

# Sanding, Grinding & Polishing Quick Reference

Material / Tool	Best Uses	Notes
Emery Paper	General sanding, deburring, rust removal, smoothing metals	Wears quickly on hard alloys; inexpensive and versatile
Scotch-Brite Pads	Blending finishes, cleaning oxidation, surface prep before painting	Non-woven, reusable, less aggressive than sandpaper
Steel Wool	Fine finishing, polishing wood/metal, cleaning rust or old finishes	Can shed fibers that rust; avoid near electricals or food equipment
Polishing Compounds	Achieving mirror finishes on metals and plastics	Use with buffing wheels or cloths; compounds tailored for specific metals
Grinding Wheels	Heavy stock removal, shaping, sharpening tools	Generate heat; use proper wheel for material (aluminum vs steel, etc.)
Grinding Stones	Detail grinding, tool sharpening, deburring small features	Used with Dremel/die grinders; fragile, avoid side pressure
Strops (leather)	Final honing of blades, razor edges, tool sharpening	Typically loaded with compound (green chrome oxide, etc.)
Buffing Wheels	Polishing metals, plastics, final luster	Use with compounds; risk of catching edges — keep work secure
Flap Discs	Aggressive sanding, blending welds, shaping metal	Mounted on angle grinders; combine grinding & sanding in one
Wire Wheels/Brushes	Removing rust, paint, scale; cleaning welds	Can leave scratches; use safety glasses — wires can eject
Lapping Plates	Precision flat polishing (tooling surfaces, gauge blocks, knives)	Uses abrasive slurry; for very fine flatness and finish work