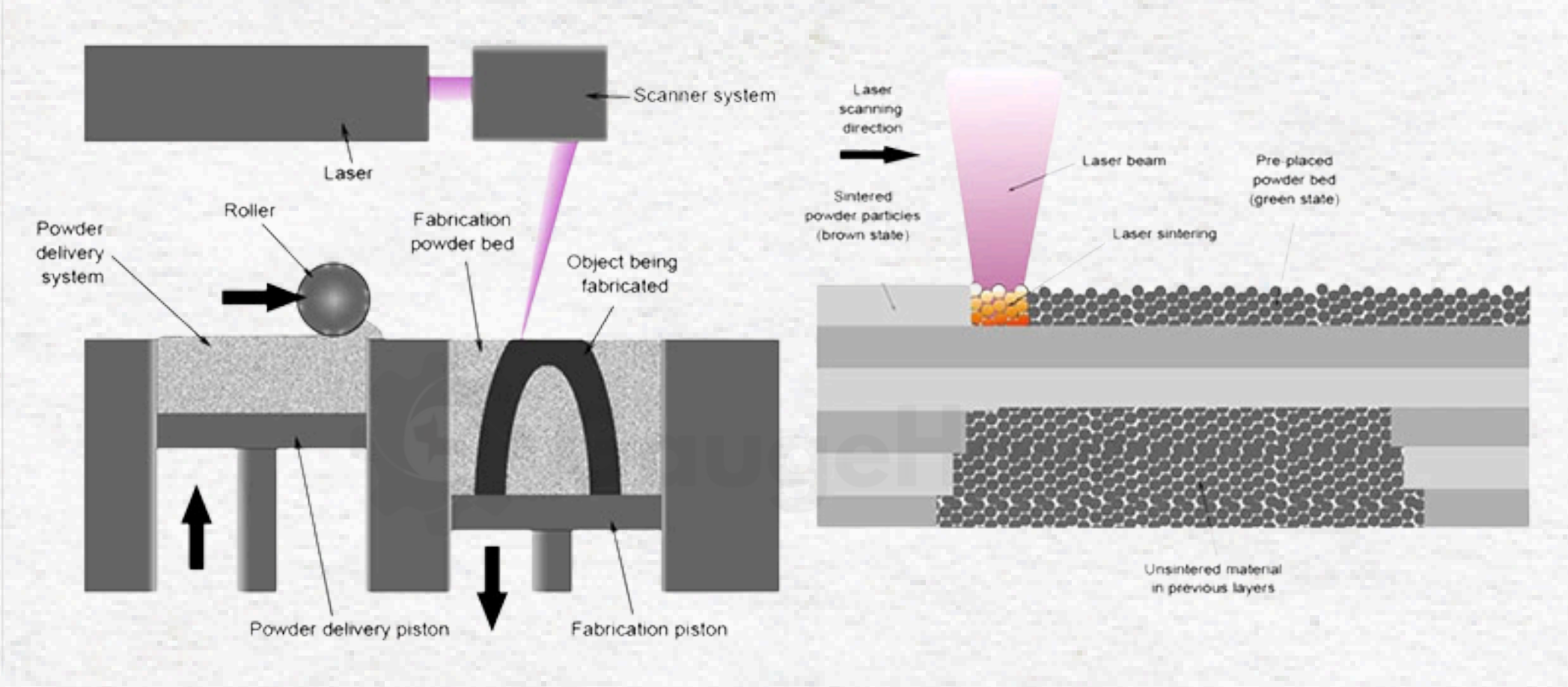


# What is Metal 3D Printing?

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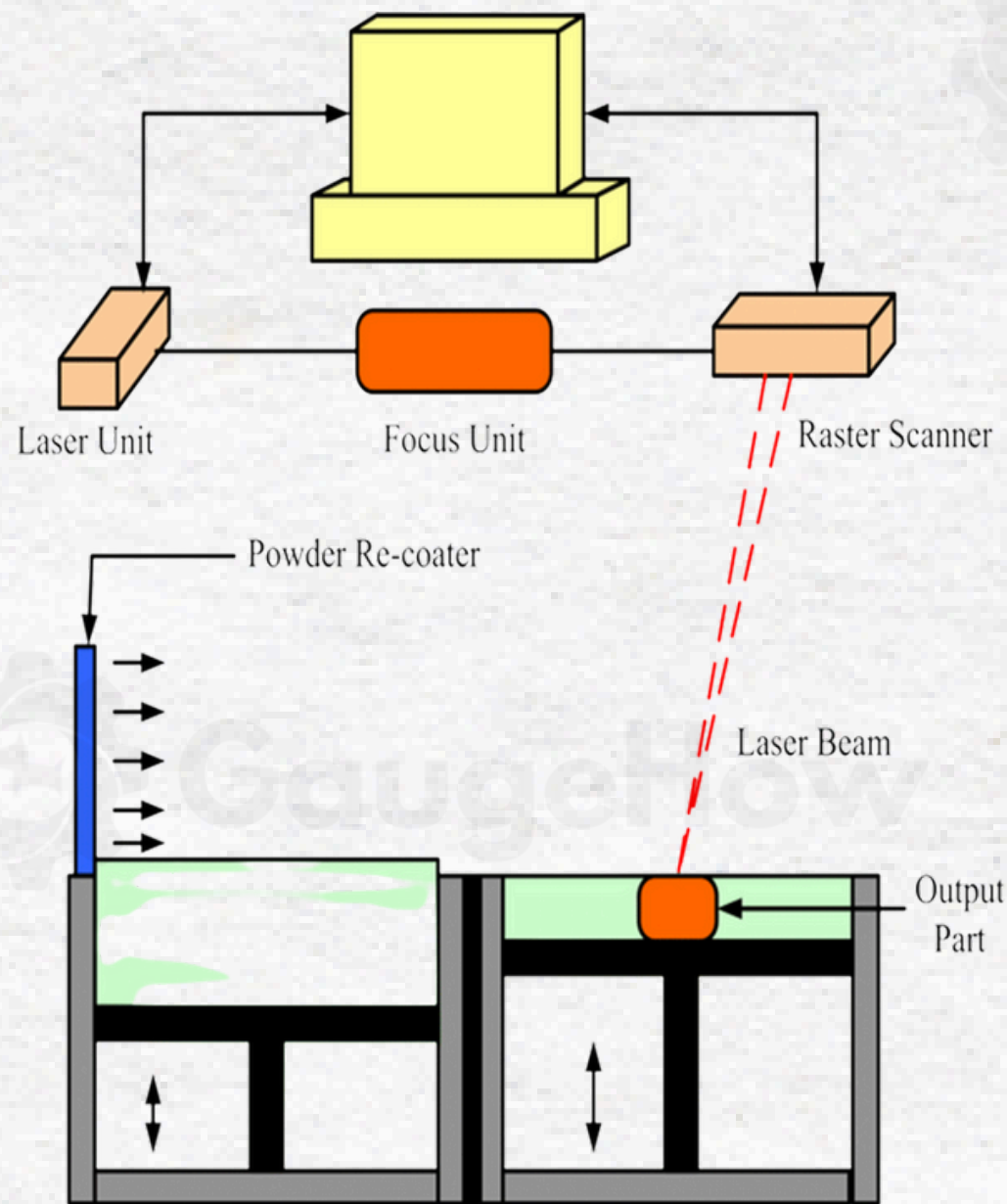
Metal 3D printing is an additive manufacturing technique that creates metal components layer by layer directly from a digital design.



