

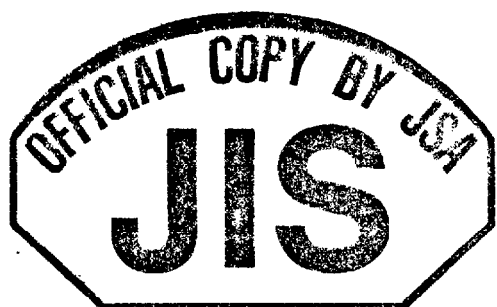
# JIS

This standard was revised in 3, 1994

## JAPANESE INDUSTRIAL STANDARD

### Leaf Springs

JIS B 2701 —1986



This copy is an English version of Japanese Industrial Standard prepared by Japanese Standards Association, the copyright holder. Any further reproduction without permission is prohibited.

Translated and Published

by

Japanese Standards Association

Translation without guarantee  
In the event of any doubt arising, the original  
standard in Japanese is to be evidence

## JAPANESE INDUSTRIAL STANDARD

J I S

## Leaf Springs

B 2701-1986

1. Scope

This Japanese Industrial Standard specifies laminated springs (containing single spring) for use in automobiles, railway carriages, etc., hereinafter referred to as the "springs".

Remark: The units given in { } in this standard are in accordance with the conventional units and are to be regarded as the standard.

2. Definitions

The definitions for principal terms used in this standard are as follows:

- (1) span The length indicated by the symbol  $L$  in Figs. 1 to 4
- (2) camber The height indicated by the symbol  $C$  in Figs. 1, 2 and 4
- (3) height The height indicated by the symbol  $H$  in Figs. 1 to 4
- (4) spring constant The load required to give a spring the unit deflection
- (5) spring characteristics The relationship between loads applied to a spring and the deflections produced by them
- (6) pre-setting The operation of increasing the elastic limit of a spring by applying a load to it to produce some permanent set
- (7) nip The values indicated by  $C_{01}$ ,  $C_{02}$ , .....  $C_{0n}$  in Fig. 5.

---

Applicable Standards and Reference Standards: See page 9.

Fig. 1

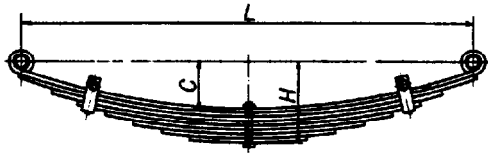


Fig. 2

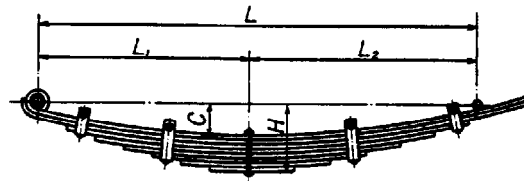


Fig. 3

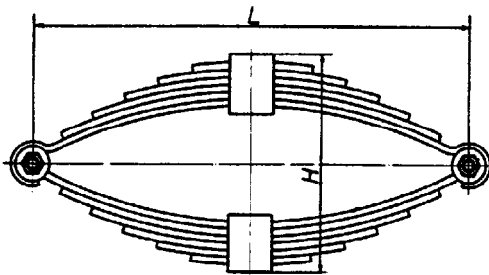


Fig. 4

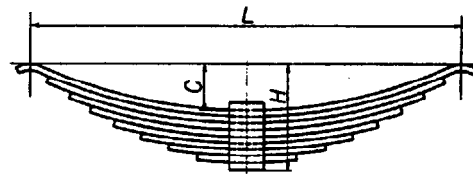
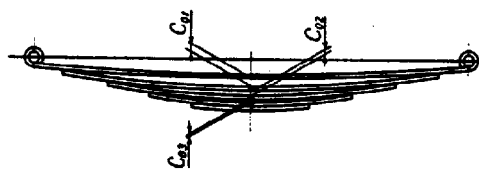


Fig. 5



### 3. Hardness

The hardness of spring plates after tempered shall be as given in Table 1. However, the hardness shall be measured on the side, close to the central portion of plate, at point subjected to the compressive stress.

Table 1

Classification	Brinell Hardness HBW
Carbon steel	331 to 401 (diameter of indentation, 3.05 to 3.35 mm)
Alloy steel	388 to 461 (diameter of indentation, 2.85 to 3.10 mm)

### 4. Dimensions and Tolerances of Spring Plates

**4.1 Dimensions and Tolerances of Spring Plates** The tolerances on the length of spring plates, and the distance from the centre hole or from centre projection to the end shall be specified when especially necessary, and their values shall be agreed upon between parties concerned.