HITACHI SUMITOMO

SCX2800-2

HYDRAULIC CRAWLER CRANE

Specifications

ASIAN ISSUE

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Superstructure

UPPER REVOLVING FRAME:
All-welded, precision machined, robust construction. A machined surface provided for mounting load hoist and boom hoist assemblies, and mounting itself on turntable bearing. And pins bail frame with a 12-sheave machinery and single center sheave of a 21.0 D/d ratio for 2×12-part boom hoist reeving.

TURNTABLE BEARING WITH INTERNAL SLEWING GEAR:
Heavy duty, single shear ball type; inner race of turntable bearing with integral, internal slewing (ring) gear bolted to lower frame, and outer race of turntable bearing bolted to upper revolving frame.

CONTROL SYSTEM:
System contains two sets of triplicate tandem valves which direct oil to various machine function and are actuated by control levers via remote controlled hydraulic servo for all motions. Working speeds can be precisely controlled by motorcycle type throttle and pilot-operated armchair single axis control levers in cooperation with "EPC" controller that varies engine rpm and hyd. pump discharge simultaneously, or varies just hyd. pump discharge while keeping engine rpm via motorcycle type grip throttle. System also takes a specially-tailored unique hydraulic circuit to maximizes drum horsepower, and reduces horsepower loss with eliminating the possibility of engine stall.

Pump control system — By "EPC" controller that provides two modes of engine-pump control.

MODE I:
The "EPC" Controller is normally programmed to vary the engine speed and pump discharge simultaneously. Simply twisting the grip advances the engine to maximum speed and the hydraulic pumps to maximum flow at the same time. This mode is suitable to precision crane work.

MODE II:
By activating a switch, it is able to vary just the pump discharge by means of the grip throttle, while keeping engine speed fixed. Mode II is convenient for operations such as lifting magnet and bucket work, where the engine is normally run at full throttle.

A specially-tailored pressure compensating valve — Utilized in hydraulic circuits to realize a good minute operation of two main, boom hoist and opt. luffing jib hoist drums.

HYDRAULIC SYSTEM:
System provided with three variable displacement axial piston pumps and one fixed displacement duplicate tandem gear pump for both independent and combined operations of all functions. Gear pump also used for system valves and cylinder controls.

Main/aux. crane hoist motors — Variable displacement axial piston motor with counterbalance valve and spring-applied/hydraulically released multiple wet-disc type automatic brake as std.

Boom hoist motor — Variable displacement axial piston type with counterbalance valve and spring-applied/hydraulically released multiple wet-disc type automatic brake.

Luffing jib hoist drum motor — Optional extra; axial piston type with counterbalance valve and spring-applied/hydraulically released multiple wet-disc type automatic brake; available for luffing jib hoisting/lowering.

Slewing motor — Two; axial piston type with spring-applied/hydraulically released multiple wet-disc type brake; electrically controlled from instrument panel of operator's cab.

Travel motors — Shoe-in design; axial piston motor with brake valve and spring-applied/hydraulically released multiple wet-disc type automatic brake.

Oil cooler — Aluminum-make; located at a part of superstructure as separated from engine radiator together with an independent autocooling fan for better cooling efficiency and heat balance.

Hydraulic oil reservoir — 450 liters capacity.

Kind of hyd. oil — Standardized with ISO VG46 having viscosity ranging from 41.4 thru 50.6mm^2/sec at 40°C.

LOAD HOIST ASSEMBLY:

Std.; front and rear main operating drums driven by independent hydraulic motor of bi-directional, variable displacement axial piston motor through 2-stage planetary reduction gear units powering the rope drum in either direction for hoisting and lowering load. Both of drums size in same dimension.

Brakes — Spring-applied, power hydraulically released multiple wet-disc type automatic brake; provided within hyd. motor.

Drums — One piece, parallel grooved lagging with locking ratchet wheel cast integral; involute-splined to the reduction gear unit shaft which is mounted on anti-friction bearing. Available to wind up 51m long cable of 28mm dia. at drum 1st layer.

Drum locks — Electrically controlled pawl.

Drum rollers — Optional extra; available for right cable winding onto drums.

Drum rotation speed controller — Max. rotation speed can be tuned according to arbitrary value that is electrically controlled by dialing, and then varies pump discharge. Available on two main operating drums independently.

Motor swash plate angle setting switch — Available to set motor swash plates of front/rear drum winch motors at a certain angle for easily sychronizing front and rear drum rotation speeds.

BOOM HOIST ASSEMBLY:

Twin-drum design; driven by single bi-directional, axial piston hydraulic motor through a 3-stage planetary reduction gear unit powering the rope drum in either direction for hoisting and lowering boom.

Brake — Spring-applied, power hydraulically released multiple wet-disc type automatic brake.

Drum — One piece, twin-design, parallel grooved lagging with locking ratchet wheel cast integral; bolted to planetary reduction gear unit outer case.

Drum lock — Power hydraulically operated automatic pawl.

Drum rotation speed controller — Max. rotation speed can be tuned according to arbitrary value that is electrically controlled by dialing, and then varies pump discharge.

LUFFING JIB HOISTING MECHANISM:

Optional extra; driven by bi-directional, axial piston hydraulic motor through 2-stage planetary reduction gear unit powering the rope drum in either direction for hoisting and lowering luffing jib; required when rear drum is used for liftwork with tower head top sheave machinery. Mounted on boom bottom section.

Brake — Spring-applied, power hydraulically released multiple wet-disc type automatic brake; provided within hydraulic motor.

Drum — One piece, parallel grooved lagging with locking ratchet wheel cast integral; bolted to planetary reduction gear unit outer case.

Drum lock — Power hydraulically operated automatic pawl.

Drum rotation speed controller — Max. rotation speed can be tuned according to arbitrary value that is electrically controlled by dialing, and then varies pump discharge.

SLEWING:

Driven by two units of bi-directional, axial piston hydraulic motors through 2 sets of planetary reduction gear unit powering slewing pinion. Slewing pinion meshes with internal teeth of slewing (ring) gear of turntable bearing inner race.

Brakes — Spring-applied, power hydraulically released multiple wet-disc type; provided on each of hydraulic motor.

Slewing speed controller — Max. slewing speed can be tuned according to arbitrary value that is electrically controlled by dialing, and then varies pump discharge.

Lock — Mechanically operated drop pin.

Speed — 1.5min.$^{-1}$ <1.5rpm>

OPERATOR'S CAB:

A 2.3mm thickeness steel plate construction with 940mm wide and a stamped-and-rounded corner designs; acoustically treated, full-vision, cushion rubber mounted, well-ventilated, full compartment, roomy operator's cab with a large straighted front window with green-tinted safety glass; provided with an arrangement of "EPC" control/slewing lever, armchair control station, sunvisor, sunshade, rear-view mirrors, dual intermittent type window shield wipers with washer on both front and roof windows, sliding windows on both sides of cab, and slewing-link type sliding door.

Slewing-away mechanism — Provided as std; available to set a 3-meter overall width of superstructure for a good transport.

Tilting mechanism — Power hydraulically tiltable cab is standrdized for a good upward visibility.

Instrument panel — Contains engine monitoring lamps, graphic display panel of Load Moment Indicator, gauges & meter, warning lamps and other necessary controllers and switches.

Operator's seat — Full adjustable reclining seat with head rest and both R/H and L/H side arm rests.

Air-conditioner — Provided as std.; built-in type full air-conditioner.

Electric cab fan — Optional extra; wind-direction adjustable type.

Anemometer — Optional extra; recommended for luffing jib attachment.

Engine foot throttle — Optional extra; Available for right-hand foot control, with electrical control.

Electric outlet — 24V; available in cab.

Operator's cab side step — Optional extra; Available for access ease to operator's cab.

Gripping bar — Provided as std. for cab side step.

AM/FM radio — Provided as std. with clock.

Fire extinguisher — Optional extra; powder type with 1kg capacity.

MACHINERY CAB:

Equipped with hinged doors on both sides for machinery access and inspection; affixed tape-type non-skid material on the roof.

CATWALKS:

Optional extra; hitched in place along both sides of machinery cab.

MACHINERY CAB RAILING:

Optional extra;

COUNTERWEIGHTS:

Weighs 102.8ton consisting of a 22.4ton base weight and a 12-piece cast iron block of 80.4ton in its total.

Counterweight self-removal device — Provided as std.; raises and lowers a 102.8ton full counterweight by a lifting mechanism with two power hyd. cylinders attached on the base weight.

ELECTRICAL SYSTEM:

24-volt negative ground system; provided with two maintenance free 12-volt batteries.

LIGHTING SYSTEM:

Includes following lights.

- Two 70 W working lights;
- One 10 W interior cab light.

REAR VIEW MIRRORS:

Two; each provided on front-left and -right corners of superstructure.

POWER UNIT:

Make & Model	Mitsubishi 6M70—TL
Type	Water-cooled, 4-cycle, direct injection, turbo-charged, diesel w/automatic cooling fan
No. of Cylinders	Six (6)
Bore & Stroke	130 mm × 150 mm
Displacement	12,880 cc
Rated Output	272 kW/2,000 min^{-1} 〈370 ps/2,000 rpm〉
Maximum Torque	1,510 NÆm/1,600 min^{-1} 〈154 kgf-m/1,600 rpm〉
Fuel Tank	500 liters

Note: 1. The engine meets Stage/Tier 3 of current smoke emission regulations in Europe, America and Japan.
2. A 272kW engine horsepower shown above is defined under a current international engine horsepower indication formura which includes necessary horsepower for engine alternator drive but excludes engine fan drive.

A PORTABLE ENGINE-HYDRAULIC POWER PACK:

Optional extra; available to supply power hydraulic to hydraulic cylinders as used as rear post backstops. Required when luffing jib att.

Undercarriage

LOWER FRAME:

All-welded, precision machined, box type construction; provided with four tip blocks w/pins and lugs to hook and then assemble crawer side frames on. To mount turntable bearing, a machined surface is provided too.

Hyd. removal joint-pins — Four; available to hold in place crawler side frames on lower frame with a face-contact design to bear reaction force of crawler side frame. And, four pins are each operated by hyd. cylinder thru remote control box shown in clause of "LOWER FRAME JACK-UP DEVICE" below.

LOWER FRAME JACK-UP DEVICE:

Contains four hydraulic jack cylinders attached on lower frame jack cylinder beams for disassembling/assembling ease of crawler side frames.

Remote control box — Provided for control of lower frame jack cylinders and hyd. removal joint-pins.

Pontoon — All-welded construction; four pontoons each attached on outside of lower weight.

CRAWLER SIDE FRAMES:
All-welded, box type construction, precision machined; each provided with two steel plate hooks for an assembling ease on lower frame. Held in place by hydraulic removal heavy duty joint-pins provided on four tip blocks of lower frame.

Crawler side steps — Provided at both ends of the frames for easy access to superstructure.

LOWER WEIGHT:
Weighs 18ton; made of cast iron. A 9ton each mounted on lower frame jack cylinder beams provided at front and rear of the lower frame

DRIVE SPROCKETS:
Cast steel, heat treated; one per side frame. Track drive sprocket assembly bolt-coupled to 3-stage planetary reduction gear unit outer case as an integral part of shoe-in type traction motor. Sealed between parts of rotation and non-rotation of the motor with floating seal.

IDLER WHEELS:
Cast steel, heat treated; one per side frame. Mounted on two bronze bushings with floating seals for lifetime lubrication.

TRACK ROLLERS:
Fifteen per side frame; each heat treated cast steel with double flange design. All rollers mounted on two bronze bushings with floating seals.

CARRIER ROLLERS:
Three per side frame; each heat treated cast steel with double flang design. All rollers mounted on bronze bushings with floating seals.

TRACKS:
Heat treated, self-cleaning, multiple hinged track shoes joined by full floating pins; 58 pcs. per side frame.

Shoe width — 1,120mm wide as standard.

Track adjustment — Manual adjustment device with oil jack and shim plate packs is standardized.

Automatic track tension adjusting device — Optional extra; available instead of std. track adjustment to always keep track tension at optimum level by means of power hyd. cylinder thru idler wheel actuated by power hydraulic supplied from superstructure.

TRAVEL AND STEERING:
A bi-directional, shoe-in type axial piston hydraulic motor bolt-couples drive sprocket thru 3-stage planetary reduction gear unit outer case at each crawler side frame end for travel and steer. Straight-line travel (forward or reverse), pivot or differential turns, and counter-rotation for spin turns are available.

Brake — Spring-applied, hydraulically released multiple wet-disc type automatic brake; located within hydraulic motor. Brakes automatically set when travel levers are in neutral or when engine is shut down.

Travel speed — 1.1/0.5km/hr. (based on flat, level and firm supporting surface, and under the conditions that no load must be applied and front-end att. must be 15.25m basic boom only).

Gradeability — 30% (17°) permissible based on basic machine without front-end attachment.

Safety Devices

LOAD MOMENT INDICATOR:
This is a fully computerized automatic over-load preventing system including total safe operation control system and meets EN Standards; provided with the designs of (1) no zero-point adjustment, (2) data input according to interface counter-indication/message on display panel, and (3) a graphic display panel with setting ease of viewing angle.

Construction (standard version) — Comprises (1) load detecting device with amplifier, (2) boom angle detector, (3) computerized Micro Processing Unit (M.P.U.), and (4) graphic display panel.

Functions — This system functions that if the lifting load reaches 90% of the rated one specified in the crane capacity chart, an intermittent pre-warning buzzer is given; if it is 100%, a warning is given by a continuous buzzer, and all peril side motions are automatically stopped. The machine, however, can be operated in safety side motions.

