



??????

? C ?0.38?0.43? Si?0.15?0.35

? Mn?0.60?0.90

? S ??????????0.030

? P ??????????0.030

? Cr?0.13-0.16

? Ni?????????0.25

? Cu?????????0.030

??????

???? ?b (MPa)??980(100)

???? ?s (MPa)??785(80)

??? ?5 (%)??9

????? ? (%)??45

??? Akv (J)??47

????? ?kv (J/cm<sup>2</sup>)??59(6)

?? ??207HB

????????????25mm

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

????????850?,????520?,?????

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