

EDM Services

We invest in state-of-the-art EDMs because they allow quicker manipulation of hard metals. Our Mitsubishi EDMs allows our craftsmen to cut complex shapes and tapered holes with extremely tight tolerances. How tight? How about accuracies held to only microns!

Electrical discharge machining (EDM) is a metal removal process in which thousands of electrical discharges per second flow between an electrode and the workpiece in a dielectric fluid. It has the effect of vaporizing metal in a very small controlled area. The EDM process can be used on any material that is electrically conductive, including exotic materials that can be difficult to machine using conventional methods.



SINKER EDM



WIRE EDM

Sinker EDMs like our EA 28V shown above use an electrode workpiece submerged in fluid. A power supply is connected to the electrode and generates electrical potential between the parts, producing a breakdown to form a plasma channel and spark jumps. As the sparks continue to form, the base metal erodes and the electrode is lowered, causing the “sinking” effect. When the process is complete, the base metal has been eroded in a very specific shape or design.

Sinker EDMs are ideal for blind cavities or keyways, sharp corners, thin walls and fine finishes.

Wire EDMs like our MD Pro II shown above use a single string of thin metal wire to cut thick metals for precise incisions and splits. Wire EDM machining submerges the part being cut in deionized water and the wire acts as the electrode, creating a spark that skims the part into the desired shape without the wire ever coming in contact with the part.

Any conductive material can be Wire EDM machined, including aluminum, brass, carbide, copper, hastelloy, inconel, steel, stellite and titanium.

Advanced controls, automation capabilities and a superior power supply make these EDM machines the ideal choice for your tight-tolerance EDM applications.