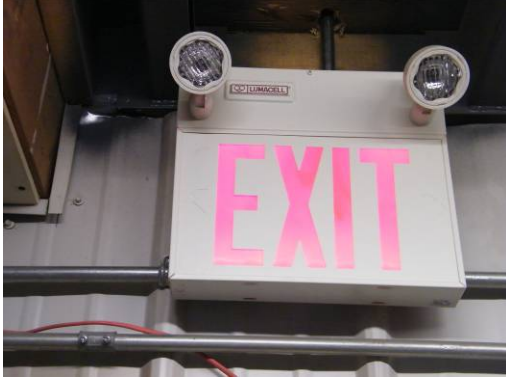
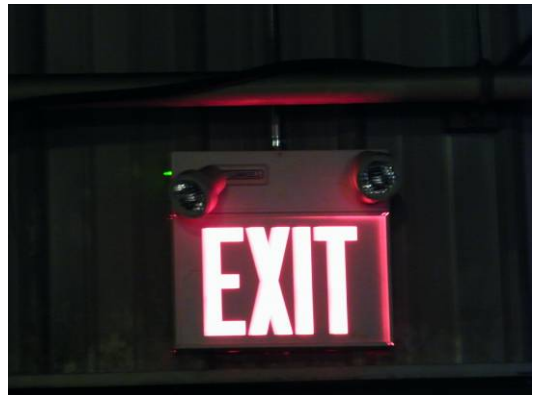


Picture Dictionary for Manufacturing



This is an EXIT sign. It shows the door where you can go out.

This is how the EXIT sign will look when it is dark.





This Exit door has a crash bar.

This is the door to go outside. There is an EXIT sign above the door. EXIT means to go out of or to leave.





This is an overhead door that opens up to bring things inside or to take things outside.

This is the control to open and close the overhead door.





The OPEN button is green. The STOP button is red.

This switch has 3 buttons. The green ones are to open or close the door. The red one is the emergency stop.





This is a door opener and the door.

There are chains, wires, cables, springs, and a belt that open the door.





This is an overhead crane. Can you see the chain?

This is the motor for the overhead crane.





These are the wires that move with the overhead crane.

The motor for the overhead crane is hung from the ceiling.



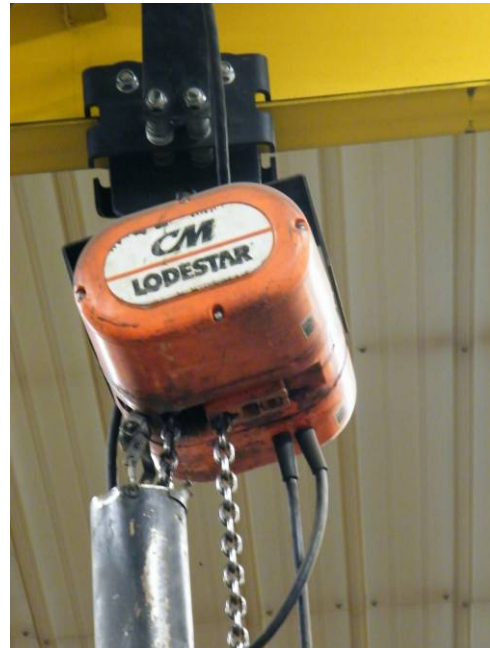


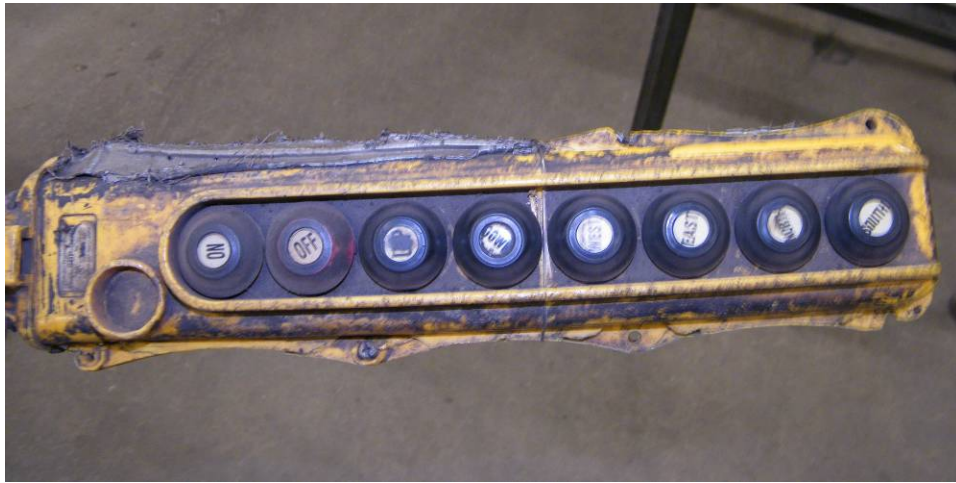
In this picture you can see how the cable moves along the track.