Display panel design — A graphic display panel is designed, and it is able to input necessary operating conditions/data according to interface counter-indication/message on the display panel, and the display panel indicates ten and some kinds of the present lifting and working conditions/data like “lifting load”, “max. allowable lifting load”, “working radius”, “max. allowable working radius”, “boom angle”, “load ratio”, “boom/jib lengths”, “engine rpm” and so on when working. In addition, the display panel is provided with three warning indicators over “engine over-heat”, “hyd. oil over-temp.” and “brake oil over-temp.”.

MAIN HOOK OVER-HOISTING LIMITER:
Limit switch type. Available to prevent hook over-hoisting with functions of automatic drum braking with hydraulic lock, and warnings by an alarm.

BOOM OVER-HOISTING AND -LOWERING LIMITER:
Available in two kinds of devices; one is limit switch located on a part of boom foot for preventing boom over-hoisting, and the other is the safety function of the LMI available to automatically prevent boom over-hoisting and -lowering with the functions of automatic drum braking with hydraulic lock, and warnings by an alarm. Further boom protection from rapid boom over-hoist by hook over-hoist motion under mal-function of main hook over-hoisting limiter is available as one of functions of the LMI.

BOOM BACKSTOPS:
Dual; telescopic design with spring buffers.

SECONDARY BOOM OVER-HOISTING LIMITER:
Additional limit switch located on boom backstops; this is as a further safety device for redundant boom protection.

SLEW LOCK:
Mechanically operated drop pin; available to firmly lock superstructure in four positions of facing front or rear or left or right to undercarriage.

DRUM LOCKS:
Electrically operated pawl locks is available on front and rear main drums while power hydraulically operated pawl lock is available on boom hoist drum with an automatic locking device as std.

SLEWING BRAKE SAFETY CIRCUIT:
Available not to start engine whenever slewing brake is off.

BOOM ANGLE INDICATOR:
Pendulum type; mounted on right-hand side of bottom section of crane main boom.

HOOK LATCH:
Provided on every kinds of hook to prevent out of place of cable from hook.

LEVEL GAUGE:
Bubble type; located on operator's cab floor and a part of undercarriage.

LEVER LOCKS:
Provided on all control levers (except slewing lever) to lock levers in neutral.

SLEWING ALARM:
This is by buzzer, and flasher lamps located on both sides of machinery cab.

SPEED SLOWDOWN DEVICE:
This is for speed slowdown of hoisting and lowering motions of boom (and tower jib in case of luffing tower crane att.) which are available just before automatic stopping at both upper and lower side limits of boom/tower jib angle even though control lever(s) is still at hoisting/lowering position to prevent a shock.

SLEWING BRAKE LAMP:
Provided on operator's cab instrument panel; this is available to confirm whether or not slewing brake is applied.

SIGNAL HORN:
Available as warning just before every kinds of motions are initiated.

LOCK LEVER (FOOL PROOF SHUT-OFF LEVER):
Located in the cab exit; this is available to automatically deactivate and lock hydraulic system.

TRAVEL ALARM:
An intermittent buzzer warns when travel motion is initiated.

ENGINE MONITORING LAMPS:
Available to let operator warn engine abnormal conditions as to battery charge, lubrication oil pressure, radiator coolant level, oil filter clogging, air filter clogging, water temp., contorol unit and glow plug.; provided on instrument panel.

FRONT-END ATT. ERECTION MODE:
This is an internal, integral function of the LMI. In the range out of crane working area, the LMI display panel automatically indicates "Now, out of crane working range" with a rigging instruction, and it is available to lift front-end att. off ground without the influence of LMI safety functions, and, after front-end att. is lifted over the range of crane working area, LMI safety function gets back automatically for safe erection work. This function is also available for the work of vice-versa.

LIFTING HEIGHT INDICATION DEVICE:
Available to indicate lifting height above ground or depth below ground on display panel of the LMI. Also, hook hoisting speed slowdown function is available just before automatic stopping at a desired height under hook height setting before operation.

LMI SAFETY CIRCUIT-OFF SWITCH:
Available in key type for a good crane safety operation management without fail.

TRAVEL DIRECTION ARROW:
Attached each on crawler side frames.

GAUGES & METER:
Engine water temperature gauge, fuel gauge and hour-meter are provided on instrument panel.

WARNING LAMPS:
Available to let operator warn abnormal machine conditions as to pilot pressure and brake system of two main and opt. luffing jib hoist drums; provided on instrument panel.

THREE COLOR PERCENTAGE INDICATOR:
Optional extra; this is with three colors of Green, Yellow and Red. Each color indicates the load percentage to rated capacity; Green shows less than 90% as safety, Yellow shows 90 to 99% as marginal, and Red shows over 100% as over-loading. As further function, Red lamp comes on automatically when operator cuts off safety circuit of LMI absent-mindedly.

MICROPHONE & LOUD-SPEAKER:
Optional extra; this is for operator's convenience for loud speaking.

AUX. HOOK OVER-HOISTING LIMITER:
Optional extra; this is available for auxiliary crane hoist with optional short jib and/or fly jib. Performs the same function as that of "Main hook over-hoisting limiter" mentioned before.

In addition to the above, following safety devices are standard for luffing jib attachment.

LUFFING JIB ANGLE DETECTOR:
This is one of key safety device in a case of luffing jib attachment.

LUFFING JIB LOAD DETECTOR:
This is also important safety device when luffing towercrane attachment is required.

LUFFING JIB OVER-HOISTING AND-LOWERING LIMITER:
Performs all the same function as that of "Boom over-hoisting and-lowering limiter" stated before.

LUFFING JIB HOOK OVER-HOISTING LIMITER:
Performs the same function as that of "Main hook over-hoisting limiter" described before.

LUFFING JIB BACKSTOPS:
Dual; telescopic design with spring buffers.

SECONDARY LUFFING JIB OVER-HOISTING LIMITER:
Additional limit switch located on tower jib backstops; this is as a further safety device for redundant tower jib protection.

LUFFING JIB HOIST DRUM LOCK:
Provided with automatic pawl-locking device like boom hoist drum pawl-locking (if luffing jib hoist drum is optionally provided).

REAR POST BACKSTOPS:
Two power hydraulic cylinders are designed to easily set rear post position as necessary when assembling front post and luffing jib; power hydraulic is supplied to these cylinders by a portable engine-hydraulic power pack.

Front-end Attachment

CRANE BOOM:
Lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.

Boom connections	In-line pin connections at 2.10m deep and 2.10m wide.
Basic boom	Two-piece, 15.24m basic length; 7.62m heavy-duty base and tapered top sections. Provided with boomfoot pin removal cylinders.
Boom head machinery	Five head sheaves, and two guide sheaves mounted on anti-friction bearings of conventional non-sealed grease type.
Six-hanger sheave block	Optional extra; pinned to boom head shaft. Sheaves each mounted on anti-friction bearings of conventional non-sealed grease type. Required when lifting load exceeds 145ton, and available up to 275ton lift.
Five-hanger sheave block	Optional extra; pinned to boom head shaft. Sheaves each mounted on anti-friction bearings of conventional non-sealed grease type. Required when lifting load exceeds 145ton, and available up to 250ton lift.
Ultra heavy-duty boom extensions	Optional extra; available in 3.05m, 6.10m and 12.20m with pendants.
Heavy-duty boom extension	Optional extra; available in 12.20m with pendants.
Maximum boom length	91.45m meters.

Note: All of ultra heavy- and heavy-duty boom extensions are designed with no intermediate diagonal bracing(s); the diagonal bracing is only designed at one of two picture frames. Accordingly, it is able to nest luffing jib extension into appropriate boom extension in length.

FLY JIB:
Optional extra; lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing having in-line pin connections at 1.0m deep and 1.0m wide, and jib head machinery with single sheave mounted on antifriction bearings of conventioral non-grease type. Provided with jib strut, jib backstops, and jib/boom guyline pendants. Mounted on 7.62m tapared top section, and available for light load lifting operation with less than 27ton with two-part hoist line. Single part hoist line is also available for a 13.5ton lift as max.

Basic fly jib	Two-piece, 12.20m basic length; 6.10m base and top sections.
Fly jib extensions	Available in 6.10m length with pendants.
Maximum fly jib length	36.55m.
Boom plus fly jib length	Max. 70.1m + 36.55m.

SHORT JIB:
Optional extra; all-welded construction having single sheave head machinery. Pinned to 7.62m tapered top section.

BOOM LIVE MAST:
A 7m long; all-welded, box construction. Mounted in front of upper revolving frame, and pins bridle frame with a 12-sheave machinery of a 21.0 D/d ratio for a 2x12-part boom hoist line. Raised by two power hyd. cylinders from transportation position to a certain working position as a short boom for self-assembling work as this mast is available to use for self-assembling of a whole machine without helper crane in cooperation with hydraulic counterweight self-removal device, and qucik-draw power hydraulic cylinder with hook attached onto the mast. In addition, a 2-large diameter single pendant rope of short length with plate link is pinned on top of the mast for easy connection with a 2-dual extender cables.

MID-POINT SUSPENSION LINK:
Optional extra; required when boom length exceeds 88.40m.

HOOK BLOCKS:

275/145t, five sheaves plus 5-hanger sheave block with duplex type hook ····Optional extra.
250/145t, five sheaves plus 5-hanger sheave block with duplex type hook ····Optional extra.
145t, five sheaves with duplex type hook(275t use) ·····Optional extra.
145t, five sheaves with duplex type hook(250t use) ·····Optional extra.
80t, three sheaves ·····Optional extra.
35t, one sheave ·····Optional extra.
13.5t, ball hook ·····Optional extra.

Notes: An 145t hook block is each available from 250/275t hook block by dismounting a 5-hanger sheave block.

BAIL AND BRIDLE:

All-welded construction; provided with larger sheaves of a 21.0 D/d ratio on both bail and bridle for 2×12-part boom hoist rope reeving. Bail pinned to upper revolving frame directly, and bridle pinned to boom live mast respectirely. And, pendant ropes bridge the gap between boom live mast and 7.62m tapered top section.

DRUM DATA:

Drum	Root dia.	Type	Line speed (Hoisting, Lowering)	Cable	Max. line pull
Front main	596mm	Parallel grooved	110 ~ 2mpm	28mm	245kN (25.0ton)
Rear main	596mm	Parallel grooved	110 ~ 2mpm	28mm	245kN (25.0ton)
Boom hoist	641mm	Parallel grooved	2 × (24 ~ 1.0) mpm	22.4mm	165kN (16.9ton) × 2
Luffing jib hoist (opt.)	596mm	Parallel grooved	55 ~ 2mpm	28mm	245kN (25.0ton)

Notes:
1. Line speed is based on drum first layer and rated engine rpm with no load.
2. Hoisting line speed varies under load and operating conditions.
3. Crane hoist applications of front and rear main drums shall be upon kind of front-end attachment.

HOIST REEVING:

(ton)

No. of partline / hook	21	19	16	14	12	10	9	8	7	6	5	4	3	2	1
275t	275.0	250.0	216.0	189.0	162.0	—	—	—	—	—	—	—	—	—	—
250t	—	250.0	216.0	189.0	162.0	—	—	—	—	—	—	—	—	—	—
145t	—	—	—	—	—	145.0	121.5	108.0	94.5	81.0	67.5	54.0	40.5	27.0	13.5
80t	—	—	—	—	—	—	—	—	—	80.0	67.5	54.0	40.5	27.0	13.5
35t	—	—	—	—	—	—	—	—	—	—	—	—	35.0	27.0	13.5
13.5t	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.5

CABLES:

Front drum ·····P·S (19)+39×P·7, non-spin type, 28mm dia./450m long, breaking load 755kN (77.0t).

Rear drum ·····Optional extra; P·S (19)+39×P·7, non-spin type, 28mm dia., breaking load 755kN (77.0t).
Length depends on crane hoist applications as under:
1. Fly jib application·····350m.
2. Short jib application·····190m.

Boom hoist drum ·····XP rope with construction of IWRC 6×P·WS (31), 22.4mm dia./320m long, breaking load 417kN (42.5t).

Luffing jib hoist drum ·····Optional extra; XP rope with construction of IWRC 6×P·WS (31), 28mm dia./210m long, breaking load 657kN (67.0t).

