

Coding System of Architectural Aluminum Formwork System

Technical Field

The invention relates to a coding system of architectural aluminum formwork system.

Background Art

The existing coding system of architectural aluminum formwork system mainly includes two forms, namely a paint pen for handwriting and a sticker. Such two forms can only identify some information of products. Besides, the product information is static, and fails to achieve automated management of products, such as delivery and recycling. Besides, the aluminum formwork system has the particularity of many panels and similar shapes, and therefore there is usually the situation of error assembling or the panel is not available on the installation site.

Summary of the Invention

The invention provides a coding processing system of architectural aluminum formwork system that can maximize automated management of products and formwork positioning service.

In order to solve the above technical problem, the present invention uses the technical solution of: a coding system of architectural aluminum formwork system, including an architectural aluminum formwork system and a coding system, wherein,

The architectural aluminum formwork system comprises: a number of architectural aluminum formworks, each of the architectural aluminum formworks is provided with corresponding aluminum formwork parameters; a panel number generator generating a unique panel number according to the

corresponding parameters of the architectural aluminum formwork;

The said coding system comprises a data storage connected to the panel number generator and used to store the panel number generated by the panel number generator; an identification mark generator connected to the data storage and used to generate a unique identification mark in accordance with the panel number of the architectural aluminum formwork in the data storage; an identification mark printer connected to the identification mark generator and used to print the identification mark generated by the identification mark generator; a handheld operator connected to the data storage and used to read the identification mark and match the read identification mark information with the panel number information in the data storage to get the position information of the desired architectural aluminum formwork.

Further, the architectural aluminum formwork system further comprises a parameter collector, which is connected to the panel number generator, and is used to collect parameter information of the architectural aluminum formwork and deliver the collected parameter information to the panel number generator.

In particular, the parameter collector comprises a formwork size collection module, a formwork position collection module, a formwork unit collection module, a formwork area color collection module and a formwork position collection module.

Further, the identification mark generator is provided with a two-dimensional code generating module, or the identification mark generator is provided with a one-dimensional code generating module, or the identification mark generator is provided with a bar code generating module.

Further, the handheld operator is provided with an identification mark reading module and a matching module, where the matching module is respectively connected to the identification mark reading module and the data

storage.

Further, the coding system further comprises a storage unit, which is connected to the data storage, is provided with an identification mark reading module, and stores the architectural aluminum formwork information read by the identification mark reading module in the data storage.

Further, the coding system further comprises a delivery unit, which is provided with an identification mark reading module and a delivery note generating module, wherein the identification mark reading module is connected to the delivery note generating module, and the delivery note generating module generates a delivery note according to the architectural aluminum formwork information read by the identification mark reading module.

The invention has the advantages and positive effects as follows: the invention introduces the identification technology, such as the two-dimensional code technology, one-dimensional code technology and bar code technology, into the aluminum formwork building system, thereby forming a new aluminum formwork system coding management system. In the invention, an identification mark generator is equipped to gather the panel number information of each aluminum formwork in the architectural aluminum formwork system to generate an identification mark in the form of a two-dimensional code, a one-dimensional code or a bar code; an identification mark printer is equipped to print the identification mark generated by the identification mark generator; a handheld operator is equipped to read the identification mark and match the read identification mark information with the panel number information in the data storage to get the position information of the desired architectural aluminum formwork. The invention is more convenient to manage aluminum formwork products of the architectural aluminum formwork system, can easier collect and deliver aluminum formwork products, is also more efficient in site installation,

can clearly indicate the position of aluminum formwork products, and can effectively reduce time consumption for workers to look for aluminum formworks, thus improving the work efficiency.

Brief Description of the Drawings

Figure 1 is a system block diagram of the coding process of the invention architectural aluminum formwork system.

Detailed Description of the Invention

The embodiment of the invention is illustrated in detail with reference to the Drawings as follows.

As shown in Figure 1, the coding system of the invention architectural aluminum formwork system comprises an architectural aluminum formwork system and a coding system.

Wherein, the architectural formwork system comprises a number of architectural aluminum panel and a panel number generator. Each of the architectural aluminum panels is provided with corresponding aluminum panel parameters. The plate number generator can generate a unique panel number according to the corresponding parameters of the architectural aluminum panel.

The architectural aluminum template system further comprises a parameter collector, which is connected to the plate number generator, is used to collect the parameter information of the architectural aluminum formwork and deliver the collected parameter information to the panel number generator. Wherein, the parameter collector comprises a formwork size collection module, a formwork position collection module, a formwork unit collection module, a formwork area color collection module and a formwork position collection module, which are respectively used to collect size parameter, position parameter, unit parameter, area color parameter, and position parameter of the aluminum formwork.

The coding system comprises a data storage, an identification mark generator, an identification mark printer and a handheld operator. The data memory is connected to the panel number generator and is used to store the panel number generated by the panel number generator. The identification mark generator is connected to the data storage, and is used to generate a unique identification mark in accordance with the panel number of the architectural aluminum formwork in the data storage. The identification mark printer is connected to the identification mark generator, and is used to print the identification mark generated by the identification mark generator. The handheld operator is connected to the data storage, and is used to read the identification mark and match the read identification mark information with the panel number information in the data storage to get the position information of the desired architectural aluminum formwork.

