



DYNAMIC & COMPACT

広がる可能性、高まる機動力。

SUMITOMOの先進技術が50tクレーンにまた新しい可能性を生み出しました。

豊かなパワー、多彩な機能、充実の安全装備に加えて、
ショートブームの標準化、後端半径の縮小等で機動力も一段とアップ。

さらにラフィングタワー、三段伸縮ブームも選択でき、
クラスをこえた幅広い活躍も可能。

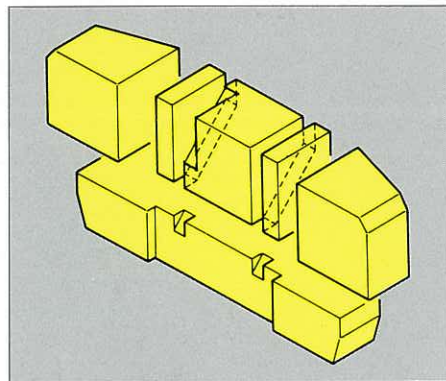
高度に過密化・複雑化する工事環境に、しなやかに対応します。

全油圧式クローラクレーン
LS-118RH-5

※カタログ写真はオプション仕様機

ワイドに広がった活躍領域。 新たな進化を遂げた、LS-118RH-5

後端半径を縮小し、
狭い現場での作業性をアップ



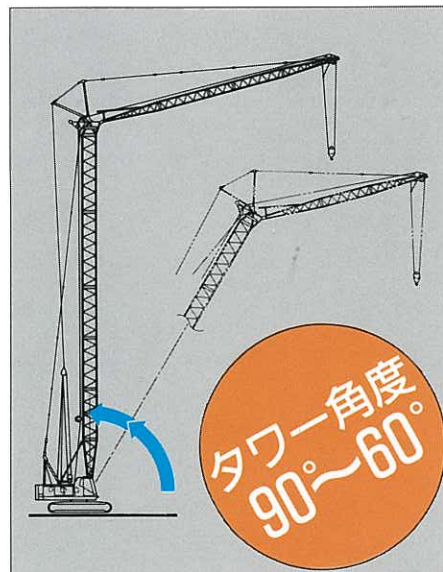
鋳物製の4分割カウンターウェイトを新たに採用。安定性を損なうことなく後端半径を25cmも縮小、市街地など狭い現場での作業性・機動性を高めました。

3段伸縮式の
ラチスブームも設定。



高所作業に対応、3段伸縮ブームも選択可能です。ブーム伸縮はオペレーターひとりでもOK。伸縮操作はブームサイドからリモコンオペレーション可能です。

作業領域を大きく広げる
ラフィングタワー新登場。



タワー角度90°↔60°可変式のラフィングタワーも新登場。コンパクトなボディで画期的に広い作業範囲。ひとクラス上の作業もラクにこなします。
(詳細は専用カタログをご参照ください)



PERFORMANCE & QUALITY

1 高度な複合操作も 思いのまま。

- ツインDMシステムで主巻・補巻は独立操作。
- 強力ラインプルで重作業に対応。
- EFCシステムでラクにこなすインチャージ操作。

2 ビッグな作業量を 低燃費で実現。

- 高効率エンジンに加えて省エネ油圧システム採用。
- 作業がはかどる優れた旋回性能。
- 耐久性・安定性抜群の強力な足まわり。

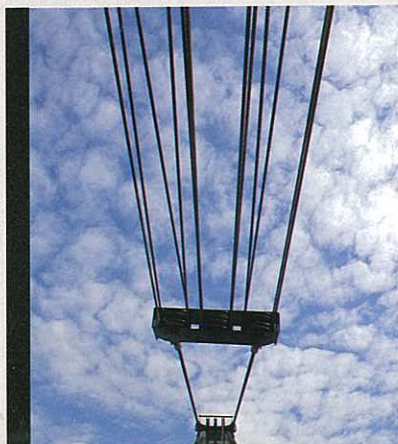
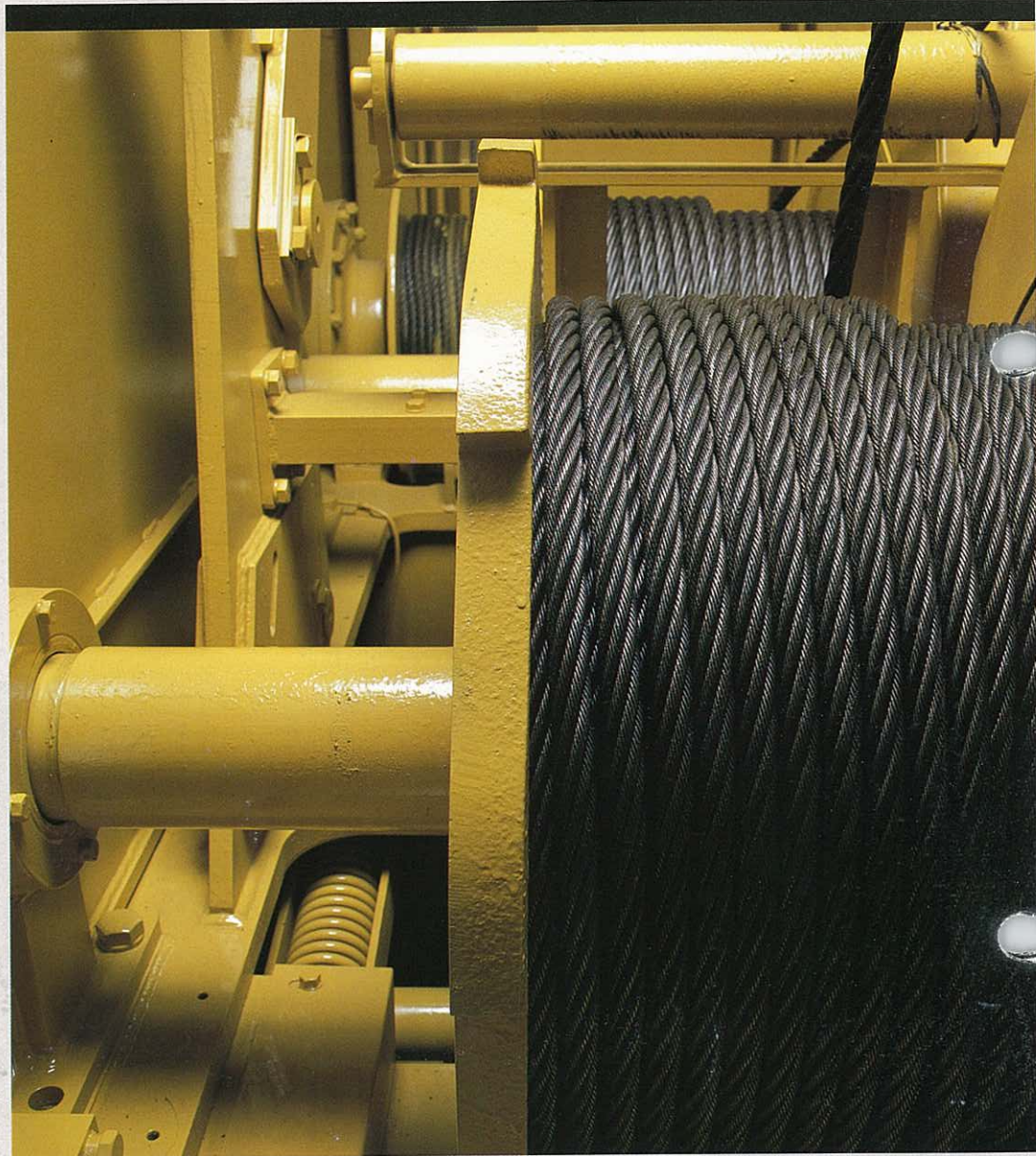
3 自然な一体感を生む 広視界・快適キャブ。

- 自在の操作を可能にする機能的なレイアウト。
- 優れた居住性が疲労を軽減。
- 環境にやさしい低騒音型。

4 大きな安心を装備 優れた安全性・整備性。

- サービスモニターで作動コンディションは一目瞭然。
- 新型モーメントリミッター採用。
- 安全性、メンテナンス性にきめ細かく配慮。

高度な複合動作も思いのまま、 先進のツインDMシステム。 (ダイナミック)



ダイナミック ツインDMシステムで 各ドラムの独立操作が可能。

主巻・補巻・第3ドラム（オプション）とも、各々独立した油圧モーターを装備したワンドラム&ワンモーター機構を採用。各ドラムの巻上・巻下操作が独立して簡単にできます。

