

DRY COTTON IN COTTON CLEANING ENTERPRISES, FIBER WETTING TECHNIQUE AND TECHNOLOGY

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Abstract

This article presents modern methods and devices for wetting dry cotton, fiber in cotton refineries. It is known to us that in the process of processing cotton, the dryness rate of cotton is 8%, while the dryness rate is normal. In the process of processing cotton, the quality of the produced product will be at a high level if the degree of dryness of the cotton is in moderation.

Keywords: Initial processing of cotton, cotton wetting, uneven wetting, soaking efficiency, moisturizing agent.

Introduction

Due to significant changes in the cotton industry carried out in the field of improvement and modernization of machinery and technology of primary cotton processing, Uzbek cotton fabric is sold in net weight on the world market and occupies a leading position in terms of quality indicators. Along with this, at most cotton gins in the Republic, recommendations on choosing the optimal ways to moisten cotton and its fibers are applied and applied locally.

At cotton gins, various steam boilers made by local craftsmen are used to impregnate cotton and fibers. These steam boilers are small in size and large in size, and the non-automated processes of their operation are lengthy and dangerous. The result is uneven wetting of cotton and fibers, which does not allow rational use of electricity while reducing the wetting efficiency. Taking into account the shortcomings and disadvantages of existing systems, the cotton industry, in accordance with the demand for sawtooth cotton gins having cotton and fiber wetting to improve technological systems, increase their technical level, reduce the cost of fiber produced and preserve natural quality indicators, Cotton Cleaning Iicb researchers have developed a compact, fast and automated moisturizing agent manufacturer (NAICH) and set up production. The masking system can be applied and used both in cotton processing plants and in cotton processing plants.

Manufacturer of a moisturizing agent for moisturizing cotton and fiber (naich brand). Manufacturer of a moisturizing agent of the NAICH type, the composition of the components of the cotton and fiber humidification system, installation is carried out according to the technological positioning scheme:

The scheme of soaking cotton wool is shown in Figure 1, and its composition is shown in the table.

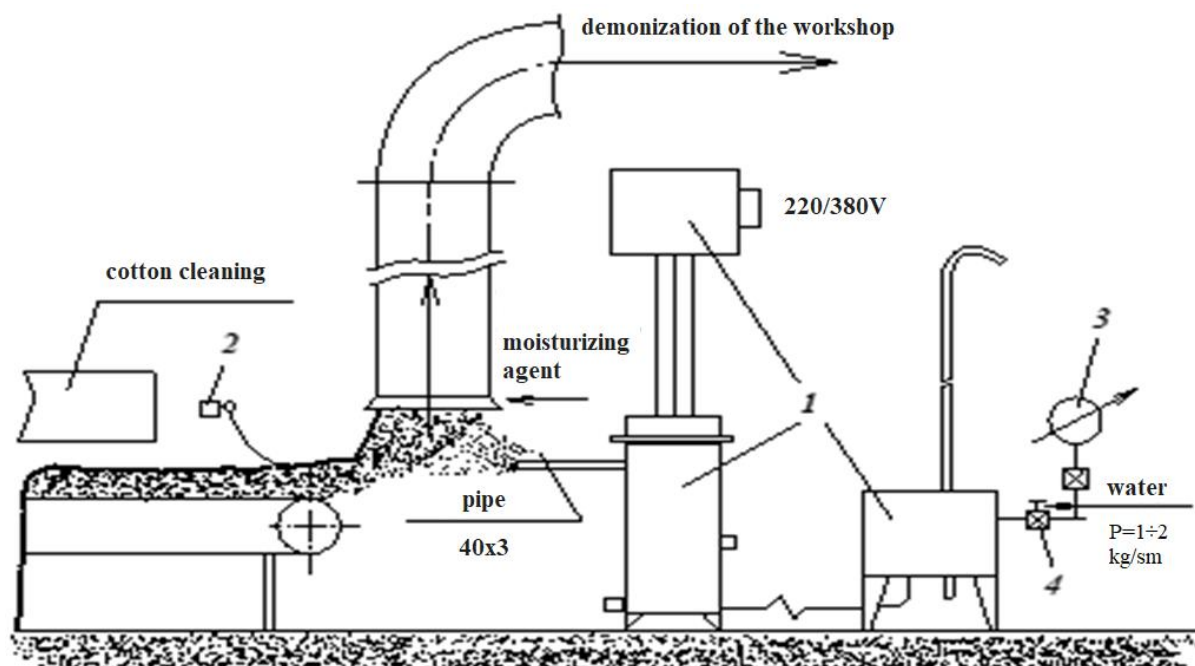


Figure 1. Cotton soaking scheme

The scheme of the cotton wool wetting system consists of the following main parts: 1- developer of the wetting agent; 2-cotton flow sensor; 3-Pressure gauge; 4-valve.

