

AUTO STATOR WINDING SYSTEM AND METHOD

ABSTRACT

An automated technique facilitates winding a stator, such as a stator for a submersible motor of an electric submersible pumping system. According to an embodiment, needles are placed in slots of the stator and a sensor system, e.g. a camera-based vision system, is used to determine the positions of the needles. This data is provided to a control system programmed to assign a predetermined wiring pattern to the needle positions. Based on this predetermined wiring pattern, an automatic feeder system moves a feeder guide into position adjacent the appropriate needles. The automatic feeder system is then operated to feed magnet wire into the corresponding stator slot at the corresponding needle position(s) to achieve a desired winding pattern.

Figure 11