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IMPLEMENTATION AND APPLICATION OF 3D PRINTING IN THE FIELD OF MECHANICS IN BOLIVIA

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It has been considered convenient to take the technology of 3D printing and apply it in the mechanical field of Bolivia, which would allow us to make copies of the spare parts we need regardless of their level of complexity, and ensure that all copies will be done in detail, the manufacturing times will be reduced, there will be no reprocessing since the parts were previously modeled in CAD software in which the part can be examined in detail, if it is necessary to make a modification, it will be done by computer.

Besides rapid prototyping, 3D printing is also used for rapid manufacturing. Rapid manufacturing is a new method of manufacturing where companies are using 3D printers for short run custom manufacturing. In this way of manufacturing the printed objects are not prototypes but the actual end user product. Here you can expect more availability of personally customized products. 3D printing has become in one solution in a lot of countries around the world, it is used in Biomedical Industry, Aerospace technology, in vehicles development and on present time is used to mass production of various products. This new kind of technology has change industry in last years, because of the plusses of it application, so it means that it's applying in Bolivia will be useful for the society.

Some advantages for this technological applying in Bolivia are:

- Versatility, a single 3D printer is capable of making countless different products. Much of the current manufacture is made with machines that have limited function and if the product changes, the machine must also be readjusted or changed.
- Flexibility and rapid prototyping. The limit is the imagination and the ability to represent your ideas in 3D. It allows to realize prototypes of products with facility, which can imply an improvement in the design of these.
- Reduction of costs. Both in the production process and in the transportation process.
- Production can be done from home.
- One of the most attractive advantages is the possibility of making your own, objects, products etc. in a personalized and exclusive way.
- A new industry and a new sector that create new jobs, and new forms of business.

References

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