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**On-line detection method for foreign fibers in
cotton-Electro-optical method**

棉花异性纤维在线检测方法 光电法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

Please note that some of the contents of this document may involve patents. The issuing

organization of this document does not assume the responsibility for identifying patents.

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This document was drafted by: Xinjiang Uygur Autonomous Region Standardization Research Institute, Xinjiang Uygur Autonomous Region Fiber Quality Monitoring Center, China Fiber Quality Monitoring Center, Uster Technology (China) Co., Ltd., Qingdao Shuangqing Intelligent Technology Co., Ltd., Beijing Jingwei Textile Machinery New Technology Co., Ltd. Limited Company.

The main drafters of this document are: Huang Xianglai, Du Weidong, Li Guanglei, Li Yu, Hou Chuan, Gao Jian, Cai Wenchao, Wang Jian, Tang Wei, Yang Dongsheng, Zhu Xuanzhi, Tang Jie, Zhang Zhenning, Huang Longxin, Li Tongzhong, Huo Chuan, Gu Yujun, Yin Zhongxin, and Cui Chunjie.

Online detection method for foreign fibers in cotton - photoelectric method

1 Scope

This document describes a method for the on-line detection of foreign fibers in cotton using a photoelectric method.

This document is applicable to the on-line detection of foreign fibers in raw cotton during the cotton spinning process.

2 Normative references

GB 1103.1

GB 1103.2

GB/T 8170

3 Terms and Definitions

For the purposes of this document, the terms and definitions given in GB 1103.1 and GB 1103.2 and the following apply.

3.1 injection efficiency

The ratio of the number of samples collected in waste cotton bags to the number of known tested samples.

Note. Injection efficiency is expressed in %.

3.2 Cotton pass efficiency

The continuous efficiency of the on-line foreign fiber detection equipment for cotton in the pipeline.

Note. The cotton passing efficiency is expressed in %.

3.3 cotton flow velocity

The speed at which cotton in a pipe passes through the foreign fiber detection equipment.

Note. The unit of cotton flow velocity is meter per second (m/s).

3.4 Carding machine output

The total weight of sliver and its noil produced by the carding machine in a certain period of time.

Note. Carding machine output is expressed in kilograms per hour (kg/h).

3.5 Number of foreign fibers online

The number of foreign fibers detected per 100 kg of test sample under online conditions.

Note. The unit of the number of foreign fibers online is expressed in pieces per 100 kilograms (pieces/100 kg).