

A Device and Method for Assisting the Formation of Alumina Chopped Fiber Felt by Air-laying

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Abstract

The present invention belongs to the technical field of textile accessories. Disclosed are an auxiliary air-laying device for forming an alumina chopped fiber felt, and a method. The device comprises: a cotton feeding cart, wherein the cotton feeding cart is connected to a combing machine; the combing machine is connected to a high cotton box by means of a fan pipe; a channel device is arranged below the high cotton box, and a plurality of rows of spiked roller groups composed of several spiked rollers are arranged in the channel device; a negative-pressure suction fan is arranged below the channel device; a conveyor device is arranged between the negative-pressure suction fan and the channel device; and a press roller is arranged at an outlet of the channel device. The present invention avoids damage to fibers caused by conventional carding, so as to meet the needling conditions of a needling machine and high-thickness web forming requirements, thereby ensuring high-quality and stable preparation of an alumina chopped fiber felt, and the present invention can effectively solve the problem of alumina fibers being broken and squeezed into powder during web forming. and can effectively improve the production efficiency and production quality of the alumina chopped fiber felt.

(Figure 1)