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(54) **METHOD FOR PRODUCING STEEL COMPONENT**

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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

A method for producing a steel component by performing the treatments of the following sequentially steps 1 and 2 to a steel material containing, by mass %, C: 0.15 to 0.25%, Si: 0.01 to 0.10%, Mn: 0.50 to 0.80%, S: 0.003 to 0.030%, Cr: 0.80 to 1.20%, Mo: 0.30 to 0.45%, Al: 0.015 to 0.050%, and N: 0.010 to 0.025%, wherein Cr/Mn is 1.3 to 2.4, the balance being Fe and impurities, and contents of P and O among the impurities are P: not more than 0.010%, and O: not more than 0.0020%:

step 1: a treatment which holds the steel material at a temperature of 850 to 1000° C. in a carburizing atmosphere or carbonitriding atmosphere, and

step 2: a treatment which quenches the carburized or carbonitrided steel material, by using quenching oil having a temperature of 40 to 80° C. and a kinetic viscosity of 20 to 25 mm^2/s at 40° C.

3 Claims, 5 Drawing Sheets