Title (en)

PROCESS FOR MANUFACTURING STRESS CORROSION CRACK-RESISTANT TUBULAR BODIES, PARTICULARLY NON-MAGNETIZABLE AUSTENITIC STEEL DRILL COLLARS, AND BODIES OBTAINED THEREBY

Publication

EP 0356417 B1 19930526 (DE)

Application

EP 89890199 A 19890727

Priority

AT 196588 A 19880804

Abstract (en)

[origin: JPH0270884A] PURPOSE: To provide a tubular body stable in stress cracking corrosion by heating the tubular body, made of an austenitic material which is cold-worked after solution treatment and quenching at temperature for maintaining, and corresponds to a specific condition and therafter by intensifying cooling. CONSTITUTION: An object is heated to temperature equilibrium, having at least 10 deg.C temperature differential on an object wall at temperature of 200-600 deg.C, after deformation at temperature of less than 500 deg.C for increasing object strength, processing and formation of a hole after solution treatment, and quenching. Thereafter, the object is cooled by maintaining relation of (t)=10<-(> T<-638)/50> at most, under the presumption of time(t)(minute) and a temperature T (deg.C) and remarkably removing thermal energy from this temperature or this starting temperature, at least from an inside surface of a tubular body. The cooled surface is made to show temperature decrease of at least 100 deg.C/min. down to half the value between the starting temperature and room temperature from the starting temperature.

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C21D 6/00; C21D 9/14; E21B 17/16

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CPC (source: EP KR US)

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