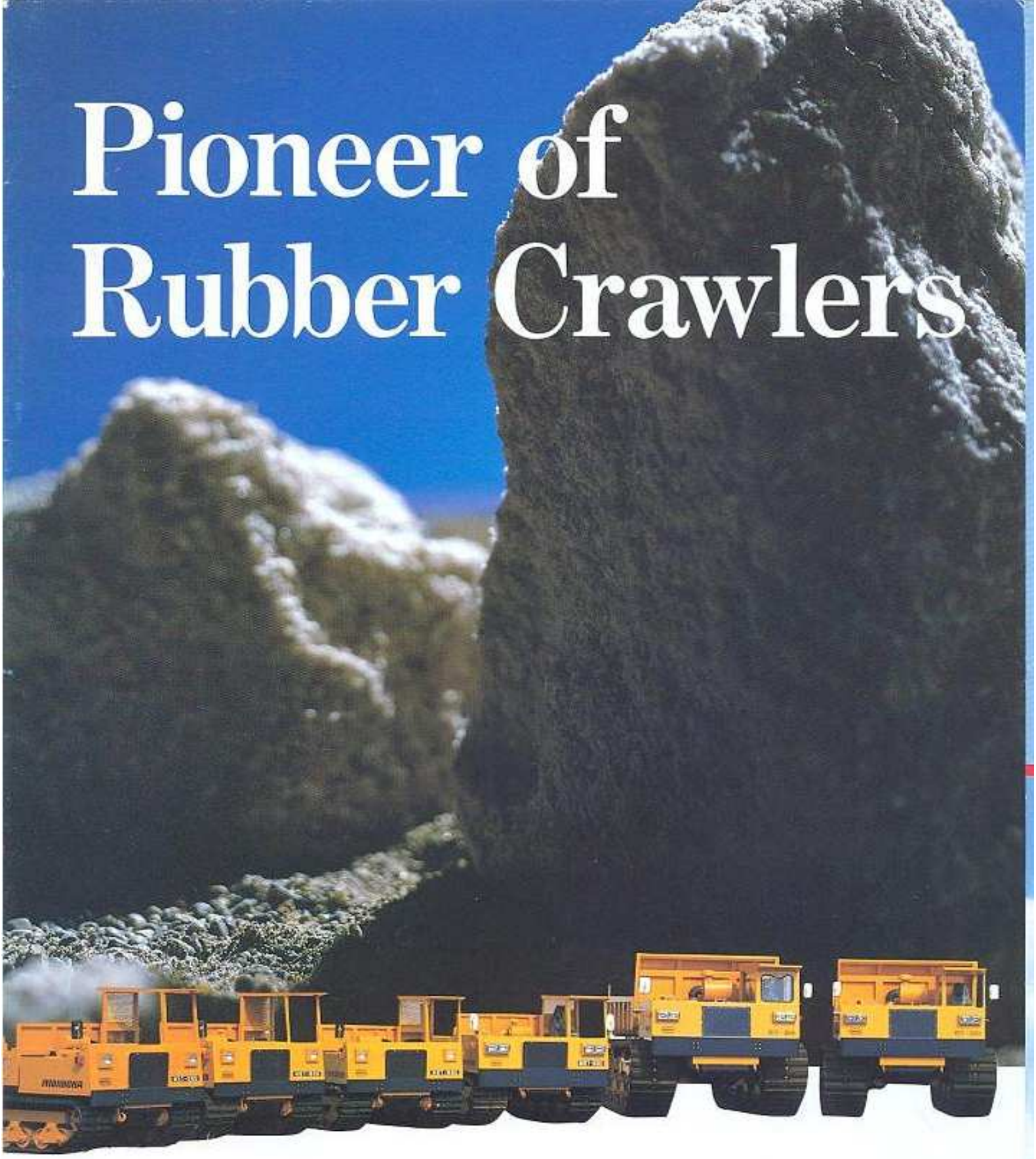
Carrier Series

Rubber Crawlers

Challenge for a new earth

MORooka

Pioneer of Rubber Crawlers



MST-250

MST-450

MST-550

MST-600

MST-800

Not graded ground, soft ground, snow, sand dunes, railroad sites, subways

Active in transport of large amounts of materials MOROOKA Carrier

Simple Operation and Ride Comfort

By use of HST (hydrostatic transmission) and the single lever system, developed by Morooka as a first in Japan, anyone can operate the vehicle easily in forward and reverse direction, and can turn it to the right and left, and smooth and stepless speed selection is possible. The rubber crawlers developed first in the world by Morooka cause few vibrations and little noise, and comfortable riding is possible at high speeds.

