Automatic Pencil Sharpener

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Invention purpose : to design pencil full-automatic planing device with simple structure, to improve the automation degree of sharpening pen, environmental protection and to enhance the working efficiency of the sharpening pen. Invention step: the principle research is conducted first, then the structure design is carried out, and finally the physical model making is carried on. The first generation scheme can realize the full-automatic sharpening pencil of three pencils?The second-generation scheme design includes four travel switches which control the forward direction and inversion of two motors respectively, so as to realize the automatic conveying , clamping, planing and blanking of pencil. data my works needs 10 seconds to sharpen a pencil, but the key of my works is to realize the full automation. To sharpen 500 pencils, the manual pencil sharpener needs 273 mins, while my product needs only 83 mins. the motor used now is 7W 12V 0.6 A, 120 r/minute conclusion The device can achieve automatic feed, planing and discharging of the pencil, greatly improving the working efficiency, and can separate powered carbon from sawdust the first time, realizing the recycling of powered carbon, saving resources, avoiding polluting environment, and reducing the labor intensity of sharpening pen. two patents of utility models have been successfully applied.

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