FORMULA STUDENT EAST 2015 BJULY

elringklinger







FS EAST REAL CASE SCENARIO

In this Real Case Scenario your team is an company, which is developing body kits for Formula Student cars. Your task is to design a wheel fender body kit for your Formula Student car and its manufacturing. Your car should be considered as already delivered car to the customers, therefore to be able to integrate with the fenders maximum the front wings and the sidepods (side wings) can be modified of the original body elements.

THE WHEEL FENDER BODY KIT HAS TO COMPLY WITH THE FOLLOWING RULES:

- The fenders should cover the wheels totally from the top view of the car
- The wheel rims have to be visible from side view of the car
- The fenders can be fixed to the uprights or to the chassis also.

The annual production volume should be 1000 fender body kits, and the total cost of the body kit cannot exceed 400 EUR including (in the case of modification) the original part modification too. The result of your development has to be presented in 20 minutes at the Cost Event during the discussion and you are allowed to use maximum two flip chart sheets (68x98 cm) to aid your presentation.

Innovative, creative ideas will be scored, but during the presentation keep in mind to show the following points:

- Design
- Material selection
- Design for manufacturability
- Manufacturing process
- Assembly and installation processes
- Cycle times
- Quality control
- Recyclability
- Total Cost

In the respect of the sustainability, the reuse and recovery of the end-of-life parts of the body kit should reach 95% by an average weight and the re-use and recycling should be 85% by an average weight per body kit.

As there are many right solutions for the task, we expect you to substantiate your decisions with detailed supporting data (e.g. decision matrices, diagrams, references) wherever possible.

CHANGELOG

Version	Date	Modification	Page
1.0.0	3rd July, 2017	Original document	-



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