Running is possible on all kinds of ground. Pioneer for high-speed carriers.

Easy Running Even on not Graded or Weak Ground

Transport of sand and various materials for work at land consolidation projects, forest roads, shore protection work, and other places with band ground conditions always presents a neck for smooth work progress, and in many cases, much human labor is required.

All of these transport problems are solved by the Morooka rubber crawler carrier. Efficient transport work can be executed even on not graded, weak, or inclined ground where trucks or dump cars can not run. Materials can be loaded onto the wide load-carrying platform, and they can be transported speedily. At sites with bad ground, the transport work can be made more efficient and labor can be saved.

MOROOKA carriers are active all over the world and have realized many excellent results.

Ground self Defense Forces

Antarctica

Easy Running in Cold Areas and on Snow

Transport of construction materials to work sites on snow, transport of goods for daily life to hotels and homes on skiing grounds and in hilly areas is very difficult, but the Morooka rubber crawler carriers can execute this work speedily and efficiently.

Design for Correspondence to all Kinds of Work

■Rubber Crawlers With High Durability and Reliability

The ground pressure is small, operation on weak ground is possible, and vibrations and noise from surface irregularities are absorbed so that the operator fatigue is very small. Smooth movement is possible even in cold areas (−30°C), the durability is considerably higher than that of iron, and the work range is not limited, as paved surfaces are not damaged.

■Easy Spin Turns

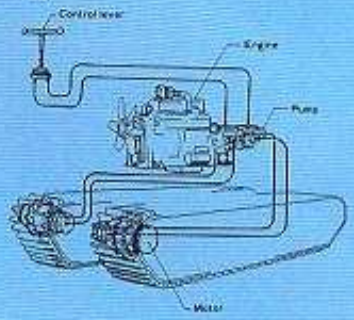
Because of HST use, spin turns in narrow places can be executed easily without causing excessive loads for the crawlers.

■Floating Track Rollers (the lower rollers use floating seals)

The rollers move according to the ground shape, they have been designed so as to always have contact with the ground, shocks are absorbed for the entire machine, and stable running is made possible.

■Simple Construction and Easy Servicing

The main parts consist of engine and HST mechanism (hydraulic pump, hydraulic motors), so that the construction is simple, there is little trouble, and maintenance also is easy.



■Boat-shaped Undercarriage

Irregularities of the ground surface are absorbed, the climbing ability is improved, and bad roads can be travelled easily.

Option Specifications

Most suitable for transport of secondary products, laminated wood, and assembly work. Cranes from 1 ton to 2.9 tons can be installed, depending on the type.

A vessel dump type especially for transport of large quantities of sand.

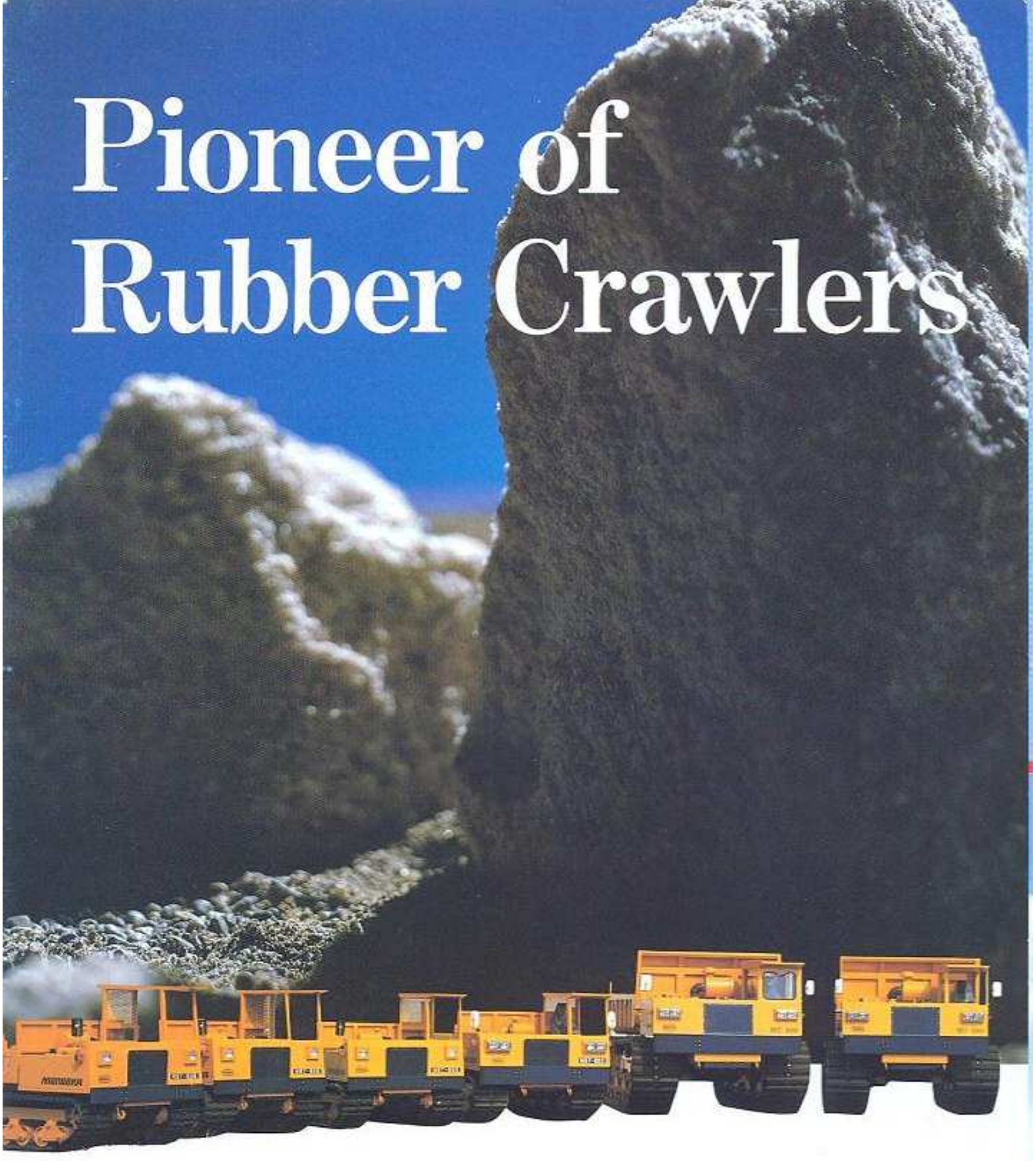
Cabins are available for 1 or 2 persons.

