increases.

[0006] In view of this, it is an object of the present invention to provide a coating removing method and a coating removing equipment that, in order to obtain a base film with which a recycled film can be stably formed from a used coated film even when the film is remelted, can efficiently remove a coating from a surface of a coated film including a coating containing a water-soluble resin on at least one side of a base film by dissolving the water-soluble resin with a very small amount of a solvent.

Solution to Problem

[0007] According to a first aspect of the present invention, there is provided a method for removing a coating from a coated film including a coating containing a water-soluble resin on at least one side of a base film. The method includes: supplying a cleaning liquid in a form of droplets to a surface of the coating film at 1 cm^3 or more and 30 cm^3 or less per unit area of 1 m^2, and retaining the cleaning liquid in the form of droplets having a diameter of 1mm or less on the surface of the coating; and c removing the coating containing the cleaning liquid from the coated film.

The coating removing method according to the above aspect of the present invention has the following embodiments.

The cleaning liquid is supplied to the surface of the coating while being heated to 40°C or higher.

The coated film is heated to 40°C or higher.

The coating film contains a curable silicone resin.

The cleaning liquid is water.

A diameter of the droplets of the cleaning liquid is 1 mm or less.

[0008] According to a second aspect of the present invention, there is provided an equipment for removing a coating from a coated film including a coating containing a water-soluble resin on at least one side of a base film. The equipment includes: a cleaning-liquid applying

mechanism configured to dispense a cleaning liquid in a form of droplets toward a surface of the coating film at 1 cm^3 or more and 30 cm^3 or less per unit area of 1 m^2 such

that the cleaning liquid is able to be retained in the form of droplets having a diameter of 1mm or less on the surface of the coating; and a removing mechanism configured to remove the coating film containing the cleaning liquid from the coated film in which the cleaning liquid has been supplied to the surface of the coating.

The coating film removing equipment according to the above aspect of the present invention has the following embodiments.

The cleaning-liquid supplying mechanism includes a unit configured to heat the cleaning liquid.

The coating film removing equipment further includes a unit configured to heat the coated film.

Advantageous Effects of Invention

[0009] By the method for removing a coating film and the equipment for removing a coating film according to the above aspects of the present invention, the coating film can be efficiently removed from the coated film including the coating film containing the water-soluble resin on at least one side of the base film with a small amount of the cleaning liquid.

Brief Description of Drawings

[0010] FIG. 1 is a schematic diagram of a removing equipment 101 according to a first embodiment of the present invention.

FIG. 2 is a schematic diagram of a removing equipment 201 according to a second embodiment of the present invention.

FIG. 3 is a schematic diagram of a removing equipment 301 according to a third embodiment of the present invention.

FIG. 4 is a schematic diagram of a conventional

Claims

1. A method for removing a coating film from a coated film including a coating film containing a water-soluble resin on at least one side of a base film, the method comprising:

supplying a cleaning liquid in a form of droplets to a surface of the coating film at 1 cm^3 or more and 30 cm^3 or less per unit area of 1 m^2, and retaining the cleaning liquid in the form of droplets having a diameter of 1mm or less on the surface of the coating film; and

subsequently removing the coating film containing the cleaning liquid from the coated film.

2. The method for removing a coating film from a coated film according to claim 1, wherein a method of supplying the cleaning liquid is a method other than a steam injection.

3. The method for removing a coating film from a coated film according to claim 1 or 2, wherein the cleaning liquid is supplied to the surface of the coating film while being heated to 40°C or higher.

4. The method for removing a coating film from a coated film according to any one of claims 1 to 3, wherein the coated film is heated to 40°C or higher.

5. The method for removing a coating film from a coated film according to any one of claims 1 to 4, wherein the coating film contains a curable silicone resin.

6. The method for removing a coating film from a coated

film according to any one of claims 1 to 5, wherein the cleaning liquid is water.

7. An equipment for removing a coating film from a coated film including a coating film containing a water-soluble resin on at least one side of a base film, the equipment comprising:

a cleaning-liquid supplying mechanism configured to dispense a cleaning liquid in a form of droplets toward a surface of the coating film at 1 cm^3 or more and 30 cm^3 or less per unit area of 1 m^2 such that the cleaning liquid is able to be retained in the form of droplets having a diameter of 1mm or less on the surface of the coating film; and

a removing mechanism configured to remove the coating film containing the cleaning liquid from the coated film in which the cleaning liquid has been supplied to the surface of the coating film.

8. The equipment for removing a coating film from a coated film according to claim 7, wherein the cleaning-liquid supplying mechanism is a mechanism other than a steam injection.[1]

9. The equipment for removing a coating film from a coated film according to claim 7 or 8, wherein the cleaning-liquid supplying mechanism includes a unit configured to heat the cleaning liquid.

10. The equipment for removing a coating film from a coated film according to any one of claims 7 to 9, further

comprising a unit configured to heat the coated film.