50t×3.7m。 余裕の吊り上げ能力。

フルさに加えて、ブーム長さも最長51.97mと余裕たっぷり、重量物荷役、高所作業で真価を発揮します。

グンと能率アップ！ 作業も移動もスピーディ。

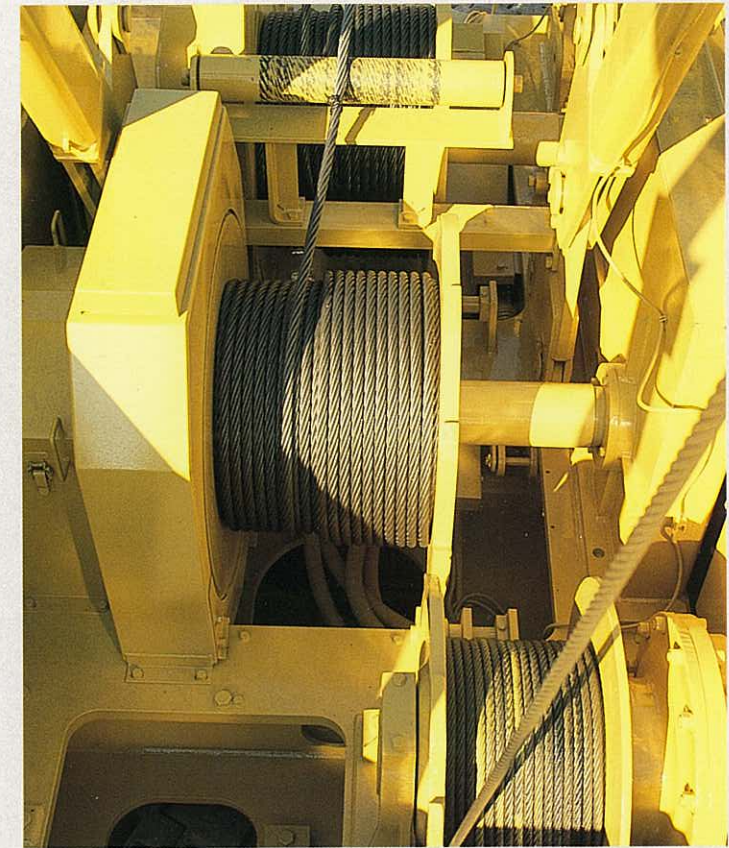
主・補巻の最大ロープ速度は80m/min、さらに走行スピードもアップし機動力抜群。作業の能率を大きく高めます。

強力ラインプルで、 重作業も余裕。

主・補巻独立ウインチが合わさった強力なラインプルで、重作業もラクラクこなします。

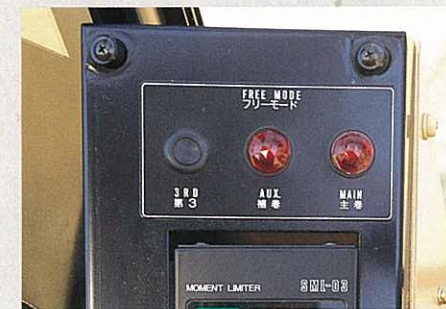
操作レバーは伸縮式、 好みに合わせて調整可能。

操作しやすい長さ、幅に調整できます。また、わずらわしいクラッチレバーの操作は不要、ゆったりしたポジションでラクに操作ができます。



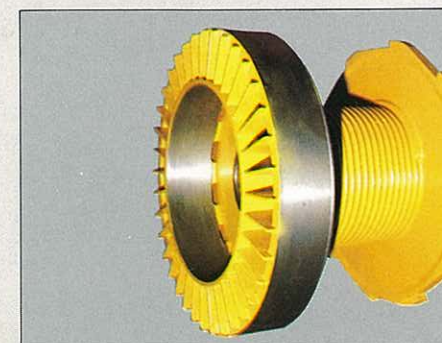
ワンタッチのスイッチ切換えで、 動力降下／フリー降下も自在。

レバー中立時作業に対応して、スイッチによるモード（クレーンモード・バケットモード）切換えで、オートブレーキ（自動）とフートブレーキの使い分けが可能です。



EFCシステムで、 高度なイン칭ング操作もラクラク。

レバー操作による高低2速の切換えはもちろん、微速操作用のポンプコントロールボタンによって、主・補巻の4速切換えが1本のレバーで簡単にできます。さらにエネルギーロスを低減する省エネ回路を加えたEFCシステムを採用。優れたイン칭ング性能と幅広い作業スピードの選択を可能にしています。



操作フィーリング抜群の ブレーキシステム

直接作動式ブレーキシステムを採用し、吊り荷を降ろす時のブレーキ・フィーリングを向上、高度なイン칭ング操作が軽快に行なえます。

心地良い開放感そして緊張感、
人の感覚を満たす快適キャブ。



ワイドな視界と素晴らしい居住性。
徹底した快適設計のニューキャブ。

キャブには5面ガラス窓、アルミサッシを採用し、前後・左右・上部とすべてにワイドな視界を確保。またフロアレバー方式のため、前面下方視界もワイド、巻き取りドラムも手に取るように見ることができます。さらに出入り口はスライドドア、後部ガラス以外はすべて自由な開度に開閉でき、抜群の開放感を実現。加えてキャブ内は内張りの装備やアンダーカバーの取り付けによって居住性をアップ、徹底した安全・快適設計を施しました。

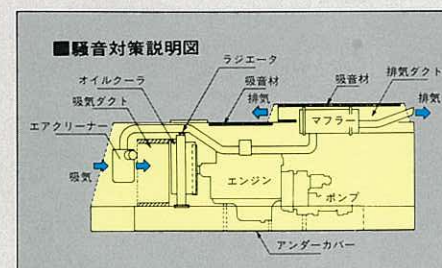
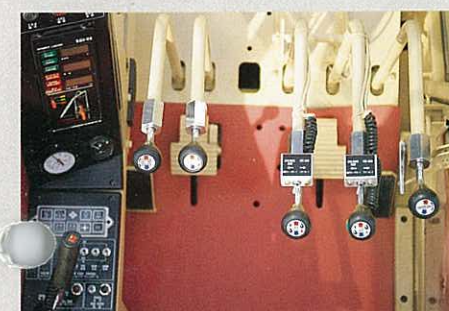


