

## FAQ

### Chisels

- Can IRWIN chisels be re-sharpened? If so, what's the best angle to re-sharpen at?

Since IRWIN chisels are one-piece solid-forged steel, they can be re-sharpened up to the last inch of the blade length below the tang. IRWIN chisels are ground by the factory at 25° and honed at 30°. The proper re-sharpening angle is 30°.

### Circular Saw Blades

- I am crosscutting oak veneer plywood on a table saw, and the veneer is chipping on the backside. What type of blade would you recommend to cleanly cut across plywood?

A 10", 80T blade with a reduced feed rate would be your best bet. The IRWIN Marathon #14076 would be a good choice.

### Drill Bits

**Are Irwin cobalt drill bits coated like the titanium ones? If the cobalt bits are rockwell hardness 66 - 67 HRC, what hardness are the titanium bits? Once you sharpen a cobalt bit and the gold coating is gone, is it just a regular bit?**

Cobalt bits are not coated, they are cobalt steel through and through. At the end of manufacture a cobalt bit is baked in an oven to turn the surface color of the steel a dull gold color. This is done primarily for easy identification by color. If the gold wears off or is ground off in sharpening on a cobalt bit, it is still solid cobalt steel. Our cobalt drill bits are made of M35 cobalt steel which has 5 percent cobalt content. The Rockwell is approximately 65.5 to 67 Rockwell C. Irwin titanium drill bits have a hardness of approximately 64.5 to 65.5 Rockwell C. The titanium coating is much harder at approximately 82 Rockwell C. If you sharpen a cobalt bit it is still as good as a new bit, assuming it was sharpened correctly. If you sharpen a titanium bit its performance will drop because the coating is gone on the tip; however, you still have the benefit of the titanium coating in the flute of the bit and on the sides of the bit. It will still perform better than a standard bit.

**How do I resharpen Irwin auger bits?**

First never sharpen the outside edges of the bit that cut the spur and side lip. There are three edges you may have to sharpen the spur, cutter and side lip. Your bit may not have a spur. The spur is a thin piece of metal that sticks up parallel with the screw point above the cutter. To sharpen it hold the bit by the shank or twist against a work bench. Using a flat file, sharpen on the front (as you view the cutting edge) and top

inside edge of the spur. Never sharpen the outside. To sharpen the cutter and side lip, hold the bit upside down with the screw point sticking into a piece of wood. This gives you a clear view and access to the underside of the cutter and inside of the side lip. Using a small triangular or square file, sharpen the underside of the cutter and inside the side lip.

### **How do I resharpen Speedbor flat bits?**

Use a small file to sharpen the top of the cutting edge and inside the spurs and on the side of the point. Try to follow the same angles that were ground on the bit when it was new. When sharpening the top of the cutters, make as many strokes on one side as on the other even if you don't think it's necessary. This keeps the cutting edges balanced.

### **What is the recommended bit speed for flat bits? I am sure that the speed varies by bit diameter and wood species**

We have a recommended turning speed of 1500 - 2000 RPM on the IRWIN Speedbor wood boring bits, never exceed 2500 RPM. A good rule of thumb to follow on any drilling tool is the larger the bit the slower the speed. I'd recommend the 1/4" at a max 2000 RPM and slow the speed gradually as you move up to the 1-1/2" size.

### **What is the function of the hole in an auger bit?**

The hole in the flute of the Installer Bits is to hook a wire through to aid in pulling wire through the drilled hole. This technique is used by many telephone and security wire installers. The hole in the Spade Bits was initially for hanging it on a finish nail in a workshop. It is also used to hook wires to help pull wires through drilled holes. Some people think the holes are for heat dissipation in keeping the bits cool but it is not.

### **Does the spade bit #88810 fit in the regular bit extensions #88702 that are not Quick-Change.**

No, the 88810 (SPEEDBOR2000's) will not fit into the old extensions, 88702 and 88601. The first SPEEDBOR 2000 bits and the old style SPEEDBOR 88 bits that had a 1/4" shank measured across the corners of the flat. When we introduced the Quick Change bit system on the SPEEDBOR 2000 to fit the quick change extensions 90102, 90106, 90112 we had to change the size of the shank, because it had to be made to an ANSI spec, to 1/4" across the flats. So the SPEEDBOR2000 with the quick change shank has a larger shank thus it will not fit into the old style extensions.

