

ADDITIONAL RESOURCE MATERIAL

GRINDING

For every tool I basically use the same process:

1. Grind off the heavy scale due to forging, using an angle grinder fit with a grinding wheel.
2. Belt sander, 50 grit.
3. Belt sander, 80 grit.
4. Belt sander, coarse Bear Tex (brown)
5. Belt sander, medium Bear Tex (red)

I custom order all of my grinding belts through Airgas, a large welding supply store. Go to www.airgas.com to locate a store nearest you..

POLISHING

Polishing is a two step process:

1. Black buffing compound, \$2.50, used with a laminated sisal buffing wheel (8" x 1/2") \$5.50.
2. High Gloss Compound for Stainless Steel \$24.95, used with spiral sewn buffing wheel (8" x 60 ply) \$10.95
3. The polishing materials are available through Grizzly Industrial Supply, www.grizzly.com or 1-800-523-4777.

QUENCHING

1. Industrial grade quenching oil, available through heat treating supply stores. McMaster Carr Supply, 562-692-5911
2. Transmission fluid.

TOOL STEELS & SPECIALTY ALLOYS

Suggested Applications

1. Cross Peen Hammers: 4140,4130, S-7, W-2, 1045
2. Repoussé Hammers: 4140, 1045
3. Drifts: 1045, 4140
4. Hot cut: H-13, Atlantic-33
5. Fullers: 4140, 1045
6. Touchmarks: O-1
7. Chisels: H-13, Atlantic-33

Hardening Characteristics

1. Air hardening Steels: S-7, H-13
2. Oil hardening: 4140, 4130, O-1, 5160
3. Water hardening: W-2, 1045, Atlantic-33

Steel Suppliers

1. Pacific Machine: Portland, Oregon. Tel-503-226-7656
2. Description: large supplier of different tool steels and the minimum order is \$30 or \$40. Also sell a steel supply book with in depth heat treating specs on all their steels (\$25).
3. Mojave Southern Machine Works. Jim Riddle Tel-909-654-5660 or 888-644-4471.
4. Description: Atlantic 33 or "Flutegon" sells by the foot.
5. Atlantic 33 bar sizes: 5/8 octagonal, 1/2 square, 3/4 square, 1" square, 1 1/2 " square.
6. Atlantic Steel, New Jersey. Tel-718-729-4800. Atlantic 33.
7. Description: Atlantic 33, will only sell in 20 ft lengths.
8. Crucible Tool steel & Specialty alloys. Arlington, Texas. Tel-817-640-7777.
9. Description: Excellent source for steel, nice book on about heat treating their steels & alloys (\$5 or \$10).

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