Several kinds of common heat treatment concept

1: Normalized steel or steel parts are heated to the critical point AC3 or ACM over the proper temperature to maintain a certain time in the air cooling, thermal treatment process pearlite organization.
2 annealing annealing: hypoeutectoid steel workpiece heated to above AC3 20 - 40 degrees, the heat preservation after a period of time, with the furnace cooling slowly (or buried cooling in sand or lime) to 500 degrees Celsius in air cooling heat treatment process
The 3 solution heat treatment: the alloy is heated to a high temperature constant temperature keeping single-phase region, the excess phase fully dissolved into the solid solution, and then rapidly cooling, in order to get over the heat treatment process of saturated solid solution
The 4 time: the alloy after solution heat treatment or cold plastic deformation, placed or slightly above room temperature maintained at room temperature, its performance varies with the time of the phenomenon.
5 solid solution: make the alloy in various phase fully dissolved, reinforced solid solution and improve the toughness and corrosion resistance, eliminate stress and softening, in order to continue processing molding
6 aging: strengthening phase in the heating temperature and heat preservation, the strengthening phase precipitation, can improve the strength of hardened.
7: after quenching the austenite cools at an appropriate rate, make the workpiece heat treatment process in cross section of all or certain range the martensite unstable organizational structure change