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**TEXTILE INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

FZ/T 94044-2010

Replacing FZ/T 94044-1996

**Automatic winder
(English Translation)**

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Foreword

Instead of the standard FZ/T 94044-1996 "automatic winder." the main technical differences between this standard and FZ/T 94044-1996 compared as follows.

- This standard defines the scope of the original standard "automatic winder yarn library" to "automatic winder", extends the standard coverage (See Chapter 1);
- Increased product type, in addition to yarn type library, the original standard of the standard product type increases the "fine-linked network, centralized automated library yarn feeding tube Type cylinder rewinding automatic winder "(see 3.1);
- The standard machine type original standard "single winding head (single spindle) single-sided arrangement" to "single winding head (single spindle) Formula" (see 3.2.1);
- Expanding the scope of the number of winding heads, the present standard of the original standard winding head number "10 ~ 60" to "4 ~ 72" (see 3.2.2);
- Original standard fitting manner "air splicer, twisting machinery, mechanical knot" to "the formation of knotless yarn air splicer, mechanical rub Twist and other "(see 3.2.5);
- Expand the speed range of the automatic winder according to the development of technology, the present standard of the original standard winding speed "500m/min ~ 1500m/min "to" 300m/min ~ 2000m/min "(see 3.2.6);
- Original standard splicer length "12mm ~ 25mm" to "15mm ~ 35mm", focus on ensuring the strength splicing joints, twist Then the length is more in line with actual usage (see Section 4.1.3);
- The original standard three splice success rate " $\geq 95\%$ " to improve " $\geq 98\%$ " (see 4.2);
- Cheese length original standard error of the mean " $\pm 2\%$ " raised to " $\pm 1.8\%$ " (see 4.3.2);

- Original length standard tube gauze length coefficient of variation CV (%) " $\leq 2\%$ " to improve " $\leq 1.8\%$ " (see 4.3.3);
- References to security test requirements GB 5226.1-2008 (see 4.10 and 5.8);
- According to "verifiability principle" standard content, delete the reliability requirements of the original standard of 4.11;
- Cheese length and average error test tube gauze length variation coefficients, according to the national standard GB/T 4743 requirements, Makes provision for one hundred meters to take the weight of the standard yarn yarn way (see 5.3);
- Increase in the length of the tube gauze length coefficient of variation CV (%) and winding yarn tension coefficient of variation CV (%) calculation formula " $\times 100$ ", amended the original standard formula error [see equation (6) and (9)];
- Noise testing, security testing, inspection and product packaging coating according to existing national standards, industry standards revised accordingly Change (see 5.9, 5.11 and 5.7 ~ 7.2);
- The type test conditions of the original winding speed standard "1000m/min" raised to "1200m/min" [see 5.11c)], body Now in recent years substantial progress domestically automatic winder technology;
- Increasing the need for type testing fourth case "d) the national quality supervision departments type inspection requirements" (see 6.3.1);
- Increased its product marking requirements (see 7.1).

The standard proposed by China Textile Industry Association.

This standard by the National Standardization Technical Committee Textile machinery and accessories.

This standard was drafted. Qingdao Hongda Textile Machinery Co., Ltd., Shanghai Textile Machinery Co., Ltd., Dong Fei Mazuo in textile machinery have Ltd., Jiangsu Kai Gong Machinery Co., Ltd., Zhejiang Titan Corp., China Textile Machinery Association.

1 Scope

This standard specifies the automatic winder type and basic parameters, technical requirements, test methods, inspection rules and signs, packaging, transportation, Storage.

This standard will be applicable to natural fiber, chemical fiber as raw material linear density of pure 667tex ~ 4.2tex of blended yarn or strands Network automatic winder is made of cheese.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements GB/T 7111.1 Textile machinery - Noise test code - Part 1. General requirements GB/T 7111.4 Textile machinery - Noise test code - Part 4. Yarn processing, machinery rope GB/T 17627.2-1998 low-voltage high voltage test techniques for electronic equipment Part 2. Measuring systems and test equipment FZ/T 90001 Textile machinery Packaging FZ/T 90074 textile machinery products Painting FZ/T 90089.1 textile machinery nameplate types, sizes and technical requirements FZ/T 90089.2 textile machinery nameplate content FZ/T 93030 Textile machinery and accessories with a conical cross-wound bobbin technical conditions

3.1 Product Type

Yarn type library, fine-linked network, centralized automated library yarn feeding tube, tube rewinding automatic winder.

3.2 Basic parameters

3.2.1

Machine Type. Single winding head (single spindle) formula.

3.2.2

winders (ingot) Number. 4 ~ 72.

3.2.3

Spindle gauge. 320mm.

3.2.4

yarn detection types. electronic yarn clearer.

3.2.5

joint way. the formation of knotless yarn splicing air, twisting and other machinery.

3.2.6

Winding speed. 300m/min ~ 2000m/min.

3.2.7

computer monitor, setting records.

4.1 Joint quality

4.1.1

joint strength $\geq 80\%$ of the raw yarn strength; low support for high-strength yarn allows joint strength