There are 2 chains. One is grey and the other is black.

This is the motor for the hoist. It is used to lift things that are heavy or awkward.





This is the control bar for the hoist.



Do you see the ON, OFF, UP and DOWN buttons?

These are the directional buttons: WEST, EAST, NORTH and SOUTH.

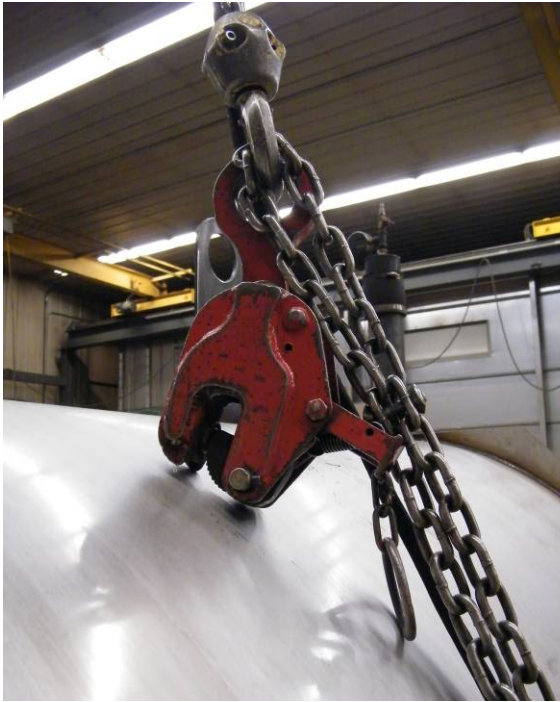




This is a very strong hook that you use to hang something heavy.

This is a 1 Ton hook with a safety clasp. It is for something that is heavy.





This is a large hook and chain. It can be used to lift a heavy load.

There are 2 strong hooks on each side of the control.





This door is for the paint booth. It has many filters in it.



You can see 4 filters in this picture.

These are the handles to a door.





The red and yellow handles are shut-off valves.



This is a tank of welding gas.

Can you see the control to open and close the tank?





Can you see the gauge? It will tell you how much gas is coming out.



These are the gauges for the air from the tanks. The air is combined so it is safe to use.

In the red tank is oxygen, and in the black tank there is acetylene. You need both to use with the cutting torch.





This is a Pressure Washer. It will help you to clean things.

There are many warning labels on a Pressure Washer.





This is a Mig welder.

There is a gauge for the Volts. There are 2 gauges for the Amps. There is a grey crank handle and a black switch to turn the machine on or off.





These are the controls for the Amps and for the Voltage.

The Power Switch is in the right-hand corner of the picture. It will turn the machine on or off.

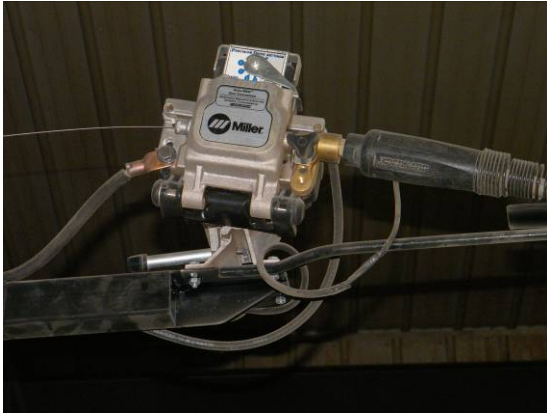




Here you can see the switch for the Trigger Hold, on and off. You can also see the switch to Jog or Purge.



In this picture you can see the roll of welding wire being fed into the Mig welder.



This is a machine used to thread welding wire.

The wire and the threading machine is attached to the wall or suspended from the ceiling.





In this picture you can see the welding wire and the welder tip.

This is a spool of welding wire on a long arm that can be moved by the person doing the welding.





This is a roll of welding wire lying on the floor.



This roll of welding wire is standing against the wall.



Can you find the controls for the Voltage, the Wire Speed, and the Trigger?

The Wire Feeder has controls to adjust the wire speed.





This is a welder's helmet. It is blue.

The welding helmet is important. It will keep your eyes and your face safe.





This welding helmet is black.

This is a different kind of welding helmet.





This is a welding curtain. It stops the sparks that the welder makes from spreading.



This pan has metal shavings in it.

