

think3

Shape a new world.

30
Years of
Innovation

AMD and CMD

Adaptation on Measured Data

Compensation on Measured Data

Preliminary



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Digital and Physical worlds are different

Designers and Engineers they invent, design, model, shape, render, but...

- in the styling field what has been defined and looks good in digital world sometimes don't fit physical sensation when user touch and handle it, wear or sit on, etc.
- in the tooling field physical phenomenon like the "spring-back" changes what has been defined in digital way

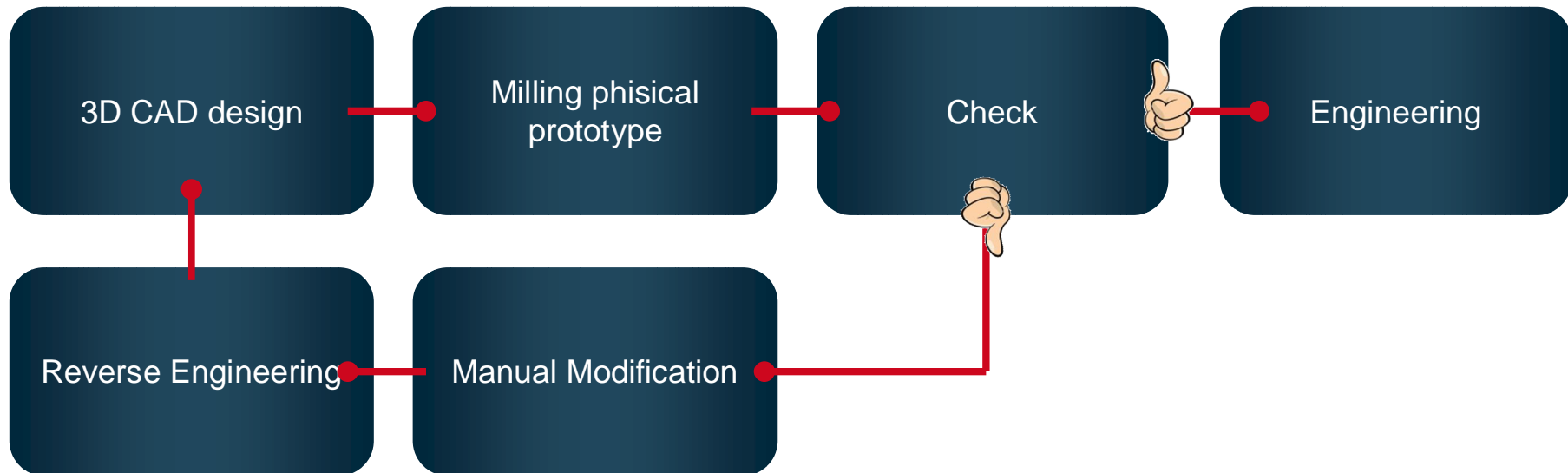
For this reason physical prototypes are still an important step in the product process definition and there is a bi-directional interaction between digital and physical world. This is a very expensive process where companies they risk:



Companies take months to create a high quality design and do not want to see it disappears in the production shop. Maintaining design quality throughout the production process today is a big challenge for all.

