

Manufacturing of Race Car Case Study AGH Racing

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Abstract : The aim of this article is to familiarize with the activity of AGH Racing scientific circle, pertaining to the international project -Formula Student, giving the opportunity to young engineers from all around the world to validate their talent and knowledge in the real world conditions, under the pressure of time, and the design requirements. Every year, the team begins the process of building a race car from the formation of human resources. In case of the public sector, to which public universities can be included, the scientific circles represent the structure uniting students with the common interests and level of determination. Due to the scientific nature of the project which simulates the market conditions, they have a chance to verify previously acquired knowledge in practice. High level of the innovation and competitiveness of participating in the project Formula Student teams, requires an intelligent organizational system, which is characterized by a high dynamics. It is connected with the necessity of separation of duties, setting priorities, selecting optimal solutions which is often a compromise between the available technology and a limited budget. Proper selection of the adequate guidelines in the design phase allows an efficient transition to the implementation stage, which is process-oriented implementation of the project. Four dynamic and three static competitions are the main verification and evaluation of year-round work and effort put into the process of building a race car. Acquired feedback flowing during the race is a very important part while monitoring the effectiveness of AGH Racing scientific circle, as well as the main criterion while determining long-term goals and all the necessary improvements in the team.

Keywords : SAE, formula student, race car, public sector, automotive industry

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