

## SPECIFICATIONS

Scale	1/20 ( G gauge ) (45 mm)
Weight	1.5kg
Length	624.2mm(engine/400+tender/232mm)
Width	110.3mm
Hights	168 mm(Max) /tender100mm
Wheel agmt	1-3-0 (Mogul)
Main driver	dia 42 mm(CNC made with Trivalent black plated )
Pilot track	30mm/35mm stainless
Tender track	36mm stainless
Axle pump	Bore / Stroke 5 x 5 mm
Cylinder	2 D slide valve ( bore 10mm ×stroke 19mm)
Vlave gear	Stephenson valve gear (parts are CNC made)
Boiler	Center Flue (smoke tubeΦ19mm)
Water capacity	128cc(80% full)
Fittings	2 x safety valves, water gauge, pressure gauge, throttle valves, by-pass valve, blow-down valve
Lubricator	Rocore displacment type
Tender	Water 300ml ·wih habnd pumo ( BORE 11 mm × STROKE 12 mm )
Fuel	34.4cc(Butane gas only)
Minimum radius	2.0m (dia4 m)

-subject to change without notice-

### History of the JNR Type 7100

JNR Type 7100 is a tender-type steam locomotive that was formerly used by the Railway Bureau and the Ministry of Railways, the predecessors of the Japanese National Railways. It was imported from the United States in 1880 (Meiji 13) for the opening of Hokkaido's first railway (the government-owned Horonai Railway).

With its classic American style, reminiscent of something straight out of a Western movie, it is affectionately known as a representative example of classic Japanese steam locomotives. Our model is based primarily on the JNR 7100 series (Yoshitsune), which is preserved in working condition at Umekoji in Kyoto. For the details of this limited-production domestic model, we used existing models provided by customers, namely the Shizuka (Otaru City, Hokkaido) and Benkei (Omiya Railway Museum, Saitama), to create the details. The driving wheels and valve gear arms are made entirely of iron and CNC machined, as shown in the photograph. The smokebox door, leading wheels, and tender wheels feature the US Porter Company markings.

It is basically reproduced in G gauge size, so it can be pulled by G gauge American-style passenger cars.

## The history of US Porter Mogul

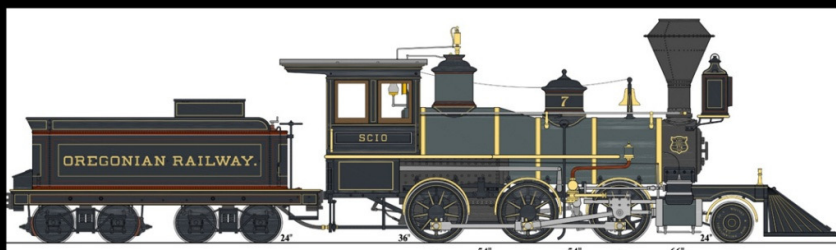
In 1880, this Mogul locomotive was the largest locomotive manufactured by the newly established H.K. Porter Company in Pittsburgh, Pennsylvania. Known for its beautiful, generally smaller industrial locomotives, H.K. Porter had only recently been reorganized from the former Porter-Bell Company in 1878, following the death of Arthur Bell. The financial crisis of the early to mid-1870s put immense pressure on East Coast locomotive manufacturers, many of whom expanded their orders through dealings with foreign governments. Rogers, Baldwin, and Porter found niche markets in remote railroad developments in many countries around the world, and Japan was no exception. Large Class C Mogul locomotives from H.K. Porter were manufactured and delivered to the Japanese government in five groups between 1880 and 1889. Initially, they operated on the newly constructed Horonai Railway in Hokkaido. The first six locomotives, delivered between 1880 and 1885, were named after prominent figures in Japanese history. Three of these locomotives are currently preserved in Japan, representing the only surviving examples of this class of Porter Mogul locomotives. While these are clearly historically significant locomotives in Japan, they also hold importance in the history of American railroads, where numerous locomotives of the same design operated on railroads during the American Westward Expansion. Virtually identical locomotives were also manufactured for the 3-foot (914mm) gauge of the western United States. Most notably, these include locomotives manufactured from 1881 for the Black Hills Railroad (later the Black Hills and Fort Pierre Railroad) in South Dakota, and three locomotives manufactured in 1880 for the Oregonian Railroad in northern Oregon. The Oregonian Railroad locomotives were later sold and continued to operate well on the Sierra Valley Railroad from 1895 to 1899. These locomotives were identical to the Japanese locomotives, with only minor external differences. The Japanese locomotives were manufactured for 36-inch gauge (1067mm), but without any widening or overall modifications. The large Class C mogul locomotives manufactured by H.K. Porter Company were produced and delivered to the Japanese government in five groups between 1880 and 1889. Initially, they operated on the newly established Horonai Railway in Hokkaido. The first six locomotives, delivered between 1880 and 1885, were named after prominent figures in Japanese history. Three of these are currently preserved in Japan and are the only surviving examples of this class of Porter mogul locomotives. While these locomotives are clearly of historical significance in Japan, they also hold importance in the history of American railroads, where many locomotives of the same design operated on railroads during the American Westward Expansion. Virtually identical locomotives were also produced for the 3-foot gauge railroads of the western United States. Most notably, these include the locomotives produced from 1881 for the Black Hills Railroad (later the Black Hills and Fort Pierre Railroad) in South Dakota, and three locomotives produced in 1880 for the Oregonian Railroad in northern Oregon. The Oregonian Railroad locomotives were later sold and continued to operate well on the Sierra Valley Railroad from 1895 to 1899. These locomotives were identical to the Japanese locomotives, with only minor external differences. The Japanese locomotives were built at 3 feet 6 inches, but without any widening or overall modifications. These were simply built on the same 3-foot design, with the frame and wheels widened to 3.6 feet. The control systems remained unchanged.