Liftcrane Capacities 275 metric tons

Boom length (m) / Working radius (m)	15.25	18.30	21.35	24.40	27.45	30.50	33.50	36.55	39.65	42.65	45.70	48.75	51.80	54.85	57.90	60.95	64.00
4.3	275.0																
4.5	269.4	243.0/4.8															
5.0	244.3	242.4	216.0/5.2														
5.5	223.5	223.3	215.1	215.2/5.7													
6.0	205.8	205.6	205.3	204.9	189.0/6.1	162.0/6.6											
7.0	177.6	177.3	177.0	176.6	176.3	162.0	148.5	135.0/7.5									
8.0	155.9	155.7	155.4	155.1	154.8	154.6	147.8	134.8	120.8	121.5/8.4	108.0/8.9						
9.0	138.8	138.6	138.3	138.0	137.6	136.8	132.8	130.5	119.8	121.5	108.0	94.5/9.3	93.2/9.8				
10.0	125.0	124.8	124.5	124.1	123.9	121.0	117.6	116.0	113.0	110.0	107.4	94.5	93.0	81.0/10.2	78.3/10.7	67.5/11.1	65.6/11.6
12.0	102.0	102.2	102.1	102.0	100.1	97.8	95.4	94.6	92.5	90.3	88.4	86.5	84.5	81.0	77.5	67.5	65.4
14.0	81.9	82.0	81.9	81.7	81.5	81.5	79.9	79.6	77.9	76.1	74.7	73.2	71.6	70.3	68.9	67.5	64.5
16.0	75.1/14.9	68.0	67.9	67.8	67.6	67.5	67.3	68.4	67.0	65.6	64.5	63.2	61.9	60.7	59.7	58.6	57.4
18.0		59.8/17.6	57.7	57.6	57.4	57.3	57.0	58.2	58.0	57.4	56.5	55.4	54.2	53.2	52.4	51.5	50.4
20.0			50.0	49.9	49.7	49.5	49.3	50.4	50.2	49.9	49.7	49.1	48.1	47.2	46.5	45.7	44.7
22.0			49.5/20.2	43.9	43.6	43.5	43.2	44.2	44.0	43.7	43.6	43.4	43.0	42.2	41.5	40.9	40.0
24.0				41.8/22.8	38.7	38.5	38.2	39.3	39.0	38.7	38.7	38.4	38.1	37.9	37.5	36.9	36.0
26.0					35.7/25.5	34.5	34.2	35.2	35.0	34.7	34.5	34.3	34.0	33.8	33.7	33.4	32.7
28.0						31.2	30.8	31.8	31.6	31.2	31.2	30.9	30.6	30.3	30.2	30.0	29.7
30.0						31.0/28.1	28.0	29.0	28.7	28.3	28.2	28.0	27.7	27.4	27.2	27.1	26.7
32.0							27.0/30.8	26.5	26.2	25.8	25.7	25.5	25.2	24.9	24.7	24.6	24.2
34.0								25.0/33.4	24.1	23.7	23.6	23.3	23.0	22.7	22.6	22.3	22.1
36.0									22.2	21.8	21.7	21.4	21.1	20.8	20.7	20.5	20.1
38.0										20.2	20.0	19.7	19.3	19.1	19.0	18.7	18.4
40.0										19.7/38.7	18.6	18.2	17.8	17.6	17.5	17.2	16.9
42.0											17.7/41.3	16.9	16.6	16.2	16.1	15.8	15.6
44.0												15.8	15.3	15.1	14.9	14.6	14.3
46.0													14.3	14.0	13.8	13.6	13.2
48.0													14.1/46.6	13.0	12.8	12.6	12.2
50.0														12.5/49.2	12.0	11.6	11.3
52.0															11.2/51.9	10.8	10.5
54.0																10.1	9.7
56.0																9.9/54.5	9.0
58.0																	8.6/57.2

Boom length (m) / Working radius (m)	67.05	70.10	73.15	76.20	79.25	82.30	85.35	88.40	91.45
12.0	60.5	54.0/12.5	50.3/12.9	46.5/13.4	42.7/13.8				
14.0	59.7	54.0	50.0	46.2	42.5	38.3/14.3	34.2/14.7	30.4/15.2	27.0/15.6
16.0	56.2	53.1	49.2	45.6	42.0	37.2	33.4	29.9	26.8
18.0	49.3	48.7	47.7	44.5	40.9	35.9	32.3	28.8	25.8
20.0	43.7	43.2	42.3	41.4	39.2	34.4	30.9	27.7	24.8
22.0	39.1	38.7	37.9	37.0	36.2	32.7	29.6	26.4	23.6
24.0	35.2	34.9	34.0	33.3	32.5	31.0	28.2	25.2	22.5
26.0	31.9	31.6	30.8	30.2	29.4	29.2	27.1	24.1	21.5
28.0	29.0	28.7	28.0	27.3	26.7	26.5	25.6	23.0	20.5
30.0	26.4	26.2	25.6	25.0	24.2	24.2	23.5	22.1	19.5
32.0	23.8	23.9	23.4	22.8	22.2	22.1	21.5	20.7	18.6
34.0	21.7	21.7	21.3	20.9	20.2	20.2	19.6	19.0	17.8
36.0	19.7	19.7	19.4	19.1	18.6	18.6	18.0	17.3	16.7
38.0	18.1	18.1	17.7	17.3	17.0	17.1	16.5	15.8	15.3
40.0	16.5	16.6	16.2	15.8	15.5	15.6	15.1	14.5	14.0
42.0	15.1	15.1	14.8	14.5	14.1	14.2	13.8	13.3	12.8
44.0	14.0	14.0	13.6	13.3	12.8	13.0	12.6	12.1	11.6
46.0	12.8	12.8	12.5	12.1	11.8	11.8	11.5	11.1	10.6
48.0	11.8	11.8	11.5	11.1	10.8	10.8	10.5	10.1	9.7
50.0	10.9	10.9	10.5	10.2	9.8	9.9	9.6	9.1	8.8
52.0	10.1	10.1	9.6	9.3	9.0	9.1	8.7	8.3	8.0
54.0	9.3	9.3	8.9	8.6	8.2	8.3	8.0	7.5	7.2
56.0	8.6	8.6	8.2	7.9	7.5	7.5	7.2	6.8	6.5
58.0	8.0	7.9	7.5	7.2	6.8	6.9	6.5	6.1	5.8
60.0	7.4/59.8	7.3	6.9	6.6	6.2	6.3	5.9	5.5	5.1
62.0		6.8	6.4	6.0	5.6	5.7	5.4	4.9	4.6
64.0		6.7/62.4	5.8	5.5	5.1	5.1	4.8	4.4	4.0
66.0			5.6/65.1	5.0	4.6	4.6	4.3	3.9	3.5
68.0				4.7/67.7	4.1	4.2	3.9	3.4	3.0
70.0					3.7	3.7	3.4	3.0	2.5
72.0					3.7/70.4	3.4	3.0	2.5	2.0
74.0						3.2/73.0	2.6	2.2	1.6
76.0							2.3/75.6	1.8	1.2
78.0								1.5	
78.3								1.5	

■WORKING MASS & GROUND CONTACT PRESSURE:

Shoe width	Mass	Pressure
1120mm	223.0t	124.0kPa <1.27kg/cm^2>

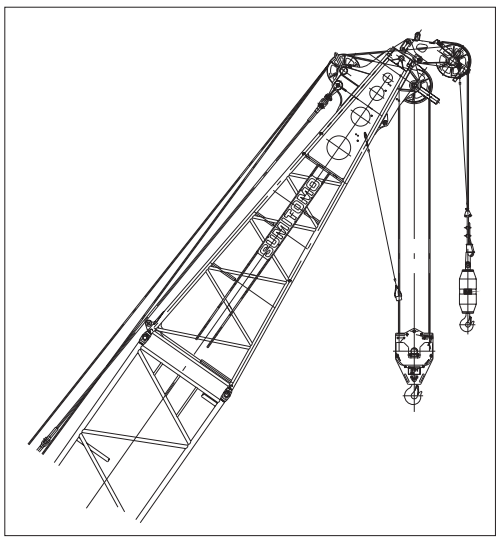
Note: Working mass shown above is with 15.24m basic boom, 102.8ton counterweight, 18ton lower weight and optional 275t hook block.

Notes — Liftcrane capacities

1. Capacities included in these charts are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tons, and are rated in accordance with European EN13000 Standards in terms of machine stability and structural strength limitations; the figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
   Hook block weight is as follows:
   275t·····4.3ton 250t·····3.7ton
   145t·····3.3ton (275t use)
   145t·····2.7ton (250t use)
   80t·····1.4ton 35t·····0.9ton 13.5t·····0.62ton
4. All capacities are rated for 360° slewing.
5. Least stable rated condition is over the side.
6. An 102.8ton counterweight and 18.0ton lower weight are required for all capacities on this chart.
7. Attachment must be erected and lowered over the ends of the crawler mounting.
8. Main boom length must not exceed 91.45m.
   Maximum fly jib length permitted — 36.55m.
   Maximum boom plus fly jib combination length permitted — 70.1m+36.55m.
   Maximum boom length when mounting short jib is 88.40m.
9. Capacities when handling load off main boom head sheaves in case of mounting fly jib or short jib on top of boom are detailed; if required, please consult us or nearest distributor.
10. Boom combination shall be in accordance with manufacturer's standard described here in "Boom Combination Diagram" of page 16.

SCX2800-2 SHORT JIB CAPACITIES:
Max. 13.5ton

Note: Jib capacities are almost equal to the figures made by the deduction of approx. 620kg from the liftcrane capacities for boom length up to 88.40m unless restricted by the maximum jib capacity shown above. As to the details, please consult us or nearest distributor.



Short jib (Option)

