



CLASSIFICATION OF RP/3DP

There are 3 types of RP/3DP systems:

- Liquid-Based
- Solid-Based
- Powder-Based



LIQUID-BASED

- Liquid-based RP systems have the **initial form of its material in liquid state.**
- Through a process commonly known as curing, the liquid is converted into the solid state.
 - Stereolithography Apparatus (SLA)
 - Solid Ground Curing (SGC)
 - Light Sculpting
 - Two Laser Beams
 - Microfabrication



SOLID-BASED

- Solid based rapid prototyping systems are meant to encompass all the forms of materials in solid state.
- The solid form can include the shape in the form of a **wire, laminate, pellets or a roll.**
 - Laminated Object Manufacturing (LOM)
 - Fused Deposition Modeling (FDM)

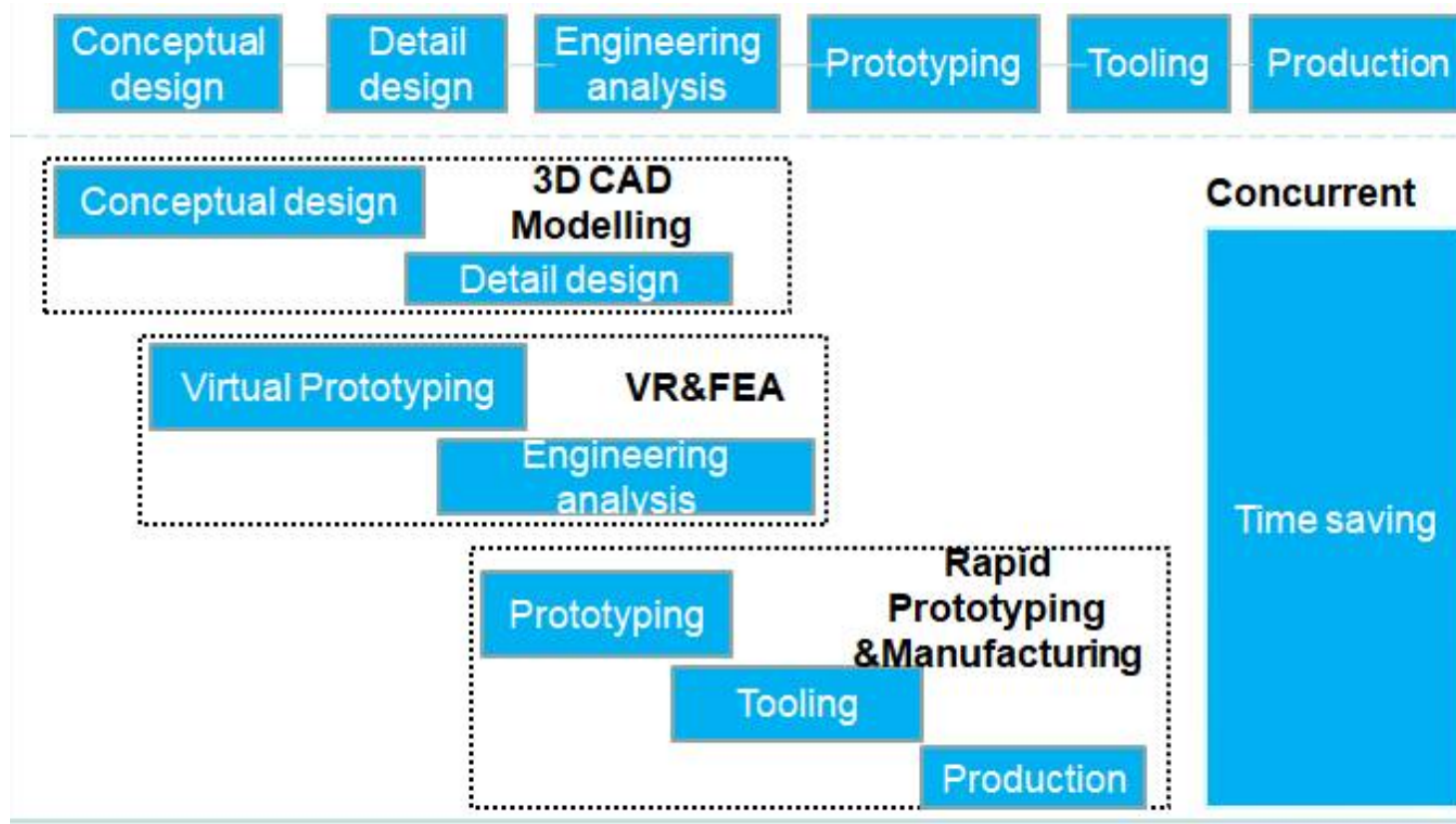


POWDER-BASED

- These processes build the part by **joining powder grains** together using either a laser or a separate binding material.
 - Selective Laser Sintering (SLS)
 - Three-Dimensional Printing (3DP)
 - Laser Engineered Net Shaping (LENS)
 - Gas Phase Deposition (GPD)



TIME COMPRESSION ENGINEERING IN PD





ADDITIVE MANUFACTURING/3DP MATERIALS