The identification mark generator is provided with a two-dimensional code generating module, a one-dimensional code generating module or a bar code generating module. The identification mark generator can generate a two-dimensional pattern, a one-dimensional code pattern or a bar code pattern based on the panel number information of the architectural aluminum formwork. The identification mark generator as shown in Figure 1 is provided with a two-dimensional code generating module.

The handheld operator is provided with an identification mark reading module and a matching module. The matching module is respectively connected to the identification mark reading module and the data storage. The identification mark reading module is used to read the identification mark information of aluminum formwork. The matching module is used to match the read identification mark information with the aluminum formwork information in the data memory, so as to find the storage position information of each aluminum

formwork.

The coding system further comprises a storage unit, which is connected to the data storage, is provided with an identification mark reading module, and stores the architectural aluminum formwork information read by the identification mark reading module in the data storage.

The coding system further comprises a delivery unit, which is provided with an identification mark reading module and a delivery note generating module, wherein the identification mark reading module is connected to the delivery note generating module, and the delivery note generating module generates a delivery note according to the architectural aluminum formwork information read by the identification mark reading module.

The working process of the management system of this invention architectural aluminum formwork system comprises:

According to the structural characteristics of a building, designing a complete workable aluminum formwork system solution, marking the position of each formwork in the building structure, and creating a unique position map for each formwork, and then collecting the parameter information of each aluminum formwork by the parameter collector.

Processing the parameters of each template to generate a unique panel number by the panel number generator, and storing the panel number as the name of the position map in the data storage. By the two-dimensional code generating module in the identification mark generator, generating a two-dimensional code pattern corresponding to the unique panel number, and generating a label comprising the two-dimensional code pattern. The label records the information corresponding to the formwork, including: formwork size, formwork position, formwork unit, formwork area color, formwork position sketch map, etc.

Printing the above two-dimensional code label by the identification mark

printer, and pasting the two-dimensional code label on the corresponding formwork template.

When in storage, reading the two-dimensional code label on the formwork and extracting the data corresponding to the formwork for storage by the identification mark reading module in the storage unit.

During delivery, by the identification mark reading module in the delivery unit, reading the two-dimensional code label on a formwork, extracting the data corresponding to the formwork, and subtracting the original number of aluminum formworks in the data memory for delivery, whilst generating the delivery note.

When locating the formwork position, the two-dimensional code label is bound with the corresponding formwork position sketch map. When the workers need to locate the formwork position in the building structure on the site, they can read the two-dimensional code label by the identification mark reading module in the handheld operator, match the information on the two-dimensional code label with the information in the data storage through the panel number information in the data memory with wireless connection, find the aluminum formwork position sketch map, and refer to the map for effective installation.

The invention is more convenient to manage aluminum formwork products of the architectural aluminum formwork system, can easier collect and deliver aluminum formwork products, is also more efficient in site installation, can clearly indicate the position of aluminum formwork products, and can effectively reduce time consumption for workers to look for aluminum formworks, thus improving the work efficiency.

While an embodiment of the present invention has been described in detail, but this description is a preferred embodiment only, and is not intended to limit the scope of the invention. All equivalent modifications and improvements, etc. that are made without departing from the claims of this invention shall fall within

the scope of the invention patent.

Claims

1. A coding system of architectural aluminum formwork system, comprising an architectural aluminum formwork system and a formwork coding system, wherein,

the architectural aluminum formwork system comprises:

a number of architectural aluminum panels, each of which is provided with corresponding aluminum panel parameters;

a parameter collector collecting the corresponding aluminum panel parameters of the architectural aluminum formwork; wherein the parameter collector comprises a formwork size collection module for collecting formwork size information, a formwork unit collection module for collecting formwork unit information, a formwork area color collection module for collecting formwork color information, and a formwork position collection module for collecting formwork position information in building structure; thereby creating a unique position map for each panel;

a panel serial number generator, connecting to the parameter collector, and used to generate a unique panel number for each architectural aluminum panel according to its corresponding aluminum panel parameters;

the coding system comprises:

a data memory, connected to the panel number generator and used to

store the panel number generated by the panel serial number generator;

an identification mark generator, connected to the data storage and used to generate a unique identification mark in accordance with the panel number of the architectural aluminum formwork in the data storage;

an identification mark printer, connected to the identification mark generator and used to print the identification mark generated by the identification mark generator;

a handheld operator, connected to the data storage and used to read the identification mark and match the read identification mark information with the panel number information in the data memory to get the position information of the desired architectural aluminum formwork.

2. The coding system of the architectural aluminum formwork system according to Claim 1, wherein, the identification mark generator is provided with a two-dimensional code generating module, or the identification mark generator is provided with a one-dimensional code generating module, or the identification mark generator is provided with a bar code generating module.

3. The coding system of the architectural aluminum formwork system according to Claim 1, wherein, the handheld operator is provided with an identification mark reading module and a matching module, wherein the matching module is respectively connected to the identification mark reading module and the data storage.

4. The coding system of the architectural aluminum formwork

system according to Claim 1, wherein, the coding system further comprises a storage unit, which is connected to the data storage, is provided with an identification mark reading module, and stores the architectural aluminum formwork information read by the identification mark reading module in the data storage.

5. The coding system of the architectural aluminum formwork system according to Claim 1, wherein, the coding system further comprises a delivery unit, which is provided with an identification mark reading module and a delivery note generating module, wherein the identification mark reading module is connected to the delivery note generating module, and the delivery note generating module generates a delivery note according to the architectural aluminum formwork information read by the identification mark reading module.