

Metallurgical Study – AISI Steel Grades

Sample A
AISI 1020 steel
Carbon 0.33
Manganese 0.45
Quench at 820 C
Tempered 2.1 hr
520 MPa tensile strength.

Sample B
AISI 1045 steel
Carbon 0.45
Manganese 0.75
Quench at 860 C
Tempered 2.0 hr
670 MPa tensile strength.

Sample C
AISI 4140 steel
Carbon 0.40
Manganese 0.85
Quench at 900 C
Tempered 2.2 hr
850 MPa tensile strength.