体格に合わせて調整自在の
フルリクライニングシート。

疲れにくく、座り心地抜群のヘッドレスト付きフルリクライニングシートを採用、体格や好みに合わせて上下・前後のポジション調整が簡単にできます。

国際企画 (ISO) にマッチした、
機能的なレバー配置。

合理的、機能的に配置された操作レバー。
長時間作業の疲労を軽減します。

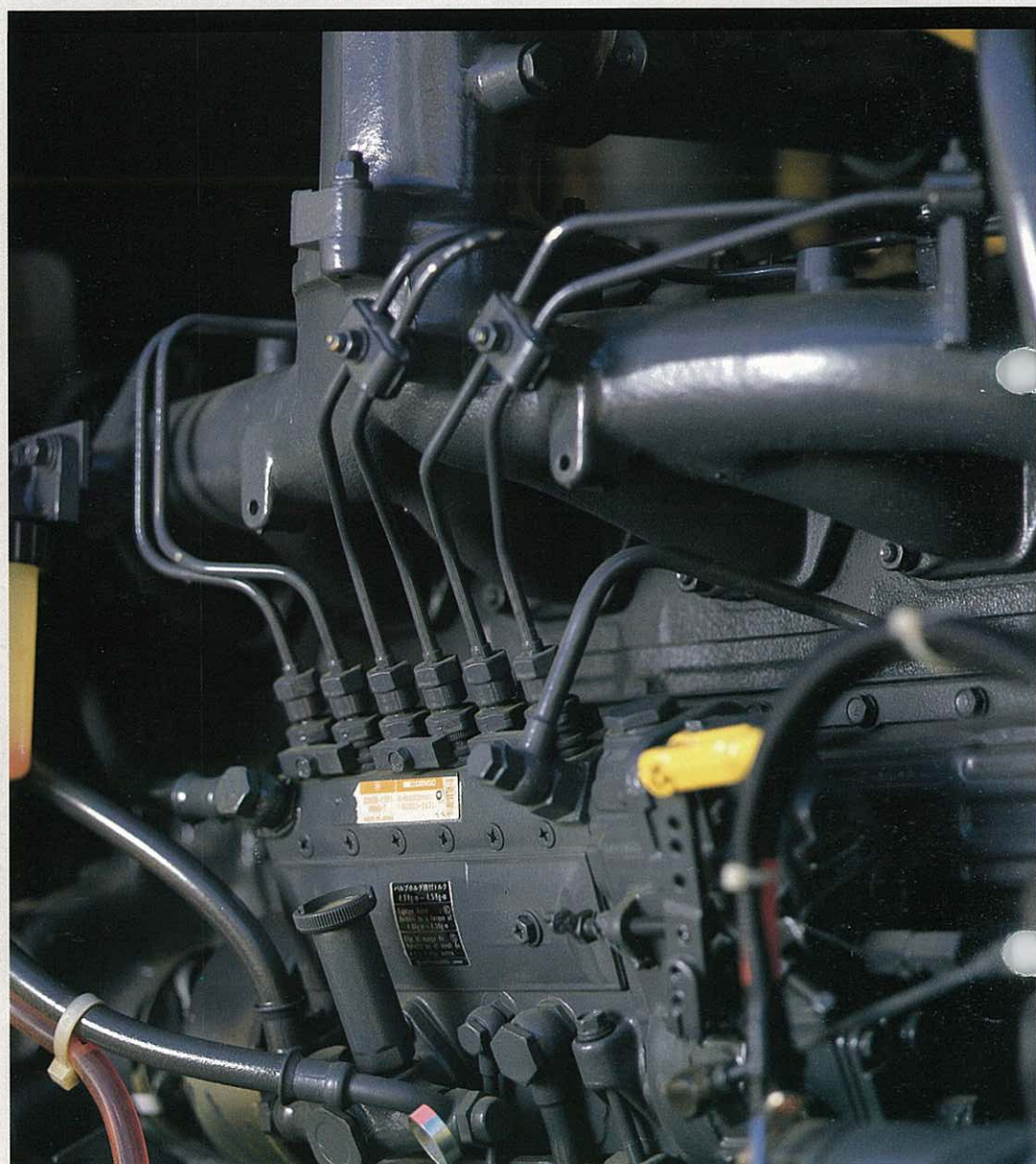


市街地や夜間の作業に対応、
60dB[A] (30m地点) の低騒音設計。

随所に入念な騒音対策を施し、クラスきっての静かさを実現。市街地や夜間の作業も安心です。

※騒音値は測定条件により異なります。

低燃費しかもビッグな作業量。
理想のパワー制御を具現化、



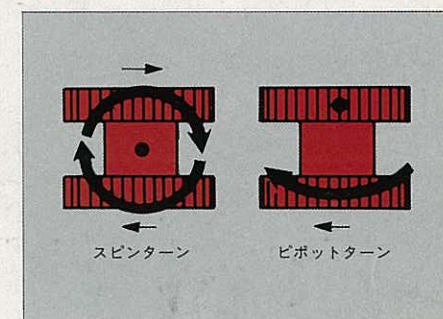
高効率エンジンと 省エネ油圧システムを採用

低速ターボ付の新型150馬力直噴エンジンの採用と、全馬力制御の油圧システム及び省エネ回路によって、エネルギーロスを最小に抑えてエンジンパワーをムダなく活用。大きな作業量を確保するとともに、約15%（当社比）の燃費低減化に成功しています。



パワフル&スムーズ 作業がはかどる優れた旋回性能。

コントロールバルブ直動式の採用等によってイン칭ング性能も一段とアップ、大きな旋回力がフローティング作業やバケット作業などに威力を発揮します。旋回保持操作はレバーを握ったままワンタッチでOK、位置決めも容易です。



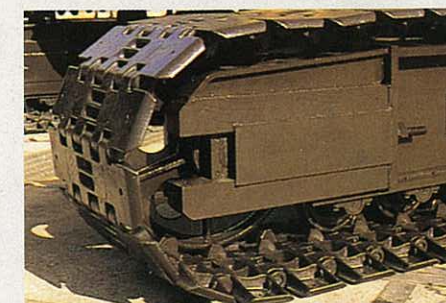
スピントーンや
ピポットターンも自由自在。
狭い現場での小移動もラクにこなします。



ドラム押さえ（オプション）

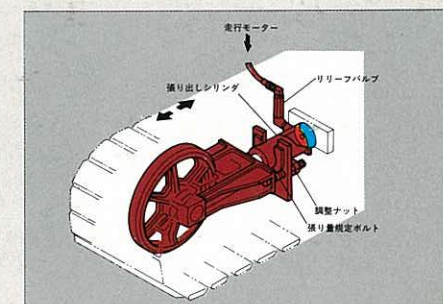
ロープ寿命を延長し、 ランニングコストを低減化

各ドラムには乱巻を防ぐ改良型平行溝を採用、さらにロープエンド式の新型モーメントリミッターの採用やワイドなドラム幅によってロープ寿命の延長をはかっています。



シュー張り調整の簡単な 油圧式自動緊張装置を採用。

フロントアイドラ部には油圧式自動緊張装置（実用新案）を採用。シュー張り調整が簡単なことはもちろん、走行時のショックを吸収し足まわりの損傷を防止する効果もあります。



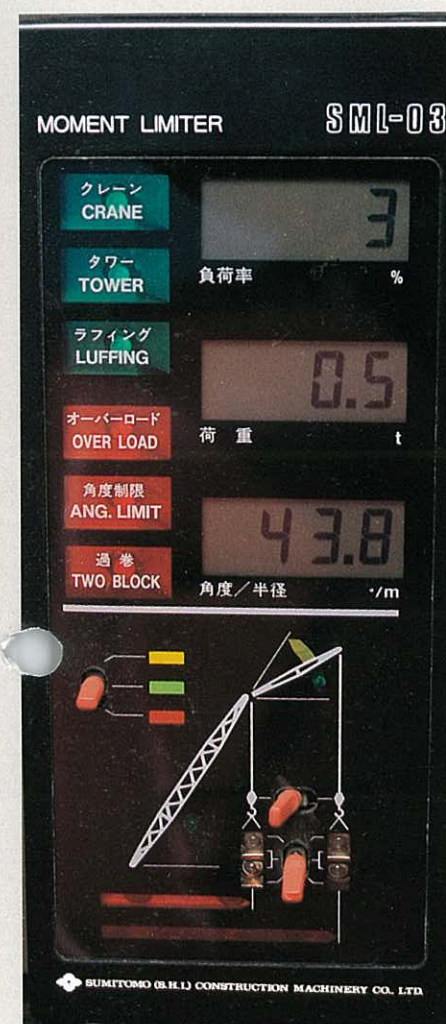
油圧式自動緊張装置



組立・分解も簡単。 移動・輸送にスピーディに対応。

ラクにできる組立作業。カウンタウェイトの取り付けも短いボルト2本で簡単にできます。またクローラ伸縮も独立レバーで走行しながら行うことができます。

充実の安全性、メンテナンス性。
 安心につつまれて能率アップ、



事故防止に効果を発揮する、
 二重、三重の入念な安全装備。

●フック過巻き停止装置 ●ブーム過俯仰停止装置 ●自動ブレーキ ●ブームバックストップ ●ドラムパウルロック ●インターロック装置

耐久性への配慮は万全、
 メンテナンスも手間いらず。

●足まわりはフローティングシール採用 ●ブーム、プライドルなどには無給脂ベアリング採用 ●ウインチまわりには無給脂ベアリング採用 ●ポールレース、マストは集中給脂採用

ドラム周りの広い足場スペースで、
 ワイヤロープの仕込みも簡単。

ドラム周りの足場スペースは広く、しかもすべり止め付きで、ワイヤロープの仕込みもラクに安全にできます。

新型モーメントリミッター採用で、
 ロープ制御の安全性を大幅アップ

●ブーム俯仰ロープエンド張力検出式を採用 ●信頼性、操作性、視認性に優れたデジタル表示 ●メモリーカセット使用、本体は各機種共通 ●ブーム長さ、ジブ長さ、掛数などの条件はデジスイッチで数値を設定 ●操作は片手でOK ●大容量カセットを使用し、差換えは不要です



荷重検出器

作動コンディションのチェックが
 ひと目でできるサービスモニター。

エンジンオイル、油圧、水温、冷却水量などの以上が、キャップ内で操作しながらひと目で確認できます。



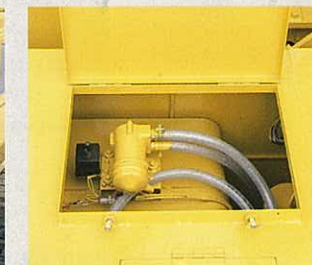
サービスモニター



旋回警報



便利な工具箱



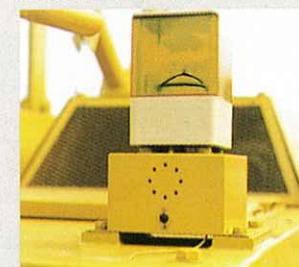
ビルジポンプ



ハウストア



マスト給脂



外部過負荷警報ランプ
 (オプション)



ステップ&すべり止め



Upper Machinery

UPPER FRAME: All-welded, precision machined unit.

