

Technical description - Linesman Pliers

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Writing for Engineering 21007

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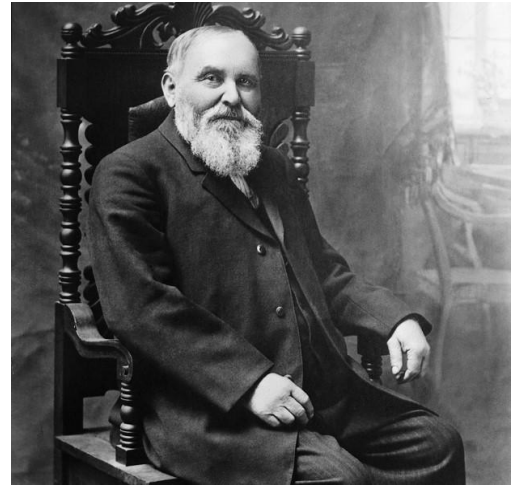
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History

Figure 1) Mathias Klein, inventor of linesman pliers

In their basic form, pliers were an early invention. They were invented around 3000 bc. Initially, most were made of wood material, but later they were created from stronger materials such as steel, iron, and bronze. Pliers with a pivot joint design came about 1000 bc in modern-day Europe. At the time, pliers were made for specific uses. For instance, there were special pliers for surgeons, dentists, for making ammunition, etc.



The first modern pliers came on the market in the year 1857 and were invented by the company *Kleins tools*. Called linesman pliers, they are still used today by a number of tradesmen including electricians and linemen.



Figure 2) The first pair of linesman pliers

Although many of the electric-powered inventions widely known today weren't around back then, the communications industries needed to bend, twist and cut wires. Linesmen's needed the pliers to work on electrical lines in cities and towns. As time passed, linesman pliers became more and more popular and widely used due to advancements in technology such as the invention of the telephone, the telegraph, and eventually the lightbulb. The specific pliers that I use are called the Milwaukee linesman pliers. Milwaukee was founded decades after Kleins tools were but nonetheless, they continue to be a powerhouse for electric tools to this day.

Anatomy

The Milwaukee Linesman's pliers are known for their flat gripping surface, stub nose, angular edges, and large cutting edges. The pliers are made of steel and have a polished black oxide finish. The pliers feature parts such as the stub nose, flat gripping surface, angular outside edge, cutting edges, crimper, and an insulated handle.

1: Stub Nose

2: Flat gripping surface

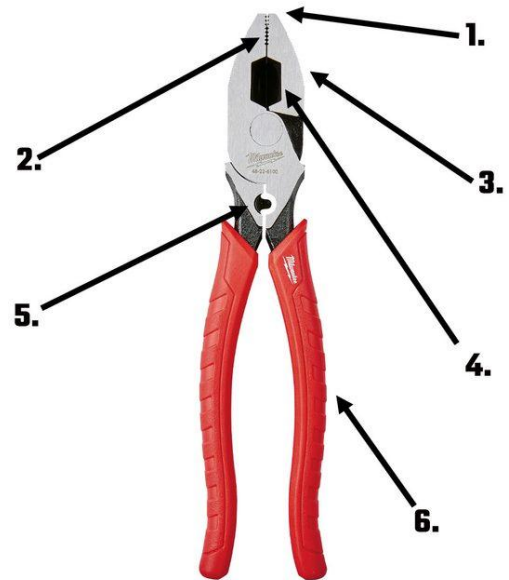
3: Angular outside edge

4: Cutting edge

5: Crimper

6: Insulated handle

Figure 3) Parts of a pair of linesman pliers



Uses:

The images shown below are examples of the ways linesman pliers are used. The pliers in the photos work the same way that Milwaukee pliers do. Linesman's pliers are mainly used by electricians when dealing with wires, and the pliers have many parts which make them versatile. The flat gripping surface can be used to twist and pull wires. As the name suggests, they are also used by linesmen when working on electric power lines. The crimper on the linesman pliers is used to crimp wires, or in other words, bond wires together. The angular outside edge can be used similarly to a hammer. The cutting edge is typically used to cut and strip wires. In some instances, several parts of the pliers must be used to complete a task. For example, when wiring outlets and switches, the electrician must cut and twist the wire. Proper safety precautions must be in effect in order to properly and safely use this tool. If you are not careful when wiring an outlet with live wire you can get electrocuted. Although it's very effective it can also cause fatality if used the wrong way.

