

Photographs of ski edge under the microscope

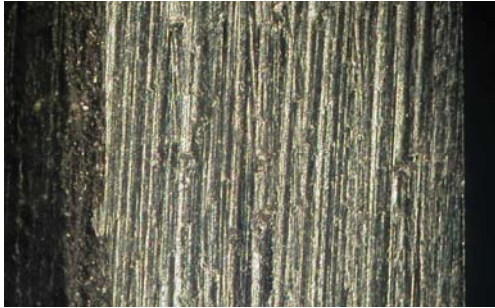
The Pictures show a 100 time magnification on the edge with different types of tools used to pull the edge.

The pictures are before any diamond or ceramic stone is used and the Machine runs were dry (with no lubricant). Remember the ceramic stone work typically only effects the very tip of the edge knocking off the burs at the tip of the angle and does not polish much of the rest of the edge. You can see that you have much finer starting point with the machine then you do with using a file. The machine cuts less material and makes a finer cut, so regardless of the "lines" or "marks" that are visible the smoothness is much better then the visual polished edge from a file. The "Ra" is a roughness measurement, the lower the decimal number the finer the surface. You can see below that Ra #'s show a 75% smoother surface with the medium stone then with a file. (with a file Ra=.90 and with the medium stone a Ra=.22). You can expect even smoother surfaces if you use a lubricant on the edge before passing the machine. This smoothness along with the precise angle is one of the reason the edge stays so sharp longer then with a file.

Base Edge

Base edge with a File

Ra = 0.8



Base edge with SnowGlide machine with B25 stone (fine)

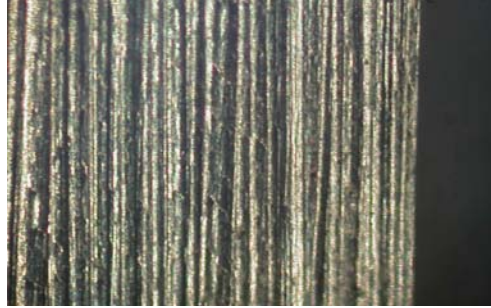
Ra = 0.15



Side Edge

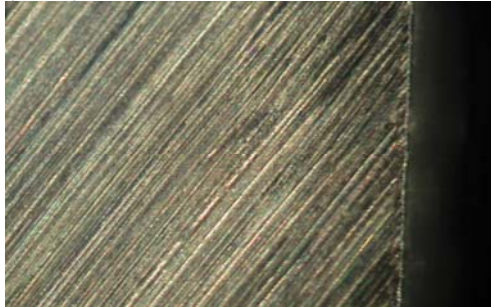
Side edge with File

Ra = 0.9



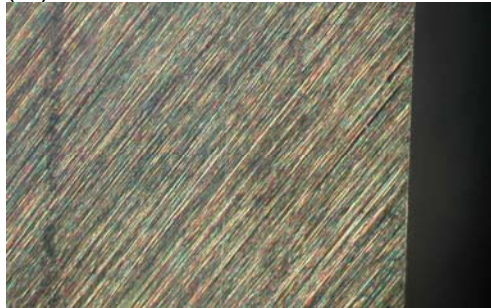
Side edge with SnowGlide with B46 stone (medium)

Ra = 0.22



Side edge with SnowGlide with B25 stone (fine)

Ra = 0.13



Ra = is a roughness measurement

This is measure with an extremely precise stylus machine which measures peaks and valleys in height and depths in microns along the width of the edge.