

 CASE STORY /

## EXPANITE SPONSORING SAE RACING TEAM FROM UAS MUNICH

*Expanite, the surface hardening specialist has supported the students at the SAE Racing Team in Munich to solve some of the challenges experienced with wear on titanium component in their racing car*

The SAE Racing Team is a student project that since 2006 builds completely self-developed racing cars. With these racing cars, the team participates in the worldwide development tournament formula student program. For this tournament they build combustion, electric and autonomous racing cars. In 2019 they will participate in 5 tournaments in Germany, Hungary, Austria, Spain and Italy and have practised on famous racetracks like Hockenheimring, the Red Bull ring in Spielberg and the circuit de Barcelona Catalunya.

To increase the performance and meet the demands for an even lighter race car the student team changed some of the parts to titanium. They were faced with problems related to wear on the titanium parts due to low surface hardness and they then contacted the experienced surface hardening company Expanite.

The Expanite material experts proposed and tested solutions to surface harden the critical titanium part, more specific the sprocket located on the gearbox output shaft for power transmission to the rear axle by a chain, with the ExpaniteHard-Ti process.

"We are excited and thankful about the sponsorship with Expanite. With the guidance and recommendations from Expanite, we are convinced that with the Expanite hardening technology we will experience less or no wear on the titanium parts in our race cars", says Julian Looschen, Team leader Drivetrain Combustion.

"We are of course pleased and proud to support and sponsor the SEA Racing Team and very pleased that the Expanite surface hardening technology and service served as a solution for this Team's ambitious project", CEO at Expanite Thomas Sandholdt says.

### About SAE Racing Team:

SAE Racing Team is a student project from UAS Munich, the team is also known as munichMotorsport. The Formula Student Racing Team of the Munich University of Applied Sciences was founded to apply the theory from the lectures in practice. The team member invests a large part of their free time into the project. The team currently consists of about 120 students from a variety of study programs, such as automotive engineering, mechanical engineering, industrial engineering, computer science, design, business administration and many more. Their goal is to develop racing cars with which they can adequately represent their team and their sponsors.

### About Expanite

*Expanite is based on research since 2000 and was founded in 2010 by leading experts in materials and surface hardening. The company is headquartered in Hillerød near Copenhagen and has treatment centers in the USA, Germany and China. Expanite's solutions are flexible and can be tailored into a customer's own product line as part of a licensing agreement.*

