

Study on Information Collection System of Epidemic Temperature

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Abstract

This design relates to the technical field of temperature measurement by body temperature gun, in particular to an epidemic temperature information collection system, which registers through ID card or two-dimensional code marked with personal information, through ID card scanning area or two-dimensional code drawing area, users control registration through multiple groups of operation buttons, and users who register personal information measure their body temperature by themselves through body temperature gun. Charging the body temperature gun through the charging seat avoids the shortage of electricity in the body temperature gun, which can not only count the information but also avoid the inconvenience of the staff to measure a large number of people; It also comprises an information registration display, a bottom plate, an ID card scanning area, a two-dimensional code drawing area, a charging seat and a body temperature gun, wherein the bottom end of the information registration display is connected with the top end of the bottom plate; An ID card scanning area and a two-dimensional code drawing area are installed at the bottom end of the information registration display, a charging seat is arranged in the charging seat, a body temperature gun is installed in the charging seat, and a charging port is arranged at the bottom end of the body temperature gun.

Keywords

Epidemic Situation; Body Temperature; Information Collection System.

1. Preface

With the development of social economy, it also damages the environment, which will make some viruses and bacteria affect people's health. Nowadays, people's body temperature is tested in communities, companies and public places to prevent large-scale infection, and at the same time, infected people can get timely medical treatment. However, when people's body temperature is detected, they are all manually holding body temperature guns to detect people one by one, which not only has low efficiency, but also causes the detection to be terminated due to insufficient power of the body temperature guns, and the information of each person cannot be counted, causing great inconvenience. Therefore, the above problems should be solved.

2. Design content

In order to solve the above technical problems, the design provides a method for registering through an ID card or a two-dimensional code marked with personal information, through an ID card scanning area or a two-dimensional code drawing area, a user controls registration through a plurality of groups of operation buttons, and a user who has registered personal information measures body temperature by himself through a body temperature gun. The epidemic temperature information collection system can charge the body temperature gun through the charging seat to avoid the situation that the body

temperature gun has insufficient power, not only can count information, but also can avoid the inconvenience that workers measure a large number of people.

The designed epidemic body temperature information collection system also includes an information registration display, a bottom plate, an ID card scanning area, a two-dimensional code drawing area, a charging seat and a body temperature gun, wherein the bottom end of the information registration display is connected with the top end of the bottom plate, and the information registration display is provided with a plurality of groups of operation buttons, two groups of startup and shutdown buttons and a display screen. An ID card scanning area and a two-dimensional code drawing area are installed at the bottom end of the information registration display, the bottom end of the charging seat is connected with the top end of the bottom plate, and the charging seat is located at the left end of the information registration display.

The epidemic temperature information collection system of this design also includes a liquid sprayer, a support frame, a switch, a first conveying pipe, a liquid inlet pipe, a water pump and a second conveying pipe, the support frame and the switch, wherein the bottom end of the liquid sprayer is connected with the top end of the support frame, the switch is located on the left side of the support frame, The liquid inlet pipe is communicated with the chamber of the disinfection box, the first conveying pipe is communicated with the input end of the water pump, and the input end of the water pump is communicated with the second conveying pipe which extends into the chamber of the disinfection box.

The designed epidemic temperature information collection system also includes a motor, a speed reducer and a stirring shaft. The top ends of the motor and the speed reducer are connected with the bottom end of the disinfection box. The output end of the motor is in transmission connection with the input end of the speed reducer, which is in transmission connection with the stirring shaft, which extends into the chamber of the disinfection box and is provided with a stirring rod.

The designed epidemic temperature information collection system also includes an alarm display screen and two groups of support boards, the bottom ends of which are connected with the top ends of the information registration display, and the alarm display screen is connected with the temperature gun PLC control.

The designed epidemic temperature information collection system also includes paper tubes and two groups of hanging plates, and the paper tubes are installed on the bottom plate through the two groups of hanging plates. It also comprises two groups of fixing columns, and the top ends of the two groups of fixing columns are connected with the bottom end of the bottom plate. It also comprises two groups of threaded seats, and the top ends of the two groups of threaded seats are connected with the bottom ends of the two groups of fixed columns. It also comprises two groups of casters. Two sets of casters are installed on the bottom ends of the two sets of fixed columns.

3. Specific implementation mode

The specific implementation of this design will be further described in detail with reference to the drawings and examples. The following examples are used to illustrate the design, but not to limit the scope of the design.

Mark in the drawings: 1. Information registration display; 2. Bottom plate; 3. Operation buttons; 4. Start the close button; 5. Display screen; 6. ID card scanning area; 7. QR code scanning area; 8. Charging seat; 9. Body temperature gun; liquid sprayer; support frame; switch; A first conveying pipe; disinfection box; And a liquid inlet pipe; water pump; And a second conveying pipe; motor; reducer; stirring shaft; stirring rod; alarm display screen; support plate; paper tube; hanging board; fixed column; screw seat; casters.

As shown in fig. 1 to this design, the epidemic body temperature information collection system also includes an information registration display 1, a bottom plate 2, an ID card scanning area 6, a two-dimensional code drawing area 7, a charging seat 8 and a body temperature gun 9, wherein the bottom

end of the information registration display 1 is connected with the top end of the bottom plate 2, and the information registration display 1 is provided with a plurality of groups of operation buttons 3, two groups of start-stop buttons 4 and a display screen 5. An ID card scanning area 6 and a two-dimensional code drawing area 7 are installed at the bottom end of the information registration display 1. The bottom end of a charging seat 8 is connected with the top end of the bottom plate 2, and the charging seat 8 is located at the left end of the information registration display 1. Through the ID card or the two-dimensional code marked with personal information, The registration is carried out through the ID card scanning area 6 or the two-dimensional code drawing area 7, the user controls the registration through a plurality of groups of operation buttons 3, the user who has registered personal information measures the body temperature by himself through the body temperature gun 9, and charges the body temperature gun 9 through the charging seat 8 to avoid the situation that the body temperature gun 9 has insufficient power. It can not only count the information, but also avoid the inconvenience of measuring a large number of people.

