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Some process of Flame Cutting by Nikebell

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The method of flame cutting involves a combination of gasses to produce a controlled flame which is used to cut different types of metals. The gasses used in this process include is oxygen as well as other liquid gasses such as, acetylene or propylene. When these gasses are mixed and ignited, they produce a powerful flame with temperatures more than 2000 degrees Celsius. The temperature of the flame is determined by the burning of the fuel gas as well as the fixed flow of oxygen.

The gasses used in flame cutting are directed onto the surface of the metal with a flame cutting torch. A chemical reaction happens on the metal sheet where the flame is directed. These gases are used to carry on the metal to melting point, not to truly melt the metal. This chemical reaction is caused by the high temperature of the metal that comes into get in touch with with oxygen. The oxygen combines with the steel to oxidize the metal immediately which produces the cut or kerfs in the steel.

In this process, the oxygen is effectively used to remove the melted metal as it is blown into the kerfs or incision on the metal with force. By adjusting the stream rate of the oxygen a variety of cuts are made.

Flame cutting is usually done at fast speed by using CNC machines which use multiple torches. This means that more than one flame cutting technique can be done at the same time, which makes it ideal for creation runs that need a high amount of exactness repeated.

This process is also known as oxy-fuel cutting and used for separating and crafting steel pieces. It is carried out by using a torch through which oxygen and a fuel gas includes, acetylene, propane or some other gases are passed. An outer ring of jets in the torch nozzle are used to preheat the bottom line of the steel. A separate oxygen flow is directed from a inner jet on to the part to be cut. Quick oxidation of the steel takes place and substance is removed by the pressure of the gases.

Flame cutting may be manual, where the cutting torch is held and guided by the operator, or automated, where the torch may be mounted on a machine. Cutting of compound figures is potential. Using Cutting machines may be pre-programmed and computer technology, to minimize substance consumption of plate being cut. Multi-cutting head machines are available for high volume creation applications.

The system of flame cutting involves a reasonable, yet resourceful way of cutting metals like steel to give them the desired shape as per the industry demands. The machines essential for flame cutting are designed to provide machining aid to small and medium scale industries that cannot afford more complex and costly forms of flame cutting.

Today a number of techniques used in flame cutting by people such as roughing cuts, gas cutting and many more. In order to form a shape due to the desired mould, we need to use one of them that suitable and easy in use.

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