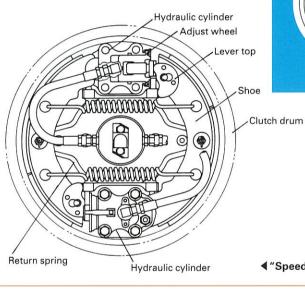
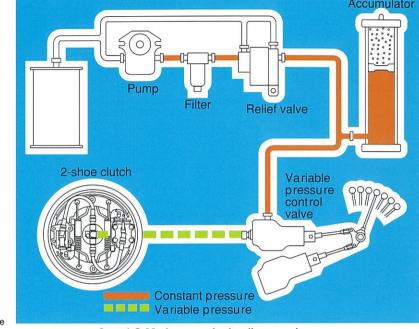
exclusive <u>Speed-o-Matic</u>

power hydraulic controls

To much improve minute operation on all machine functions with precise control

HITACHI SUMITOMO developed "Speed-O-Matic" clutch through owned experiences and accumulated techniques in the past. Indeed, its superior performance like powerful torque transmission, fingertip feeling control, less operator's fatigue, easy clutch adjustment and so on has been field proven throughout the world. The clutch structure is illustrated below.





Speed-O-Matic power hydraulic control system

■"Speed-O-Matic" clutch

Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd.

12-14, Ueno 7-chome, Taito-ku, Tokyo 110-0005, Japan Phone: 81-3-3845-1387 Facsimile: 81-3-3845-1394

- •We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Illustrations may include optional equipment and accessories, and may not include all standard equipment.

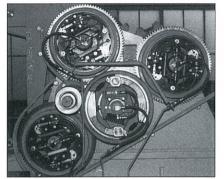
Address Inquires to:

Truck Cranes & Excavators
ST400M
ST500M
series

Full-function upper mechanism of highest standards

"Speed-O-Matic" clutch

As mentioned in last page, ST400M and ST500M adopt "Speed-O-Matic" clutches. The clutches enable the machine to make a good minute operation with precise control on all machine functions.

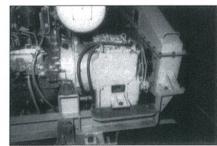


"Speed-O-Matic" clutches

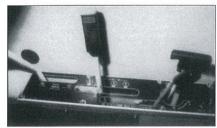
Power-shift type three-speed transmission

The three-speed transmission makes best work-efficiency with wide variety work-speed in crane hoist, boom hoist and swing operations. It is smoothly power-shifted without clutch in operator's cab.

Also it can easily provide P.T.O. for driving generator for lifting magnet operation and so on.



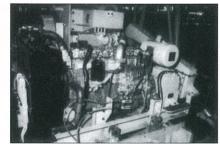
Three-speed transmission



Power-shift lever

Fuel economy with powerful turbo-charged diesel engine

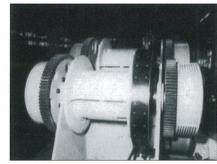
To get big power with less fuel consumption, the machine equips turbo-charged diesel engine. It makes better fuel consumption, especially in high speed operation range.



Turbo-charged diesel engine

Special designed drums

The all drum laggings are designed with bigger D/d ratio and parallel groove to prevent disordered rope winding in order to obtain long life of the rope.



Special designed drums

Turntable bearing

The machine equips special designed turntable bearing to assure high durability, extreme smooth swing, and reliability of adjustment-free. Swing pinion meshes with swing (ring) gear of outer bearing race precisely.



Swing pinion meshing with swing (ring) gear

Comfortable operator's cab

The operator's cab is compartment, separated from upper machinery room, which assures freedom from noises and vibrations. Operator's cab then offers exceptional comfort and visibility and well-ventilation.



Operator's cab

Operation safety

A computerized automatic over-load warning device of model SML-06 Load Moment Alarm is optionally available for further safety operation.

Parts interchangeability

ST400M and ST500M have been designed with part interchangeability of more than 80% each other in itemwise.

Upper c.t.w.t. with hydraulic cylinder (ST500M only)

Counterweight is raised and lowered from and to the ground by power hydraulic cylinder for its easy assembling and disassembling with no assiting crane.



Upper c.t.w.t. with hydraulic cylinder

Durable and reliable crane carrier



Carrier

The ST400M/ST500M's 8 x 4 drive Nissan carriers feature a powerful diesel engine which gives a high power-to-weight ratio for lively road performance. The high torque output and flexible transmission also ensure good lugging power off the road. The semi-under floor type, two-man cab offers outstandingly comfortable appointments-sprung driver's seat, adjustable mate's seat, full ventilation, heater/blower unit, radio and other equipment that makes life easy for the operator.

