

3D Printed Elastomer Applications In Automotive Manufacturing

Discover the powerful applications of TEPU 50A in the automotive manufacturing landscape. From assembly line to interior components and finishing, see how this material's exceptional properties—like compression strength, feature details, accuracy and environmental stability—make it an indispensable tool in modern automotive production.



1d. Sheath grommet

1 Transportation and Assembly

From robotic grippers to component protection and jigs, TEPU 50A soft touch features are suitable for various custom fittings and fixtures to aid in placement, packaging, and tooling.



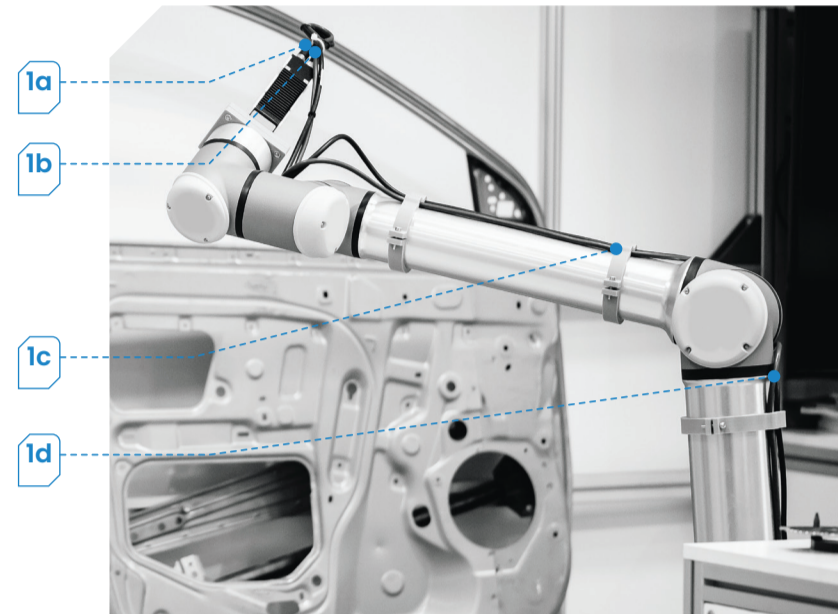
1b. Round suction cup



1a. Elliptical bellow suction cup



1c. Housing bore

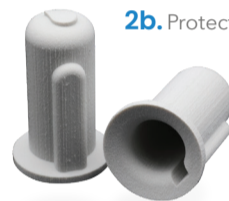


2 Interiors

Prototype functional rubber-like components such as grommets, seals, O-rings or buttons. Protect wires from sharp edges or cover electronics from dust and liquid.



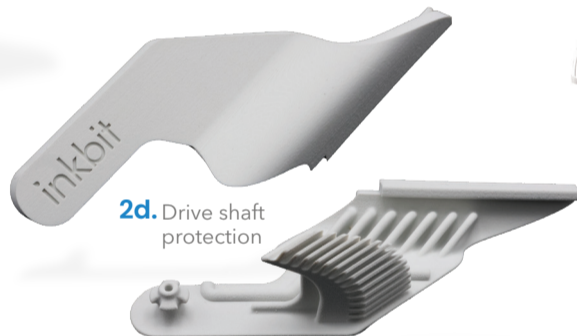
2a. Protection grommet



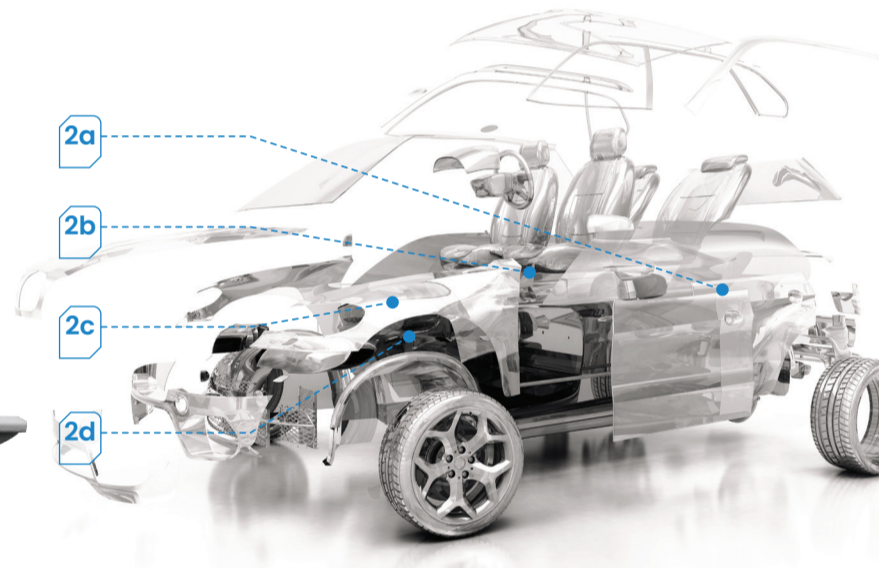
2b. Protection cap



2c. Open hole grommets

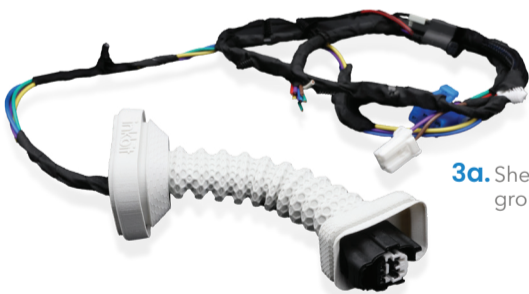


2d. Drive shaft protection

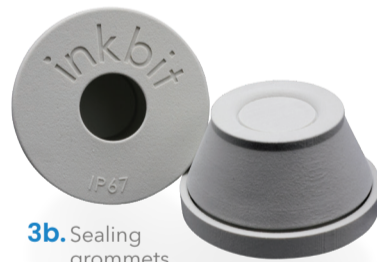


3 Doors

Develop car door sheaths in a range of configurations. Accurately prototype door and window weather seals.



3a. Sheath grommet



3b. Sealing grommets

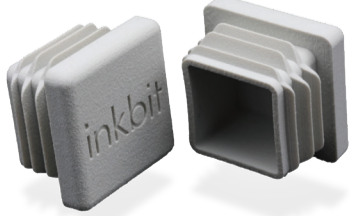


3c. Gasket Seal

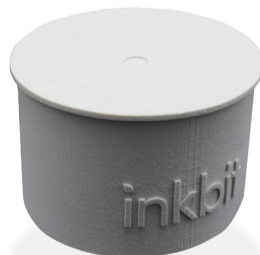


4 Finishing

Quickly produce single or reusable custom caps to protect components during finishing, painting or final transport.



4a. Protection squares



4c. O-ring face seal caps



4b. Valve caps



TEPU 50A at a glance

Elongation at Break	128%
UTS	1.79 MPa
Shore Value	49A
Compression Set, 23°C , 72 h	7.7%
Glass Transition Temp. DSC-Tg	-28c
Tear Strength	5 kN/m