

PREPARATION OF PLASTICINE HANDLE DETAIL BY STAMPING METHOD

Mahammadziyoyev Mukhiddin Salokhiddin ogli

Fergana Polytechnic Institute

Annotation:

This research is aimed at studying the process of preparing plasticine handle details through the stamping method. Stamping is an effective and economical technology used for metal forming and cutting, and is widely used in the automotive industry.

Keywords: stamping, metal forming and cutting method. the component used in cars. mechanical properties and compatibility.

Machines for stamping. In stamping Mills, stamping presses, hydraulic and frictional presses horizon stamping is performed on machines. Issyk will be open and closed types of volumetric stamping. In the case of open stamps, the cut of the stamp is removed by the arikcha kilinib on the edge recesses, and the stamping vaccine turns out to be an orthic metal slurry at the expense of pressure. In closed stamping, the deformation of the metal is performed in berk space. As a result of stamping the metal, the alloy does not come out. Heat the items as follows from the general technological operations of the Stamps: scraping the Zagotovka, hiding the zagotovka, stamping (if the zagotovka is a complex bulsa, it is stamped several times) consists in cleaning the mixture, cleaning it from the thermal performance burn, cooling it if necessary. Stamping is performed on several exchanger operations aloxida stamp ariks. An example would be anikrok in issiklayn stamps from pokovka, whose zagotovka dimensions are bolted. When sealing and stamping, it is necessary to clean the burn on the surface of the hidden object otherwise the burn particles can penetrate the metal surface. Krivoship-stamping presses were widely abandoned in the preparation of their pokovks at metal stamping enterprises. When stamping in bolging machines, anik-sized, high-quality, low-metal is wasted. Crivoship-stamping presses with a strength of 5000-8000 kg are hit 35 - 90 times per minute. When stamping with molots, the deformation is mostly bulsa in the surface fold of the zagotovka, while in krivoship-stamping presses, the deformation of the zagotovka is uniform as the deformation increases from small to large [1-5].

Stamping occurs in stamping Mills, stamping presses, hydraulic and frictional presses, horizon stamping machines. There will be open and closed types of volumetric stamping. In open stamps, the stamp cut is threaded along the edge edges, which turns out to be an excess metal slurry at the expense of pressure during stamping. In closed stamping, the deformation of the metal is performed in berk space. As a result of stamping the metal, the alloy does not come out. The general technological operations of stamping items are: Zagotovka shearing, zagotovka heating, stamping (if zagotovka is complex, it is stamped several times). It consists in cleaning the mixture, cleaning it from thermal performance burn, in cases where necessary,

calibrating it cold. Stamping is performed on separate stamping punches for several alternating operations. For example, in hot stamps, the size of the zagotovka will be more accurate than that of the hammered pokovka. When heated and stamped, it is necessary to clean the burn on the surface of the heated object, otherwise the particles of the burn can penetrate the metal surface.

Volumetric stamping is often said to occur when metal zagotovkas heated to a certain temperature are poured into the lower punch groove of the so-called Stamp (which usually consists of two) instrument, deformed in punching work with the upper punch, filling in the stamp groove (figure 120, a). This method is widely used in large-scale blacksmith shops, where many uniform punches are made according to their advantages, such as higher productivity than the free hammer familiar above, obtaining complex shaped punches, accuracy of shape and dimensions, low surface roughness, does not require a highly skilled worker. But the cost of the stamp, the mass of the pokovka up to 250-300 kg, is a disadvantage of this method.

