

Application scope of EDM machine

Detail Introduction :

EDM machine long-life application is mainly used in the process production and secondary processing field of CNC, as well as CNC series of machines. The reliable and multifunctional EDM machine also provide users with an efficient way to do a variety of machining processes. We will thoroughly discuss the application scope of EDM machine so that you can find out about its main field of application.

The Application Scope of EDM and CNC Machining

The EDM machine is an electric discharge machining machine. This method uses electricity to cut and remove materials from conductive materials. The tool is guided by a dielectric medium, such as deionized water, which is pumped through a pumping system. The control unit in the machine regulates the flow of the dielectric. This is done through a CNC program. An electrode is mounted on the tool post.

An electrical discharge machining machine is a type of wire-cutting machine that produces sparks during the cutting process. The electrode is not continuous and breaks off in short cycles. The workpiece is immersed in a liquid that generates a potential difference and is removed.



The machine's ability to produce precise edges and shapes has helped it gain acceptance in the manufacturing industry. Some companies manufacture EDM machines, including Mitsubishi Electric, OPS Ingersoll, Makino, Excetek, Sodick, and GF Machining Solutions.

There are several advantages of using an EDM machine. For example, the process can be automated to cut complex designs. Another benefit of the EDM machine is the ease of use. You can easily set up an EDM machine and start cutting and shaping parts within minutes.

The process can be repeated as many times as you need to. There are many types of EDM machines available, and each one can be tailored to a specific industry.

The machine is very versatile and can be used for a variety of industries. The most common types of EDM machines are rotary and fixed. The EDM machine is a good choice for manufacturing parts for the aerospace, automotive, and aerospace industries.

It is easy to operate and can process a workpiece up to 300mm thick. Some machines have other features that can be beneficial for your company. If you need a wire-cutting EDM machine, you can opt for a portable version.

Aside from metal machining, EDM machines can also be used for various other applications. These machines are able to cut hard materials. They can be used in different industries. However, they have limitations, such as high cost.

Besides, there are several types of EDM machines, including rotary and fixed-tool machines. Aside from these, they can also be used in welding and assembling. These tools are often equipped with a wide range of features and can be customized for various applications.



Although electrical discharge machining is faster than conventional milling, it is slower than other methods. This factor hampers the growth of the market. Nevertheless, EDM machines are required in various industries, including automotive and aerospace. In addition, the need for these machines is growing rapidly.

This has led to the increase in demand for these machines. They have become more versatile. There are more benefits to the use of these tools than their disadvantages.

The EDM machine can be used for small productions of parts. The process of electrodischarge machining is non-traditional. It is often used for small holes. It is a fast way to make metal components.

It is suitable for many applications in the automotive and aerospace industry. In some industries, this technique is used for high-precision machining. This machine is a highly flexible solution for metal machining.

An EDM machine is used for small parts requiring intricate shapes. Its high-precision capabilities make it suitable for machining small parts. It can also be used for large-scale production. Moreover, it can be used for large-scale components.

The EDM machine can perform a variety of functions, allowing a wide range of applications. This machine is especially useful in aerospace and automotive industries, where the ability to customize and design products is essential.

The EDM machine has two categories of generators. Micro-EDM uses an RC circuit while micro-EDM employs transistor controlled pulses. Both of these technologies allow the machine to achieve accurate results.

Despite the complexity of the machines, they are versatile and can be used in many applications. Its user-friendly design makes it easy for anyone to operate and maintain. It is best for low-volume

manufacturing.

But it is undeniable that by far CNC has become the most favorable choice in manufacturing, especially in the field of electronic components. The reason lies in that EDM machine requires highly skilled operators and extensive maintenance.

It also needs high investment which is out of the reach of many small companies. And lastly, CNC is able to do more types of processes than EDM machine, becoming a better choice.