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(57) Abstract :

An automatic stud welding device for metal workpiece comprising a platform 1 to be positioned over a metal workpiece, a touch enabled screen 2 mapped on platform 1 accessed by user for inputting commands regarding number of studs, distance between consecutive studs and an angle of bending central studs, a primary telescopic gripper 3 for gripping a ceramic ferrule from a chamber 4 and positioning it on workpiece, a secondary telescopic gripper 5 for gripping stud from a vessel 6 and positioning in centre of ceramic ferrule, a robotic arm 7 equipped with a stud welding gun 8 installed on said platform 1 for welding stud, a temperature sensor mapped on welding gun 8 for detecting temperature of stud, a mechanical arm 9 equipped with a motorized cutter 10 cutting ceramic ferrule, plurality of motorized omnidirectional wheels 11 for maneuvering platform 1 for maintaining distance between consecutive studs.

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