Fly Jib Capacities 27 metric tons

Boom length(m)	45.70												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
12.3	27.0	13.5/12.5											
14.0	27.0	13.5	13.9/15.8		23.4/14.3	13.5/14.5							
16.0	27.0	13.5	13.8	13.5/16.3	22.9	13.5		13.5/16.4					
18.0	27.0	13.5	13.5	13.5	22.2	13.5		13.5		11.8/18.3			
20.0	27.0	13.5	12.9	12.9	21.7	13.5	10.1/20.1	13.5		11.6		8.2/20.3	
22.0	27.0	13.5	12.4	12.4	21.1	13.5	9.8	13.5	7.8/23.9	11.3		8.0	
24.0	25.7	13.5	12.0	12.0	20.6	13.5	9.3	13.5	7.8	10.9		7.6	
26.0	24.2	13.5	11.6	11.6	19.7	13.5	9.0	13.5	7.5	10.6	6.1/27.6	7.3	
28.0	22.7	13.5	11.2	11.2	18.6	13.5	8.7	13.5	7.1	10.3	6.1	7.0	
30.0	21.5	13.5	10.8	10.8	17.5	13.5	8.4	13.5	6.9	10.1	5.9	6.6	4.8/31.4
32.0	20.3	13.5	10.6	10.6	16.6	13.5	8.1	13.5	6.6	9.8	5.6	6.4	4.7
34.0	19.3	13.5	10.3	10.3	15.8	13.5	7.9	13.3	6.5	9.5	5.5	6.1	4.5
36.0	18.4	13.5	10.0	10.0	15.0	13.5	7.6	12.8	6.3	9.3	5.3	5.9	4.4
38.0	17.6	13.5	9.8	9.8	14.3	13.5	7.5	12.2	6.0	9.0	5.0	5.6	4.3
40.0	16.8	13.5	9.6	9.6	13.6	13.5	7.3	11.6	5.9	8.8	4.9	5.4	4.1
42.0	16.2	13.5	9.3	9.3	13.1	13.1	7.1	11.1	5.7	8.5	4.8	5.2	4.0
44.0	15.5	13.5	9.1	9.1	12.6	12.6	7.0	10.7	5.5	8.2	4.6	5.0	3.9
46.0	14.8	13.5	9.0	9.0	12.1	12.1	6.8	10.3	5.4	8.0	4.5	4.9	3.8
48.0	13.8	13.5	8.9	8.9	11.6	11.6	6.6	9.8	5.3	7.8	4.4	4.7	3.7
50.0	12.9	12.9	8.8	8.8	11.3	11.3	6.5	9.5	5.1	7.5	4.3	4.5	3.5
52.0	12.1	12.1	8.7	8.7	10.8	10.8	6.4	9.2	5.0	7.4	4.1	4.4	3.5
54.0	12.0/52.4	11.6/53.1	8.7/53.0	8.7/53.8	10.5	10.5	6.4	8.8	5.0	7.1	4.0	4.3	3.4
56.0					10.2	10.2	6.3	8.6	4.9	7.0	4.0	4.1	3.2
58.0					9.9	9.9	6.2	8.3	4.8	6.9	3.9	4.0	3.2
60.0					9.8/58.1	9.8/58.8	6.2/59.9	8.1	4.8	6.7	3.8	3.9	3.1
64.0								7.6	4.6	6.4	3.7	3.7	3.0
68.0								7.6/64.5	4.6/66.0	6.2	3.6	3.5	2.9
72.0										6.0/70.3	3.5	3.4	2.8
76.0											3.5/72.1	3.3	2.7
80.0													2.7/78.2
80.8													
No. of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	48.75												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
12.3	27.0/12.8	13.5/13.0											
14.0	27.0	13.5			23.4/14.7	13.5/14.9							
16.0	27.0	13.5	13.9/16.3	13.5/16.7	23.1	13.5		13.5/16.9					
18.0	27.0	13.5	13.6	13.5	22.4	13.5		13.5		11.8/18.8			
20.0	27.0	13.5	13.1	13.1	21.8	13.5	10.1/20.5	13.5		11.6		8.1/20.7	
22.0	27.0	13.5	12.6	12.6	21.3	13.5	9.8	13.5		11.3		8.0	
24.0	26.6	13.5	12.1	12.1	20.8	13.5	9.5	13.5	7.8/24.3	11.0		7.8	
26.0	25.0	13.5	11.8	11.8	20.3	13.5	9.1	13.5	7.5	10.6		7.4	
28.0	23.5	13.5	11.3	11.3	19.1	13.5	8.8	13.5	7.3	10.4	6.1/28.1	7.0	
30.0	22.2	13.5	11.0	11.0	18.1	13.5	8.6	13.5	7.0	10.1	5.9	6.8	4.7/31.9
32.0	21.1	13.5	10.7	10.7	17.1	13.5	8.3	13.5	6.8	9.8	5.7	6.5	4.7
34.0	20.1	13.5	10.5	10.5	16.2	13.5	8.0	13.5	6.5	9.6	5.5	6.2	4.5
36.0	19.1	13.5	10.1	10.1	15.5	13.5	7.8	13.2	6.3	9.4	5.3	6.0	4.5
38.0	18.2	13.5	10.0	10.0	14.8	13.5	7.6	12.6	6.1	9.1	5.1	5.7	4.3
40.0	17.5	13.5	9.7	9.7	14.1	13.5	7.4	12.0	6.0	8.9	5.0	5.5	4.2
42.0	16.8	13.5	9.5	9.5	13.6	13.5	7.2	11.5	5.8	8.6	4.8	5.3	4.1
44.0	15.6	13.5	9.3	9.3	13.0	13.0	7.0	11.1	5.6	8.3	4.7	5.1	4.0
46.0	14.5	13.5	9.1	9.1	12.6	12.6	6.9	10.6	5.5	8.1	4.5	5.0	3.9
48.0	13.5	13.5	9.0	9.0	12.1	12.1	6.8	10.2	5.4	7.9	4.5	4.8	3.7
50.0	12.6	12.6	8.9	8.9	11.6	11.6	6.6	9.8	5.3	7.7	4.3	4.6	3.6
52.0	11.7	11.7	8.8	8.8	11.3	11.3	6.5	9.5	5.1	7.5	4.2	4.5	3.5
54.0	11.0	11.0	8.7	8.7	10.9	10.9	6.4	9.1	5.0	7.3	4.1	4.4	3.4
56.0	10.6/55.0	10.5/55.7	8.7/55.7	8.7	10.6	10.6	6.4	8.8	5.0	7.1	4.0	4.3	3.3
58.0				8.7/56.5	10.0	10.0	6.3	8.6	4.9	7.0	4.0	4.1	3.2
60.0					9.3	9.3	6.2	8.3	4.8	6.9	3.9	4.0	3.2
64.0					9.1/60.7	8.8/61.5	6.2/62.6	7.9	4.7	6.5	3.7	3.8	3.0
68.0								7.5/67.2	4.6	6.3	3.6	3.6	2.9
72.0									4.6/68.7	6.1	3.5	3.5	2.8
76.0										6.0/72.9	3.5/74.8	3.4	2.7
80.0												3.3/78.6	2.7
80.8													2.7
No. of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	51.80												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
13.2	27.0	13.5/13.4											
14.0	27.0	13.5			23.3/15.2	13.5/15.4							
16.0	27.0	13.5	13.9/16.7	13.5/17.2	23.1	13.5		13.5/17.3					
18.0	27.0	13.5	13.6	13.5	22.5	13.5		13.5		11.8/19.2			
20.0	27.0	13.5	13.1	13.1	21.9	13.5	10.1/21.0	13.5		11.6		8.1/21.2	
22.0	27.0	13.5	12.7	12.7	21.5	13.5	9.9	13.5		11.3		8.1	
24.0	27.0	13.5	12.3	12.3	21.0	13.5	9.6	13.5	7.8/24.8	11.1		7.9	
26.0	25.7	13.5	11.9	11.9	20.5	13.5	9.2	13.5	7.5	10.8		7.5	
28.0	24.3	13.5	11.5	11.5	19.7	13.5	8.9	13.5	7.3	10.5	6.1/28.5	7.1	
30.0	23.0	13.5	11.2	11.2	18.6	13.5	8.6	13.5	7.0	10.2	6.0	6.9	
32.0	21.8	13.5	10.9	10.9	17.7	13.5	8.3	13.5	6.8	10.0	5.8	6.5	4.7/32.3
34.0	20.7	13.5	10.6	10.6	16.7	13.5	8.1	13.5	6.6	9.7	5.5	6.3	4.6
36.0	19.8	13.5	10.3	10.3	16.0	13.5	7.9	13.3	6.4	9.5	5.4	6.0	4.5
38.0	19.0	13.5	10.1	10.1	15.3	13.5	7.7	13.0	6.2	9.3	5.2	5.8	4.4
40.0	17.8	13.5	9.8	9.8	14.6	13.5	7.5	12.4	6.0	9.0	5.0	5.6	4.2
42.0	16.5	13.5	9.6	9.6	14.0	13.5	7.4	11.8	5.9	8.8	4.9	5.4	4.1
44.0	15.3	13.5	9.5	9.5	13.5	13.5	7.1	11.4	5.8	8.6	4.8	5.3	4.0
46.0	14.1	13.5	9.3	9.3	13.0	13.0	7.0	11.0	5.6	8.3	4.6	5.0	3.9
48.0	13.1	13.1	9.1	9.1	12.5	12.5	6.9	10.6	5.5	8.1	4.5	4.9	3.7
50.0	12.2	12.2	9.0	9.0	12.1	12.1	6.8	10.1	5.4	7.9	4.4	4.8	3.7
52.0	11.3	11.3	8.9	8.9	11.6	11.6	6.6	9.8	5.3	7.6	4.3	4.6	3.5
54.0	10.6	10.6	8.8	8.8	11.0	11.0	6.5	9.5	5.1	7.5	4.1	4.5	3.5
56.0	9.9	9.9	8.8	8.8	10.3	10.3	6.4	9.1	5.0	7.3	4.1	4.3	3.4
58.0	9.3/57.7	9.3	8.7	8.7	9.6	9.6	6.4	8.9	5.0	7.1	4.0	4.2	3.3
60.0		9.1/58.4	8.7/58.3	8.7/59.1	9.0	9.0	6.3	8.6	4.9	7.0	3.9	4.1	3.2
64.0					8.1/63.4	7.9	6.2	8.1	4.8	6.7	3.7	3.9	3.0
68.0						7.9/64.1	6.2/65.2	7.4	4.6	6.5	3.7	3.7	3.0
72.0								7.0/69.8	4.6/71.3	6.2	3.6	3.5	2.9
76.0										6.0/75.6	3.5	3.4	2.8
80.0											3.5/77.4	3.3	2.7
84.0												3.3/81.3	2.7/83.5
86.1													
No.of part line	2	1	2	1	2	1	1	1	1	1		1	1