# JNR Type 7100(Yoshitune/義経)

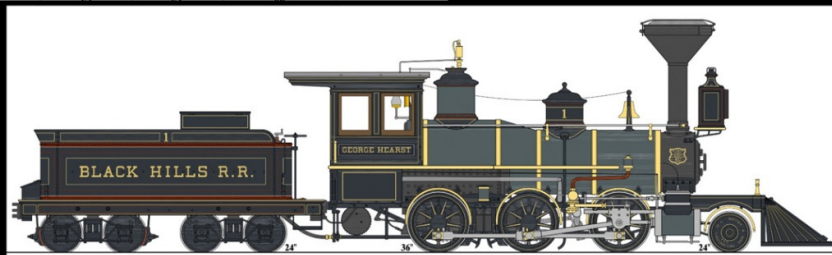


## — Technical Specifications —

縮尺・ゲージ Gauge	1/20(G gauge) (45 mm)	最小回転半径 Boiler	Center flue-Type
車輪配列 Wheel Arrangement	2-6-0(1C/Mogul)	ボイラー装備 Boiler Fittings	safety valves, water gauge,
重量 Weight	7.5kg (Engine 5.5 kg + Tender 2 kg)		pressure gauge, throttle valves
全長 Length	624.2mm(engine/400+tender/232mm)	缶水容量 Boiler Capacity	by-pass valve, blow-down valve,
全高 Height	168 mm(Max) /tender100mm	常用圧力 Normal Working Pressure	128 cc at 80% Full
全幅 Width	110.3mm	バーナー Burner	3-4KG/CM2
シリンダー Cylinders	Two cylinders with D Slide Valve	燃料容量 Tender Fuel Capacity	Gas
	Bore 10 mm X Stroke 19 mm	炭水容量 Tender Water Tank Capacity	Capacity 200 cc
動輪径 Main Driving Wheel	dia 42 mm(CNC Machined Iron Trivalent black plated)	炭水容量 Tender Hand Water Pump	200cc
先従輪径 Pilot / Trailing Truck Wheel	dia 27 mm (forged brass with machined iron Trivalent black plated)	炭水容量 Tender Truck Wheels	Bore 11 mm X Stroke 12 mm with
弁装置 Valve Gear	Stephenson(all CNC machine parts)	炭水容量 Tender Truck Wheels	dia 27 mm (forged brass with machined
給油器 Lubricator		最小回転半径 Min Dia.	Trivalent black plated)
軸動ポンプ Axle Driven Pump	Bore 6 mm X Stroke 5 mm		1.5m



## US Porter version



7100 was a Japanese steam locomotive which was first used in Hokkaido, upon the establishment of the government-sponsored Horonai Railway in 1880. The locomotives were imported from the United States.

The locomotives were produced by H. K. Porter, Inc, of Pittsburgh, Pennsylvania. Two were purchased in 1880 (Nos. 368, 369), two more in 1882 (Nos. 487, 488), one in 1884 (No. 643), one in 1885 (No. 672), and two more in 1889 (Nos. 1009, 1010), for a total of eight. Six of the locomotives were named after major historical or literary figures in 1889, at the suggestion of the Japanese Consul of New York City, Takagi Saburō, who found appeal in the similar practice seen in the United States at the time.

Yoshitsune (1159 – 1189) was a military commander of the Minamoto clan of Japan in the late Heian and early Kamakura periods. During the Genpei War, he led a series of battles which toppled the Ise-Heishi branch of the Taira clan, helping his half-brother Yoritomo consolidate power. He is considered one of the greatest and the most popular warriors of his era, and one of the most famous samurai fighters in the history of Japan.

Yoshitsune fled Kyoto in 1185. His faithful mistress, Shizuka, carrying his unborn child, fled with him at first, but then was left behind, and soon taken into custody by forces loyal to Yoritomo.

More information:  
[www.asterhobby.com](http://www.asterhobby.com)  
[www.accucraft.com](http://www.accucraft.com)

