CLAIMS

1. A thermal spraying device comprising:

a thermal spraying machine including a thermal spraying torch for thermally spraying a material onto a base material;

one or more peripheral devices for use with the thermal spraying machine; and

a centralized control board for enabling centralized operation of the thermal spraying machine and the one or more peripheral devices.

2. The thermal spraying device according to claim 1, wherein the one or more peripheral devices include at least one selected from a group including a mover for moving the thermal spraying torch, a raw material feeder for supplying the material, a rotary machine for fixing and rotating the base material, a temperature and humidity adjustment machine for controlling temperature and humidity in a thermal spraying booth, a temperature and humidity sensor for detecting temperature and humidity in the thermal spraying booth, an oxygen concentration sensor for detecting oxygen concentration in the thermal spraying booth, a radiation temperature sensor for detecting temperature on the base material, a cooling gas feed machine for cooling the base material, and a dust collector for collecting dust generated in the thermal spraying booth.

3. The thermal spraying device according to claim 1 or 2, wherein the centralized control board includes a controller for collectively controlling the thermal spraying machine and the one or more peripheral devices.

4. The thermal spraying device according to claim 3, wherein the controller is configured to control the temperature and humidity adjustment machine based

on a detection result of the temperature and humidity sensor.

5. The thermal spraying device according to claim 3 or 4, wherein the controller is configured to control the cooling gas feed machine based on a result of the radiation temperature sensor.

6. A thermal spraying control method performed by a thermal spraying machine, one or more peripheral devices used with the thermal spraying machine, and a centralized control board, the thermal spraying control method comprising:

collectively controlling the thermal spraying machine and the one or more peripheral devices using the centralized control board.

7. The thermal spraying control method according to claim 6, wherein the one or more peripheral devices include at least one selected from a group including a mover moving the thermal spraying torch, a raw material feeder supplying the material, a rotary machine fixing and rotating the base material, a temperature and humidity adjustment machine controlling temperature and humidity in a thermal spraying booth, a temperature and humidity sensor detecting temperature and humidity in the thermal spraying booth, an oxygen concentration sensor detecting oxygen concentration in the thermal spraying booth, a radiation temperature sensor detecting temperature on the base material, a cooling gas feed machine cooling the base material and a dust collector collecting dust generated in the thermal spraying booth.

8. The thermal spraying control method according to claim 7, wherein the centralized control board includes a controller that collectively controls the thermal spraying machine and the one or more peripheral devices, the thermal

spraying control method comprising:

when the centralized control board receives an instruction to start a thermal spraying operation, maintaining temperature and humidity in the thermal spraying booth at a predetermined temperature and a predetermined humidity by the controller, based on a detection result of the temperature and humidity sensor;

determining whether a surface temperature of the base material is below a predetermined temperature by the controller, based on a detection result of the radiation temperature sensor; and

in the case where a result of the determination is that the surface temperature of the base material is below the predetermined temperature, driving the thermal spraying machine by the controller to form a coating including the material on the surface of the base material.

9. The thermal spraying control method according to claim 8, further comprising, after the coating is formed, supplying cooling gas to the coating by controlling the cooling gas supply machine, by the controller, until a surface temperature of the coating formed on the base material is below a predetermined temperature based on the detection result of the radiation temperature sensor.