Boom length(m)	54.85												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
13.2	27.0/13.7	13.5/13.9											
14.0	27.0	13.5			23.2/15.6	13.5/15.8							
16.0	27.0	13.5	13.9/17.2	13.5/17.6	23.2	13.5		13.5/17.8					
18.0	27.0	13.5	13.8	13.5	22.6	13.5		13.5		11.8/19.7			
20.0	27.0	13.5	13.3	13.3	22.1	13.5	10.1/21.4	13.5		11.7		8.1/21.6	
22.0	27.0	13.5	12.8	12.8	21.6	13.5	10.0	13.5		11.4		8.1	
24.0	27.0	13.5	12.4	12.4	21.1	13.5	9.6	13.5	7.8/25.2	11.1		7.9	
26.0	26.6	13.5	12.1	12.1	20.6	13.5	9.3	13.5	7.6	10.8		7.5	
28.0	25.1	13.5	11.6	11.6	20.2	13.5	9.0	13.5	7.4	10.6	6.1/29.0	7.3	
30.0	23.7	13.5	11.3	11.3	19.1	13.5	8.8	13.5	7.1	10.3	6.0	7.0	
32.0	22.6	13.5	11.1	11.1	18.2	13.5	8.5	13.5	6.9	10.1	5.8	6.6	4.7/32.8
34.0	21.5	13.5	10.8	10.8	17.2	13.5	8.3	13.5	6.6	9.8	5.6	6.4	4.6
36.0	20.5	13.5	10.5	10.5	16.5	13.5	8.0	13.5	6.5	9.6	5.4	6.1	4.5
38.0	19.1	13.5	10.3	10.3	15.8	13.5	7.8	13.3	6.3	9.3	5.3	5.9	4.4
40.0	17.6	13.5	10.0	10.0	15.1	13.5	7.6	12.8	6.1	9.1	5.1	5.7	4.3
42.0	16.2	13.5	9.8	9.8	14.5	13.5	7.5	12.2	6.0	9.0	5.0	5.5	4.1
44.0	15.0	13.5	9.6	9.6	13.9	13.5	7.3	11.7	5.8	8.7	4.8	5.4	4.0
46.0	13.8	13.5	9.5	9.5	13.4	13.4	7.1	11.3	5.6	8.5	4.6	5.1	3.9
48.0	12.8	12.8	9.3	9.3	12.9	12.9	7.0	10.8	5.5	8.3	4.5	5.0	3.8
50.0	11.8	11.8	9.1	9.1	12.3	12.3	6.9	10.5	5.4	8.0	4.5	4.9	3.7
52.0	11.0	11.0	9.0	9.0	11.5	11.5	6.7	10.1	5.3	7.8	4.4	4.7	3.6
54.0	10.3	10.3	8.9	8.9	10.6	10.6	6.6	9.8	5.2	7.6	4.3	4.5	3.5
56.0	9.5	9.5	8.8	8.8	9.9	9.9	6.5	9.5	5.1	7.5	4.1	4.4	3.4
58.0	8.8	8.8	8.8	8.8	9.3	9.3	6.4	9.1	5.0	7.3	4.0	4.3	3.4
60.0	8.3	8.3	8.4	8.4	8.6	8.6	6.4	8.9	5.0	7.1	4.0	4.2	3.2
64.0	8.2/60.3	8.0/61.0	8.1/60.9	8.1/61.7	7.5	7.5	6.2	8.1	4.8	6.9	3.8	4.0	3.1
68.0					7.0/66.0	6.7/66.7	6.2/67.8	7.0	4.7	6.5	3.7	3.8	3.0
72.0								6.1	4.6	6.4	3.6	3.6	2.9
76.0								6.0/72.5	4.6/73.9	5.6	3.5	3.5	2.8
80.0										5.2/78.2	3.5	3.4	2.7
84.0												3.2/83.9	2.7
86.1													2.7
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	57.90												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
14.1	27.0	13.5/14.3											
16.0	27.0	13.5	13.8/17.6		23.2/16.1	13.5/16.3							
18.0	27.0	13.5	13.7	13.5/18.1	22.7	13.5		13.5/18.2					
20.0	27.0	13.5	13.4	13.4	22.2	13.5	10.1/21.9	13.5		11.8/20.1			
22.0	27.0	13.5	13.0	13.0	21.7	13.5	10.1	13.5		11.5		8.1/22.1	
24.0	27.0	13.5	12.6	12.6	21.3	13.5	9.7	13.5	7.7/25.7	11.1		8.0	
26.0	27.0	13.5	12.1	12.1	20.8	13.5	9.4	13.5	7.6	10.9		7.6	
28.0	25.8	13.5	11.8	11.8	20.4	13.5	9.1	13.5	7.4	10.6	6.1/29.5	7.4	
30.0	24.5	13.5	11.5	11.5	19.6	13.5	8.8	13.5	7.1	10.4	6.0	7.0	
32.0	23.2	13.5	11.2	11.2	18.7	13.5	8.6	13.5	7.0	10.1	5.8	6.8	4.7/33.2
34.0	22.1	13.5	10.9	10.9	17.7	13.5	8.3	13.5	6.8	10.0	5.6	6.5	4.6
36.0	20.6	13.5	10.6	10.6	17.0	13.5	8.1	13.5	6.5	9.7	5.5	6.3	4.5
38.0	18.9	13.5	10.4	10.4	16.2	13.5	7.9	13.4	6.4	9.5	5.3	6.0	4.4
40.0	17.3	13.5	10.1	10.1	15.5	13.5	7.7	13.1	6.2	9.3	5.1	5.8	4.3
42.0	16.0	13.5	10.0	10.0	14.9	13.5	7.5	12.6	6.0	9.1	5.0	5.6	4.1
44.0	14.7	13.5	9.8	9.8	14.3	13.5	7.4	12.1	5.9	8.8	4.9	5.4	4.0
46.0	13.6	13.5	9.6	9.6	13.8	13.5	7.2	11.6	5.8	8.6	4.8	5.3	4.0
48.0	12.6	12.6	9.4	9.4	13.1	13.1	7.0	11.1	5.6	8.4	4.6	5.1	3.9
50.0	11.6	11.6	9.3	9.3	12.1	12.1	7.0	10.8	5.5	8.1	4.5	5.0	3.7
52.0	10.8	10.8	9.1	9.1	11.2	11.2	6.8	10.4	5.4	8.0	4.4	4.8	3.7
54.0	10.0	10.0	9.0	9.0	10.5	10.5	6.7	10.1	5.3	7.8	4.3	4.6	3.5
56.0	9.3	9.3	8.9	8.9	9.7	9.7	6.6	9.8	5.1	7.6	4.2	4.5	3.5
58.0	8.6	8.6	8.8	8.8	9.1	9.1	6.5	9.5	5.1	7.4	4.1	4.4	3.4
60.0	8.1	8.1	8.2	8.2	8.4	8.4	6.4	9.0	5.0	7.3	4.0	4.3	3.3
64.0	7.3/62.9	7.1/63.6	7.1/63.6	7.0	7.3	7.3	6.3	7.9	4.9	7.0	3.9	4.0	3.2
68.0				6.8/64.4	6.4	6.4	6.2	6.8	4.8	6.7	3.7	3.9	3.0
72.0					6.2/68.7	6.2/69.4	6.1/70.5	6.0	4.6	6.2	3.7	3.7	2.9
76.0								5.4/75.1	4.6	5.4	3.5	3.5	2.9
80.0									4.6/76.6	4.7	3.5	3.4	2.7
84.0										4.5/80.8	3.5/82.7	3.3	2.7
88.0												3.2/86.6	2.7
91.4													2.7/88.8
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	60.95												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
14.1	27.0/14.6	13.5/14.8											
16.0	27.0	13.5			23.2/16.5	13.5/16.7							
18.0	27.0	13.5	13.8/18.1	13.5/18.5	22.8	13.5		13.5/18.7					
20.0	27.0	13.5	13.5	13.5	22.3	13.5		13.5		11.7/20.6			
22.0	27.0	13.5	13.1	13.1	21.8	13.5	10.1/22.3	13.5		11.5		8.1/22.5	
24.0	27.0	13.5	12.6	12.6	21.4	13.5	9.8	13.5		11.3		8.0	
26.0	27.0	13.5	12.3	12.3	21.0	13.5	9.5	13.5	7.7/26.1	11.0		7.8	
28.0	26.5	13.5	12.0	12.0	20.6	13.5	9.2	13.5	7.5	10.7	6.0/29.9	7.5	
30.0	25.2	13.5	11.6	11.6	20.1	13.5	8.9	13.5	7.3	10.5	6.0	7.4	
32.0	23.9	13.5	11.3	11.3	19.1	13.5	8.6	13.5	7.0	10.2	5.9	7.2	4.9/33.7
34.0	22.3	13.5	11.1	11.1	18.2	13.5	8.5	13.5	6.8	10.0	5.7	7.0	4.9
36.0	20.3	13.5	10.8	10.8	17.4	13.5	8.2	13.5	6.6	9.8	5.5	6.9	4.6
38.0	18.7	13.5	10.6	10.6	16.7	13.5	8.0	13.5	6.5	9.6	5.4	6.6	4.5
40.0	17.1	13.5	10.3	10.3	16.0	13.5	7.8	13.3	6.3	9.3	5.2	6.6	4.4
42.0	15.7	13.5	10.1	10.1	15.3	13.5	7.6	12.8	6.1	9.1	5.0	6.4	4.3
44.0	14.5	13.5	9.9	9.9	14.8	13.5	7.5	12.3	6.0	9.0	4.9	6.2	4.1
46.0	13.3	13.5	9.7	9.7	13.8	13.5	7.3	11.9	5.8	8.8	4.8	6.0	4.0
48.0	12.3	12.3	9.6	9.6	12.8	12.8	7.1	11.5	5.7	8.6	4.6	6.0	3.9
50.0	11.3	11.3	9.4	9.4	11.8	11.8	7.0	11.1	5.5	8.4	4.5	5.8	3.8
52.0	10.5	10.5	9.3	9.3	11.0	11.0	6.9	10.7	5.5	8.1	4.5	5.6	3.7
54.0	9.7	9.7	9.1	9.1	10.1	10.1	6.8	10.3	5.4	8.0	4.4	5.5	3.6
56.0	9.0	9.0	9.0	9.0	9.4	9.4	6.6	10.0	5.3	7.8	4.3	5.4	3.5
58.0	8.3	8.3	8.6	8.6	8.8	8.8	6.5	9.3	5.1	7.6	4.1	5.2	3.4
60.0	7.7	7.7	7.9	7.9	8.1	8.1	6.5	8.7	5.0	7.5	4.1	5.0	3.4
64.0	6.6	6.6	6.8	6.8	7.0	7.0	6.4	7.5	4.9	7.1	4.0	4.8	3.2
68.0	6.3/65.6	6.0/66.3	6.2/66.2	6.0/67.0	6.0	6.0	6.2	6.5	4.8	6.8	3.8	4.6	3.0
72.0					5.3/71.3	5.1	5.5	5.6	4.7	5.9	3.7	4.4	3.0
76.0							5.3/73.1	4.9	4.6	5.1	3.6	4.2	2.9
80.0								4.5/77.7	4.5/79.2	4.4	3.5	4.0	2.8
84.0										3.9/83.5	3.5	3.9	2.7
88.0											3.5/85.3	3.4	2.7
91.4												3.2/89.2	2.7
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	64.00												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
15.0	27.0	13.5/15.2											
16.0	27.0	13.5			23.1/17.0	13.5/17.2							
18.0	27.0	13.5	13.8/18.5	13.5/19.0	22.9	13.5		13.5/19.1					
20.0	27.0	13.5	13.6	13.5	22.4	13.5		13.5		11.7/21.0			
22.0	27.0	13.5	13.1	13.1	22.0	13.5	10.1/22.8	13.5		11.6		8.1/23.0	
24.0	27.0	13.5	12.8	12.8	21.5	13.5	9.8	13.5		11.3		8.0	
26.0	27.0	13.5	12.4	12.4	21.1	13.5	9.6	13.5	7.7/26.6	11.1		7.8	
28.0	27.0	13.5	12.1	12.1	20.7	13.5	9.3	13.5	7.5	10.8		7.6	
30.0	25.8	13.5	11.8	11.8	20.2	13.5	9.0	13.5	7.3	10.6	6.0/30.4	7.4	
32.0	23.8	13.5	11.5	11.5	19.6	13.5	8.8	13.5	7.0	10.3	5.9	7.3	
34.0	21.9	13.5	11.2	11.2	18.7	13.5	8.5	13.5	6.9	10.1	5.7	7.0	4.9/34.1
36.0	20.1	13.5	10.9	10.9	17.8	13.5	8.3	13.5	6.7	9.8	5.5	6.9	4.7
38.0	18.3	13.5	10.6	10.6	17.1	13.5	8.1	13.5	6.5	9.6	5.4	6.7	4.5
40.0	16.7	13.5	10.5	10.5	16.4	13.5	7.9	13.4	6.4	9.5	5.3	6.5	4.4
42.0	15.3	13.5	10.3	10.3	15.8	13.5	7.8	13.1	6.1	9.3	5.1	6.4	4.3
44.0	14.1	13.5	10.1	10.1	14.6	13.5	7.5	12.7	6.0	9.1	5.0	6.3	4.1
46.0	13.0	13.0	9.8	9.8	13.5	13.5	7.4	12.2	5.9	8.8	4.9	6.1	4.0
48.0	12.0	12.0	9.7	9.7	12.4	12.4	7.3	11.8	5.8	8.7	4.7	6.0	4.0
50.0	11.0	11.0	9.5	9.5	11.5	11.5	7.1	11.3	5.6	8.5	4.6	5.9	3.8
52.0	10.1	10.1	9.3	9.3	10.6	10.6	7.0	11.0	5.5	8.4	4.5	5.7	3.7
54.0	9.3	9.3	9.3	9.3	9.8	9.8	6.9	10.5	5.4	8.2	4.4	5.5	3.7
56.0	8.6	8.6	9.0	9.0	9.1	9.1	6.8	9.7	5.3	8.0	4.3	5.5	3.5
58.0	8.0	8.0	8.3	8.3	8.4	8.4	6.6	9.1	5.2	7.8	4.2	5.3	3.5
60.0	7.4	7.4	7.6	7.6	7.8	7.8	6.5	8.4	5.1	7.5	4.1	5.2	3.4
64.0	6.3	6.3	6.5	6.5	6.6	6.6	6.4	7.2	5.0	7.3	4.0	4.9	3.2
68.0	5.3	5.3	5.4	5.4	5.6	5.6	6.2	6.2	4.9	6.5	3.9	4.6	3.1
72.0	5.3/68.2	5.2/68.9	5.2/68.9	5.1/69.7	4.8	4.8	5.3	5.3	4.7	5.5	3.7	4.5	3.0
76.0					4.5/73.9	4.3/74.7	4.4/75.8	4.5	4.6	4.8	3.7	4.3	2.9
80.0								3.9	4.0	4.0	3.5	4.1	2.8
84.0								3.7/80.4	3.7/81.9	3.4	3.5	3.6	2.7
88.0										3.1/86.1	3.0	3.0	2.7
92.0												2.5/91.8	2.7
96.0													2.5/94.0
96.7													
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

