Article published on July 27th 2012 | Business

When a small amount of water is forced through a narrow orifice or nozzle under high pressure, it contains enough force to cut through different types of materials. In fact, if you pressurize a waterjet in the right manner, you can actually use it for cutting hard materials like metals and stone.

The defining attributes of water jet based cutting:

However, what really defines the efficacy of awaterjet is the consistency in its pressure levels. A pressure drop could render the entire cutting process ineffective. This makes it imperative to invest in high-end tools that can offer you a coherent spray. This particular cutting technique is getting popular because it doesn’t create any heat affected zones.

Moreover, it doesn’t have an adverse side effect on the actual object being cut. Using heat-based cutting techniques often also leads to fumes and several environmentally harmful byproducts. All of these problems are negated when you resort to waterjet cutting. Conventionally used metal cutters require regular sharpening and continuous replacement of the cutters too.

A brief background:

Did you know that the use of waterjet actually gained popularity in the 19th century when it was used for mining gold in California? Yes, it was used around the same time that denim as a clothing material became popular in the mining industry! Along with jets of water, miners made use of steam to remove unwanted materials and reach the naturally occurring gold deposits. However, these were low pressure jets of water that are very different from the ones that are used in the contemporary world. It was only in the second half of the 20th century that a water jets started becoming a popular tool for cutting and slicing purposes.

The present-day uses of water jets:

Since then, there has been significant advancement in the field and a number of industries use these tools to cut objects that are up to 7” or more in thickness. Look around and you shall discover that materials such as plastics, textiles, paper, metals, rubber, and stone are cut with a water jet.

While softer materials can be cut using plain water, hard materials are cut by mixing abrasives in water. These abrasives give the water more teeth, quite literally! Today, a number of flooring inlays are carried out with the help of waterjet cutting. Several artists and sculptors also use this cutting method as it helps them achieve clean lines and contours in their artwork. As you can see, the application of a water jet isn’t simply limited to the industrial sector. It is also quite popular with other sectors.

Today, many food processing units make use of waterjet to cut meat and vegetables. Water doesn’t interfere with the properties of the object being cut. Hence, it is an eco-friendly and economical alternative to conventionally applied cutting methods.

Article Source:

http://www.articleside.com/business-articles/reasons-why-waterjet-is-preferred-to-heat-based-cutting-techniques.htm - Article Side

Prince - About Author:
Technology has always fascinated the technician inside me. And writing about the latest in technologies and mechanisms in usage has been my forte over the last few years. Follow my write ups to know about the latest in technologies and mechanisms this season for one. This fall waterjet, waterjet cutting, a flooring inlays are very much in demand among the technical and mechanical industries across the world. Keep yourself updated on these products exclusively from USA.

Article Keywords:
Waterjet, waterjet Cutting,

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!