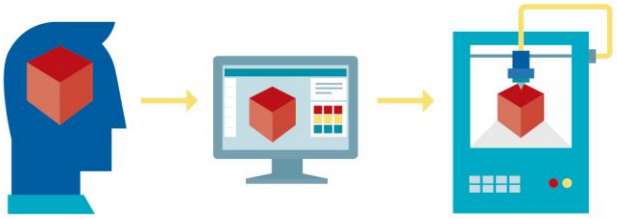
Creating trust in Additive Manufacturing
Process and product reliability

Additive Manufacturing as an industrial production technique

Additive manufacturing (AM), i.e. *3D printing,* has a big potential to change the rules of industry. It is increasingly being considered as a technique to manufacture functional products beside its primary task of prototyping. 3D-printed products start to replace traditionally manufactured products, particularly the ones for which the traditional techniques are more costly or limited in design possibilities.

AM techniques also create new industries such as *mass customization*. This new perspective shakes the fundamentals of production, B-to-B relations and service industry.

We believe that AM is going to be a mainstream industrial production technique in a near future. The faster it improves its *reliability* and *market acceptance*, the sooner this future will become reality.

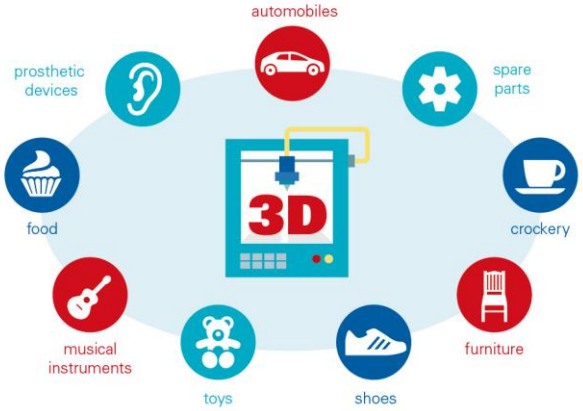


The reliability of AM

The power of AM lies in the fact that is a versatile and flexible technique that can be used to design almost everything you can imagine, with very *short time-to-market*. The range of size, shape and material alternatives is large and the technique does not need additional production tools such as molds or assembly lines.

Although AM technique enables great *creativity* and *versatility* for processes, that same versatile nature brings alongchallenges when it comes to assessing the reliability of the processes and products.

There is a need for a *simple solution* for reliability assessments of AM processes and products. The assessment should not limit the versatility and creativity of AM and be able to facilitate the realization of its acceptance as an industrial production technique for mass customization.



Additive manufacturing processes can be divided into stages such as *design*, *material feed*, *building*, *post processing* and *inspection*. These stages can be parts of one production line or function cooperatively as independent production units in a *digital ecosystem*.

Kiwa is your partner for progress in AM industrialization

Kiwa can provide a specific certification for each stage of the AM process to reduce the total effort required for the manufacturing and the costs for *quality verification* through the supply chain.

Production units working independently in the ecosystem can be also *pre-certified* to reduce the costs and the lead times for *part certification.*

Kiwa, as an *independent*, *impartial* and *innovative* partner, wants to help AM companies go forward. AM technology has the ambition and Kiwa has the knowledge to help AM companies achieve reliability and market acceptance.

Kiwa's core business lies in activities such as *testing*, *inspection* and *certification (TIC)* with related *training*, *technology* and *data services*. We aim to contribute to organizations' ability to offer quality and add value to society thanks to their reliability, safety, efficiency and sustainability.

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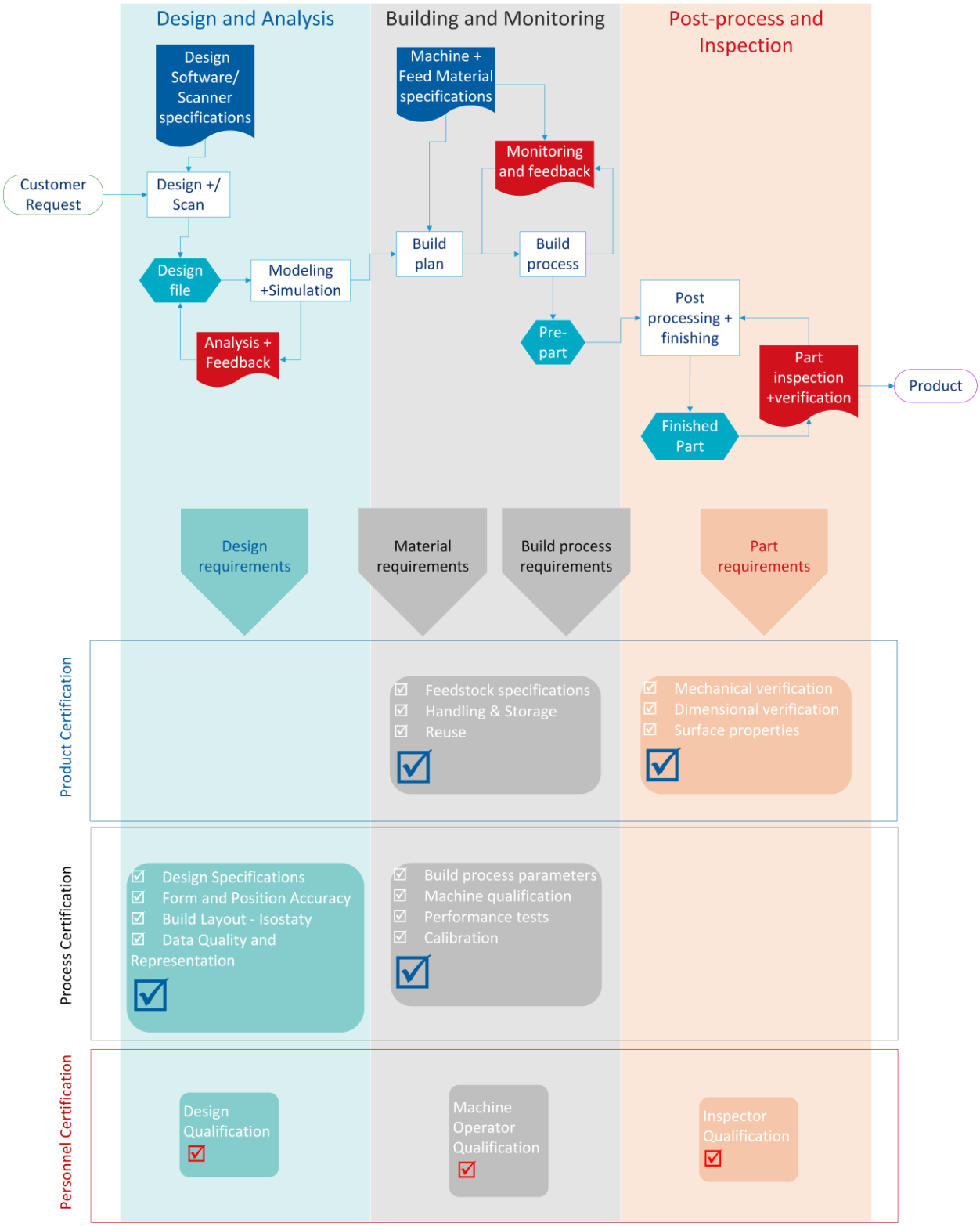

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