This is a threading machine. You use it to thread pipe.





This is the DoAll Metalcutting Band Saw.

This chart will tell you how to set the machine for the job.





It has rollers for the sheet of metal to lie on.



The controls for the DoAll are on the red box on top.

There is a trough to catch the metal shavings or the small pieces of metal.





There is a very sharp blade on the pipe cutter.
There is also a large clamp being used.



This is a Horizontal Band Saw. You use it to cut metal.

This is the label that has the Safety Rules on it.





This is the saw used to cut metal.

These are the rollers that you need to place the sheet of metal onto.





Can you see the buttons and switches that control the machine? You also need to have a key to start this machine.

The measurement in the top row is in centimetres and the bottom row is in inches.





This is a Kingsland Machine. It is a punch and shear.

This tells you the different things that the Kingsland can do.





This is the front of the Kingsland. This is a very strong machine and you must be careful when you use it.

These are the punch and dies used for making holes with Ironworker.





The metal shavings from cutting will fall inside of the plasma table.

This is the Plasma table.





You would put the sheet of metal on this side first.

You can see the spacers in the plasma table.





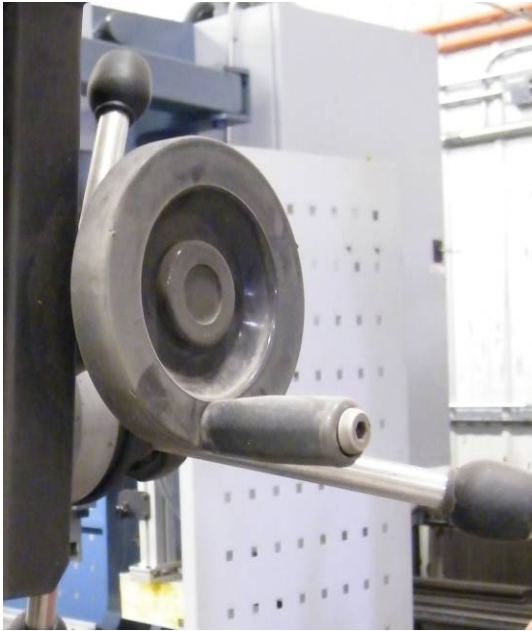
This is a portable table with rollers.



This machine is a Drill Press.

This is the chuck with a drill bit attached.





The drill press has 2 handles for 2 different things.

This is the depth gauge. You use this to set how deep you want to make the hole.





Green is always for **GO** and **Red** is always for **STOP**.

This is the handle to move the bit up and down.





The Durma Roller is a large machine that uses 220 Volt power. Can you find the power cord?

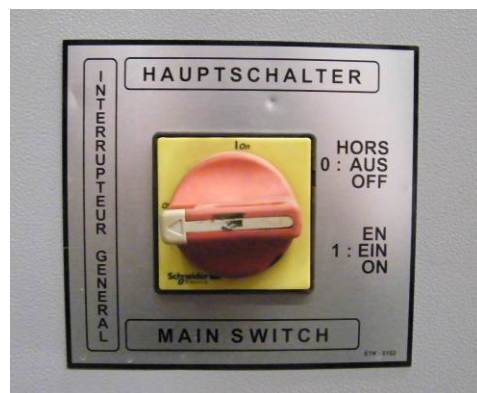
The roller has 3 large rollers. You must be careful when using the Durma.





The safety wire is used to keep the worker safe. If you touch the wire the machine will turn off.

This is the Main Switch. It can turn the machine on or off.





This sign tells you that you can get an electrical shock.

This is the gauge for the hydraulic system.





The control panel and the screen are easy to see.



This is the control panel for the Durma roller.

This is the **EMERGENCY STOP** button. It is always red.





The **START** and the **RESET** button are always **Green**. The **STOP** button is always **Red**.

You need to have a key to start the roller. Can you see the key?





This is the control to set the speed of the rollers or the bending speed.

There are many buttons on this part of the control panel.





This machine is a shear. You must be careful when you use this machine.



Can you see the strong spring inside the foot pedal that must be pushed down with your foot to allow power to go to the Shear?





This is the control panel for the AccurShear.

