

Subtractive Method of Sculpting

The subtractive method of sculpting, also known as carving, is a technique where the artist removes or subtracts material from a solid block or mass to create a sculpture. It is one of the primary methods used in sculpting and has a long history dating back to prehistoric times.



Totem poles- Burnaby, BC, Canada



In the subtractive process, the artist starts with a block or mass of material, typically stone (such as marble, granite, limestone), wood, or even materials like clay or plaster.

Granite block prepared for splitting

The sculptor then uses various tools such as chisels, hammers, rasps, drills, and saws to remove excess material, gradually shaping the sculpture according to their vision.



The process involves careful planning and visualisation, as the artist must envision the final form within the solid block and strategically remove material to bring it to life. It requires both technical skill and artistic sensibility, as the sculptor must understand the properties of the material, its texture, grain, and how it responds to different tools.



The subtractive method allows for great precision and detail, as the artist can meticulously refine the sculpture by carefully carving away layers of material. It involves a gradual process of shaping, smoothing, and refining the surface, resulting in a finished sculpture that reveals the inherent qualities of the material.



Throughout history, the subtractive method of sculpting has been used to create a wide range of sculptures, from small figurines to monumental statues and architectural elements. There are multiple famous examples of the stone carving art, from the ancient Moai statues of Easter Island to the renaissance David by Michelangelo.



Top- "Moai" figures carved by the Rapa Nui people on Rapa Nui (Easter Island)



Right- detail of "David" by Michelangelo in Florence, Italy.



Orbital sander machine



CNC machine carving wood- photo by By [WayKen Rapid Manufacturing](#).

Advancements in technology have also influenced the subtractive method in modern times. Power tools, such as pneumatic hammers and electric grinders, have made the process more efficient and enabled artists to work with harder materials. Computer-aided design (CAD) and computer numerical control (CNC) machinery have further expanded the possibilities, allowing for precise and complex sculptural forms.



Top- CNC machine carving stone- photo by By [WayKen Rapid Manufacturing](#).

Right- "Song"-sculpture by Oliver Harwood,- one of Studiostone Creative owners.



The subtractive method of sculpting offers artists the opportunity to transform solid masses into expressive and dynamic artworks. Whether it's stone, wood, or other materials, the subtractive method continues to be a fundamental and versatile approach in the world of sculpture.