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(57) Abstract :

The present invention relates to a cavity cleaner (100) to remove support structures (107) from a 3D printed internal cylindrical cavity (C). The cavity cleaner (100) comprises a shank (101), a pair of sweeper blades (102), and a pin (103) for holding them. External power supply will enable the cleaner (100) to rotate the sweeper blades (102) within the cavity (C) after the blades (102) have been easily inserted into it due to foldable design. Through the use of pins (103), foldability has been achieved in the equipment. The shank (101) with folded blades (102) is first inserted into the cylindrical internal cavity (C) and started rotating from there. Through rotation, specially designed blades with bidirectional sharp cutting edges (104) are used to remove supports (107). The sweeper's rotation inside the cavity in upward and downward directions, i.e. to-and-fro (TF) that helps in complete removal of supports (107) with high finishes due to bidirectional sharp cutting edges (104) provided on each sweeper blade (102).

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