**I recently purchased an old 13 piece set of IRWIN Solid Centre Stem Auger Bits from a used tools store for use in a hand-brace. The bits came in a wooden box with a swing-out lower drawer, and a black descriptive label on the inside lid. The box label says "1 set 20 1-2 quarters". What do these numbers mean? The bit numbers are 4, 5, 6, 7, 8, 10, 12, 14, and 16.**

The 4, 5, 6 etc refers to the size in sixteenths. 4 is 4/16 or 1/4". 6 is 6/16 or 3/8". 20-1/2 quarters refers to the total size of the set. This is the way they did it in the old days.

### **How do you sharpen your 1" speedbor ship auger bit ?**

You should use a small triangular file. Your local hardware store may even stock a Nicholson Auger Bit file. Using the file to sharpen a ship auger only sharpen under the cutter and on the inside of the side lip.

To identify these two parts hold the auger bit with the screw point pointing up. Rotate the bit until you see the single horizontal cutting edge. Looking at the cutting edge, the side lip is at the left hand edge of the cutting edge jutting down.

You should only sharpen under the cutting edge and on the inside part of the side lip. Now that you have located where to sharpen the easiest way to sharpen those areas is to hold the auger with the screw point pointed down and stuck into the corner of a wooden bench or board. You can lean the bit backwards and sharpen with the file those two areas. Try to maintain the same angles that were ground on from the factory.

## **Extractors**

### **What is the difference between a nutsetter that has a standard hex design vs. one that has a lobular design?**

There are a few key differences between these two types of nutsetters. A nutsetter that has a lobular design drives the fasteners on the sides instead of putting pressure on the corners to turn. This helps maintain the true shape of the fastener reducing corner stripping and damage. Additionally, a nutsetter with a lobular design provides corner clearance where paint build up can occur.

A nutsetter with a standard hex design uses the corners of the fastener to drive. Putting pressure on the corners of the fastener will promote corner stripping.

In summary, each type of nutsetter can drive a fastener, but a nutsetter with a lobular design helps keep the fastener in good shape.

## Hand Saws

**I recently purchased a cargo trailer. There are 2 screws that hold the license plate bracket on. I cannot identify the screw drive type. At first glance I thought it was a Torx head, but upon closer examination and trial I noticed that the star has 8 points instead of 6. The points are not as prominent as a Torx. Can you identify it?**

Unfortunately I cannot. However, I've run into this once before. If it has 8 points try using a square drive bit on it. A square drive bit will typically fit into the hole. I've found that a #3 square drive bit usually fits a #14 screw

**What is the proper way to use the reversible offset dovetail saw? I know it is reversible and it has an offset. What side needs to be offset in relation to the side of the cut?**

A very common application for the reversible offset dovetail saw is to cut off the bottom of door trim when putting down flooring such as tile, which is thick. Many people will remove base molding but not the door trim when putting down flooring. You should cut off the bottom of the door trim to slide the tile underneath the trim. The offset handle enables you to put the saw parallel to the floor to cut the trim. When cutting off the trim for tile, users will turn the tile upside down for the proper thickness and so they don't scratch the finished surface then cut the trim. It is reversible in case the door is close to a corner and the trim couldn't be cut. It also makes it easier for left and right hand persons.

## Hole Saws

Trying to cut metal too fast will overheat the material being cut, which 'heat-hardens' the work and causes the cutting blade to work harder and wear out more quickly. To answer your question we would need to know what size hole saw you are using. Every hole size requires a different RPM for different types of materials. IRWIN always details the optimum drill RPM on each hole saw package. Before you use your hole saw to cut iron, please refer to the manufacturer recommended RPM for the appropriate hole size.

## Levels

**As a mason who works on large job sites, I have dropped a level and now the level no longer work properly. Does anyone make a stronger level?**

First let me suggest that you always carry a box beam level. Typically, levels which look like an I carry the load of the weight in the center of their body. While box beams are designed with the weight distributed on the outer walls, making them much sturdier and able to resist bending and breaking. Secondly, look for a level made out of a higher-grade aluminum to give it extra strength.

**Sometimes working alone, working with a level seems so clumsy. How can I free up a hand?**

Each IRWIN Box Beam Level has patented keyed inserts which hold WoodTacs. Simply attach the WoodTacs and nail your level into door jambs or framing before you work. It's like having an extra hand.