As mentioned above, tools used in volumetric stamping of metals are called stamps. They are made from 5xnv, 5xnm, 5ATM, ZX2V9F and other brands of high-quality alloy steels and undergo appropriate thermal processing. Their grooves will be very close in shape, size to the outer shape and size of the punches. Stamps are separated into open and closed varieties according to their construction. In the separation plane of the open stamps, the removable pokovka will be a groove along the outer contour, with a narrow punch ditch connected to it. When stamping zagotovkas on these types of stamps, a punch is formed by passing through a metal narrow ditch that is in excess of the stamp groove to the punch magazine. It is then cut off. While the increase in resistance, which shows it moving metal to the punch magazine on the one hand when it cools faster in this narrow and small volume ditch, helps the stamp groove to become fuller with metal, on the other hand it prevents the stamp blades from hitting one another [6-9]. The Punch ditch structure and size depends on the material, shape, dimensions and other indicators of the pokovka-usually, the punch mass is in the range of 10-20 percent of the pokovka mass. As seen in free hammering of metals, in the design of a pokovka drawing in stamping, the volume of the pokovka (1.2-1.5 percent) is obtained at the expense of the drop, dopusks of nominal dimensions, omissions, as well as the input values in the heating, simplifying its shape as much as possible. If there is a hole in the detail, it is marked and the thickness of the cutting curtain is also indicated. In order for the zagotovka to move more easily into the stamping groove and the pokovka to be easily separated from it, the stamping groove should be small, the separation plane should go from one surface to the other at an angle, the upper and lower contours of the stamp should be equal, the adjacent surface should not differ sharply in the wall thicknesses [10-12].

Conclusion

In this study, the process of making plasticine handle details by stamping method was studied in depth. Stamping technology, as an effective method of metal forming and cutting, is widely

used in the automotive industry. The results of the study showed that the choice of material and the correct Organization of the stamping process make it possible to increase the mechanical properties and overall quality of the handles.

The equipment and technological requirements used in the stamping process play an important role in improving production efficiency. This method also contributes to reducing costs and optimizing the production process.

In the future, further development of stamping technology and the application of new materials will help to increase the efficiency of the production of plastina handles. This study serves as an important resource in ensuring the quality and reliability of plate handles.

Literature used.

1. "Arthur Ulens," Glass Magazine, February 2006, p. 110.
2. ISO / TU 16949: 2002. Sifat menejmenti tizimlari. Maxsus Avtomobil sanoati sohasida ISO 9001: 2000 ni qo'llash talablari va tegishli zahira etkazib beradigan tashkilotlar ehtiyot qismlar. - M : Rossiya davlat standarti, 2002 yil.
3. 3M Center, Building 223-1S-02 Printed in U.S.A. 8207 St. Paul, MN 55144-1000
4. 3M™ Acrylic Plus Tape Series PT1000 November 2019
5. Yokubov S. LEGAL STATUS OF AGRICULTURAL LAND //Евразийский журнал технологий и инноваций. – 2024. – Т. 2. – №. 5. – С. 105-113.
6. Yokubov S. DEVELOPMENT OF AGRICULTURAL CARDS USING ARCGIS AND PANORAMA TECHNOLOGIES //Innovations in Science and Technologies. – 2024. – Т. 1. – №. 1. – С. 101-107.
7. Khakimova K., Yokubov S. CREATION AND MAINTENANCE OF STATE CADASTERS IN THEREPUBLIC OF UZBEKISTAN //Innovations in Science and Technologies. – 2024. – Т. 1. – №. 1. – С. 85-93.
8. Yokubov S. SCIENTIFIC AND THEORETICAL FOUNDATIONS FOR THEDEVELOPMENT OF MAPS OF THE LEGAL STATUS OF STATE LANDCADASTERS IN THE TERRITORY USING GIS TECHNOLOGIES //Innovations in Science and Technologies. – 2024. – Т. 1. – №. 1. – С. 80-84.
9. Yusufovich G. Y. et al. The use of remote sensing technologies in the design of maps of agricultural land //Texas Journal of Agriculture and Biological Sciences. – 2023. – Т. 23. – С. 17-21.
10. Eshnazarov D. et al. Describing the administrative border of Koshtepa district on an electronic digital map and creating a web map //E3S Web of Conferences. – EDP Sciences, 2023. – Т. 452. – С. 03009.
11. Khakimova K. et al. Application of GIS technologies for improving the content of the tourist map of Fergana province, Uzbekistan //E3S Web of Conferences. – EDP Sciences, 2023. – Т. 386. – С. 04003.
12. Khakimova K., Yokubov S. Creation of agricultural electronic maps using geoinnovation methods and technologies //Science and innovation. – 2023. – Т. 2. – №. D1. – С. 64-71.