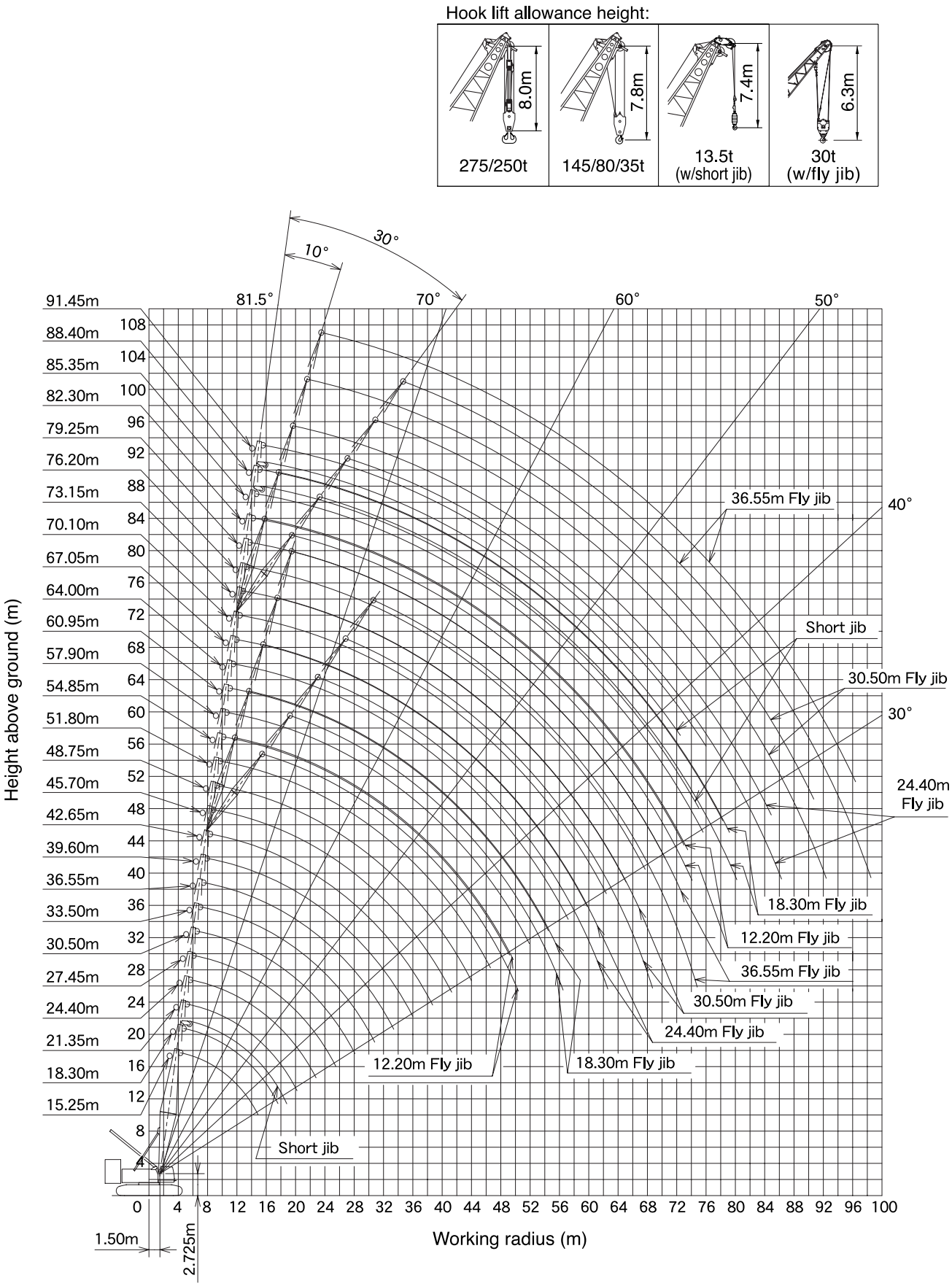
Boom length(m)	67.05												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
15.0	27.0/15.5	13.5/15.7											
16.0	27.0	13.5			23.2/17.4	13.5/17.6							
18.0	27.0	13.5	13.8/19.0	13.5/19.4	23.1	13.5		13.5/19.6					
20.0	27.0	13.5	13.7	13.5	22.6	13.5		13.5		11.6/21.5			
22.0	27.0	13.5	13.3	13.3	22.1	13.5	10.1/23.2	13.5		11.6		8.1/23.4	
24.0	27.0	13.5	12.9	12.9	21.7	13.5	9.9	13.5		11.3		8.1	
26.0	27.0	13.5	12.5	12.5	21.2	13.5	9.6	13.5	7.7/27.0	11.1		7.9	
28.0	26.2	13.5	12.2	12.2	20.8	13.5	9.3	13.5	7.5	10.8		7.6	
30.0	25.1	13.5	11.8	11.8	20.4	13.5	9.1	13.5	7.4	10.6	6.0/30.8	7.3	
32.0	23.2	13.5	11.6	11.6	20.0	13.5	8.8	13.5	7.1	10.4	6.0	7.0	
34.0	21.2	13.5	11.3	11.3	19.1	13.5	8.6	13.5	6.9	10.1	5.8	6.8	4.6/34.6
36.0	19.5	13.5	11.1	11.1	18.3	13.5	8.4	13.5	6.8	10.0	5.6	6.5	4.5
38.0	17.9	13.5	10.8	10.8	17.5	13.5	8.2	13.5	6.5	9.8	5.5	6.3	4.5
40.0	16.3	13.5	10.6	10.6	16.8	13.5	8.0	13.5	6.4	9.6	5.3	6.1	4.4
42.0	15.0	13.5	10.3	10.3	15.5	13.5	7.8	13.3	6.3	9.3	5.1	5.9	4.3
44.0	13.7	13.5	10.1	10.1	14.3	13.5	7.6	13.0	6.1	9.1	5.0	5.7	4.1
46.0	12.6	12.6	10.0	10.0	13.1	13.1	7.5	12.5	6.0	9.0	4.9	5.5	4.0
48.0	11.6	11.6	9.8	9.8	12.1	12.1	7.4	12.1	5.8	8.8	4.8	5.4	4.0
50.0	10.6	10.6	9.6	9.6	11.1	11.1	7.2	11.6	5.7	8.6	4.6	5.2	3.9
52.0	9.8	9.8	9.5	9.5	10.2	10.2	7.1	11.0	5.6	8.4	4.5	5.0	3.7
54.0	9.0	9.0	9.3	9.3	9.4	9.4	7.0	10.1	5.5	8.2	4.5	4.9	3.7
56.0	8.3	8.3	8.6	8.6	8.6	8.6	6.9	9.3	5.4	8.0	4.4	4.8	3.6
58.0	7.5	7.5	7.9	7.9	8.0	8.0	6.8	8.6	5.3	7.8	4.3	4.6	3.5
60.0	7.0	7.0	7.2	7.2	7.4	7.4	6.6	8.0	5.2	7.6	4.1	4.5	3.4
64.0	5.9	5.9	6.0	6.0	6.2	6.2	6.5	6.9	5.0	7.1	4.0	4.3	3.2
68.0	4.9	4.9	5.0	5.0	5.3	5.3	5.9	5.9	4.9	6.1	3.9	4.1	3.2
72.0	4.3/70.9	4.2/71.6	4.3/71.5	4.1	4.4	4.4	4.9	5.0	4.8	5.2	3.7	3.9	3.0
76.0				4.0/72.3	3.7	3.7	4.0	4.1	4.5	4.4	3.7	3.7	3.0
80.0					3.5/76.6	3.5/77.3	3.5/78.4	3.5	3.7	3.7	3.6	3.6	2.9
84.0								3.0/83.0	3.0	3.0	3.4	3.2	2.8
88.0									2.9/84.5	2.5	2.7	2.7	2.7
92.0										2.4/88.8	2.3/90.6	2.2	2.5
96.0												1.8/94.5	1.9
96.7													1.8
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Boom length(m)	70.10												
Jib length(m)	12.20				18.30			24.40		30.50		36.55	
Jib offset angle(°) / Working radius(m)	10		30		10		30	10	30	10	30	10	30
15.9	27.0												
16.0	27.0	13.5/16.1			23.0/17.9								
18.0	27.0	13.5	13.8/19.4	13.5/19.9	22.9	13.5/18.1							
20.0	27.0	13.5	13.8	13.5	22.6	13.5		13.5		11.6/21.9			
22.0	27.0	13.5	13.3	13.3	22.1	13.5	10.0/23.7	13.5		11.6		8.1/23.9	
24.0	26.1	13.5	13.0	13.0	21.7	13.5	10.0	13.5		11.3		8.1	
26.0	24.8	13.5	12.6	12.6	21.2	13.5	9.6	13.5	7.6/27.5	11.1		7.9	
28.0	23.7	13.5	12.3	12.3	20.9	13.5	9.4	13.5	7.6	10.9		7.6	
30.0	22.6	13.5	12.0	12.0	20.5	13.5	9.1	13.5	7.4	10.6	6.0/31.3	7.4	
32.0	21.6	13.5	11.7	11.7	20.2	13.5	8.9	13.5	7.1	10.5	6.0	7.1	
34.0	20.6	13.5	11.4	11.4	19.6	13.5	8.7	13.5	7.0	10.2	5.8	6.9	4.6/35.0
36.0	19.2	13.5	11.1	11.1	18.7	13.5	8.5	13.5	6.8	10.0	5.6	6.6	4.6
38.0	17.7	13.5	11.0	11.0	17.8	13.5	8.3	13.5	6.6	9.8	5.5	6.4	4.5
40.0	16.3	13.5	10.7	10.7	16.6	13.5	8.1	13.5	6.5	9.6	5.3	6.1	4.4
42.0	14.9	13.5	10.5	10.5	15.3	13.5	7.9	13.5	6.3	9.5	5.2	6.0	4.3
44.0	13.6	13.5	10.3	10.3	14.1	13.5	7.8	13.2	6.1	9.3	5.0	5.8	4.1
46.0	12.5	12.5	10.1	10.1	13.0	13.0	7.6	12.8	6.0	9.1	4.9	5.6	4.1
48.0	11.5	11.5	9.9	9.9	12.0	12.0	7.5	12.3	5.9	8.9	4.8	5.5	4.0
50.0	10.6	10.6	9.8	9.8	11.0	11.0	7.3	11.8	5.8	8.7	4.7	5.3	3.9
52.0	9.6	9.6	9.6	9.6	10.1	10.1	7.1	10.8	5.6	8.5	4.6	5.1	3.8
54.0	8.8	8.8	9.3	9.3	9.3	9.3	7.0	10.1	5.5	8.3	4.5	5.0	3.7
56.0	8.1	8.1	8.5	8.5	8.6	8.6	6.9	9.3	5.5	8.1	4.4	4.9	3.6
58.0	7.5	7.5	7.8	7.8	7.9	7.9	6.8	8.6	5.4	8.0	4.3	4.7	3.5
60.0	6.9	6.9	7.1	7.1	7.3	7.3	6.7	7.9	5.3	7.8	4.2	4.6	3.5
64.0	5.7	5.7	6.0	6.0	6.1	6.1	6.5	6.8	5.1	7.0	4.0	4.4	3.3
68.0	4.8	4.8	5.0	5.0	5.1	5.1	5.8	5.7	5.0	6.0	4.0	4.1	3.2
72.0	3.9	3.9	4.0	4.0	4.3	4.3	4.8	4.8	4.8	5.1	3.8	4.0	3.0
76.0	3.7/73.5	3.5/74.2	3.6/74.1	3.4/74.9	3.5	3.5	4.0	4.0	4.5	4.3	3.7	3.8	3.0
80.0					3.0/79.2	2.8/79.9	3.2	3.3	3.7	3.5	3.6	3.7	2.9
84.0							3.0/81.0	2.7	2.9	2.9	3.4	3.1	2.8
88.0								2.5/85.7	2.4/87.1	2.4	2.7	2.5	2.7
92.0										1.9/91.4	2.0	2.0	2.4
96.0											1.9/93.2	1.8/94.0	1.8
No.of part line	2	1	2	1	2	1	1	1	1	1	1	1	1

Notes — Fly jib capacities

1. Capacities included in these charts are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tons, and are rated in accordance with European EN13000 Standards in terms of machine stability and structural strength limitations; the figures surrounded by bold lines are based on factors other than those which would cause a tipping condition.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
   Hook block weight is as follows:
   35t·····0.9ton 13.5t ·····0.62ton
4. All capacities are rated for 360° slewing.
5. Least stable rated condition is over the side.
6. An 102.8ton counterweight and 18.0ton lower weight are required for all capacities on these charts.
7. Attachment must be erected and lowered over the ends of the crawler mounting.
8. Maximum fly jib length permitted — 36.55m.
   Maximum boom plus fly jib combination length permitted — 70.1m+36.55m.
9. Capacities when handling load off main boom head sheaves in case of mounting fly jibon top of boom are detailed; if required, please consult us or nearest distributor.

Liftcrane Working Ranges



Boom Combination Diagram

Boom length (m)	Boom combination	Boom length (m)	Boom combination
15.25	★ 7.6 7.6	51.80	7.6 6UH 6UH 12UH 12UH 7.6 7.6 12UH 12UH 12H 7.6
18.30	★ 7.6 3UH 7.6	54.85	★ 7.6 3UH 6UH 6UH 12UH 12UH 7.6 7.6 3UH 12UH 12UH 12H 7.6
21.35	7.6 6UH 7.6	57.90	7.6 6UH 12UH 12UH 12H 7.6
24.40	★ 7.6 3UH 6UH 7.6	60.95	★ 7.6 3UH 6UH 12UH 12UH 12H 7.6
27.45	7.6 6UH 6UH 7.6 7.6 12UH 7.6	64.00	7.6 6UH 6UH 12UH 12UH 12H 7.6 7.6 12UH 12UH 12H 12H 7.6
30.50	★ 7.6 3UH 6UH 6UH 7.6 7.6 3UH 12UH 7.6	67.05	★ 7.6 3UH 6UH 6UH 12UH 12UH 12H 7.6 7.6 3UH 12UH 12UH 12H 12H 7.6
33.50	7.6 6UH 12UH 7.6	70.10	7.6 6UH 12UH 12UH 12H 12H 7.6
36.55	★ 7.6 3UH 6UH 12UH 7.6	73.15	★ 7.6 3UH 6UH 12UH 12UH 12H 12H 7.6
39.60	★ 7.6 6UH 6UH 12UH 7.6 7.6 12UH 12UH 7.6	76.20	7.6 6UH 6UH 12UH 12UH 12H 12H 7.6 7.6 12UH 12UH 12H 12H 12H 7.6
42.65	★ 7.6 3UH 6UH 6UH 12UH 7.6 7.6 3UH 12UH 12UH 7.6	79.25	★ 7.6 3UH 6UH 6UH 12UH 12UH 12H 12H 7.6 7.6 3UH 12UH 12UH 12H 12H 12H 7.6
45.70	7.6 6UH 12UH 12UH 7.6	82.30	7.6 6UH 12UH 12UH 12H 12H 12H 7.6
48.75	★ 7.6 3UH 6UH 12UH 12UH 7.6	85.35	★ 7.6 3UH 6UH 12UH 12UH 12H 12H 12H 7.6
		88.40	7.6 6UH 6UH 12UH 12UH 12H 12H 12H 7.6
		91.45	★ 7.6 3UH 6UH 6UH 12UH 12UH 12H 12H 12H 7.6

Note: 1. The meanings of figures and symbols shown above are as follows:

7.6 : 7.62m HD base section

3UH : 3.05m Ultra HD boom extension

12UH : 12.0m Ultra HD boom extension

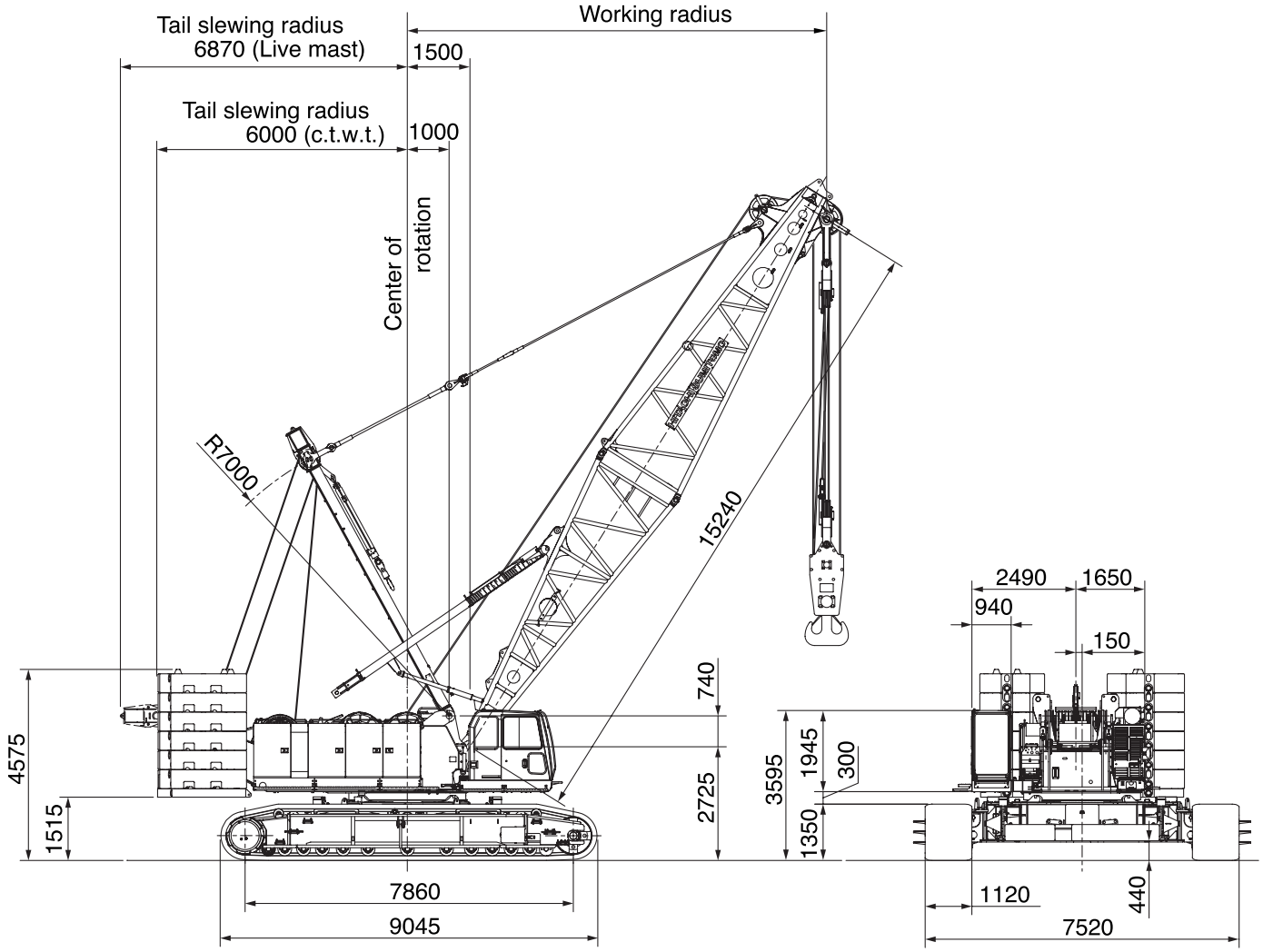
7.6 : 7.62m HD tapered top section

6UH : 6.10m Ultra HD boom extension

12H : 12.0m HD boom extension

2. A star mark (★) indicates manufacturer's recommended boom configuration in a consideration that it is able to set boom length in the pitch of 3.05 meters from its maximum length; other boom configuration with no star mark (★) is not able to do such an arrangement of boom length.

