

Publication

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Application

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- JP 31367396 A 19961125
- JP 197497 A 19970109
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- JP 4306297 A 19970227
- JP 4313897 A 19970227
- JP 7734697 A 19970328
- JP 7736997 A 19970328

Abstract (en)

[origin: EP0903418A1] The present invention is directed to steel products which exhibit excellent machinability and are suitable for steel stocks of structural steel parts for a variety of machinery, such as transportation machinery including automobiles, machinery for industrial use, construction machinery, and the like; as well as to a variety of machined structural steel parts for machinery such as crankshafts, connecting rods, gears, and the like. The steel products of the present invention are endowed with excellent machinability and have the following composition based on % by weight: C: 0.05% to 0.6%; S: 0.002% to 0.2%; Ti: 0.04% to 1.0%; N: 0.008% or less; Nd: 0% to 0.1%; Se: 0% to 0.5%; Te: 0% to 0.05%; Ca: 0% to 0.01%; Pb: 0% to 0.5%; and Bi: 0% to 0.4%; wherein the maximum diameter of titanium carbosulfide contained in the steel is not greater than 10 μ m, and its amount expressed in the index of cleanliness of the steel is equal to or more than 0.05%. The machined parts, according to the present invention, are manufactured by subjecting the steel products of the invention to a machining process, and are useful as structural steel parts for a variety of machinery, such as transportation machinery including automobiles, machinery for industrial use, construction machinery, and the like.

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Citation (search report)

- [A] US 5102619 A 19920407 - GARRISON JR WARREN M [US], et al
- [A] GB 1514093 A 19780614 - NIPPON STEEL CORP
- [A] EP 0767247 A1 19970409 - NIPPON STEEL CORP [JP]
- [A] DATABASE WPI Section Ch Week 8445, Derwent World Patents Index; Class M27, AN 84-279789, XP002094518
- See references of WO 9823784A1

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