TURNTABLE BEARING WITH INTEGRAL RING GEAR:

Outer race is bolted to upper frame, inner race with internal ring gear is bolted to lower frame. Swing pinion meshes with internal, integral ring gear. A machined surface is provided for mounting turntable bearing.

CONTROL SYSTEM: Remote controlled hydraulic servo for main hoist, aux. hoist, boom hoist and travel. Mechanical linkage type for swing. Working speed can be precisely controlled by lever stroke.

PUMP CONTROL SYSTEM: System reducing pump displacement enables both minute operation and saving energy.

HYDRAULIC SYSTEM: System combining variable displacement axial pumps and fixed displacement gear pumps provides both independent and combined operations of all functions.

Main hoist/aux. hoist/boom hoist — Axial piston motor with counterbalance valve.

Swing motor — Axial piston motor.

Travel motor — Axial piston motors with brake valves. Spring-applied/hydraulic-released multiple disc brakes are fitted.

Hydraulic oil reservoir — 160 liter capacity.

LOAD HOIST ASSEMBLY: Front (main) and rear (aux.) operating drums. Each driven by the bi-directional, axial piston motor through reduction gear powering the rope drum in either direction for hoisting or lowering load. 3rd drum equipped as optional extra.

Clutches — Power hydraulic actuated, internal expanding, self adjusting 2-shoe type.

Brakes — External contracting band type operated by foot pedal with locking latch. For crane mode, automatic brake (spring applied, hydraulically released) is applied when control lever in neutral position. For bucket mode, free-fall is available when control lever in neutral position.

Locks — Electrically operated drum lock pawl.

BOOM HOIST ASSEMBLY: Driven by the bi-directional, axial piston motor through reduction gear powering the rope drum in either direction for hoisting or lowering boom.

Brake — Spring applied, hydraulically released multiple disc type.

Lock — Electrically operated drum lock pawl.

SWING: Driven by axial piston motor, through reduction gear.

Brake — Brake is applied by spring and released by hydraulic cylinder.

Lock — Mechanically operated pin connection frame lock.

Speed — 3.0 rpm.

OPERATOR'S CAB: Full vision compartment with safety glass panels, the completely independent cab is insulated against noise and vibration.

COUNTERWEIGHT: Removable, 2 block mounted on rear of upper frame by bolts.

POWER UNIT:

Make & Model	HINO HO6CT
Type	Water-cooled, 4-cycle diesel engine
No. of cylinders	6
Bore & Stroke	108mm x 118mm
Displacement	6,485 cc
Rated output	150 ps/2,100 rpm
Max. torque	52 kg-m/1,600 rpm
Fuel tank	290 liters

Lower Machinery

LOWER FRAME: All welded robust rolled steel, box construction.

SIDE FRAMES: All welded robust rolled steel. Connected to lower frame by links and pins.

ROLLERS: Heat treated, mounted on bushings with floating seals requiring no further lubrication.

Bottom — 9 pcs. per side frame.

Top — 3 pcs. per side frame.

DRIVE SPROCKETS: Heat treated, involute splined to drive shaft mounted on antifriction bearings.

IDLERS: Heat treated, mounted on bushings with floating seals requiring no further lubrication.

TRACKS: Heat treated, self cleaning, two lug type, multiple hinged shoes, 59 pcs. per side frame.

Shoe width — 760 mm

Tractor type link shoe (58 pcs. per side frame) is available as option.

TRACK TENSION ADJUSTER: Adjusted by hydraulic cylinders at the idler blocks. Tension can be automatically released when abnormal load occurred on tracks.

TRAVEL AND STEER: Axial piston motor with reduction gear is located at inner drive end of each crawler side frame. Each track is driven simultaneously or individually for straight-line travel, or pivot turn, or the tracks can be counter-rotated for spin turns.

Brake — Spring applied, hydraulically released multiple disc brakes applied automatically when control lever in neutral position.

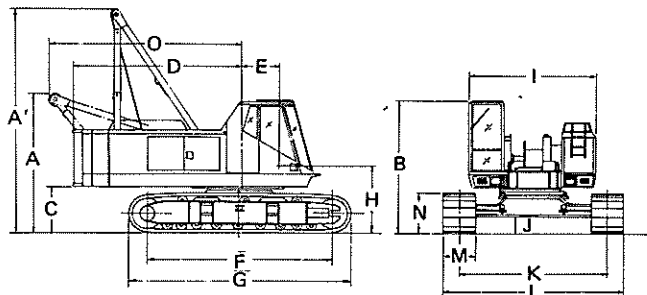
Speed — Two speed range

2.0 km/h — Pump control "OFF" (ordinary)

0.3 km/h — Pump control "ON"

General Dimensions

A : Height over low gantry unit	3.230m
A' : Height over high gantry unit	5.430m
B : Height of cab	3.105m
C : Counterweight ground clearance	1.100m
D : Radius of rear end	4.150m
E : Center of rotation to boom foot pin	0.950m
F : Center to center distance of tumbler	4.840m
G : Overall length of crawler	5.725m
H : Height from ground to boom foot pin	1.655m
I : Overall width of house	3.090m
J : Ground clearance	0.410m
K : Center to center distance of crawler	
extended	3.590m
retracted	2.540m
L : Overall width of crawler	
extended	4.350m
retracted	3.300m
M : Shoe width	0.760m
N : Height of shoe	0.965m
O : Tail swing radius at low gantry	4.720m



We are constantly improving our products and therefore reserve the right to change designs and specifications.

SUMITOMO (S.H.I.) CONSTRUCTION MACHINERY CO., LTD.

International sales Div., 1-21, Kanda, Nishiki-cho, Chiyoda-ku, Tokyo, Japan



CRANE BOOMS: Lattice construction; round tubular main chords, alloy hi-tens steel, with bracing of round steel tubing.

Boom connections In-line pin connections.

Basic boom Two-piece, 12.2m basic length; 6.1m base and 6.1m top section; 1.2m deep and 1.27m wide at connections.

Boom point machinery Five head sheaves mounted on antifriction bearings.

Boom extensions Available in 3.05m, 6.1m and 9.15m lengths with pendants. Maximum boom length 51.85m.

Jib Two-piece; 6.1m basic length with 3.05m long base and top sections, 0.5m deep and 0.61m wide at connections.

Jib extensions Available in 3.05m jib extensions. Maximum jib length 15.25m.

Boom plus jib length 42.7m + 15.25m

Angle main chords, with bracing of angle steel is available as option.

HOOK BLOCK:

50 t, four sheaves Standard

15 t, one sheave Optional extra

5 t, no sheave Standard for jib

GANTRY: Retractable high gantry.

LINE SPEED:

Drums	Root dia.	Type	Line speed (Hoisting, Lowering)		Cable dia.
			Pump control "OFF" (Ordinary)	Pump control "ON"	
Main hoist (Front)	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	20mm
Aux. hoist (Rear)	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	20mm
3rd drum (option)	320mm	Parallel grooved	65 m/min	12 m/min	16mm
Boom hoist	280mm	Parallel grooved	64 m/min	12 m/min	14mm

Notes:

1. Above line speed varies with load.
2. Above line speed is based on first layer.

HOIST REEVING:

Main hoist									
No. of parts of line	9	8	7	6	5	4	3	2	1
Max. load (t)	50.0	44.8	39.2	33.6	28.0	22.4	16.8	11.2	5.6

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
760mm	47.2t	0.60 kg/cm ²

With basic boom and counterweight.

Weight without counterweight (with basic boom): approx. 29.8 t.

COUNTERWEIGHT: Total . . . 14.4 t.

SAFETY DEVICE: Hook over hoist limiting device, boom over hoist limiting device, boom angle indicator, boom back stop, drum pawl lock for main, aux. and boom hoist drum safety valve in hydraulic circuit, swing alarm, load moment limiter (optional extra).