Other Related Types

Tractor

Shoveldozer

Pioneer of Rubber Crawlers



MST-250

MST-450

MST-550

MST-600

MST-800

Not graded ground, soft ground, snow, sand dunes, railroad sites, subways.

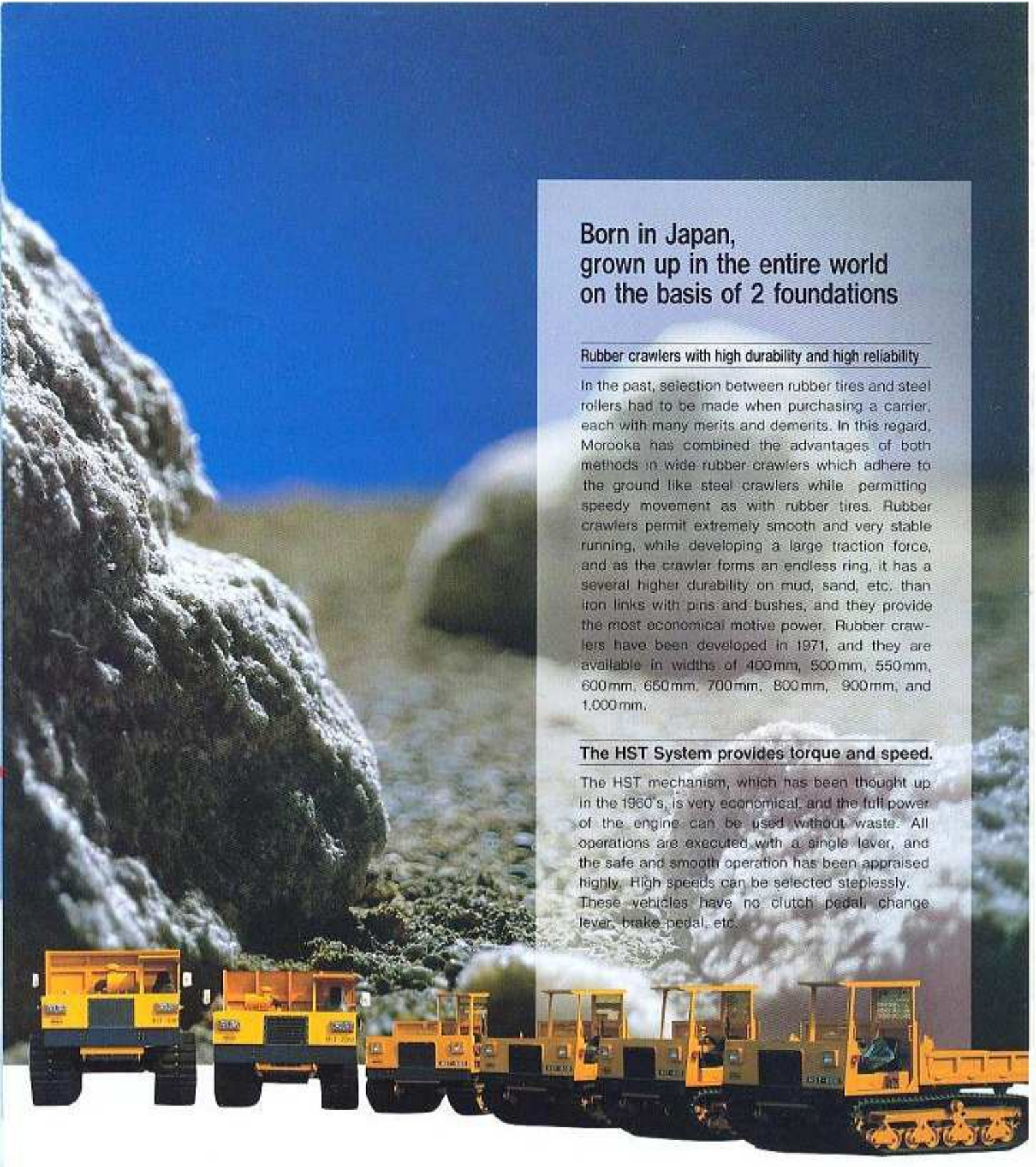
Born in Japan, grown up in the entire world on the basis of 2 foundations

