

## Aspects of the Detail Design of an Automated Biomethane Test

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**Abstract :** This paper presents aspects of the detailed design of an automated biomethane potential measurement system using CAD techniques. First, the design specifications grouped in eight sets that are used to design the design alternatives are briefly presented. Then, the major components of the final concept, as well as the design of the test, are presented. The material selection process is made using ANSYS EduPack database software. The mechanical behavior of one component developed in Creo v.5 is evaluated using finite element analysis. Finally, aspects of software development that integrate the BMP test is finally presented. This paper shows the advantages of CAD techniques in product design applied in the design of a mechatronic product.

**Keywords :** automated biomethane test, detail mechatronics design, materials selection, mechanical analysis

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