

SET OF TWO DIES FOR A CRIMPING TOOL

ABSTRACT

An apparatus (1) for forming a rim (2) on a tube (3). The apparatus (1) comprises a die block (4), a locking plate (6) supported in fixed spaced apart relationship with respect to the die block (4), an inner core block (12) extending intermediate the die block (4) and the locking plate (6), and a pair of complementary outer core blocks (15) slidably disposed around the inner core block (12) intermediate the die block (4) and the locking plate (6) such that the die block (4) and core blocks (12,15) together in a closed position form a die cavity (18). A pair of wedge blocks (20) are respectively disposed intermediate the outer core blocks (15) and the locking plate (6), and clamping means (30) are operable selectively and progressively to move the outer core blocks (15) together into the closed position thereby clamping the tube against the inner core block (12) such that an exposed end of the tube extends into the die cavity (18). The clamping means (30) are further operable to drive the wedge blocks (20) between the locking plate (6) and the respective core blocks to wedge the core blocks against the die block (4) in the closed position. The apparatus (1) also includes injection means to inject hot thermoplastic material into the die cavity (18) thereby forming a peripheral rim thermoplastically bonded to the exposed end of the tube.

Figure 1