

ABSTRACT

An intelligent module pipeline, an intelligent module helical pipeline winding machine and a winding method thereof. In the cross section of the pipeline, a plurality of intelligent modules (1) are clamped and helically wound end to end to form a circular pipeline; each of the intelligent module units is an arch-shaped module which is formed by injection molding or compression molding; the each intelligent module unit is provided a reinforcing rib structure inside, a fixing device for fixing and clamping from left to right on the side surfaces, and a clamping device for fixing and clamping end to end at the edges. An arc-shaped chute rail is provided on the front surface of a working panel of the winding machine; the arc-shaped chute rail is provided with at least one pair of feed rollers (107), and is further provided with a locking device (108) and a parallel twisting device (106); the same intelligent module units are arranged end to end on the arc-shaped chute rail, and then are locked by means of the locking device, to form a semicircular pipe diameter by means of the feed rollers; then the parallel twisting device twists the semicircular pipe diameter in parallel to change the winding rail; and the intelligent module units are wound in a staggered arrangement to form helical winding pipelines.