GRADEABILITY: 40% (22°)
with basic boom and counterweight



LS-118RH-5 CRANE CAPACITIES (WITH CRANE BOOM):

(in metric tons)

Working radius (m)	Boom length (m)													
	12.20	15.25	18.30	21.35	24.40	27.45	30.50	33.55	36.60	39.65	42.70	45.75	48.80	51.85
3.7	50.00													
4.0	44.00	43.50/3.9												
4.5	37.10	37.05	37.00											
5.0	30.90	30.80	30.70	30.50										
5.5	26.50	26.40	26.30	26.10	26.00									
6.0	23.60	23.50	23.40	23.30	23.10	23.00	19.20/6.6							
7.0	18.70	18.60	18.50	18.40	18.30	18.20	18.10	17.50/7.1	15.70/7.6					
8.0	16.58	15.40	15.30	15.20	15.10	15.00	14.90	14.80	14.70	13.90/8.2				
9.0	13.20	13.10	13.00	12.90	12.80	12.70	12.60	12.60	12.50	12.40	12.30	11.80/9.2		
10.0	11.60	11.50	11.40	11.30	11.20	11.10	11.00	10.90	10.80	10.70	10.60	10.50	10.40	
12.0	9.60/11.6	9.10	9.00	8.90	8.80	8.70	8.60	8.50	8.40	8.40	8.30	8.20	8.00	7.90
14.0		7.60	7.50	7.40	7.30	7.20	7.10	7.00	7.00	6.90	6.80	6.60	6.50	6.40
16.0		7.40/14.3	6.30	6.20	6.10	6.00	5.90	5.80	5.80	5.70	5.60	5.50	5.40	5.30
18.0			5.90/16.9	5.20	5.10	5.10	5.00	4.90	4.90	4.80	4.70	4.60	4.50	4.40
20.0				4.70/19.6	4.50	4.40	4.30	4.20	4.20	4.10	4.00	3.90	3.80	3.70
22.0					3.90	3.80	3.70	3.60	3.70	3.50	3.40	3.30	3.20	3.10
24.0						3.80/22.2	3.30	3.20	3.10	3.00	2.90	2.80	2.70	2.60
26.0							3.00/24.9	2.80	2.70	2.60	2.50	2.40	2.30	2.20
28.0								2.50/27.5	2.50	2.40	2.30	2.20	2.10	1.90
30.0									2.20	2.10	2.00	1.90	1.80	1.60
32.0										1.80	1.70	1.60	1.50	1.30
34.0											1.50/32.8	1.50	1.40	1.00

Notes:

- Capacities shown are in metric tons and are based on 75% of minimum tipping loads — over the side — with machine standing level on firm supporting surface under ideal job conditions. Deductions from the lifting crane capacities must be made for weight of hook block.

Kind of hook block	50 t	15 t	5 t
Weight of hook block (t)	0.75 t	0.30 t	0.12 t

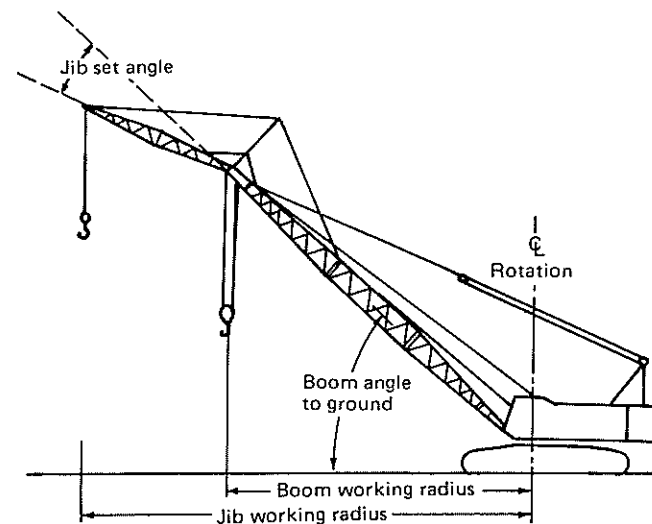
- When operating of the main boom peak sheaves with jib on boom the following deductions in machine lifting capacities must be made.

Jib length (m)	6.10	9.15	12.20	15.25
Weight to be deducted (t)	0.75	0.90	1.05	1.20

LS-118RH₅ JIB CAPACITIES:

(in metric tons)

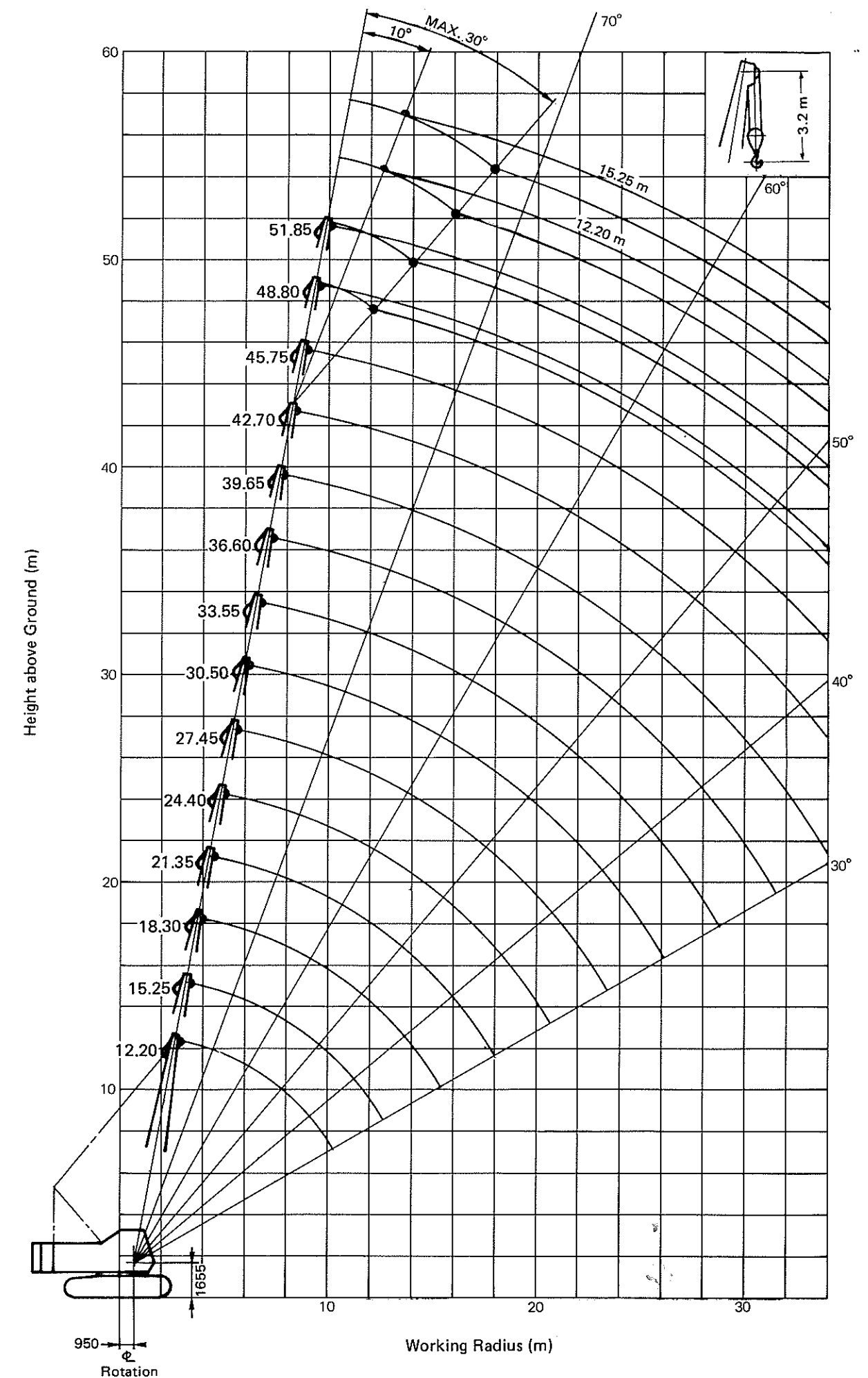
Jib length (m)	Jib set angle	Max. jib Capacities
6.10	10°	5.0
	30°	5.0
9.15	10°	5.0
	30°	5.0
12.20	10°	4.1
	30°	4.1
15.25	10°	3.3
	30°	3.3



Notes:

- The jib capacities are equal to the crane lifting capacities of the main boom on which the jib is fixed except that they are restricted by the maximum jib capacities shown left.
- Jib working radius does not exceed the working radius of the main boom which fits the jib.
- Deductions from the jib capacities must be made for weight of jib hook block (0.12 t).
- Available boom length to attach the jib is from 21.35m to 42.7m. The maximum jib length is 15.25m.
- The jib set angle to boom must not exceed 30°

LS-118RH-5 CRANE WORKING RANGES





SUMITOMO

LS-118RH5 Dragline 0.6 ~ 1.2 m³



DRAGLINE BOOMS: Lattice construction; round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.

