

## DESIGN OF THE DRIVE CHAIN AND BACK SUSPENSION OF A PNEUMOBILE RACING CAR

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## **ABSTRACT**

The topic of our article is the design of the rear suspension and drivetrain of the newly developed "Airrari Classic" pneumatic racing car. The construction of the chassis of this car is completely different from the chassis of all the cars developed by the team so far. The new car will have four wheels, both rear wheels will be driven, but instead of using a differential gear, we are planning a different solution in order to reduce the weight. The task is to design and examine the sprung suspension and the power transmission system with joints connected to it, as well as their connection. The entire undercarriage must meet the requirements of the pneumatic competition regulations. An important goal is to achieve the lowest possible weight, and to this end, optimizing the design of the components.

The car is ready, we are currently waiting for the next competition announcement.

Keywords: pneumobile, pneumatic racing car, chassis, drivetrain