Rubber crawlers with high durability and high reliability

In the past, selection between rubber tires and steel rollers had to be made when purchasing a carrier, each with many merits and demerits. In this regard, Morooka has combined the advantages of both methods in wide rubber crawlers which adhere to the ground like steel crawlers while permitting speedy movement as with rubber tires. Rubber crawlers permit extremely smooth and very stable running, while developing a large traction force, and as the crawler forms an endless ring, it has a several higher durability on mud, sand, etc. than iron links with pins and bushes, and they provide the most economical motive power. Rubber crawlers have been developed in 1971, and they are available in widths of 400mm, 500mm, 550mm, 600mm, 650mm, 700mm, 800mm, 900mm, and 1,000mm.

The HST System provides torque and speed.

The HST mechanism, which has been thought up in the 1960's, is very economical, and the full power of the engine can be used without waste. All operations are executed with a single lever, and the safe and smooth operation has been appraised highly. High speeds can be selected steplessly. These vehicles have no clutch pedal, change lever, brake pedal, etc.



MST-1500

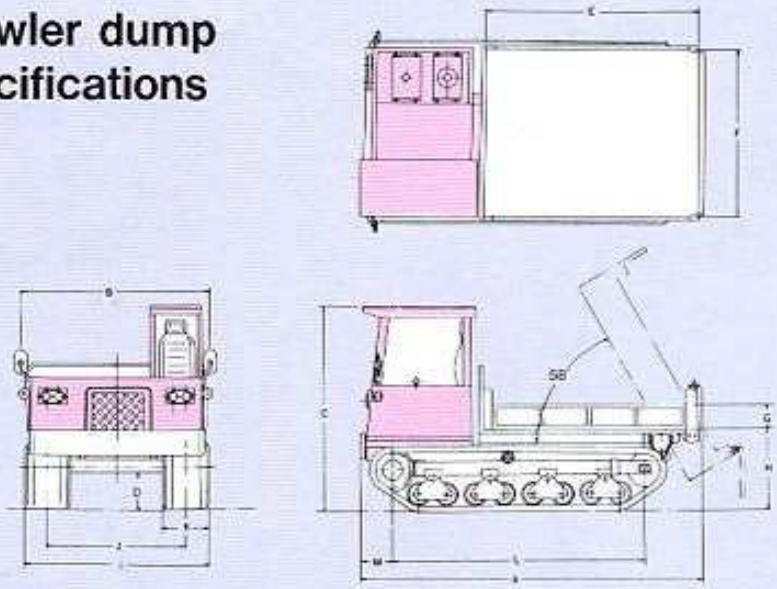
MST-2200

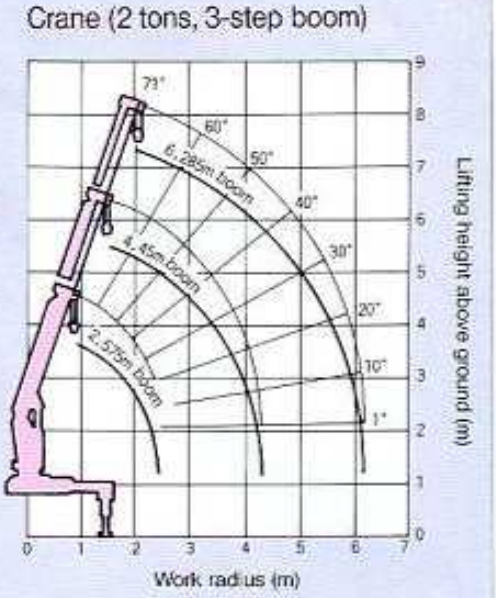
MST-2500

MST-3300

■Standard external dimension drawing

Crawler dump specifications





※The specifications of the table below can be read by matching them with the corresponding location on the figures above (Unit: mm)

	Dimensions	MST-250	MST-450	MST-550	MST-600	MST-800	MST-1500	MST-2200	MST-2500	MST-3300
A	Full Length	3,147	3,165	4,845	3,730	4,500	5,180	5,980	5,600	7,160
B	Full Width	1,560	1,600	2,300	1,985	2,525	2,615	(2,950)	(2,880)	3,300
C	Full Height	1,450	1,503	1,970	2,200	2,300	2,470	2,930	2,950	3,130
D	Minimum Ground Clearance	250	244	360	310	470	480	500	530	610
E	Loading Bed Length (Internal)	1,900	1,903	3,400	2,250	2,600	3,100	3,600	3,600	4,700
F	Loading Bed Width (Internal)	1,250	1,470	2,100	1,700	1,950	2,200	2,450	2,500	2,600
G	Loading Bed Height	310	300	350	350	350	350	400	500	500
H	Inside-Bottom of Loading Bed Distance	700	809	975	940	1,140	1,280	1,400	1,550	1,630
