QUICK REFERENCE GUIDE FOR HEAT TREATING

	Annealing	Simple HT instructions	Hamon	Forging Temp
Designer Steels - oven required for HT				
Sandvik 13C26 Stainless		6-12 mins. At 1995° plate quench, cryo	no	
Alloy: : C .68 Mn .60 Si .40 Cr 13.00		cryo after quench before temper		
Hitachi ATS-34 Stainless		15 mins. at 1900° plate quench cryo	no	
Alloy: : C 1.00 Mn .40 Si .25 Cr 13.75 Mo 3.5		cryo after quench before temper		
440C Stainless	1650° six hours	15 mins. at 1900° plate quench	no	1950° - 2150°
Alloy: : C 1.00 Mn 1.00 Si 1.00 Cr 16-18 Mo .75 P .40	Slow Cool			
CPM 154 Stainless	1650° two hours, slow cool	15 mins. at 1900° plate quench cryo	no	
Alloy: : C 1.05 Cr 14.00 Mo 4.00	to 1200° then air cool	cryo after quench before temper		
CPM S30V, S35VN, S45VN Stainless		30 mins at 1950° plate quench	no	2100°
Alloy: : C 1.45 Mn .40 Cr 14.00 Va 4.00 Mo 2.00		cryo after quench before temper		
154CM Stainless	1650° two hours	60 mins. At 1950° plate quench	no	
Alloy: : C 1.05 Mn .50 Si .30 Cr 14.00 Mo 2.00	slow cool	Cryo after quench, before temper		
AEB-L	1650° two hours	15 mins. At 1900°, plate quench	no	
Alloy: : C .68 Cr 13 Si .4 Mn .65	slow cool	Freezer cryo 1H, temper 350°		
Sandvik 14C28N	1650° two hours	15 mins. At 1950°, plate quench	no	
Alloy: : C .62 Cr 14 Si .2 Mn .6 Nb .11	slow cool	cryo 1H, temper 350°		
Nitro V	1650° two hours	15 mins. At 1950°, plate quench	no	
Alloy: : C .68 Cr 13 Si .4 Mn .65 Nb .11 V .08	slow cool	cryo 1H, temper 350°		
Tool Steels - more difficult to forge				
D-2 Tool Steel	1600° 2 hrs. slow	30 minutes at 1850° Air or plate quench	no	1850° - 2000°
Alloy: : C 1.55 Cr 11.50 V .80 Mo .90	cool to 1000° then air cool			
O-1 Tool Steel	1400° - 1450° slow cool	15 mins at 1450°-1500° Oil Quench	no	1825-1925° F
Alloy: : C .95 Mn 1.00 Si .25 Cr .50 V .25 Tungsten .6				
AISI Type A2 Tool Steel	1550°-1600° slow cool	30 mins. At 1750° - 1800°	no	1850° - 2000°
Alloy: C 1.00 Cr 5.13 Mn <1.00 Mo 1.15 V .33 Si <.50		Cryo after quench, before temper		
Alloys & Others				
L6	complicated	10-30 mins 1500°-1550° Medium Quench	yes	2000° - 1550°
Alloy: C .70 Cr .70 Mn .60 Ni 1.40 Si .25				
15 N 20	1450° slow cool	5 mins 1500°-1550° Medium Quench	no	
Alloy: : C .75 Mn .75 Si .25 Ni 1.5				
52100	1460° air cool 1275° hold	5 mins. 1475° - 1550° Medium Quench	yes	2100° - 1700°
Alloy: : C 1.02 Mn .36 Si .25 Cr 1.46	for 16 hours			
Spring Steels - easiest to forge				
Hitachi White Paper Steel	1364°-1418° slow cool	10 mins. At 1475° Very Fast quench	yes	1475°-1650°
C 1.1 - 1.2%, Si .1 - .2%, P<.025%, S<.004%		356°-428° temper 62RC		Weld 2000°
Hitachi Blue Paper Steel	1380°-1436° slow cool	5 mins. At 1436°-1500° Very Fast quench	yes	1475°-1650°
C 1.15%, Si .15%, Mn .25%, Cr .35%, W 1.25%		320°-446° temper 62RC		Weld 2000°
HR 1075/1080	1500° slow cool	1 mins. At 1450° Fast quench	no	2150°
Alloy: : C .70/.88 Mn .40/.90				
HR 1084	1500° slow cool	1 mins. At 1475 Fast quench	no	2150°
Alloy: : C .80/.93 Mn .60/.90				
HR 1095	1500° slow cool	10 mins at 1475° Very fast quench	yes	2150°
Alloy: : C .90/1.04 Mn .60/.90				
HR 5160	1525° air cool to 1250° hold	1 mins. At 1525° Medium quench	no	2200° - 1600°
Alloy: : C .60 Mn .85 P .035 max S .040 max	for 6 hours			
W1	1400° 30 minutes slow cool	5 mins at 1450° Very fast quench	yes	
Alloy: : C .95/1.05 Mn .30/.40				
80CRV2	1500° slow cool	5 mins 1,545°-1,615° medium quench	no	
Alloy: : C .80 Cr .50 Mn .40 V .20				
8670	1500° slow cool	5 mins at 1550°, medium quench	no	
Alloy: : C .72 Cr .43 Mn .50 Ni .87				

Crucible Steel Database:
Sandvik Hardening Programs
Cashen Blades
Evenheat Heat Treat Guide
AJH Knives Steel Anaylsis Page

Generic annealing according to Evenheat is 30 mins @ 1650° and leave in oven until cool with door closed

This chart is a baseline only. Do your research before actually heat treating your knife.