

RUBBER CONVERSION | MERCEDES-BENZ

Recycled Materials: Devulcanized Rubber for Cars

Mercedes-Benz, ContiTech, and Rubber Conversion are working on more sustainable rubber components.

THE CHALLENGE

The automotive industry has placed significant focus on sustainable practices, for instance, by implementing various recycled materials in the car. When it comes to recycled rubbers, however, it has been difficult to match the required automotive properties so far. Rubber Conversion has implemented a unique method for recycled rubber, from both preand post-consumers that provides automotive-grade performance. This results in a significant reduction of the amount of virgin rubber used in automotive components, enabling CO2 reductions, without sacrificing the performance. This technology was successfully tested on a NHV component for Mercedes-Benz.

THE SOLUTION

Rubber Conversion used its low-temperature devulcanization technology to produce recycled rubber from both the endof-life tyre feedstock and ContiTech post-production waste feedstock. ContiTech produced two natural rubber-based products with high content of both types of recycled rubber.

THE OUTCOME

The prototyped NVH components were successfully tested at component and system levels with Mercedes-Benz for static and dynamic properties, as well as durability. The components exhibited a reduced CO2 footprint compared to their conventional counterparts. The application of the recycling technology to further components is being evaluated.



RUBBER CONVERSION

website rubberconversion.com

FOUNDED

HEADQUARTERS Verona, Italy

NO. OF EMPLOYEES 10–50

ABOUT STARTUP AUTOBAHN

STARTUP AUTOBAHN powered by Plug and Play is an open innovation platform that provides an interface between innovative tech companies and industry-leading corporations. The basis of the program is the partnership that develops between startups and the corporate business units. The two entities hold an equal footing from the get-go: together they evaluate the potential for a joint venture, move forward to pilot the technology, and work to achieve the ultimate goal - a successful production-ready implementation. Designed with the intention to exceed startup acceleration, STARTUP AUTOBAHN powered by Plug and Play moderates a community for collaboration with a focus on implementable results. Over the years, the platform has successfully cultivated over 400 projects with more than 300 startups since its founding in 2016.



Rubber Conversion replaces virgin rubber with recycled rubber.

Rubber Conversion's product improves the sustainability of rubber-based products by replacing high-content virgin rubber with recycled counterparts, which directly translates to reduced CO2 emissions.

ACKNOWLEDGEMENTS

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