



# NASCAR

## Air Flow Duct

NASCAR recently launched its Next Gen race cars to the speedway but faced a serious problem: excessive cabin heat, making driving in heat-protective safety gear extremely uncomfortable for their drivers. NASCAR needed a solution that would meet the demanding needs of high-performance racing. Stratasys Direct utilized Stratasys' H350™ SAF™ printer to manufacture air flow ducts in High Yield Nylon 11. The ducts were mated directly to the windshield, to redirect air from the outside into the car's cabin to cool the driver. The parts were 3D printed using SAF™ technology, then dyed black using the DyeMansion DM60. Then, the part was non-abrasively shot-peened with a polymer bead blast utilizing the Dyemansion Powershot S to give the parts a homogeneous semi-gloss surface treatment. The fully post processed SAF™ parts printed by Stratasys Direct are now featured in every NASCAR Next Gen racecar.

<b>System</b>	H350 3D printer
<b>Technology</b>	SAF technology
<b>Material</b>	High Yield PA11
<b>Printed Layer Time*</b>	11h 37m for 2 airflow ducts
<b>Volume of Material Used</b>	21.1in <sup>3</sup> (346cm <sup>3</sup> )

\* Printed layer time approximates the time taken to print the layers that form the parts in the build only

ISO 9001:2015 Certified

© 2022 Stratasys. All rights reserved. Stratasys, the Stratasys Signet logo, Stratasys Direct Manufacturing, H350, H Series, SAF, Selective Absorption Fusion, Big Wave and HAF are trademarks or registered trademarks of Stratasys Inc. and/or its affiliates. The H350 printer is subject to a license from Loughborough University Enterprises Limited and Evonik IP GmbH under the following and/or related patents and patent applications and their family members: EP2739457, EP3539752, EP1648686, EP 1740367, EP1737646, EP1459871. Further details including live and inforce status of family members may be found at <https://worldwide.espacenet.com/patent/search/family/>. All other trademarks are the property of their respective owners, and Stratasys assumes no responsibility with regard to the selection, performance, or use of these non Stratasys products. Product specifications subject to change without notice.

STRATASYS.COM