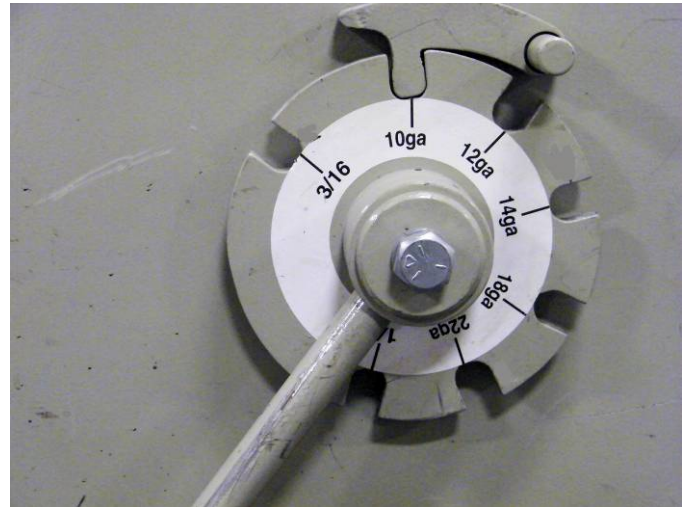
This is a safety symbol on the Shear.





This is another safety symbol on the Shear. You must be careful when using the Shear.

This gauge is for the thickness of the steel that you are wanting to cut.





This is a small ladder. It can help you to reach things.

This is a ladder. It will help you to reach things that are up high.





This is a step-stool. It can help you to reach high places.

You must be sure that the black braces are not bent or broken.





This is a dolly. You use it to help you move things that are heavy.

The dolly has a chain at the top of the left handle. It will be used to hold something secure so that the load does not move or slide off.





This dolly has a tarp strap and a chain. These will keep the load from shifting or falling off.

This is a pallet jack. It will help you move things that are on pallets.





This is a scissor lift. It can help you to reach high places.



The wheels for the scissor lift can swivel or turn easily.

There is a safety rail on all sides of the scissor lift.





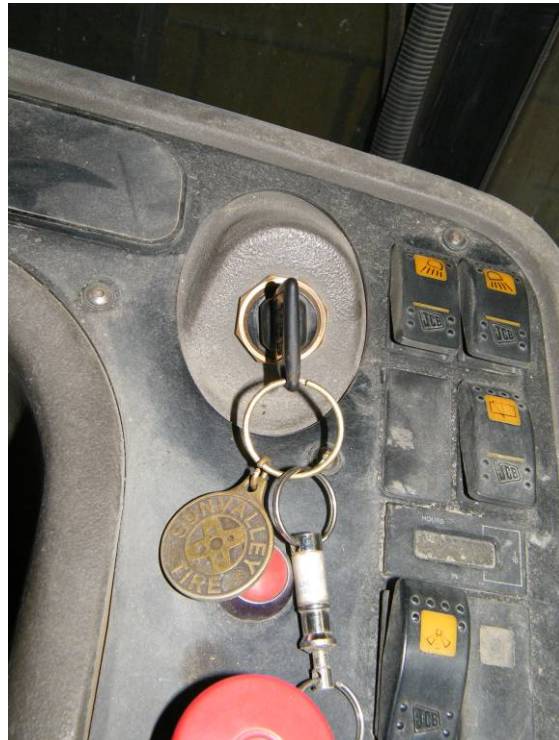
Here you can see the safety platform where you can stand.

Can you see the Hydraulic Fluid container? The container has a yellow label on it.





This is a forklift.



The key for the forklift is in the ignition.



This is to measure the angle of the load on the forklift.

This is the front of the forklift. It is ready to be used.





There is a red cable and a blue cable that help to lift.

The chains help the forklift to lift.

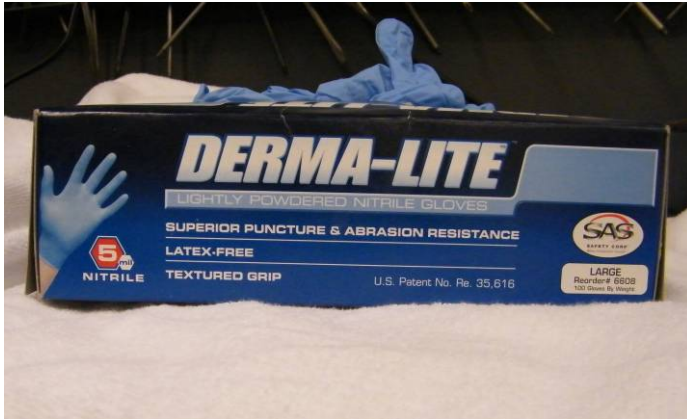




This is a fire extinguisher.

This is a First Aid Kit.





This is a box of rubber gloves.
Sometimes they are blue.

This is a rubber glove. It will
protect your hand.





This box of earplugs is attached to the shop wall.

This is a pair of leather work gloves. They have been used already.

