

Sharpening Plane Irons

The most important part of sharpening a plane iron is to flatten the back to a near polished surface. If grind marks are left in this surface, the tool will have a serrated edge, no matter how fine the bevel is honed. A smooth flat surface is easily achieved using the Lap-Sharp and only needs to be done once in the life of the tool. When polished flat, it is not necessary to use coarse abrasives on this surface again. When re-sharpening, use only the fine abrasives on the back (when removing the wire edge) to maintain a polished surface.

Once the back is flat and polished, the bevel (a small surface as compared to the back) should be sharpened at the desired angle (usually 25° for the primary bevel to 30° for a secondary bevel) to establish a sharp edge where the bevel meets the back.

Many tools including some plane irons have a tapered edge when viewing the side profile. To get an accurate bevel angle with these tools, measure the angle from the surface of the abrasive to the back of the plane iron. This will provide the correct setting of the Lap-Sharp tool guide bar angle for the desired bevel angle.

Use coarse abrasives to establish the bevel profile. Move to finer abrasives to hone the bevel to the desired finished edge, usually 10 μ (2000 grit) or finer (5 μ , 3 μ and 1 μ abrasives are available for the Lap-Sharp). The self squaring tool clamp can be use for plane irons up to a #7 and when reversed can clamp a #8.

A micro bevel is easily established using the Lap-Sharp 3 μ and 1 μ abrasives as these abrasive discs are thinner than the 5 μ abrasive. A micro bevel makes the re-sharpening process faster as there is a very small surface to hone. If no micro bevel is desired, stop at the 5 μ abrasive level or use a .010 shim (the thickness of a sheet of Microfinishing film) to raise the height of the abrasive disc as described in the Lap-Sharp Operation Manual.



Plane Iron with polished back held in self squaring clamp and against the tool guide bar to sharpen the bevel edge.



Japanese Plane Iron hand held on abrasive surface while sharpening the bevel edge.