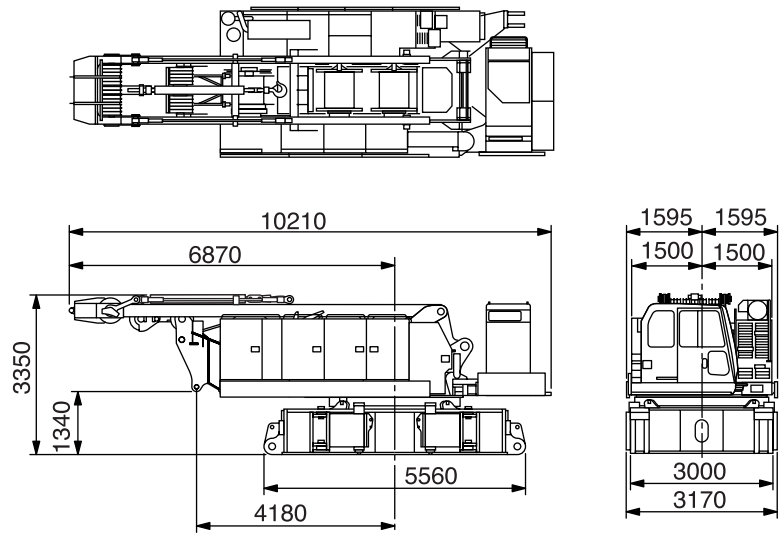
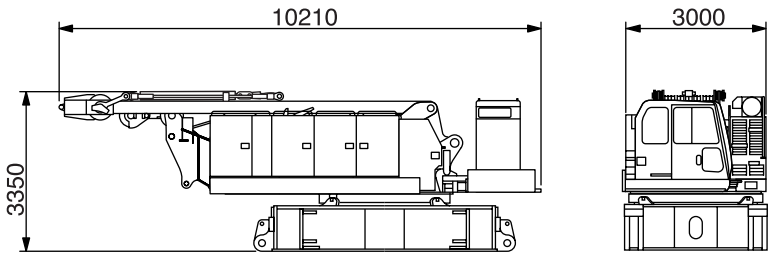
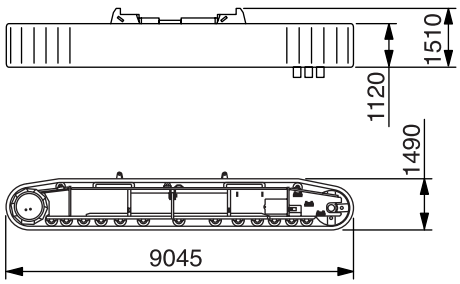
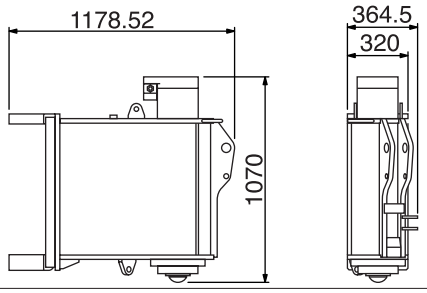
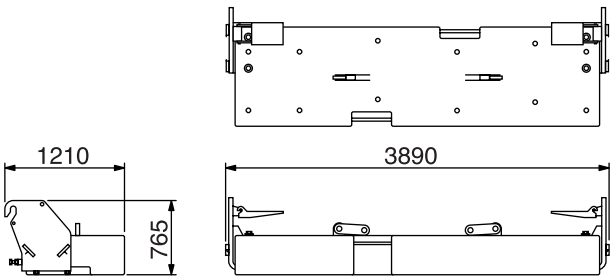
General Dimensions

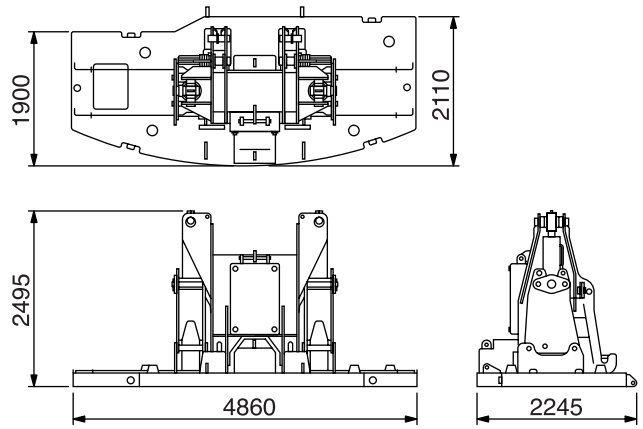
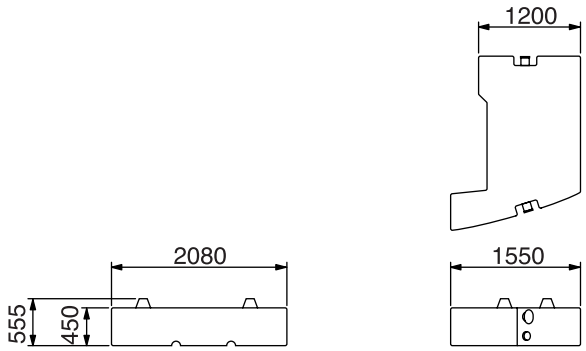
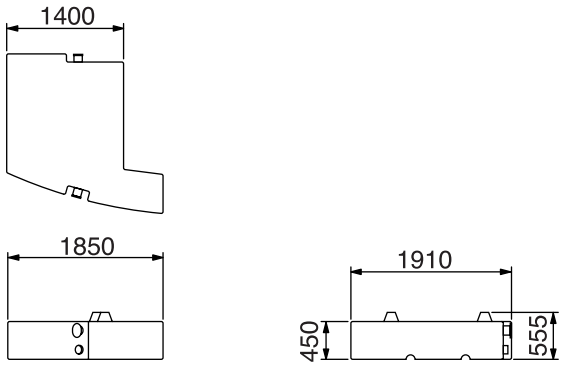
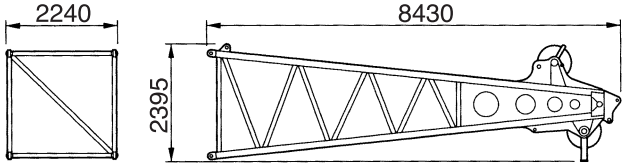
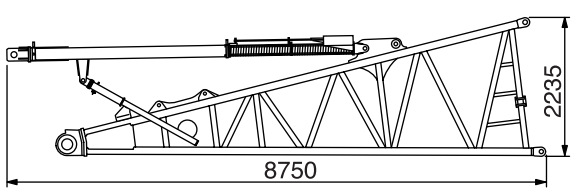


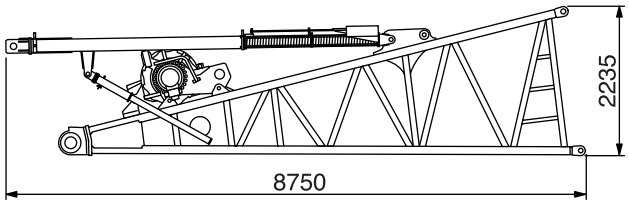
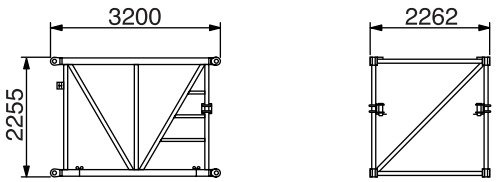
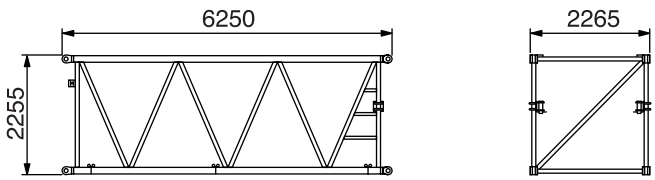
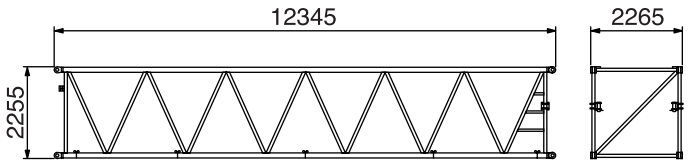
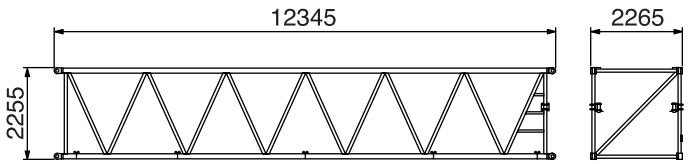
(in mm)

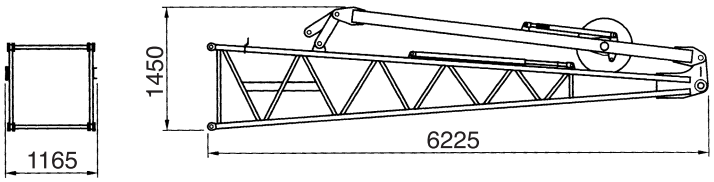
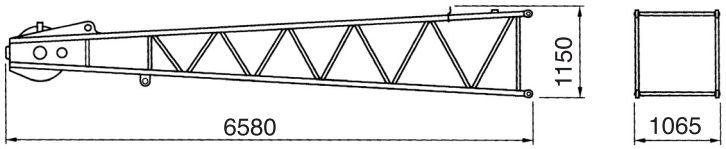
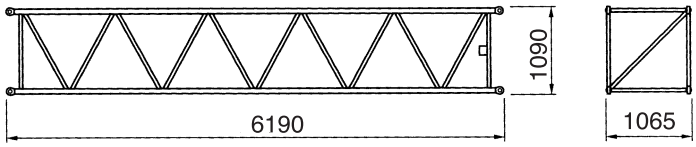
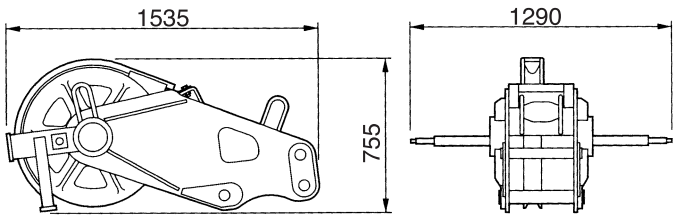
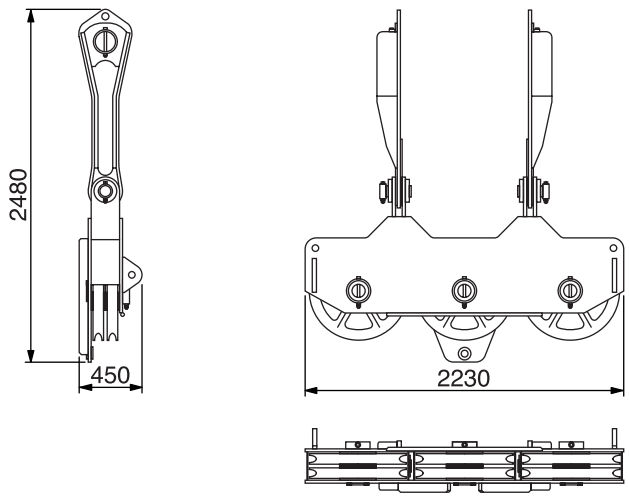
Note: The above general arrangement is under liftcrane application with 15.25m basic boom, and optional 275t hook block.

