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(57) Abstract :

An automatic tire restoration device comprises of a cuboidal housing 1 assembled with a platform 2 to be placed with a tire that is to be restored, an artificial intelligence enabled image capturing module 3 and an acuity laser sensor 4 for detecting diameter of the tire, a pair of motorized clamps 5 for gripping the tire, a telescopically operated gripper 7 for gripping a tire-sole from a chamber 8 and positioning the tire sole on the platform 2, a robotic arm 9 equipped with a motorized cutter 10 for cutting the sole, an electronic nozzle 11 for dispensing an adhesive solution on the tire, a telescopically operated bar 13 equipped with a roller 14 for accommodating the tire-sole on the tire and applying a pressure on the tire. a vessel 15 for storing adhesive solution and a pump for pumping the adhesive solution towards the nozzle 11.

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