## Marking Chalk

**I am working during the rainy season, and my chalk lines wash away if I don't spray them with polyurethane. Is there any type of chalk that will withstand bad weather, and eliminate this step?**

IRWIN makes permanent chalk in either black or red. Because it won't rub, fade or wash away, black or red chalk is perfect for use on subfloors, concrete, metal, and roofs. There is no need to polyurethane. Just snap a line, and it's set. Red, black and yellow chinks are not removable, so keep them away from finish material.

**I just bought a chalk reel and the very first marks were hard to see. What happened?**

You need to prepare your new chalk reel. Do so by pulling out the line several feet, and rewinding it. Repeat this step a few times. It will help the line absorb the chalk and produce darker, sharper strikes from the start.

**Every time I snap a chalk line, a huge cloud of chalk forms in the air. Why?**

Most likely, you are also getting a dull, hard to see line. That's most likely because the brand of chalk has a lower ratio of color to filler. In order for marking chalk to make a sharp, distinguishable line, there must be a much higher concentration of color. Then, when a chalk line is snapped, more color gets absorbed by the surface, and a truer line can be seen.

**I just purchased an IRWIN chalk reel and I'm not sure which color chalk I should use for different applications.**

Choosing the appropriate chalk is very important. Blue chalk is considered a non-permanent color. It can many times wash away but on some surfaces it can be permanent. If used indoors I always recommend white if possible. All other colors red, orange, green, yellow and black are permanent colors. It is nearly impossible to remove them. Choose your chalk color based upon permanency, contrast to surface it's being used on.

**I just purchased Irwin straight chalk line and I don't know how to use. It doesn't have any instruction on how to use it. Do I need to pour the chalk into the tool? or do I need to wet the string and put chalk on it?**

Do not wet the string. Wetting the string will cause the chalk to cake in the reel and on the string.

Here are some instructions.

First you must fill the chalk reel with chalk.

1. Take the cap off the chalk bottle.
2. Using scissors or snips cut the tip off the cap.
3. Open the slide door on the side of the chalk bottle.
4. Pull out approximately 12' of string.
5. Insert the cut tip of the chalk bottle into the slide door opening and squeeze the chalk bottle. This should force chalk into the reel. Fill it about 1/2 full.
6. Close the slide door and wind in the string. You can then repeat steps 3 and 5 filling the reel with more chalk. Don't fill it completely full. Place the cap back on the chalk bottle.
7. Pull a longer length of string than you'll need for the first marking job 6 - 8 times and rewind to coat the string with chalk.
8. Assuming you have two marks made to strike a line between place the hook on the edge of the board, or on a nail, or have a friend hold it on the mark.

9. You place the reel end of the string on the other mark.

10. Pull the string tight, grasp the string and lift it off the surface about 12 inches and release. The string should snap back to the surface and make a straight line of chalk between the two marks.

### **I have the straight line chalk real, i borrowed it from a friend, but i don't understand how to make the line "snap"?**

The string should be stretched tight over two marks to strike a line between. If you can't put the hook over the end of a board or on a nail you will probably need a friend to hold one end. After stretching the string tight between the two marks grab the string with your free hand, lift it up about 8 inches or so and release. The string should snap back to the surface laying down a straight line of chalk between the two marks.

## **Pliers and Adjustable Wrenches**

### **Are the GrooveLock and ProTouch pliers tested?**

Yes, the GrooveLock Pliers go through a series of 12 tests ranging from the Extreme Load test that tests the amount of force which can be applied to the handles to a test that measures the amount of twist the product will withstand.

Our ProTouch" pliers all meet or exceed all applicable ANSI/ASTM (USA) and DIN (Germany) specifications.

## **Snips**

### **Can I cut wire with Irwin snips?**

No! Cutting wire with your snips will damage the blades. If you are working in situations that require frequent switching from snips to wire-cutters, we recommend the Irwin Offset Snips that have a patented built-in wire cutter. Using this tool means you won't have to switch tools every time you need to cut wire.

### **Can Irwin snips be sharpened?**

Unfortunately, we do not recommend sharpening snips. Most snips are equipped with at least one serrated edge, and sharpening would reduce or eliminate the serration. Also, snips have a precise-grind angle that would be lost if the snips were to be sharpened.

## **Are there any materials I should not cut with Irwin snips?**

You should never cut hardened metals such as steel, flexible duct or wire with snips. These materials can damage the blades and diminish the quality of the cut you get with your snips.

## **Tape Measures**

### **What are the most common applications for the marking feature?**

Marking pipe and conduit, arch cuts in plywood, or electrical outlet and HVAC cutouts.