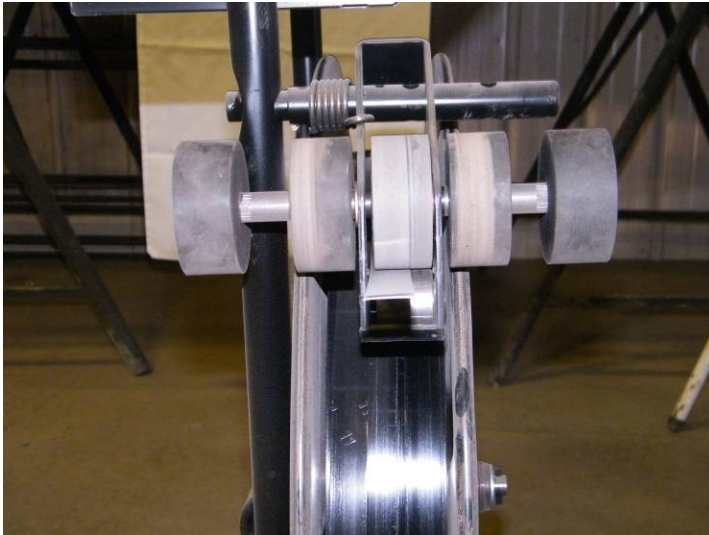




This is a metal strapping dispenser. It is used to hold things together.

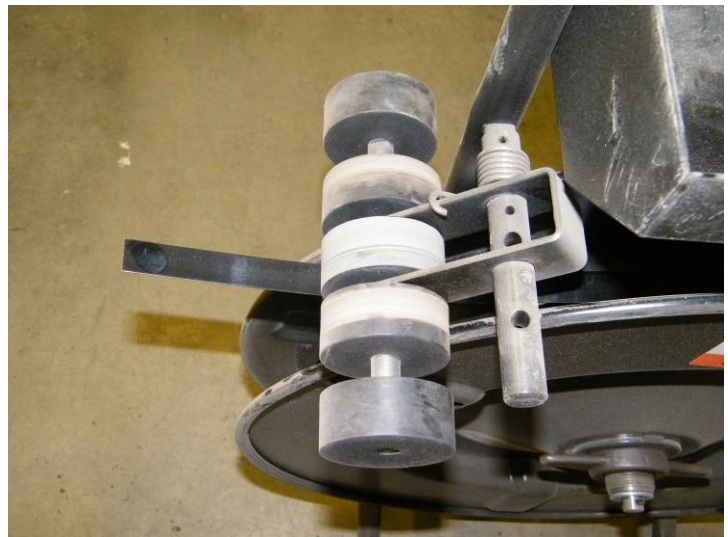
This large wheel can hold a lot of strapping.





You can see the wheel that keeps the strapping coming out straight. It also helps to keep the strapping tight.

There are 5 wheels on this machine. The strapping is coming out from underneath the middle one.





This is something that you would use to crimp the strapping together.

Now it is in the closed position.





This is a grinder. It has 2 grinding stones. One is rough and the other is a fine stone.

This grinder has a light to help you see your work more clearly.





This is a tool needed to tighten and loosen the wheel on the grinder.



This is a vice. It is used to hold things when you need to work on them.

The vice is bolted onto the workbench. It is like a large clamp.





This is a cordless drill. It is a Makita brand. It gets power from a battery that can be charged many times.

This is a hand grinder. It needs to be plugged in to get power.





The trigger on the hand grinder is orange. It will turn the power on or off.

The grinding disk on the hand grinder can be replaced when needed.





This is where the battery is placed when it needs to be recharged. The light is green so that means that the battery is ready to use.

This battery charger is for Makita batteries only.





This is a Makita cordless drill.



This is a Makita Skill Saw.



This is a heat gun. It can be used to make things soft and pliable.

This is a rivet machine.





This is a die grinder. You use it when you want to make the edges of small spaces smooth.



This is a time clock. You use this to keep track of the hours that you work.

The time clock shows the time and the date.





There is a large storage area underneath the shelf of this rack.



