CLAIMS

1. A hot-rolled steel sheet consisting of, in mass%,

C: 0.040 to 0.120%,

Si: 0.01 to 0.60%,

Mn: 0.50 to 1.50%,

P: 0.025% or less,

S: 0.010% or less,

Al: 0.010 to 0.070%,

N: 0.0070% or less,

Ti: 0.055 to 0.200%,

B: 0.0010 to 0.0050%,

Nb: 0 to 0.20%,

V: 0 to 0.20%,

Cr: 0 to 1.0%, and

Mo: 0 to 1.0%,

with the balance being Fe and impurities,

wherein:

in the microstructure, an area fraction of bainitic ferrite is 85% or more,

a dislocation density is 8.0×10^{13} to $100.0\times10^{13}/m^2$,

an average equivalent circular diameter of Ti carbides in the hot-rolled steel sheet is 10 nm or less, and

an average equivalent circular diameter of grains of the bainitic ferrite is 15 μm or less.

2. A hot-rolled steel sheet according to claim 1 containing, in mass%,

one or more kinds of element selected from a group consisting of:

Nb: 0.01 to 0.20%,

V: 0.01 to 0.20%,

Cr: 0.1 to 1.0%, and

Mo: 0.1 to 1.0%.

3. A hot-dip coated steel sheet, comprising:

the hot-rolled steel sheet according to claim 1 or claim 2, and

a hot-dip galvanized layer which is formed on a surface of the hot-rolled steel sheet and which contains Zn in an amount of 65.00% or more by mass.

4. A method for producing the hot-rolled steel sheet according to claim 1 or claim 2, comprising:

a rough rolling process of subjecting a starting material to rough rolling using a rougher to produce a rough bar,

a finish rolling process of subjecting the rough bar to finish rolling using a finisher to produce a steel sheet, in which a rolling finishing temperature FT is set in a range of 850 to 950°C,

a cooling process of cooling the steel sheet after the finish rolling is completed, and

a coiling process of coiling the steel sheet after the cooling process, at a coiling temperature of 470 to 620°C,

wherein, in the cooling process:

cooling of the steel sheet using cooling equipment is started within three seconds after the finish rolling is completed,

and when a period from when cooling using the cooling equipment is started until the temperature of the steel sheet reaches a switching temperature ST is defined as an early-stage cooling period, and a period until the temperature of the steel sheet reaches the coiling temperature from the switching temperature ST is defined as a latter-stage cooling period,

an early-stage cooling rate CR1 that is a cooling rate in the early-stage cooling period is set to less than 25°C/second,

the switching temperature ST is set to 730 to 830°C, and

a latter-stage cooling rate CR2 that is a cooling rate in the latter-stage cooling period is set to 25°C/second or more.