

Ultraviolet Curing Pipeline Repair Robot and System

Abstract

The present invention provides an ultraviolet curing pipeline repair robot. Each ultraviolet radiation lamp comprises a lamp panel distributed in the circumferential direction of the corresponding section of frame body and ultraviolet LED lamps uniformly distributed on the lamp panel; each section of frame body is provided with a spring sleeve, the outer surface of the spring sleeve is provided with a screw thread, and the spring sleeve is capable of circumferentially rotating around the section of frame body; each driving arm is formed by cross connection of two supporting arms, wherein one end of the first supporting arm is fixedly arranged on the corresponding section of frame body, one end of the second supporting arm is connected with a driving arm nut, and the driving arm nut sleeves the corresponding spring sleeve and is matched with the screw thread on the outer surface of the spring sleeve; and the inside of a tail section of frame body is also provided with a network transmission module and a first power carrier module, and the first power carrier module is connected with a second aviation plug; and a cable is a power cable. Due to the adoption of the uniformly distributed ultraviolet LED lamps, more uniform radiation is realized, and the curing effect is improved; and due to the combination of the spring sleeves and the driving arms, demands of different pipe diameters are met, and more material and time costs are reduced.

FIG. 1