Boom connections --- in-line pin connections

Basic boom --- Two-piece, 12.2m basic length; 6.1m base and 6.1m top section; 1.2m deep and 1.27m wide at connections.

Boom point machinery --- One head sheave mounted on anti-friction bearings.

Boom extensions --- Available in 3.05m, 6.1m and 9.14m lengths with pendants.

Angle main chords, with bracing of angle steel is available as option.

MAXIMUM DRAGLINE RATING: 5.0 t

GANTRY: Retractable high gantry.

LINE PULL AND LINE SPEED:

Drums	Root dia.	Type	Line speed (Hoisting, Lowering)		Line pull	Cable dia.
			Pump control "OFF" (Ordinary)	Pump control "ON"		
In haul (Front)	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	15.0 t	20mm
Hoisting (Rear)	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	15.0 t	20mm
3rd drum (option)	320mm	Parallel grooved	65 m/min	12 m/min	—	16mm
Boom hoist	280mm	Parallel grooved	64 m/min	12 m/min	—	14mm

Above line speed varies with load.

Drum lagging (400mm root dia./for use of 22.4mm cable dia.) is available as option for dragline.

LS-118RH5 DRAGLINE CAPACITIES AND WORKING RANGES:

(in metric tons)

Boom length (m)			12.20			15.25			18.30		
Boom angle (°)			30	40	50	30	40	50	30	40	50
Rated load (t)			5.0	5.0	5.0	5.0	5.0	5.0	4.1	4.8	5.0
A	Max. dumping radius (m)	0.6m ³	12.4	11.2	9.8	15.1	13.6	11.7	17.7	15.9	13.7
		0.8~1.0m ³	12.5	11.3	9.9	15.2	13.7	11.8	17.8	16.0	13.8
		1.2m ³	12.6	11.4	10.0	15.3	13.8	11.9	17.9	16.1	13.9
B	Working radius (m)		11.9	10.7	9.3	14.5	13.0	11.2	17.2	15.4	13.2
C	Digging radius on G.L. (m)		15.2	14.9	14.1	18.6	18.1	17.1	21.9	21.3	20.1
D	Digging depth (m)		8.3	8.0	7.5	10.8	10.5	9.7	13.3	12.9	12.0
E	Dumping height (m)	0.6~0.8m ³	3.6	5.4	5.9	5.1	7.3	9.2	6.6	9.3	11.6
		1.0~1.2m ³	2.8	4.6	6.1	4.3	6.5	8.4	5.6	9.5	10.8
F	Bucket clearance (m)	0.6~0.8m ³	3.95								
		1.0~1.2m ³	4.75								

- Weight of bucket plus material shall not exceed above rated loads.
- Boom length shall not exceed 18.3m.
- High gantry is required and side frame must be extended for all operating conditions.

Dimension C and D vary considerably depending on digging conditions and skill of the operator.

- Apparent specific gravity of lifting material:
Earth 1.7 ~ 1.8 t/m³
Gravel 1.8 ~ 2.0 t/m³

Kind of bucket (manufacturer's specification)

Bucket capacity (m ³)	Weight (t)
0.6	0.93
0.8	1.17
1.0	1.40
1.2*	1.60

*; medium or light duty use.

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
760 mm (Standard)	48.2 t With basic boom	0.61 kg/cm ²
	48.6 t With 18.3m boom	0.62 kg/cm ²

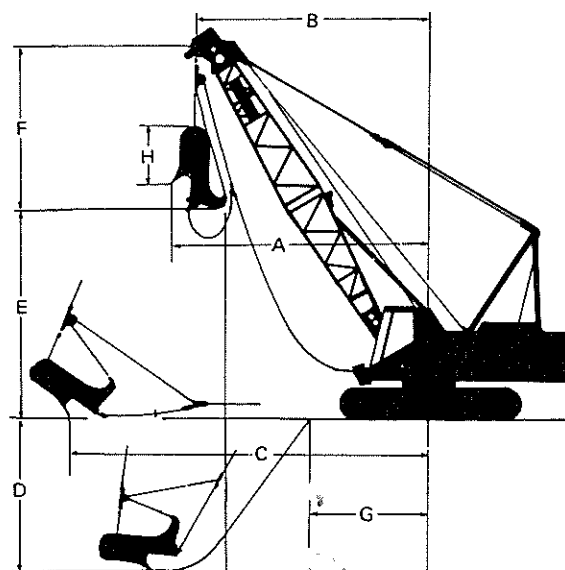
(With boom, 1.0m³ bucket and counterweight)

COUNTERWEIGHT: 7.15t ("A")

SAFETY DEVICE: Boom hoist limiting device, boom angle indicator, boom back stop, drum lock pawl for front, rear and boom hoist.

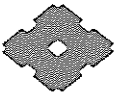
FAIRLEAD: Full-revolving type.

GRADEABILITY: 30% (17°)



We are constantly improving our products and therefore reserve the right to change designs and specifications.

SUMITOMO (S.H.I.) CONSTRUCTION MACHINERY CO., LTD.



TOWER BOOMS: Lattice constructions; round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.

Boom connections In-line pin connections.

Basic boom Two-piece 12.20m basic length; 6.10m base and 6.10m top section. 1.2m deep and 1.27m wide at connections.

Boom point machinery Four head sheaves mounted on antifriction bearings.

Tower boom extensions Available in 3.05m and 6.10m lengths with pendants. Maximum boom length 48.80m.

Jib Two-piece, 6.10m basic length with 3.05m long base and top sections. 0.5m deep and 0.61m wide at connections.

Jib extensions Available in 3.05m jib extension. Maximum jib length 15.25m.

Tower boom plus jib 42.70m + 15.25m length

HOOK BLOCKS:

50t, four sheaves Standard

15t, one sheave Optional extra

5t, no sheave Standard for jib

LS-118RH5 CRANE LIFTING CAPACITIES (WITH TOWER BOOM)

Unit: metric tons

Working radius (m)	Boom length (m)													Working radius (m)
	12.20	15.25	18.30	21.35	24.40	27.45	30.50	33.55	36.60	39.65	42.70	45.75	48.80	
3.7	50.00													3.7
4.0	43.90	43.35/39												4.0
4.5	36.90	36.85	36.80											4.5
5.0	30.75	30.65	30.55	30.35										5.0
5.5	26.35	26.25	26.15	26.05	25.85									5.5
6.0	23.45	23.35	23.25	23.15	22.95	22.85	19.00/6.6							6.0
7.0	18.55	18.45	18.35	18.25	18.15	18.05	17.95	17.30/7.1	15.55/7.6					7.0
8.0	15.35	15.25	15.15	15.10	14.90	14.80	14.70	14.60	14.50	13.75/8.2				8.0
9.0	13.05	12.95	12.85	12.75	12.65	12.60	12.50	12.40	12.30	12.20	12.10	11.60/9.2		9.0
10.0	11.40	11.35	11.25	11.15	11.05	10.95	10.85	10.75	10.65	10.55	10.45	10.35	8.95	10.0
12.0	9.40/11.6	8.90	8.85	8.75	8.65	8.55	8.45	8.35	8.25	8.20	8.15	8.00	7.85	12.0
14.0		7.40	7.30	7.20	7.10	7.00	6.90	6.80	6.80	6.70	6.60	6.40	6.35	14.0
16.0		7.30/14.3	6.15	6.05	5.95	5.85	5.75	5.65	5.60	5.55	5.45	5.35	5.25	16.0
18.0			5.85/16.9	5.10	5.00	4.90	4.80	4.70	4.65	4.60	4.50	4.40	4.30	18.0
20.0				4.60/19.8	4.30	4.20	4.10	4.00	3.95	3.90	3.80	3.75	3.65	20.0
22.0					3.75	3.65	3.55	3.45	3.40	3.35	3.25	3.15	3.05	22.0
24.0					3.70/22.2	3.15	3.05	2.95	2.90	2.85	2.75	2.65	2.60	24.0
26.0						2.95/24.9	2.65	2.60	2.55	2.45	2.40	2.20	2.10	26.0
28.0							2.35/27.5	2.30	2.20	2.10	2.05	1.90	1.80	28.0
30.0								2.00	1.90	1.85	1.75	1.60	1.50	30.0
32.0									1.60	1.55	1.45	1.35	1.25	32.0
34.0									1.35/32.8	1.35	1.25	1.05	0.95	34.0

Notes:

- Capacities shown are in metric tons and are based on 75% of minimum tipping loads — over the side — with machine standing level on firm supporting surface under ideal job conditions. Deductions from the lifting crane capacities must be made for weight of hook block.

