

ABSTRACT

The present invention discloses a method and a device for jet-packing moulding a polymer pipeline. During a spiral winding stack moulding process, a pipeline is continuously moulded by embedding the melt in a moulded pipe blank under the conjunction of the jetting welding effect produced by the melt and the shaping effect of partial calendering. The device comprises an extruder, a melt jetting mechanism, a partial calendering mechanism and a pipe diameter shaping and adjusting mechanism, wherein the melt jetting mechanism is arranged at the extrusion end of the extruder and embedded in a moulded pipe blank; the partial calendering mechanism and the pipe diameter shaping and adjusting mechanism are distributed on the wall of the pipe blank in the circumferential direction; the partial calendering mechanism is arranged at the corresponding position of the melt jetting mechanism; the melt jetting mechanism is located inside the pipe wall; the partial calendering mechanism is located outside the pipe wall; and a constrained space is formed between the partial calendering mechanism and the melt jetting mechanism. The present invention can solve problems in the moulded polymer pipelines, for example, the moulding size is limited, the mould cost is high, the moulding technology is complex, the energy consumption is high, the mechanical property is poor, the moulding efficiency is low, and moulding raw materials are limited.

Figure to be published with the abstract: **Figure 1**