

## The effect of using computer numerical control on ceramic art

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### **Abstract:**

CNC technology and CAD design has become an important role in the development of many fields, including the ceramics industry as a tool for the production of models and molds used in the production of ceramics, taking advantage of the accuracy and speed provided by this technology, as well as taking advantage of the advantages of CAD design systems. Is it possible to benefit from this technology as a tool that can have a role in enriching the art of ceramics? , And this question expresses the real problem of the research, and to answer it we must understand the nature of this technique, which can perform deletions through drilling to form the surface, and then through the artist's thought it can be used as a tool to express his idea separately, or to combine it with shaping techniques Ceramic, and various ceramic surface treatment technologies. Then the research deals with the possibility of using CNC digital control technology, and the use of CAD design systems as tools to enrich the art of ceramics, with a brief presentation of CNC digital control technology, and traditional methods of forming and treating ceramic surfaces, where the research aims to use a digital control machine With three axes to obtain artistic ceramic pieces bearing an aesthetic value, the researcher has reached through his own artistic experience of obtaining ceramic pieces bearing a distinctive aesthetic value, and the practical application of the research included a presentation of some ceramic pieces with aesthetic value in which traditional methods of forming ceramics were used with the use of his machine For drilling works with numerical control by computer, in one of the stages of obtaining these ceramic pieces.

### **Keywords:**

Ceramic Art, CNC Computer Numerical Control, (CAD) Computer-Aided Design .