One Key Recycling Intelligent Disinfection Cabinet for Waste Textbooks

Hu, Jingke (School: Hangzhou Xuejun High School)

The intelligent disinfection cabinet for textbooks is sterilized with ozone, with an automatic page turning device used to make textbook pages contact with the ozone fully and enable a thorough sterilization for the book. There is a reduction device in disinfection cabinet eliminating the residual ozone, making the device environmentally friendly and pollution-free. Experimental results show that under the conditions of ozone concentration of 250 mg/m3, page turning speed of 25 pages / minute and humidity of 50%, an overall sterilization rate of 94% is achieved. The device effectively disinfect textbooks and avoids paper damage. So it is suitable for disinfection of circular textbooks and saves valuable forest resources.

Awards Won: