

Edge of the Anvil

Carbon Content of Steel for Different Uses

Points Carbon	Properties	Uses
5-10	Very soft, plastic	Stampings, rivets, nails, wire, general forging
10-20	Tough	Structural steel, general use, good for case hardening, general forging
20-30	Quite tough	Better grade for structural and machine parts, screws, general forging
30-40	Very tough	Crane hooks, machine parts, connecting rods
40-50	Great toughness with little hardness	Heat-treated machine parts, gears, axles, shafts
50-60	Great toughness with some hardness	Crowbars, garden tools, gears, shafts, machine parts
60-70	Great toughness with fair hardness	Flatters, fullers, hot swages, tools to be used on hot work, drop-forging dies
70-80	Great toughness with medium hardness	All general blacksmith's tools, hammers, rivet sets, hot sets, wood augers, gun barrels, wood chisels, screwdrivers
80-90	Very tough, better than medium hardness with slight cutting edge	Cold chisels, hammers, sledges, hammer dies, shear blades, large springs, scissors
90-100	Fair toughness, hard with medium cutting edge	Pneumatic chisels, knives, punches, mills, reamers, taps, anvil faces, wrenches, railroad springs
100-110	Little toughness, hardness with good cutting edge	Drifts, swages, springs, stone drills, pliers
110-120	Great hardness with keen cutting edge	Planing tools, axes, saws, woodworking tools, threading discs, coil springs
120-130	Very keen cutting edge; somewhat brittle	Drills, taps, lathe tools, shear knives, basic steel used for cutting-tool purposes, files
130-140	Very hard keen cutting edge; brittle	Cold-trimming discs, razors, glass cutters, ball bearings, steel engraving
140-150	Extremely hard and very brittle	Brass cutting tools with fine edge, turning hard metals, tools used to cut other partially hardened metals