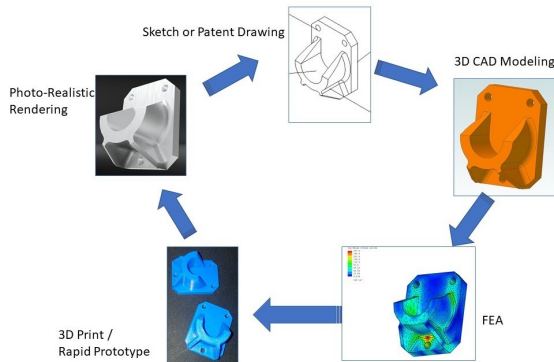


Significance of Prototyping Prior to Production

In the development cycle of a new product, one of the key milestones is to build a prototype of the product or design before starting the production.



Lifecycle from CAD to Prototype

Definition of Prototype

The representation of a design before producing final product so that the design can be understood properly by both the company and the customers. The prototype models are used to test fit and functionality, as well as employed for exhibitions and photoshoots. The customers can provide their feedback on the prototypes which verifies the design and its suitability.

Benefits of a prototype

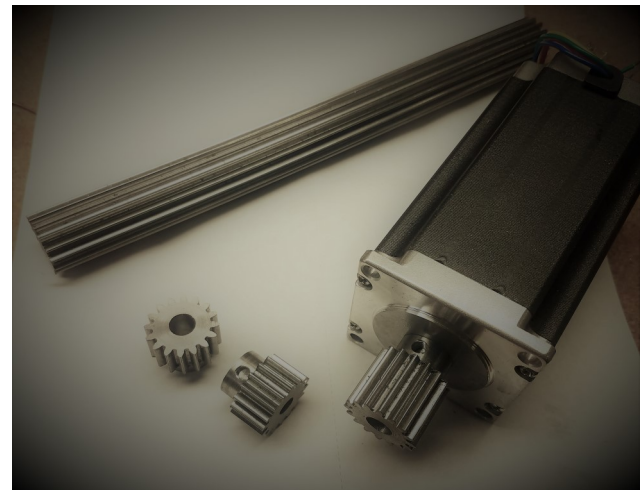
- General Advantages

A prototype is the representation of the working model which will enable both the customer as well as the company to test various functions expected from the product. It can be tested whether the design performs according to the proposed specifica-

tions or not. The branding images and initial shape of the product can be reviewed. The early adopters and customers can also provide feedback on the design so that any changes can be made if required.

- Using Prototype as a Test Bed

The prototype can serve as a test-bed for the development of additional features and testing their suitability. The issues if present, can be identified as early as possible and can be addressed before proper



Prototyping and testing of different anti-backlash gear concepts

production start. The company stakeholders can see the physical model to review and understand it in a better way.

- **Benefits of Prototype While Preparing Order for Foreign Clients**

The communication channel can be cleared so that it can be ensured that the developed prototype is exactly according to the requirements of the foreign client. This removes any sort of ambiguity that might have arisen because of the communication barrier. By showing prototype to the foreign clients, the company can win their trust and show the capability to develop the product as desired. The company can also provide working samples to the clients that can be prompted to production phase after approval from client.



Components of an assembly. Check fit & Function

Engineering and Design Benefits

The purpose of engineering and design is to bring forth a product easy to make and less in cost. Moreover, it should have all desired specifications and absolutely fit for the market. The engineering and design teams can review their practice techniques like design for assembly (DFA) and design for manufacture (DFM) by looking at the prototype. The failure modes and effects analysis can also be carried out by testing the prototype. In case of any issue, the design and engineering team can revisit the development practice and make a better prototype. FalconCAD Engineering Services has employed skilled and experienced design and engineering teams and we assure you that we shall satisfy you completely from our services. Our prototyping will make all the design process very simple and straight-forward. We shall review our designs and then present them to the clients so that the clients and consumers can provide their feedback. If required, the team shall build an improved prototype until the requirements have been met.