

## **Internal Mandrel**

This 3D printed part is an internal mandrel tool which is used to create a composite pipe. The internal mandrel tool was printed on the Neo450s using Somos® DMX-SL 100 resin. This resin can withstand high temperatures utilized in the autoclave process for composites manufacturing maintaining its flexural strength, elongation and tear resistance. These unique properties allow, at a certain temperature, for mandrels to be removed from complex and convoluted geometries through a "dry removal" process which is unique for a solid mandrel. The composite pipes used on vital components of cars such as break ducts or engines require a specific type of manufacturing method that retains good internal surface in order for the tool to be extracted from the pipe.

Industry	F1
System	Neo®450s
Material	Somos® PerFORM and Somos® DMX-SL 100
Build Time	Somos® PerFORM Tool - 18h 50m, Somos® DMX-SL 100 Mandrel - 8h 34m

## ISO 9001:2015 Certified

© 2022 Stratasys Ltd. All rights reserved. Stratasys, Stratasys signet and Neo are trademarks or registered trademarks of Stratasys Ltd. and/or its subsidiaries or affiliates and may be registered in certain jurisdictions. All other trademarks belong to their respective owners. Product specifications subject to change without notice.

PC\_SL\_Internal Mandrel\_A5\_0522a

STRATASYS.COM





