Scraper Sharpening

When sharpening hand scrapers or scraper planes (e.g. Stanley #80), if the condition of the metal is fairly smooth, use a sequence of 40µ and 20µ Microfinishing film on the backs or sides, followed by A10 and A5 Trizact (Figure A). Future sharpening may only require flattening the burr and a quick pass with the A5 Trizact abrasive on the two sides before redoing the edge. Repeat the above process on the edge or bevel using the tool guide bar for an angle reference of 90 degrees for the hand scraper (Figure B) to achieve a square edge as shown in (Figure C). The scraper plane should have a 45 degree bevel (Figure F).

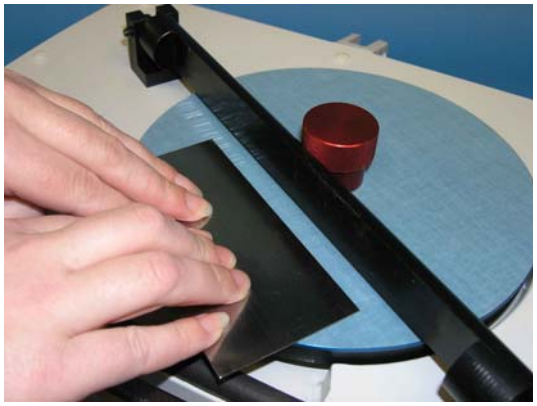


Figure A

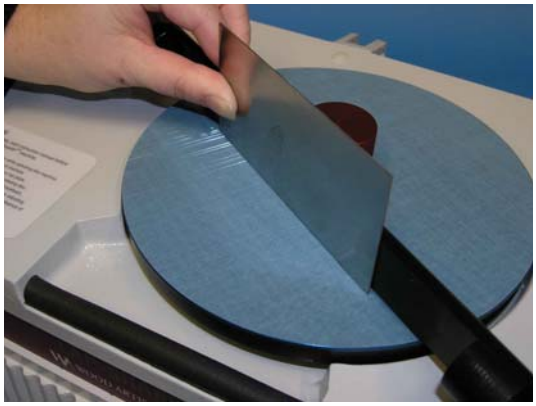
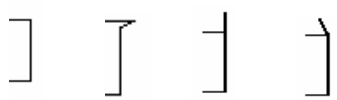
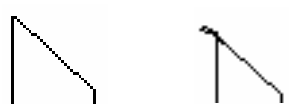


Figure B



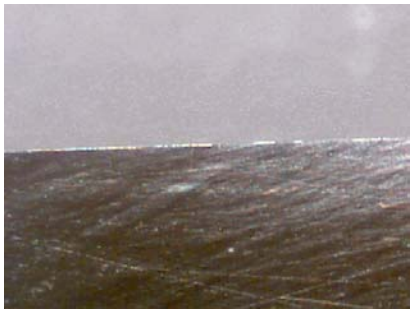
C **D1** **D2** **D3**



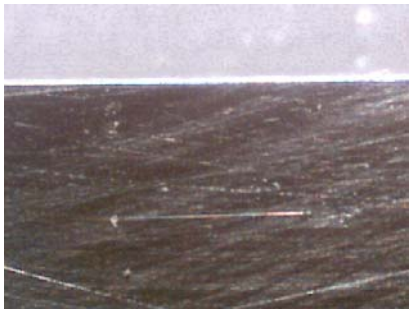
F **G**

For hand scrapers, use a burnishing tool (engine valve stems or wrist pins make excellent burnishing tools) to apply some pressure while pushing flat along the side of the tool where you want a burr. This will push a burr out from the edge of the scraper (Figure D1). Some recommend a slight angle to the burnishing tool, to develop the burr, but this will push the burr down in the wrong direction. Next hold the burnishing tool at a 90° angle to roll the burr straight up (Figure D2). Next burnish the edge at the appropriate angle for the type of scraper (5 to 15 degrees from vertical for hand scrapers) and roll the burr back from the edge to form a hook (Figure D3) edge by taking one to three passes at slightly increasing angles along the edge. The size of the burr is controlled by the amount of pressure one applies to the edge. For chip out removal, a larger burr enables one to remove a fairly significant shaving, while a small burr may be more appropriate for scraping between coats of applied finish.

On a scraper plane, roll the bevel edge side about 15 degrees to make the hook (Figure G). You should now feel a fine burr along the tool edge. This is a fast way to easily make a great scraper edge.



Scraper with no burr (60x mag.)



Scraper with burr (60x mag.)

Scrapings of Bubinga