Kind of hook block (t)	50	15	5
Weight of hook block (t)	0.75	0.3	0.12

- When operating of the main boom peak sheaves with jib on boom the following deductions in machine lifting capacities must be made.
- High gantry is required and side frames must be extended for all operating conditions.

LS 118RH5 JIB CAPACITIES

Unit: metric tons

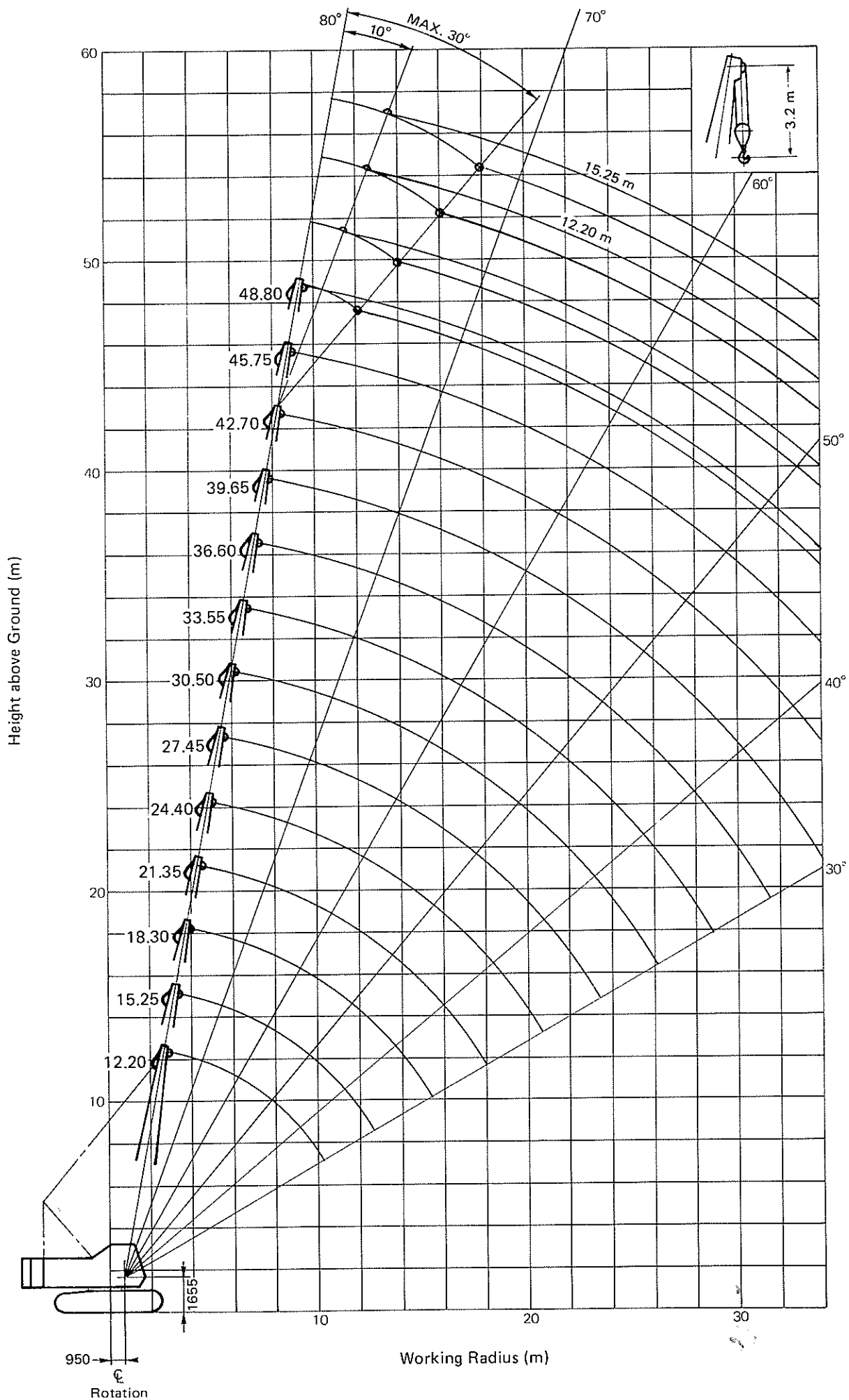
Jib length (m)	6.10	9.15	12.20	15.25	Short Jib
Jib set angle (°)					
10	5.0	5.0	4.1	3.3	See note
30	5.0	5.0	4.1	3.3	See note
Weight to be deducted (t)	0.75	0.90	1.05	1.20	0.3

LS-118RH5 SHORT JIB LIFTING CAPACITY

Notes:

- Rated load of auxiliary hook is equal to the main boom lifting capacity at each working radius minus 0.2 ton subject to maximum 5 ton load.
Deduction from the lifting capacity of auxiliary hook must be made for weight of main hook, aux. hook and other entire sling tools.
- Main hook lifting capacity when equipped short jib shall be rated load of main boom at each working radius minus 0.3 ton. Deduction from the lifting capacities of main hook must be made for weight of main hook, aux. hook and other entire sling tools.
- Short jib is applicable for main boom length from 12.2m to 45.75m.

LS-118RH.5 CRANE WORKING RANGES WITH TOWER BOOM





CLAMSHELL BOOMS: Lattice construction; round tubular main chords, alloy hi-ten steel, with bracing of round steel tubing.

Boom connections . . . In-line pin connections.

Basic boom . . . Two-piece, 12.2m basic length; 6.1m base and 6.0m top section; 1.2m deep and 1.27 wide at connections.

Boom point machinery . . . Five head sheaves mounted on anti-friction bearings.

Boom extensions . . Available in 3.05m, 6.1m and 9.15m lengths with pendants. Maximum boom length 18.3m.

Angle main chords, with bracing of angle steel is available as option.

MAXIMUM CLAMSHELL RATING: 5.0t

LINE SPEED:

Drums	Root dia.	Type	Line speed (Holding, Closing)		Cable dia.
			Pump control "OFF" (Ordinary)	Pump control "ON"	
Holding	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	20mm
Closing	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	20mm
3rd drum (option)	320mm	Parallel grooved	65 m/min	12 m/min	16mm
Boom hoist	280mm	Parallel grooved	64 m/min	12 m/min	14mm

Notes:

1. Above line speed is based on first layer.
2. Above line speed varies with load.

GANTRY: Retractable high gantry

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
760 mm	49.7 t	0.63 kg/cm ²

Notes:

1. With basic boom, 1.0m³ bucket and counterweight.
2. Weight without counterweight and front attachment: approx. 29.8t

LS-118RH5 CLAMSHELL CAPACITIES AND WORKING RANGES:

(in metric tons)

Boom length (m)								
12.20			15.25			18.30		
R (m)	A (°)	L (t)	R (m)	A (°)	L (t)	R (m)	A (°)	L (t)
7.0	63.0	5.0						
8.0	57.5	5.0	8.0	64.6	5.0			
9.0	51.6	5.0	9.0	60.3	5.0	9.0	65.7	5.0
10.0	45.1	5.0	10.0	55.8	5.0	10.0	62.2	5.0
12.0	28.8	5.0	12.0	45.9	5.0	12.0	54.7	5.0
			14.0	33.9	5.0	14.0	46.5	5.0
						16.0	36.8	5.0

R: Working radius A: Boom angle L: Rated load

Notes:

1. Following weight of bucket plus load should not exceed above rated loads.

Bucket capacity	0.6m ³	0.8m ³	1.0m ³	1.2m ³
Bucket weight	1.6t	2.1t	2.5t	2.3t

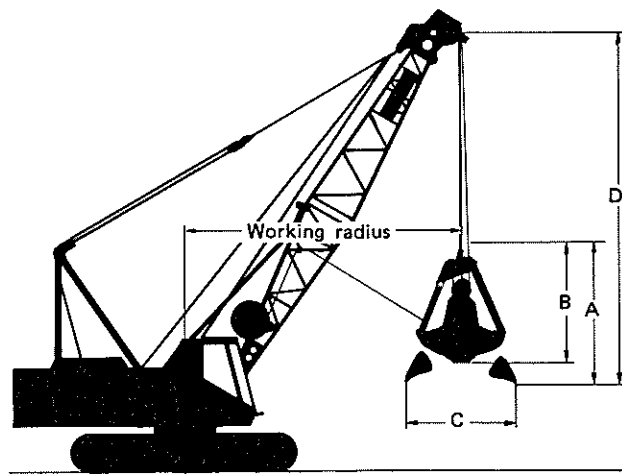
2. Boom length shall not exceed 19.0m.
3. Apparent specific gravity of lifting material:
Earth 1.7~1.8t/m³
Gravel 1.8~2.0t/m³
4. High gantry is required and side frames must be extended for all operating conditions.