### **What is the Diamond symbol every 19'-2" increment?**

The diamond symbol represents an alternative on-center spacing for framing materials. The spacing matches 16" on-center spacing every 8' making it compatible with most sheet goods (plywood, OSB, and paneling). The benefit of using the diamond symbol is that you save one joist or stud every 8'.

### **Why the Optic-White(TM) blade color?**

The color provides good visibility in dimly lit job site environments.

### **Why is there a slot in the front of the end hook?**

The small slot is designed for a construction nail. Users laying out arches can place the end hook on the nail, extend the tape, and draw the arch using the Quick Mark(TM) tip.

### **How do you support or validate the "3x Durability" Claim?**

Our performance specifications were defined by benchmarking to our primary competitors, and replicated real-world job site conditions.

## **Taps, Dies, & Sets**

### **When would I use a tap and die set and how would I properly use them?**

Tap and dies are metal threading tools. Taps make internal threads inside a hole and dies make external threads on a round rod. They are often used for rethreading (cleaning up existing threads).

#### **HOW TO USE A TAP**

1a) To create new threads inside a hole you must first redrill the existing hole. Refer to the tap / drill chart in your set to determine the correct drill bit size for the new hole. Drill your new hole.

2a) Place the square of the tap into the tap holder and tighten. Place the tip of the tap into the hole. Keep the tap as perpendicular to the hole as possible. Press down and turn the tap in the hole. The tap should begin cutting threads into the wall of the hole. After making 2 - 3 full turns, turn the tap backwards 1/2 - 3/4 of a turn. This will break the chip loose.

3a) Continue the above steps until finished.

Dies are used in the same manner except they are used on a round rod instead of in a drilled hole. The die size you select should be the same size as the rod. IE If you want a 3/8" rod, you would use a 3/8" die.

We always recommend using a quality cutting fluid. This will extend the life of the tools and improves the quality of the threads.

### **I was trying to tap a hole in aluminum with a 1/4" tap. Half of the tap broke off in the workpiece. How do I get it out?**

Ideally you would want to use a tap extractor. These are readily available from catalog houses such as Grainger and McMaster-Carr. If you do not have access or the time you may try the following. The smaller size makes it more difficult. First, see if you can find a couple of small nails that will fit into the flute or groove of the broken tap. Insert them into two grooves or flutes across from each other. Clamp onto them with a pair of locking pliers. Try to turn the piece out with the nails. If the piece is broken off flush with the top of the hole you may try to turn the piece by striking it with a punch. This may be more successful if two people can punch it at the same time.

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### **IRWIN Taps & Dies information:**

We carry only a few high speed steel taps or dies. The key identifier is their part number will be six digits as opposed to the high carbon steel which will be four digits.

## **Utility Knives & Blades**

### **What does the 'Bi-Metal' mean when referring to a utility blade?**

The bi-metal terminology refers to how the utility blade is constructed. With a bi-metal blade, the edge of the blade is constructed of a high speed steel while the body of the blade is made of spring steel. The two sections are welded together to form a single blade. The advantages of a bi-metal blade is that the hardened edge of the blade stays sharp longer than a standard carbon blade and the spring steel body allows the blade to flex without breaking which is common among carbon body blades.

## **Laser Guide**

### **I have a radial arm saw. Will this product work on my saw?**

NO. This product is specifically for 10" and 12" miter saws.

### **I have an older model DeWalt miter saw (DW704). Will this product work on my saw?**

Yes, with the retro-fit kit.

### **How do I change the batteries?**

Remove the set screws on the top of the unit using the small hex key. Change the batteries and replace the top and the set screws.

### **Can I drill out the arbor to make this fit my saw? Why or why not?**

NO, because the metal will heat up and melt the insides causing the laser to be out of alignment.

### **Mitersaw Laser Guide useful information:**

Laser Guides will not fit any saw with a 1" arbor, Our Miter Saw Laser Guides will also not fit on any of the following brands Bosch Ridgid, ProTech, or Makita.

You can use two types of batteries G13-A and LR44.

We do have adapter sets in the event that the laser guide does not fit properly and would make the blade Wobbly.

## **Door Lock Installation Kit**

**I just used the large hole saw to drill through my door and it worked great. Now I have to use the small hole saw and the mandrel-pilot bit will not fit into it. What should I do?**

The large hole saw has an adapter in it. When using this hole saw first, the adapter may tighten down on the mandrel when removed. Remove the adapter from the mandrel and it will work in the small hole saw.