I	Distance between crawler outer edges	1,350	1,600	2,300	2,000	2,300	2,500	2,800	2,950	3,300
J	Center Distance between Crawlers	1,100	1,250	1,700	1,500	1,700	1,900	2,000	2,100	2,300
K	Crawler Width	250	350	600	500	600	700	750	900	1,000
L	Center Distance between Idler and Sprocket	1,920	2,217	3,160	2,600	3,130	3,930	3,840	4,800	5,105
M	Center Distance between Front End and Sprocket	535	568	925	365	560	490	900	900	1,155

※( ) collapsible back mirror stays.

■Rubber Crawler Carrier Series (standard specifications)

	Model	MST-250	MST-450	MST-550	MST-600	MST-800	MST-1500	MST-2,200	MST-2,500	MST-3,300
	Machine Weight (kg)	2,350	2,530	5,000	3,900	5,740	7,500	12,900	14,000	20,700
	Maximum Carrying Capacity (kg)	2,000	2,900	4,900	3,000	4,000	6,000	10,000	12,000	17,000
Engine	Manufacturer	Kubota	Isuzu	Isuzu	Mitsubishi	Mitsubishi	Mitsubishi	Hino	Hino	CAT
Engine	Model	D-1403-B	4JB1PA	4BDT	4D31T	4D34T	6D14CT	EK100	EK130-T	3406T
Engine	Power(PS)/Revolutions per minute (rpm)	26/2,800	80.5/2,600	106/2,400	85/2,800	115/2,800	154/2,500	250/2,300	260/2,000	365/2,100
Engine	Displacement (cc)	1,489	2,771	3,856	3,298	3,907	6,557	13,267	13,267	14,600
Running Performance	Drive System	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic	Fully hydraulic
Running Performance	Hydraulic Pressure (kg/cm²)	250	250	280	350	350	350	350	350	320
Running Performance	Brakes (Main/Parking) Dual	2systems	2systems	2systems	2systems	2systems	2systems	2systems	2systems	2systems
Running Performance	Speed Forward/Backward km/hr	0~10	0~6.0	0~11	0~12	0~11	0~10	0~13	0~13	0~9
Running Performance	Transmission	2speed	2speed	2speed	Single Speed	Single Speed	Single Speed	2speed	2speed	2speed
Running Performance	Climbing Grade % (When empty)	57	57	57	57	57	57	57	57	57
Running Performance	Ground pressure (when empty kg/cm²)	0.12	0.13	0.11	0.12	0.14	0.12	0.17	0.17	0.17
Crawler	Width mm	250	350	600	500	600	700	750	850	1,000
Crawler	Circumferential Length mm	5,200	5,800	8,000	7,000	8,000	9,900	9,900	9,900	12,900

※The specifications of this equipment are subject to change for improvements.

Note: No running on public roads.

Challenge for a New Earth

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