Table 1

O/n	Component	The concept of quantity, type	Components of the workplace	composition, pieces
1	Manufacturer of the moisturizing agent Including: Control cabinet The supplier	1 NAICH . 000 1 NAICH. 100 1 NAICH. 200	"Paxta tozalash IIChB" OAO - -	1 1 1
2	Cotton flow sensor	D. 000	"Paxta tozalash IIChB" OAO	1
3	Pressure gauge R=2 kg/cm ²	MTP	Pressure gauge manufacturing company in Tomsk, Russia	1
4	Valve, bronze		Free trade	1

In this system, the receipt and departure of cotton raw materials is monitored using a cotton flow sensor 2 installed at the point where cotton is fed into the pneumatic transmission pipeline through a belt conveyor after cleaning cotton from small and large impurities. If the cotton is not in the belt conveyor, the cotton flow sensor 2 automatically stops the supply of the wetting agent to the NAICH, thereby ensuring uniform wetting of the cotton.

The composition of the cotton soaking system. The wetting scheme (in Fig.2) from the fiber transmission pipeline in front of the capacitor to the fiber stream is presented in the

composition-table diagram, which will consist of the following main parts: It consists of the 1st developer of the wetting agent, the 2nd pressure gauge, the 3rd valve and the 4th stud.

Method of operation:

The fiber, which is separated from the seeds by cotton shredding machines, is cleaned of impurities contained in the fiber by fiber cleaning machines and sent through an air pipe to the correct condenser. A pre-prepared 1st wetting agent is fed into the fiber-conducting pipe in front of the condenser through a thread of the 4th diameter Ø30 mm, which as a result mixes with the fiber in the air stream and moistens it to 0.4%. If the fiber stops the fiber from entering the pipe, the wetting agent is automatically stopped.

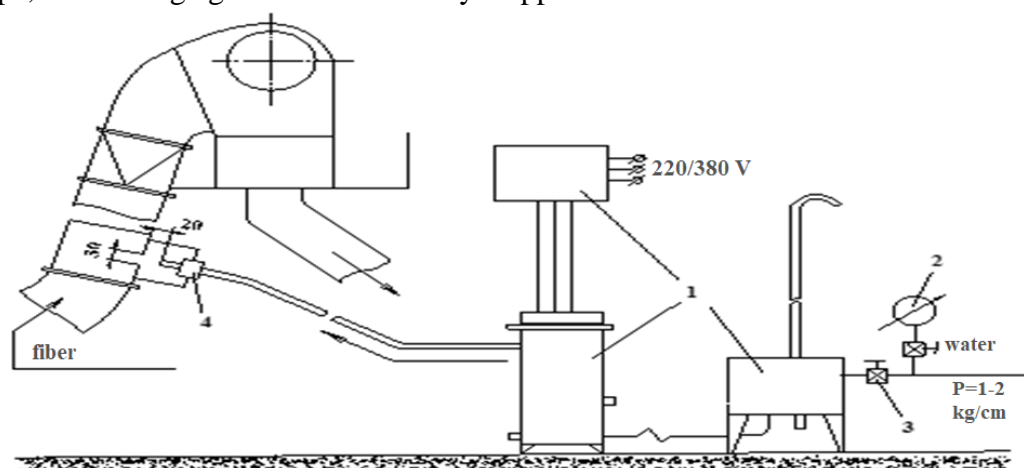


Figure 2. The scheme of wetting the fiber in the fiber transmission pipeline in front of the capacitor. 1-generator of the wetting agent; 2-pressure gauge; 3-valve; 4-nozzle.

The scheme of the humidification system in the vertical shaft after the fiber condenser is shown in Figure 3. Its composition is a table that consists of the following main parts: 1-humidifying agent; generator, 2-pressure gauge; 3-fan; 4-fiber humidifier in a vertical shaft the way it works is as follows the fiber separates the fiber from the air using a condenser.

A special fiber humidifier is installed on the fiber passing through the vertical shaft, into which the moisturizing agent is wrapped through the manufacturer of the moisturizing agent and additionally moisturizes the fiber passing through the vertical shaft by 0.7 percent.

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