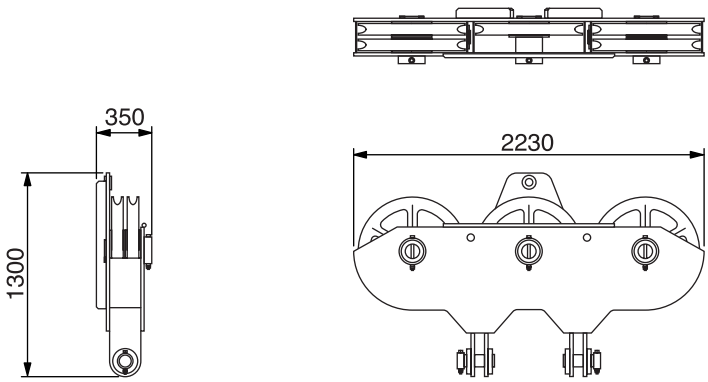
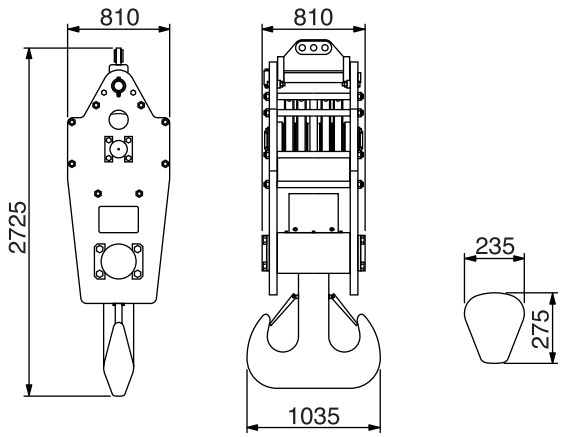
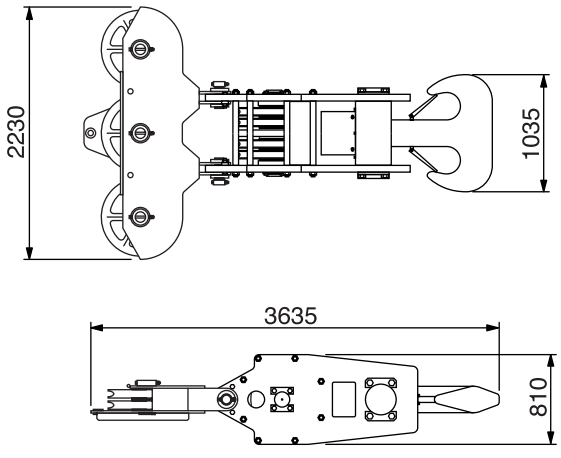
Transport Data

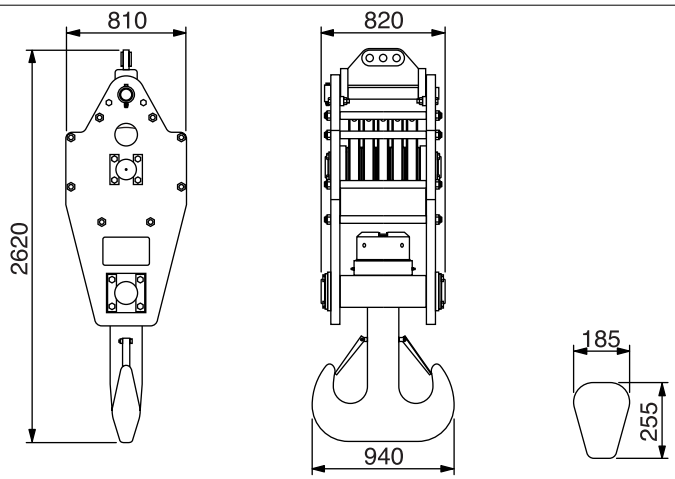
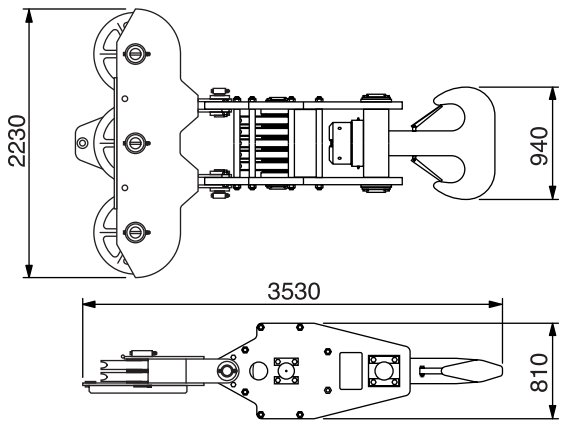
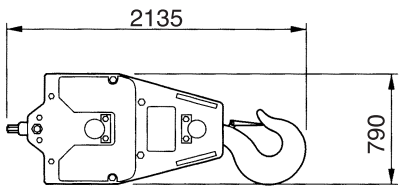
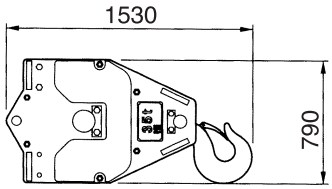
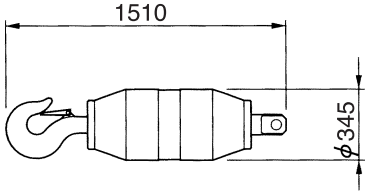
Description	Q'ty	Dimensions(mm)	Mass(kg)
Superstructure with: 1. Lower frame; 2. Boom live mast w/bridle; 3. Front drum cable; 4. B/H drum cable; 5. Lower frame jack-up device.	1		44,900
Superstructure with: 1. Lower frame; 2. Boom live mast w/bridle; 3. Front drum cable; 4. B/H drum cable.	1		42,500
Crawler Side Frame	2		@22,200
Lower Frame Jack-up Cylinder (w/beam)	4		@600
Lower Weight	2		@9,000

Description	Q'ty	Dimensions(mm)	Mass(kg)
Base Counterweight	1	 (w/counterweight removal device)	22,400
Counterweight “R”	6		@6,900
Counterweight “L”	6		@6,500
7.60m HD Boom Top Section	1	 (w/pendant ropes)	3,300
7.60m HD Boom Bottom Section (w/backstops)	1		5,000

Description	Q'ty	Dimensions(mm)	Mass(kg)
7.60m HD Boom Base Section (w/luffing jib hoist drum) (w/backstops)	1	Width: 2425  	7,500
3.05m Ultra HD Boom Extension	1	 (w/out pendant ropes)	800
6.10m Ultra HD Boom Extension	1	 (w/out pendant ropes)	1,400
12.20m Ultra HD Boom Extension	1	 (w/out pendant ropes)	2,500
12.20m HD Boom Extension	1	 (w/out pendant ropes)	2,300

Description	Q'ty	Dimensions(mm)	Mass(kg)
6.10m Fly Jib Base Section (w/strut)	1		1,250
6.10m Fly Jib Top Section	1	 (w/out pendant ropes)	650
6.10m Fly Jib Extension	1	 (w/out pendant ropes)	400
Short Jib	1		300
Upper 6-hanger Sheave Block	1	 Note: This is pinned to boom head shaft, and available to lift the load exceeding 145t, and up to 275t.	1,300

Description	Q'ty	Dimensions(mm)	Mass(kg)
Lower 5 -hanger Sheave Block	1	 Note: This is pinned to 145t hook block each of 275t/250t lift use, and available to lift the load exceeding 145t, and up to 275t/250t.	1,000
145t Hook Block	1	 Note: This is available for 275t lift with a lower 5-hanger sheave block.	3,300
275t Hook Block (w/5-hanger sheave block)	1		4,300

Description	Q'ty	Dimensions(mm)	Mass(kg)
145t Hook Block	1	 Note: This is available for 250t lift with a lower 5-hanger sheave block.	2,700
250t Hook Block (w/5-hanger sheave block)	1		3,700
80t Hook Block	1	 Width: 520	1,400
35t Hook Block	1	 Width: 395	900
13.5t Ball Hook Block	1		620

Note: All of dimensional figures are of with no export packing; in the case that an export packing is done on each cargo,the dimension in height or height/width or height/width/length increases appropriately, and then cubic measurement and mass each comes up accordingly.

Standard and Optional Equipment

	Standard equipment	Optional equipment
Superstructure	● Mitsubishi 6M70-TL diesel engine with a 272kW <370ps> rated output; ● Hydraulic system with three variable displacement axial piston pumps and one fixed displacement duplicate tandem gear pump; provided with an aluminum-make independent oil cooler; ● Control system with one each of quadruplicate and triplicate tandem valves and pilot-operated armchair single axis control levers; provided with motorcycle type "EPC" controller (easy-precise-minute engine rpm and hyd. pump oil flow control device), and specially-tailored pressure compensating valves. In addition, drum rotation speed control is desighed on; ● Front and rear main operating drum winches of 245kN<25t> line pull with 596mm dia. drum lagging driven by independent variable hyd. motor; each provided with multiple wet-disc type automatic brake with no free-fall function; ● Boom hoist mechanism with a twin-drum design driven by a hyd. motor with automatic brakes; provided with drum rotation speed control design; ● Slewing mechanism with heavy-duty turntable bearing; driven by two hyd. motors w/spring-applied, power hydraulically released multiple wet-disc brakes; provided with speed control design; ● Bail frame with a 10-sheave machinery and single center sheave; pinned to a rear part of upper revolving frame; ● 940mm wide, full-vision operator's cab with a stamped-and-rounded corner design and large front window; provided with an arrangement of armchair operator control station and instrument panel. Slewing-away and tilting mechanisms, and air-conditioner are provided too; ● 102.8ton counterweight; provided with a self-removal device for full weight; ● Machinery cab with hinged doors; ● 24-volt electrical system with two 12-volt batteries; ● Lighting system: • Two working lights; • One interior cab light; ● Rear view mirrors: ● Accessories; • AM/FM radio w/clock; • Engine hourmeter; • Engine tachometer;indicated on display panel of LMI; • Fuel gauge; • Eng. water temp. gauge; • Engine over-heat indicator; available on display panel of LMI; • Hyd. oil over-temp. indicator; available on display panel of LMI; • 24V electric outlet; • Dual, intermittent window shield wipers with washers; available on both front and roof windows; • Cigar lighter; • Ashtray; • Book holder; • Sunvisor; • Sunshade; • Cup holder; • Non-skid surfaces; • Cab floor mat; ● Cab front step; ● Cab side step; ● Gripping bar (for cab side step); ● Under-cover (under engine bed); ● Centralized lubrication system (for live mast and slewing circle).	● Tower head section sheave machinery; ● Luffing jib hoisting mechamism; ● Drum rollers; available on front/rear main drums; ● Catwalks, along both sides of machinery cab; ● Machinery cab railing; ● Working light; ● Re-fuel pump; ● Engine foot throttle; ● Microphone & loud speaker; ● Fire extinguisher; ● Electric cab fan; ● Add. air cleaner element; ● Reeving winch; ● Portable engine-hydraulic power pack; required when luffing jib att.

	Standard equipment	Optional equipment
Undercarriage	● 7,520mm width by 9,045mm long crawler lower with removable crawler side frames; provided with four of tip blocks with pins, lugs and hyd. joint-pin removal cylinders; ● Crawler drive units with shoe-in type traction motor with wet-disc type automatic brakes; ● Lower frame jack-up device w/4-vertical hyd. jack-up cylinder and remote control unit; ● 1,120mm wide track shoes; ● Manual track tension adjusting devices; ● 18ton lower weight; ● Lifetime lubricated track lower; ● Crawler side steps.	● Automatic track tension adjusting device, i/o manual one as std.
Liftcrane Att.	● 15.25m basic crane boom; 7.62m base section, and 7.62m tapered top section w/five head sheaves, and two guide sheaves; provided with boom foot pin removal cylinders; ● Boom live mast and bridle frame with a 12-sheave machinery; provided with "quick draw" power hyd. cylinder; ● Main crane hoist cable; 28mm dia./450m long; ● Boom hoist cable; 22.4mm dia./320m long.	● 3.05m ultra heavy-duty boom extension; ● 6.10m ultra heavy-duty boom extension; ● 12.20m ultra heavy-duty boom extension; ● 12.20m heavy-duty boom extension; ● 12.20m basic fly jib; 6.10m base and top sections with jib strut and boom / jib quyline pendants; ● 6.10m fly jib extension; ● Short jib; ● 275/145t duplex type hook (145t hook with 5 sheaves hanger block); ● 250/145t duplex type hook (145t hook with 5 sheaves hanger block); ● 80t hook block; ● 35t hook block; ● 13.5t ball hook; ● Six-hanger sheave block (pinned to boom head shaft); required together with 275t hook block when lifting load exceeds 145ton, and available up to 275ton lift; ● Five-hanger sheave block (pinned to boom head shaft); required together with 250t hook block when lifting load exceeds 145ton, and available up to 250ton lift. ● Aux. crane hoist cable, 28mm dia./350m long; available for fly jib application; ● Aux. crane hoist cable, 28mm/190m long available for aux. short jib application; ● Mid-point link; required when boom length exceeds 88.40m; ● Boom skywalk; available for all sections of lificrane main boom; ● Boom hooking bracket.
Liffting jib Att.		See Specifications catalogue of Luffing Jib Att.

	Standard equipment	Optional equipment
Safety Devices	● Load Moment Indicator; this is a computerized automatic over-load preventing system incl. total safe operation control system; provided with a graphic display panel indicating ten and some kinds of present lifting conditions; ● Lock lever (Fool proof shut-off lever); ● Emergency engine stop switch; ● Speed slowdown device; ● Before-work check monitor; ● LMI safety circuit-off switch; ● Main hook over-hoisting limiter; ● Boom over-hoisting and -lowering limiter; ● Secondary boom over hoisting limiter; ● Slewing alarm; ● Travel alarm; ● Slew lock; ● Independent lever lock; ● Main and aux. drum pawl locks; ● Boom hoist drum pawl lock (w/automatic locking device); ● Lifting height indication device; ● Boom angle indicator; ● Level gauge; fitted on floor of operator's cab and a part of undercarriage; ● Slewing brake lamp; ● Warning lamps; available for pilot line; ● Slewing brake safety circuit; ● Signal horn; ● Hook latch; ● Engine monitoring lamps; ● Travel direction arrow; ● Front-end att. erection mode.	● Aux. hook over-hoisting limiter; ● Three color percentage indicator; ● Cabin roof window guard; Followings are standard in case of luffing jib attachment: ● Luffing jib angle detector; ● Luffing jib load detector; ● Luffing jib hook over-hoisting limiter; ● Luffing jib over-hoisting and -lowering limiter; ● Luffing jib hoist drum pawl lock (if luffing jib hoist drum is optionally provided); ● Luffing jib backstops; ● Secondary luffing jib over-hoisting limiter; ● Anemometer (recommended for tower crane application); ● Rear post backstops (hyd. cylinder type).

MEMO

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- Units in this specification are shown under International System of Units; the figures in parenthesis are under Gravitational System of Units as old one.

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