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(57) Abstract :

An automated polyurethane foam recycling device comprises of a housing 1 installed with a chamber 2 stored with waste polyurethane foams to be recycled, a touch enabled screen 3 is mapped on the housing 1 to select a shape for obtaining a recycled foam, a telescopically operated gripper configured within the housing 1 for gripping the waste foam from the chamber 2, a pair of L-shaped bars 5, each configured with a blade 6 for cutting the foam in multiple pieces, a heating unit configured with the receptacle 9 to melt the foam to obtain polyol, a pair of motorized ball and socket joints configured between the links 10 and receptacle 9 for flipping the receptacle 9 to transfer the foam in the created shape, a Peltier unit configured with the cavity 15 for solidifying the foam and convert the foam to the user-selected shape.

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