What is an Autoclave?

The use of disposable tattoo tools such as ink and needles is the best way to prevent transmission of any disease. However, there is some equipment that may not be disposable or easily replaced that will need to be sterilized with a machine called an autoclave. This is the same type of machine used in medical settings to sterilize medical and surgical instruments.

Every tattoo shop should have an autoclave machine. The process of sterilizing the tools is pretty simple—the items are put into special bags, sealed and inserted into an airtight chamber. The chamber is heated up to at least 121 degrees Celsius—this is the temperature that will kill most germs. In addition the autoclave will increase the air pressure in the chamber to 15 pounds per square inch (psi) which will force out the old air in the chamber and replace it with sterilized air. The machine is run for 15 to 20 minutes.

Every tattoo shop is required to maintain a log that will include the dates the autoclave is used to sterilize the equipment. The date that the tools are autoclaved is written on the bag and into the log. When the artist is ready to begin work on the tattoo he or she will break the seal of the sterilized bag in front of you. This way you know that the items have been sterilized.

Facts

There are two major types of autoclave sterilizers — steam and chemical. Most dentists use chemi-claves, but steam is really the only kind acceptable in the tattoo field.

The autoclave was invented by Charles Chamberland in 1879, although a precursor known as the steam digester was created by Denis Papin in 1679. The name comes from Greek auto-, ultimately meaning self, and Latin clavis meaning key — a self-locking device.

If you are interested in learning more about an autoclave, your tattoo artist may be able to provide you with more in-depth information on the use of the autoclave and how it works.