Quite simply, the ST400M/ST500M are joy to drive as well as to operate.

Rugged outriggers

The sturdy outriggers are very quickly extended out four-beam and then down four-jack simultaneously with a good design of lever linkage among control levers, control valve and engine acceleration device.

As the convenient control levers are mounted on each side of the carrier, the operator can see and control the outriggers individually and level to terrain requirements.



Hydraulic outrigger

Front hydraulic jack (optional extra)

The carrier can equips as optional extra front hydraulic jack to ensure crane lifting capacities in 360 degrees full swing circle. Front hydraulic jack fits pressure switch with warning alarm and lamp to prevent over-load to the jack and carrier frame.

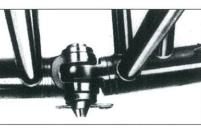


Front hydraulic jack

Dependable front-end attachments

Pin-connected tubular boom/jib

ST400M/ST500M features a pinconnected tubular boom and jib. Tubular boom chord members are tempered high-ten alloy steel. The tubular boom represents the latest advances in design and is precision built with special automatic machine tools and fixtures. Machine-coped lattice ends match the contour of the round, alloy steel, tubular chords and are carefully welded in place with 360° welds



In-line pin lugs

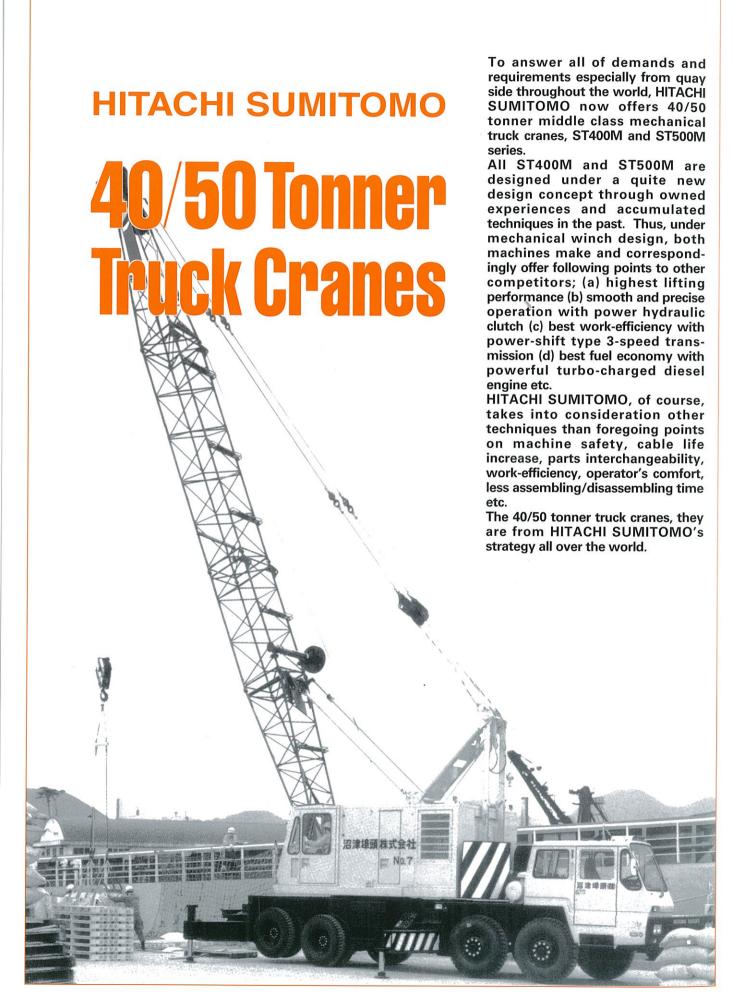
Boom and jib head machinery

The boom and jib point contain sheave(s), all mounted on anti-friction bearings to eliminate the need for daily lubrication.

Safety device

The machine provides safety devices such as boom angle indicator, boom over-hoist limiting device, boom backstops, hook over-hoist alarm, boom hoist drum pawl locking device and so on. Also, SML-06 Load Moment Alarm, a computerized automatic over-load warning device, is available as optional extra for further safety operation.

Highest lifting performance, best work-efficiency.



ST400M ST500M

series

establish for quay side works a good standards of:

lifting performance precise operation work-efficiency fuel economy mobility

