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(57) Abstract :

A workpiece joining device comprises, a platform 1 for placing the first and second workpiece, multiple supporting legs 2 are attached underneath the platform 1 for supporting the platform 1, a touch interactive display panel 3 for entering the length of the workpiece, a primary robotic arm 4 for holding the workpiece, a slider 5 for placement of the workpiece, an AI based imaging unit 6 for capturing images of placed workpiece, a L-shaped telescopic bar 7 with drilling unit 8 for drilling a hole in the workpiece, a secondary robotic arm 9 configured with a motorized sanding belt 10 for shaping the workpiece, a robotic link 11 configured with a welding torch 12 to weld joint workpiece, and a telescopic rod configured with a motorized grinder for eliminating uneven edges of the weld joint.

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