

2020 CREATE THE FUTURE DESIGN CONTEST



PRODUCED BY
TECH BRIEFS

PRINCIPAL SPONSORS



HOW TO VOTE

RESOURCE CENTER

ABOUT

RULES & TIPS

ENTRIES

ARCHIVE

PRIZES

FAQS

CONTACT

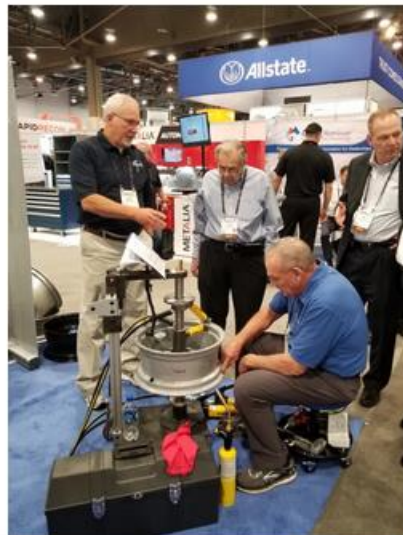
HOME | 2020 | ENTRIES | AUTOMOTIVE/TRANSPORTATION | ENTRY

Automobile Wheel Straightening

Donald Neubauer
Canton, United States

Votes: 6
Views: 539

Automotive/Transportation
May 18, 2020



Patented method of safely straightening bent automobile wheels. The SEMA award winning process employs simultaneous dual-axis hydraulic pressure to gently relieve the molecular strain in the metal at the bend site. The process spreads the yielding forces over a wider area allowing for the minimal application of heat. Too much heat will alter the physical and chemical properties of the metal and can damage the heat treat level. Scientific testing, reported in SAE Technical Paper 2016-01-1573, revealed that driving on a bent wheel will eventually result in a crack, which causes low air pressure, a dangerous driving hazard. NHTSA reports over 11,000 catastrophic blowouts annually are caused by low tire pressure. If properly done, wheel straightening is safe and can save lives. Our process is the only one accepted by the Society of Automotive Engineers.

VIEW ENTRIES BY CONTEST CATEGORY

Aerospace & Defense

Automotive/Transportation

Consumer Product Design

Electronics/Sensors/IoT

Manufacturing/
Robotics/Automation

Medical

Sustainable Technologies/
Future Energy

ALSO

Tag Cloud

2020 Entrants

Number of votes

Number of page views

View All Entries

RESOURCE CENTER

Visit the Resource Center

2019 CONTEST RESULTS

Grand Prize & Category Winners

Top 100 Entries

Video



[Browse all the entries](#)

[Final voting scoreboard](#)

[Meet the Judges](#)

Follow Us



Voting

Voting is closed!

ABOUT THE ENTRANT

Name: Donald Neubauer

Type of entry: individual

Profession: Business Owner/Manager

Number of times previously entering contest: never

Donald's hobbies and activities: Golf

Donald is inspired by: Necessity, Safety and Demand of customers

Software used for this entry: Iron CAD

Patent status: patented