comparison between the five cotton types of material has been observed.

### **Keywords:**

Cotton G92, G94, Greek, American, Strength, Elongation, Break Force And Break Work