## Selective Laser Melting (SLM)

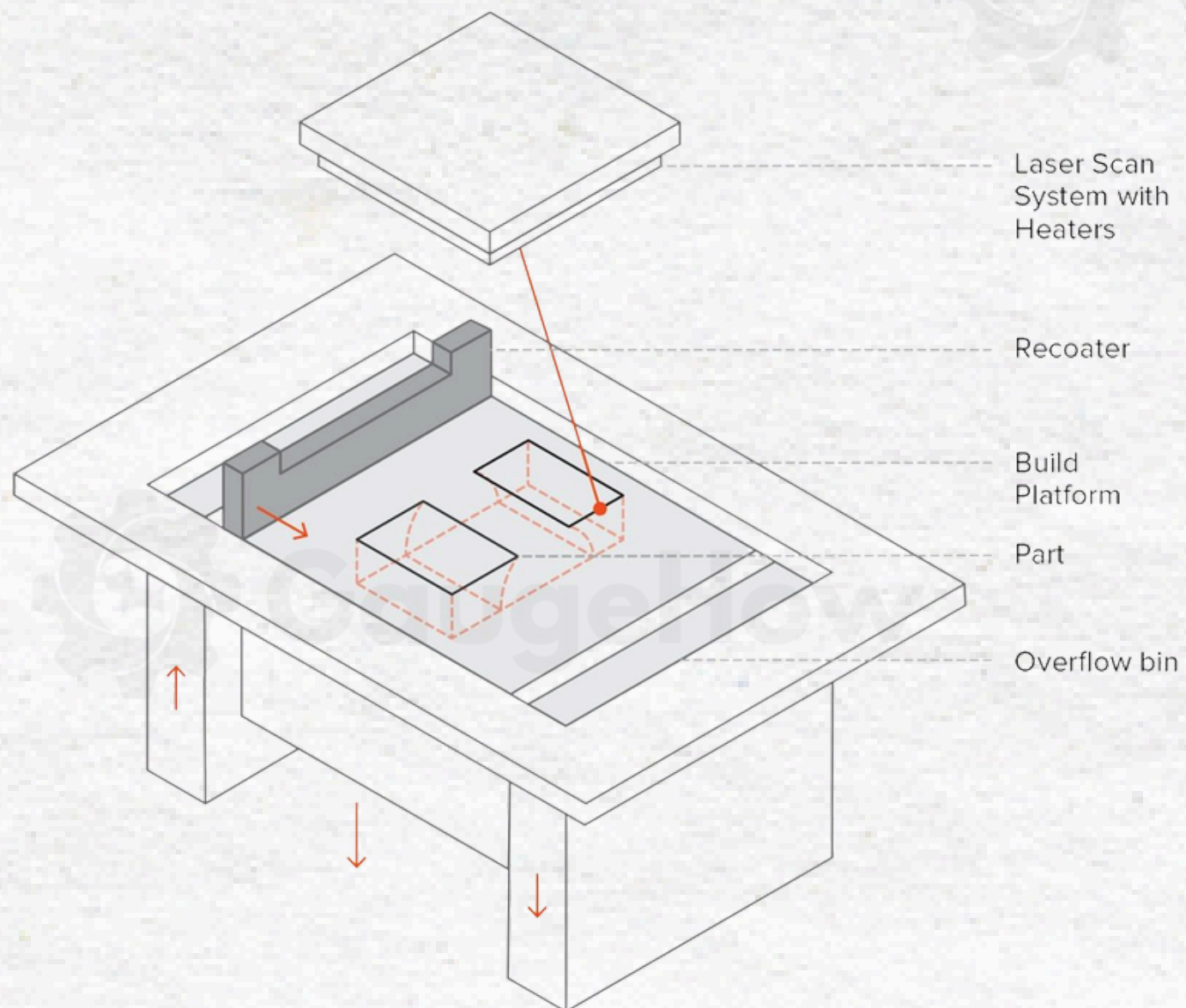
SLM is a metal additive manufacturing process where a high-powered laser completely melts fine layers of metal powder, fusing them into a dense, fully solid part with mechanical properties comparable to conventionally manufactured metals.





## Direct Metal Laser Sintering (DMLS)

Direct Metal Laser Sintering (DMLS) is an additive manufacturing (3D printing) process that builds complex metal parts by fusing fine metal powder with a high-wattage laser, layer by layer, based on a digital CAD model.



## Metal 3D Printing (SLM & DMLS)

Layers of metal powder are fused by a high-power laser in an inert gas chamber. Parts are built with supports to prevent warping, then cooled, stress-relieved, and removed from the build plate for use or post-processing.



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 <b>Autodesk Powerinspect 2022</b> CMM (Coordinate Measuring Machine) 1-2 weeks   2-3 hrs/week	 <b>Engineering Graphics/Drawing</b> 1-2 weeks   2-3 hrs/week	 <b>Mechatronics</b> 5-6 weeks   2-3 hrs/week	 <b>Basics of 6 Sigma</b> 1-2 weeks   2-3 hrs/week	 <b>Uncertainty Measurement</b> 1-2 weeks   2-3 hrs/week

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