**I drilled the large hole in my door and have also drilled the small hole, but the small hole does not go all the way back to the large hole. What can I do?**

Remove the template from the door and finish drilling out the lock set.

## **STRAIT-LINE LL 120**

**My tool was working fine a month ago. Now, I have a very faint line where I'm trying to work and a bold line and big dot on the other wall. What can I do to fix this tool?**

The tool may have been adjusted for a longer work area. Readjust the tool for a closer (shorter) work area by swiveling the tool on the base.

**What is the measuring tape thing and how does it work?**

This is for hanging items at an angle. Start on 0 and rotate the tool to the degree you wish.

**I can't get both bubbles to line up at the same time, can you help me?**

One vial is for horizontal leveling and the other is for vertical leveling. Both vials will not be lined up at the same time.

## **STRAIT-LINE Rolling Tape**

**My rolling tape is not working. Can you help me?**

Be sure there are 3 AAA batteries in this tool.

**My rolling tape is about 2-1/2" off. Is this tool defective?**

No. Make sure you are pushing the arrow that marks your starting point.

**My rolling tape keeps giving me the same measurement, even though I've measured 2 different distances. Is this tool defective?**

No. Remove the film cover on the display window.

**The display on my rolling tape keeps flashing and will not give me a reading. Is this tool defective?**

No. Push the start/stop button to begin.

## **STRAITLINE® Sonic Laser Tape 50**

**I just recently purchased your Sonic Laser Tape 50 and when I'm trying to use it, say to measure a length of a room, which I know is 15.6 ft. it gives me a measurement of 50 ft plus or gives me an error message. Is there something I'm doing wrong or is there somewhere I can reset it?**

Normal trouble shooting should solve this. . .is there anything in the way, be sure the tool is pointed at a solid surface, be sure the tool is perpendicular, tool is not laying on a table...

**My laser tape will not measure in feet, only centimeters. How do I fix this?**

Change the unit of measure.

## **STRAITLINE Stud Finder 150 LCD (Wall Scanner)**

**I am not able to use the marking system on the stud finder. It does not mark and I find no trouble shooting in your manual that addresses this?**

The marking function puts a tiny divot in the surface, it does not put a "pen" mark. You may need to press the "mark" button harder.

**I purchased an Accuscan Wall Scanner about 4 months ago and the unit is not working. When I place it against the wall, it does not show it is calibrating nor does it detect anything. What is Wrong? changed the batteries (fresh ones that I checked) but it still does not work. What can I do?**

Make sure the unit is turned on and that the film cover over the display has been removed.

**I have read the instructions and am still confused about how to calibrate this tool. Can you explain how this tool should be calibrated?**

Place the tool on the wall and wait for the beep. Once the tool beeps, "calibration" will disappear from the screen and the tool is ready for use.

## **STRAIT-LINE Intersect w/Stud Finder**

**The stud finder part of this tool is working but the laser part is not. What should I do?**

Replace with new batteries. If the batteries are weak, the stud finder will work, but the laser will not.

**When I turn this tool to the unlock icon and set it on the floor or table, my lines are not straight. Should I return this to you to inspect?**

No. The self-leveling function is not designed to be used for floor projects or on a table.

## **How do I get this tool to stick to the wall?**

Press the "press to stick" button and place the red side of the label to the tool. Remove the black side of the label, put the tool on the wall, press the "press to stick" button again to place the tool on the wall. Or, use the pin holes and push pins.

## **STRAITLINE Intersect**

**I just took this tool out of the package and put the batteries in. I have very faint lines showing. Does this tool need to be returned?**

No, remove the plastic guard from the laser.

**I just painted my house and don't want to get adhesive on the wall. Is there a way to use this tool without using the 3M command strips?**

Yes, use push pins and the pin holes. But this could leave holes in the wall.

## **STRAITLINE X3**

**I have a faint line on the wall where I'm working and a dark line on the adjacent wall. Is there something wrong with this product?**

No, tilt the laser head until the line is darker on the wall where you are working.

## **IRWIN Lettered and Numbered Drill Bits information:**

Letter and numbered drill bits were developed to make up the gaps in between metric and fractional sizes. The most common use is for using taps. There will not be an exact match for fractional sizes but you can refer them to closest fractional bit that is larger than the numbered bit.

## **IRWIN Permanent Staining Chalk**

### **What will remove the permanent staining chalk?**

The chalk is permanent staining and we do not guarantee that anything will completely remove the chalk from any type of surface or fabrics. The product that we have had the greatest success with is Oxi Clean.