

JB

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JB/T 10312-2001

**Steel foil method for determination of carbon potential of
carburizing atmospheres**

钢箔测定碳势法

(English Translation)

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This document was issued on 29 December 2001 by the State Economic and Trade Commission of the People's Republic of China, and applied from 1 June 2002.

It has been superseded by JB/T 10312-2011, Steel foil method for determination of carbon potential of carburizing atmosphere.

It is a JB/T standard: a recommended industry standard of China's machinery industry.

1 Scope

JB/T 10312-2001 is the 2001 edition of the Chinese machinery industry method for determining the carbon potential of carburizing atmospheres with steel foil - the reference check used in heat treatment shops to verify the carbon potential that a furnace atmosphere actually delivers. Carbon potential controls the surface carbon content and case depth of carburized gears, shafts and bearings, and the sensors that control it in production (oxygen probes, dew point, infrared analysers) drift, so a direct measurement is needed to calibrate them. In the steel foil method a thin foil of low-carbon steel is exposed in the furnace until it reaches equilibrium with the atmosphere, and its carbon content, determined afterwards by analysis or weighing, gives the carbon potential. It has been superseded by JB/T 10312-2011, which is also available on this site. Issued on 29 December 2001, it applied from 1 June 2002.