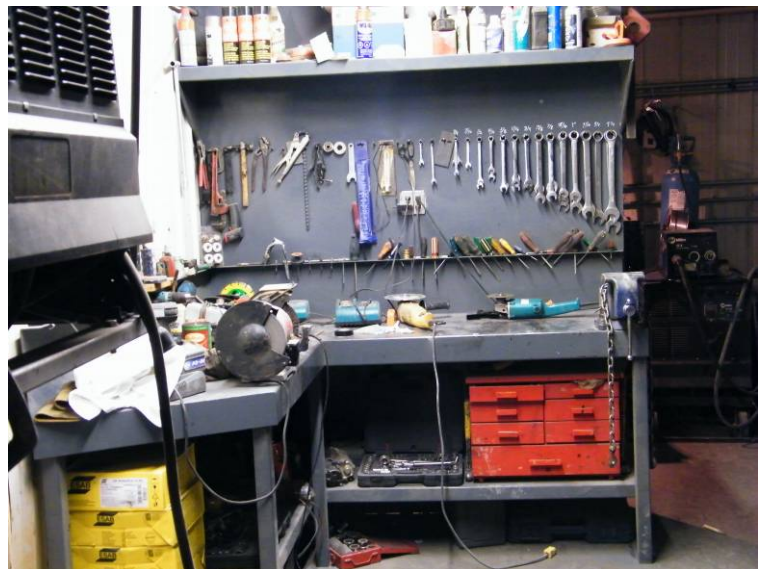
This rack has 3 shelves. There is insulation on one of the shelves.

This rack is used to store things in an upright position.





This is called a workbench.



There are many tools by this workbench.



This is also a workbench. You can use it for many things.



These are bins. They can hold many things. They come in different sizes.

This is a storage area for many small things. The boxes are called bins.





Here are 3 self-tapping screws.



This is an oil can. It helps you to put a drop of oil in a small space.

This is an oil can. It is blue in color.





This funnel is black. You need it when you want to pour something carefully.



This is a portable tool box. It has wheels underneath it. It can hold many tools.





On these wrenches you can see the measurement of the wrench.

This is a very large crescent wrench.





This is a set of wrenches. They are hung up according to size.



These are wrenches. They measure $\frac{1}{2}$ " to $1 \frac{1}{4}$ ".



There are 3 different kinds of screwdrivers in this picture.

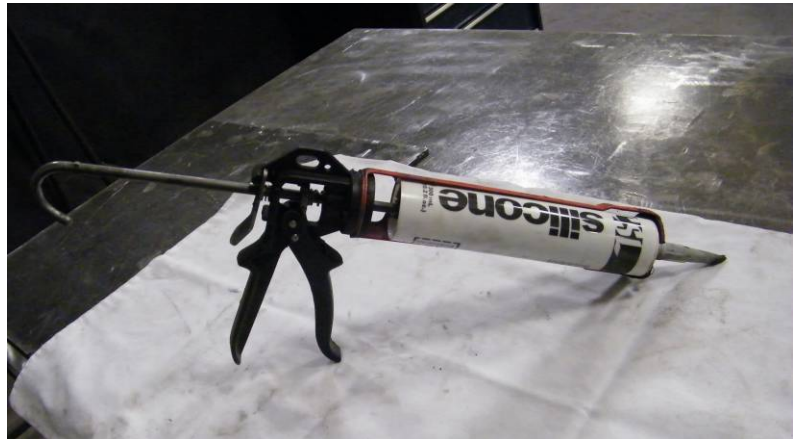
In this drawer you can see many screwdrivers.





This is a tube of silicone. Silicone is used to seal edges together so that no water can get in.

The tube of silicone is in a silicone gun. The hand hold and the trigger are black. You need to squeeze the trigger to push the silicone out of the tube.





In this picture you can see one carriage bolt with a nut already on it, and the head of the other carriage bolt is resting on a nut.

This is a Die Grinder. It needs to be connected to an air hose.





This is a metal hammer. This one has been used many times.

The ends on this metal hammer are the same.





This hammer has a grip on the handle. The grip is yellow and is made out of rubber. It will help you to hold onto the hammer so it does not slip out of your hand.

The ends on this ball peen hammer are different. One end is flat and the other is rounded.





This is a sledge hammer.



This is a pair of needle nose pliers. They can get into very small spaces. They can also cut wire.



This is a pair of needle-nose pliers.
They are closed.

This pair of needle-nose pliers is
open.





This pair of side cutters is open.
The edges are sharp.

This is a pair of wire strippers.





This is a pair of tin snips.

This is a pair of side cutters.





This pair of wire cutters is in the locked position.

Now they are in the open or unlocked position.





This is a wire stripper. You use this when you need to add wires or when you need to cut wires.

This is a pair of pliers.





This is a regular sized vice grip.
It is in the open position.

The vice grip is now in the closed position. There is a screw at the end of the handle that you use to adjust the claws.





This is a C-Clamp.



This is a large C-clamp. It is in the open position.



Now the C-clamp is in the closed position.



This is a center punch. It can make a small, round hole.

A punch can be in many different sizes.





This is a rivet tool.

You can adjust the bit by turning the screws at the top.





This is a small pry bar; sometimes it is called a claw-bar.

This is a large crow-bar or a claw-bar.