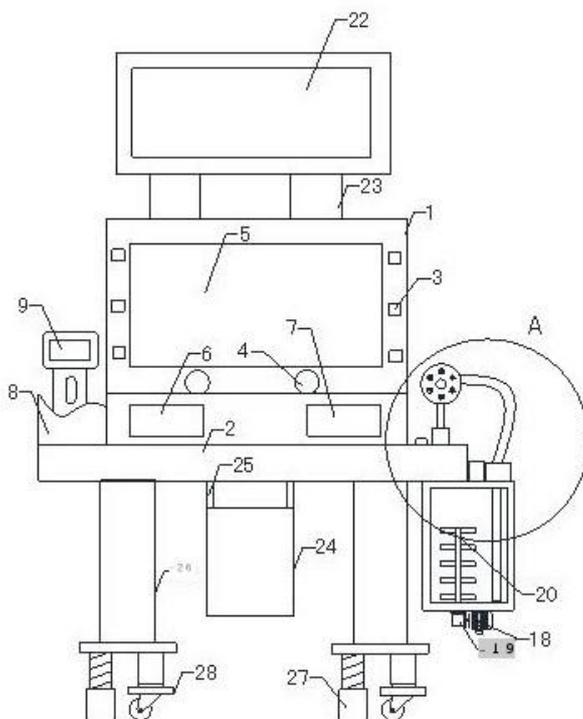


Figure 1. Schematic diagram of structure

The epidemic temperature information collection system of this design also includes a liquid sprayer, a support frame, a switch, a first conveying pipe, a liquid inlet pipe, a water pump and a second conveying pipe, the support frame and the switch, wherein the bottom end of the liquid sprayer is connected with the top end of the support frame, the switch is located on the left side of the support frame, The liquid inlet pipe is communicated with the chamber of the disinfection box, the first conveying pipe is communicated with the input end of the water pump, and the input end of the water pump is communicated with the second conveying pipe which extends into the chamber of the disinfection box; Disinfection liquid and water are poured into a disinfection box through a liquid inlet pipe, and are transmitted through a first conveying pipe and a second conveying pipe by a water pump to be sprayed by a liquid sprayer. Disinfect the user's hands.

The designed epidemic temperature information collection system also includes a motor, a speed reducer and a stirring shaft, the top ends of which are connected with the bottom of the disinfection box, the output end of the motor is in transmission connection with the input end of the speed reducer, and the input end of the speed reducer is in transmission connection with the stirring shaft, which

extends into the chamber of the disinfection box and is provided with a stirring rod. The motor and the reducer drive the stirring shaft and the stirring rod to mix the disinfectant and water in the chamber of the disinfection box, thus improving the mixing effect and efficiency.

The designed epidemic temperature information collection system also includes an alarm display screen and two groups of support boards, the bottom ends of which are connected with the top ends of the information registration display 1, and the alarm display screen is connected with the temperature gun 9 PLC control. The temperature detected by the body temperature gun 9 is displayed on the stirring shaft, The user with abnormal temperature displays red on the alarm display screen to indicate that the user is abnormal, and the information of abnormal temperature is synchronized in the personal information of the information registration display 1.

The epidemic temperature information collection system of this design also includes paper tube and two groups of hanging plates, and the paper tube is installed on the bottom plate 2 through the two groups of hanging plates; Toilet paper can be obtained by conveniently placing some disinfectant water after wiping hands through a paper tube.

The designed epidemic temperature information collection system also includes two groups of fixed columns, the top ends of which are connected with the bottom end of the bottom plate 2. It is convenient to support equipment.

The epidemic temperature information collection system of this design also includes two groups of threaded seats, the top ends of which are connected with the bottom ends of two groups of fixed columns; Improve support stability.

The designed epidemic temperature information collection system also includes two sets of casters, which are installed on the bottom ends of the two sets of fixed columns. Facilitate the movement of equipment.

The epidemic temperature information collection system designed in this paper, when working, firstly drives the stirring shaft and the stirring rod to mix the disinfectant and water in the chamber of the disinfection box through the transmission of the motor and the speed reducer, presses the switch, transmits it through the first conveying pipe and the second conveying pipe by the water pump for spraying, and disinfects the hands of the users. Then register through ID card or two-dimensional code marked with personal information, ID card scanning area 6 or two-dimensional code drawing area 7, users control registration through multiple groups of operation buttons 3, users who have registered personal information measure their body temperature by themselves through body temperature gun 9, and then the temperature detected by body temperature gun 9 is displayed on the stirring shaft. A user with abnormal temperature displays red on the alarm display screen to indicate that the user is abnormal, and the information of abnormal temperature is synchronized in the personal information of the information registration display 1.

The design of the epidemic temperature information collection system, its installation mode, connection mode or setting mode are common mechanical modes, as long as it can achieve its beneficial effects, it can be implemented; The motor of the epidemic temperature information collection system designed in this paper is purchased from the market, and the technicians in this industry only need to install and operate it according to the attached operating instructions.

4. Concluding remarks

Compared with the prior art, the design has the beneficial effects that registration is carried out through an ID card or a two-dimensional code marked with personal information, a user controls registration through a plurality of groups of operation buttons, a user who has registered personal information measures body temperature by himself through a body temperature gun, Charging the body temperature gun through the charging base can avoid the situation of insufficient power of the body temperature gun, which can not only count information but also avoid the inconvenience of workers to measure a large number of people.

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