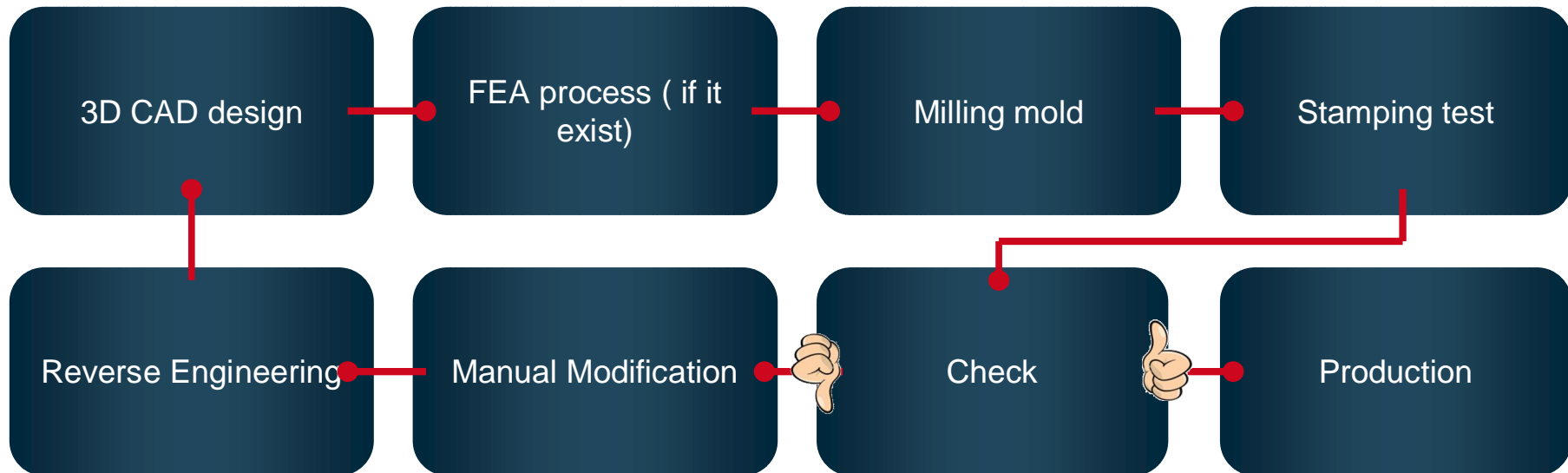
Typical styling process

In order to converge to the same geometry (digital & physical) the typical process involves following phases:



Typical tooling process

In order to obtain alignment between digital and physical geometry the typical process is:



Think3 merges these worlds

Think3 started in 2002 offering Compensator solution for compensating physical deformations that can occur along the manufacturing process and also offers Reshape solution for high quality reverse engineering starting from physical models.

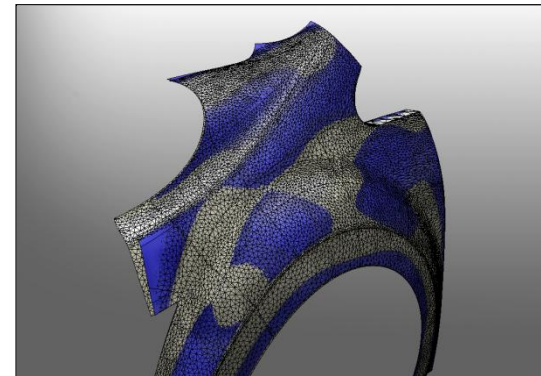
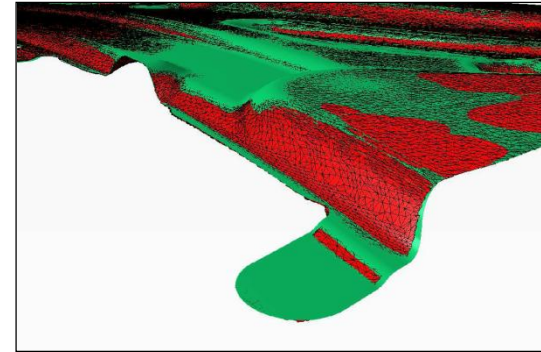
Now think3 offer a revolutionary solution able to reduce interaction and making possible to merge perfectly digital data with physical model.



AMD - Adaptation on measured data




It solves the problem of creating a digital model which is identical to the physical tool. The original surfaces of the 3D model are adapted on the basis of the physical model machined and modified by hand (obtained by scanning) maintaining quality 🔍 of digital model

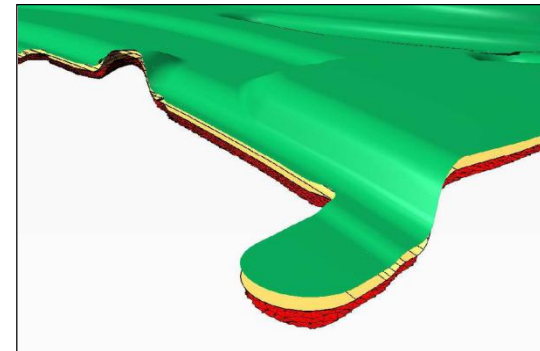
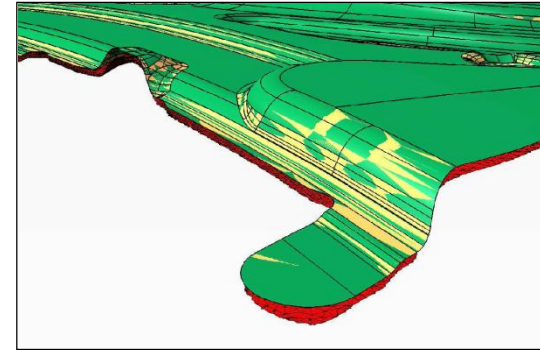
With this AMD's command it's possible to match the digital model on the physical model in few minutes, rather than days or weeks saving time ⌚ and money 💰



CMD - Compensation on measured data

It's possible to compensate the part based on the measured data rather than on data that come from the FEM. The deformation data are applied to the digital model employing an inverse law. This CMD's functionality applies reverse deformation reading the deformation from the physical model applied to the digital model.

The process is fast  and enables the quality  of CAD data to be maintained. It takes minutes, instead of several days saving a lot of money 



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