This is a grip. You use it when you need to hold onto something very tightly.

The edge is sharp.





Can you find the cotter pin and chain?



This is a pair of scissors.
You need them when you
want to cut something.

This is an Exacto knife. It is very
sharp and has a retractable
blade.





This is a scraper.



This is a blade for a skill-saw.

This is a grinding blade for the grinder.

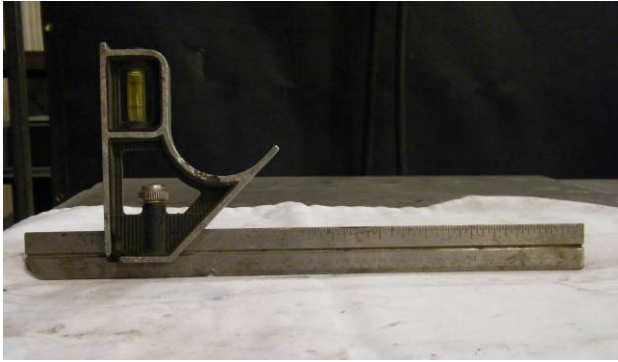




This is a square. You will need it to make corners and straight lines.

This is a square. You use this to make your corners and lines straight and true. The measurement on the square is in inches.





The square level has measurement in inches. You can slide the level by turning the knob and moving it along the ruler.

This is a small tool that you would use to make sure your work is straight and level. It is called a square level. You can use it to measure as well.





This is a tape measure. You can use it to measure in inches and in feet.



This is a set of drill bits. There are many different sizes.

These drill bits are long and they are different sizes.





This is a socket set.



This is a black elastic strap.
Sometimes it is called a tarp strap.
It is very strong. It will help to keep
things together.



This is a very strong rope
used for pulling.



This wire is 12 AWG, 300 Volt, water resistant wire.

This is a roll of wire. You will use this when you want to fix a cord or when you need to make a new cord.





This is a long, black heavy duty extension cord.



This is wire used for electrical wiring.
Each color means something.

This is an Insulation Resistance Tester Kit.

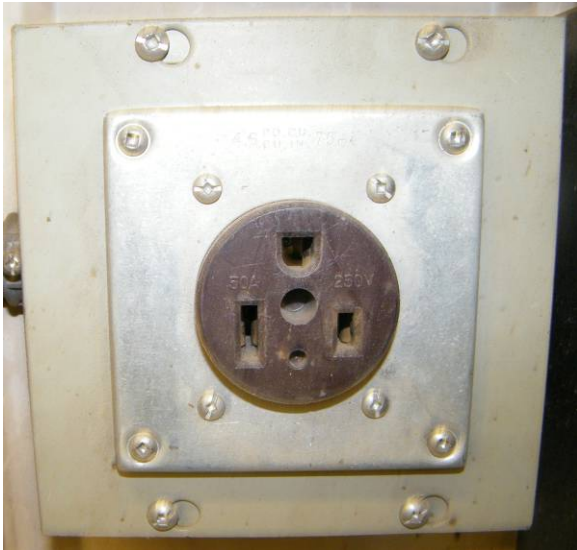




There are dials that you need to set before you can use the tester kit.

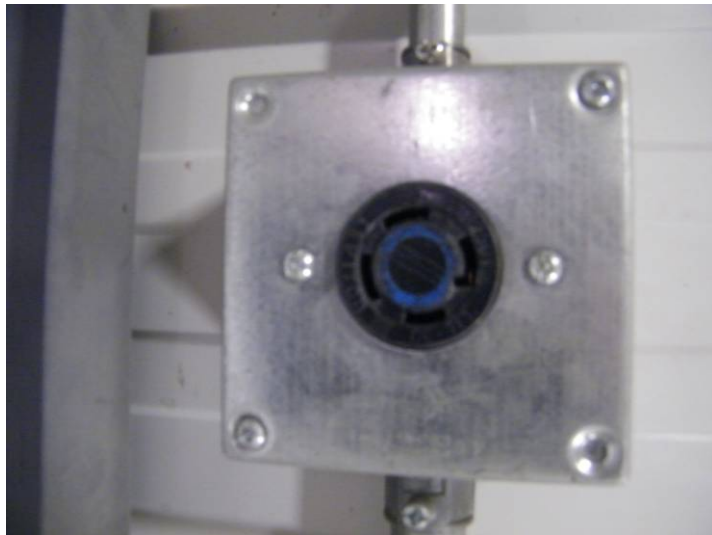
There are black and red wires that you use for testing.





This is a plug-in for a 220 Volt.

This is an electrical outlet for a machine that needs a lot of power.