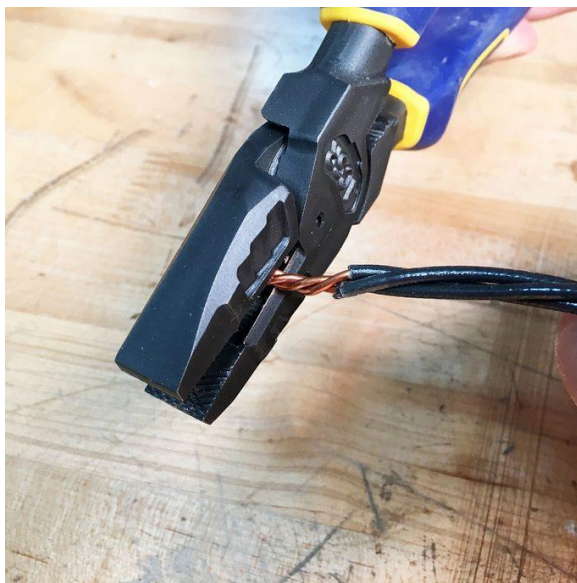


Figure 4) Pliers being used to cut wires

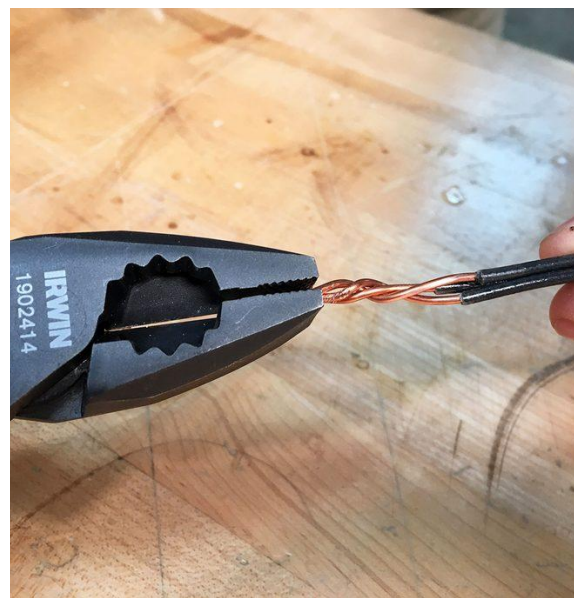


Figure 5) Pliers being used to twist wires

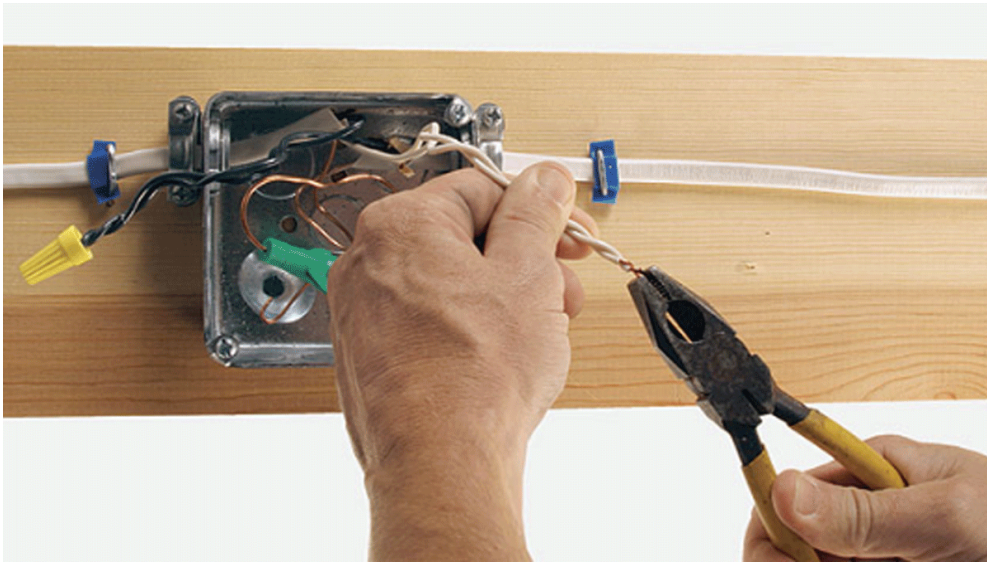


Figure 6) Pliers being used to wire outlet

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Reflection:

This assignment has helped me to further understand writing to an audience. I was sure to appeal to this audience throughout my technical description. The audience for my technical description is people who are interested in pliers and also have basic knowledge around the middle school or high school level. Because of this, I was able to use more terms and explain things that a younger audience may not understand or find important. At the same time, I feel like a wide audience would be able to understand this document, And I think most people interested in linesman pliers will have the capacity to understand it.

The purpose of the technical description is to give the reader information about linesman pliers. Went over the history, uses, and anatomy of linesman pliers to give the reader a full array of information about the topic. My stance was neutral and my opinion wasn't expressed throughout the technical description. I chose to include information that had more to do with

facts than opinions. Furthermore, I used sources to back up the information I was using throughout the document.

The genre is a technical description. Technical descriptions are used to educate the reader on an object/item. Technical descriptions often give a background on the item as well as the function and use of the item.

The media/design of this technical description is digital because it is being stored and graded online. If the document was printed in the future, it would be multimedia as it would be digital and physical print.

The exigence was the fact that I use this object often while working. My job requires me to cut and twist wires and the linesman pliers are the tool I use to do so. As a result, this tool is something I'm fairly familiar with as I use it to perform several different tasks. This paper helped me achieve course learning outcomes 2, enhance strategies for reading, drafting, revising, editing, and self-assessment, and 3, negotiate my own writing goals and audience expectations regarding conventions of genre, medium, and rhetorical situation. It helped me enhance strategies for drafting and revising because with my peer's help I found things that were missing in my technical analysis and was able to revise and make it better. It helped me negotiate my own writing goals and audience expectations regarding the three conventions because when writing I made sure to appeal to my audience by using a certain level of formality and information.