



??????

? C ?0.56?0.64

? Si?1.40?1.80

? Mn?0.40?0.70

? S ??0.030

? P ??0.030

? Cr?0.70?1.00

? Ni??0.35

? Cu??0.25

??????

???? ?b (MPa)??1764(180)

???? ?s (MPa)??1568(160)

??? ?5 (?)??6

????? ? (?)??20

?? ???+???,?321HB;??+???,?321HB

??????????????

?????????870? $\pm$ 20?,??; ??420? $\pm$ 50?(?????, $\pm$ 30)?

??

命，提高了弹簧钢的质量。