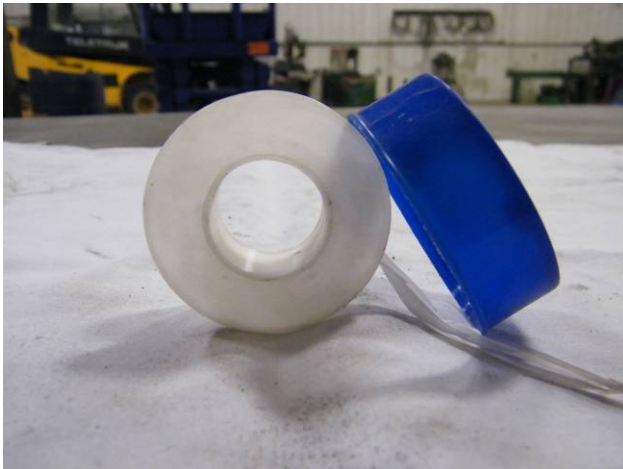




This is a 4 junction box. You need this when you have more than one tool to plug in. Can you see the male and the female ends?

This is an electrical outlet. It has 2 plug-ins with a switch to turn the power on or off.

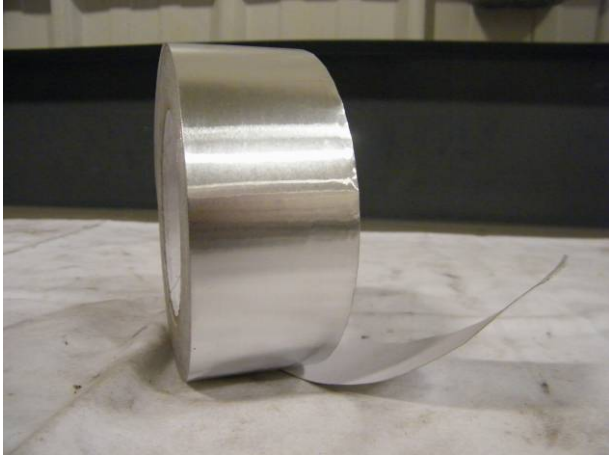




This is a roll of Teflon tape. It is white and you would use it to seal pipe connections. It is thin and stretchy.

This is electrical tape. It is always black.





This is a roll of Duct Tape.
It has many uses.

Duct tape is usually grey.

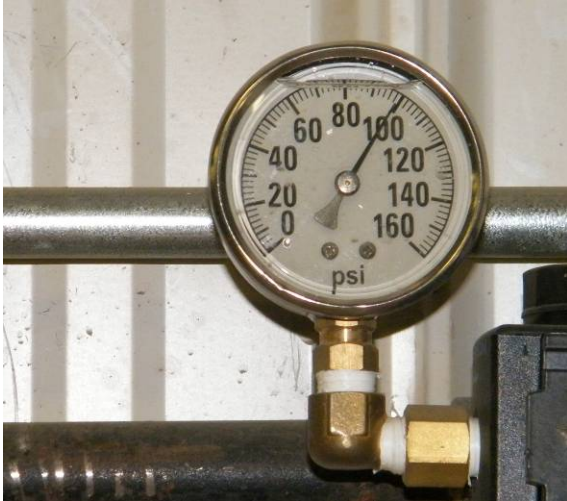




At the end of the hose is a coupler. You need to use this to attach the tool that you want to use.



This air hose is hooked up to an air compressor and is ready to be used. It is rolled up and out of the way until the worker is ready to use it.



This is a pressure gauge. It reads in psi or pounds per square inch.

This hose is connected to the air supply tube.





This is a barrel. It can be used for many things.

This is a garbage can or a waste basket.





This is a sprayer jug. It is used to hold liquids to spray things with.

This is a rack that holds brooms, a dustpan, and a shovel.





These are some of the sprays that you need in a shop.

These are bags of white R-20 insulation. When the bags are bundled together they are called bales.





This is a wheel barrow. You can carry things like sand or gravel in it.

This is a pallet. You put things on here to keep them off of the floor.





In this picture you can see stairs and a railing.

This is a set of stairs with a railing.





In this picture you can see a waste basket which is sometimes called a garbage can. You can also see a water cooler and a machine that is used for shredding paper.

This is a lunch or coffee room. Can you find a clock, a calendar, a candy machine, a refrigerator, a ketchup bottle, some chairs, and some garbage or recycling containers?





In this picture there are two microwaves. One is on the counter and one is on a shelf above the other microwave. There is also a roll of paper towel on the counter. On the wall there is a fire extinguisher.

This is a coffee pot used to make about 30 cups of coffee.

