

Studied case of hydrogen generators is a great addition to uniqueness of rapid prototyping engineering problems. Material and method selection processes are specific for 3d printing oriented designs. Different approaches are presented to emphasize on various possibilities of studying individual decision makers. Approach diversity forms foundation for analysis scaling. A unique template or process is developed for solution of complex case task based on appreciated modern engineering science studies.

Result is presenting diverse scenarios for production approaches based on demand amounts. Scenarios decisions are all based on analysis or calculation results. Production methods, material selection decisions, design improvement steps and financial and time calculations are main outcomes of production scenarios. Study results are evaluated on whole-market chain approaches. The rapid prototyping development approach requires using diverse decision-making techniques due to complexity of shapes and subsystems which complicates usage of conventional engineering calculation methods.

Complexity of project created limitations for this thesis study, but all omissions are pointed out and left prepared to be studied following the created approach. Filter materials and preheat subassembly development was out of timeline of thesis creation. Past application, AHP method created preferences for implementation of alternative similar, but more mechanical engineering-aimed screening methods.

As the industry dictates, quality in all of its aspects is the main reinforcement of price reasoning. For an impressively luxurious, high-tech, green-energy product a much wider range of abusive cases, operational conditions, logistics and economics aspects must be studied for bulletproofing quality confirmation. By personal opinion, this case study can be efficiently implemented and scaled for optimal decision on procedure of PowerUp generators production.