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(57) Abstract :

A device for testing strength of polymers, comprising a frame 1 having a roller 2 wrapped up with a polymer sheet that rotates to unwrap and translate sheet on a sorter conveyer 3, a sharpened pusher 4 for cutting the sheet in a pre-defined shape and size, multiple nozzles 5 incorporated in a compartment 6 for dispensing epoxy resin on the cut sheets for enhancing strength, a heating unit 7 arranged inside a chamber 8 that stacks the moved cut sheets in a sequential manner for heating in order to dry the resin, multiple testing kits 9 placed inside a container 10 for performing testing operations on the resin coated sheets to determine anomalies/defects in the sheets, a slot installed with a hydraulically operated pusher 11 for accommodating the piled up sheets after testing that applies a force to break the sheets to calculate strength of the sheets.

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