COUNTERWEIGHT: 14.4t

SAFETY DEVICE: Boom over hoist limiting device, drum pawl lock for closing, holding and boom hoist drum, swing lock, safety valve in hydraulic circuit, boom angle indicator, boom back stop.

TAGLINE WINDER: Spring-wound, drum-type mounted on boom, single stage type Standard
Spring-wound, drum-type mounted on boom, double stage type Optional extra
Hydraulic type mounted in front of the revolving frame Optional extra

GRADEABILITY: 40% (22°)
with basic boom, 1.0m³ bucket and counterweight.



(in meters)

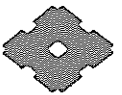
	Bucket capacity	0.6m ³	0.8m ³	1.0m ³	*1.2m ³
A	Bucket overall height (opened)	2.8	3.3	3.3	3.2
B	Bucket overall height (closed)	2.4	2.7	2.8	2.8
C	Bucket opening width	2.3	2.5	2.5	2.9
D	Bucket clearance	4.6	5.1	5.1	5.0

* Light duty service

We are constantly improving our products and therefore reserve the right to change designs and specifications.

SUMITOMO (S.H.I.) CONSTRUCTION MACHINERY CO., LTD.

International sales Div., 1-21, Kanda, Nishiki-cho, Chiyoda-ku, Tokyo, Japan



TOWER BOOMS: Lattice construction; round tubular main chords, alloy, hi-ten, steel, with bracing of round steel tubing.

Tower connections In-line pin connections.

Basic tower Five-piece, 20.85 m basic length; 6.10m base, one 1.525m, one 6.10m (with expanded metal) one 6.10m extensions and 1.04m cap sections; 1.2m deep and 1.27m wide at connection.

Tower extensions Available in 3.05m, 6.10m length with pendants. Maximum tower length 39.14m.

Basic tower jib Four-piece, 16.0m basic length; 5.5m base, two 3.0m extensions and 4.5m top section; 0.7m deep and 0.7m wide at connections.

Tower jib point machinery One head sheave mounted on antifriction bearings.

Tower jib extensions Available in 3.00m length. Maximum tower jib length 25.0m.

Maximum tower plus 39.14m tower + 22.0m tower jib.
tower jib length

HOOK BLOCKS:

10t, one sheave Standard

GANTRY: Retractable high gantry.

LINE SPEED:

Drums	Root dia.	Type	Line speed (Hoisting, Lowering)		Cable dia.
			Pump control "OFF" (Ordinary)	Pump control "ON"	
Main hoist (Front)	400mm	Parallel grooved	High 80 m/min Low 40 m/min	High 15 m/min Low 7.5 m/min	20mm
Tower jib hoist	484mm	Parallel grooved	47 m/min	8.8 m/min	16mm
Tower hoist	280mm	Parallel grooved	64 m/min	12 m/min	14mm

Notes:

1. Above line speed is based on first layer.
2. Above hoisting line speed varies with load.

HOIST REEVING:

No. of parts of line	2
Max. load t	10

WORKING WEIGHT AND GROUND PRESSURE:

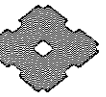
Shoe width	Weight	Pressure
760mm	52.9 t	0.68 kg/cm ²

With 39.14m tower plus 22.0m tower jib and counterweight A, B.

COUNTERWEIGHT: A 7.15 t, B 7.25 t
Total 14.4 t

SAFETY DEVICE: Hook over hoist limiting device, tower over hoist limiting device, tower and indicator, tower back stop, drum pawl lock for main, tower jib, and tower hoist drum, safety valve in hydraulic circuit, swing lock, swing alarm, automatic overload preventing device (optional extra).

NOTE: Crane boom must not be used for tower configuration.



LS 118RH5 TOWER CRANE CAPACITIES:

Unit: metric tons

Tower length (m)	20.85 ~ 33.04								36.09 ~ 39.14							
Jib length (m)	16.0				19.0				22.0				25.0			
Working radius (m)	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load	Tower Jib Angle	Load
6.6	75	10.0							75	8.0						
7.0	73	10.0	75	10.0/7.3					73	8.0	75	8.0/7.3				
8.0	69	10.0	73	10.0	75	7.5/8.1	75	4.7/8.9	69	8.0	73	8.0	75	6.5/8.1		
9.0	65	10.0	70	10.0	72	7.5	75	4.7	65	8.0	70	8.0	72	6.5		
10.0	61	10.0	66	10.0	70	7.5	72	4.7	61	8.0	66	8.0	70	6.5		
12.0	53	8.0	59	8.0	64	7.5	67	4.7	53	8.0	59	8.0	64	6.5		
14.0	43	6.9	52	6.9	58	6.5	62	4.7	43	6.9	52	6.9	58	6.5		
16.0	31	6.0	44	6.0	52	5.6	57	4.1	31	6.0	44	6.0	52	5.6		
18.0	25	5.7/16.7	34	5.3	44	4.9	51	3.6	25	5.7/16.7	34	5.3	44	4.9		
20.0			25	5.0/19.5	36	4.5	45	3.2			25	5.0/19.5	36	4.5		
22.0					25	4.0/22.2	38	2.8					25	4.0/22.2		
24.0							30	2.6								
24.9							25	2.5								

Notes:

- Capacity shown are based on structural strength and machine standing level on firm supporting surface under ideal job conditions.
- Deductions from the tower crane capacities must be made for following weight of hook block.

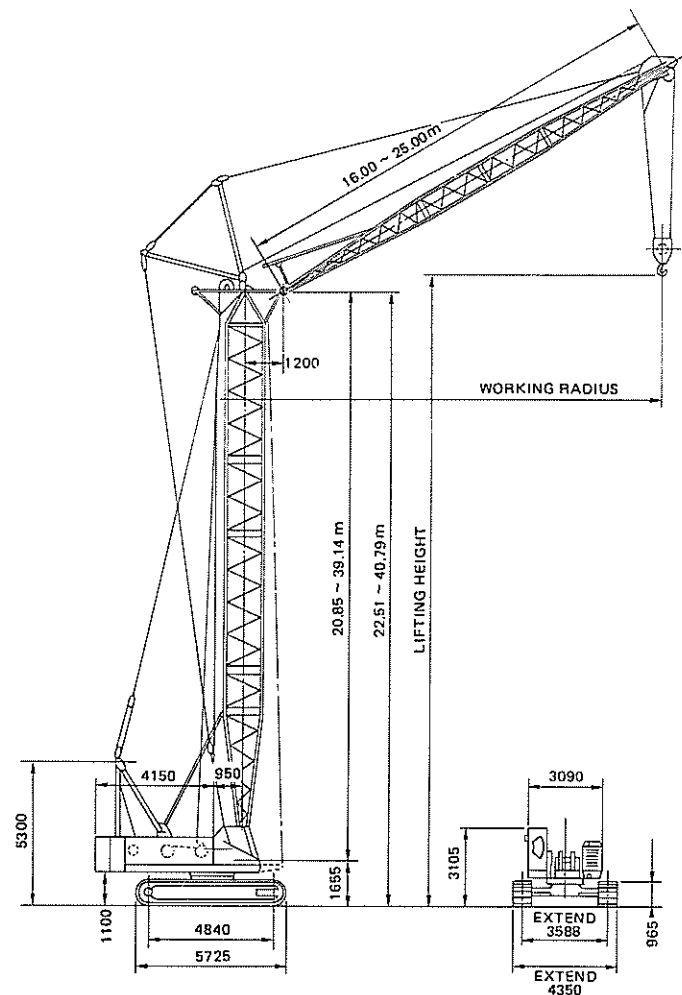
Kind of hook block t	10
Weight of hook block t	0.3

- High gantry is required and side frames must be extended for all operating conditions.

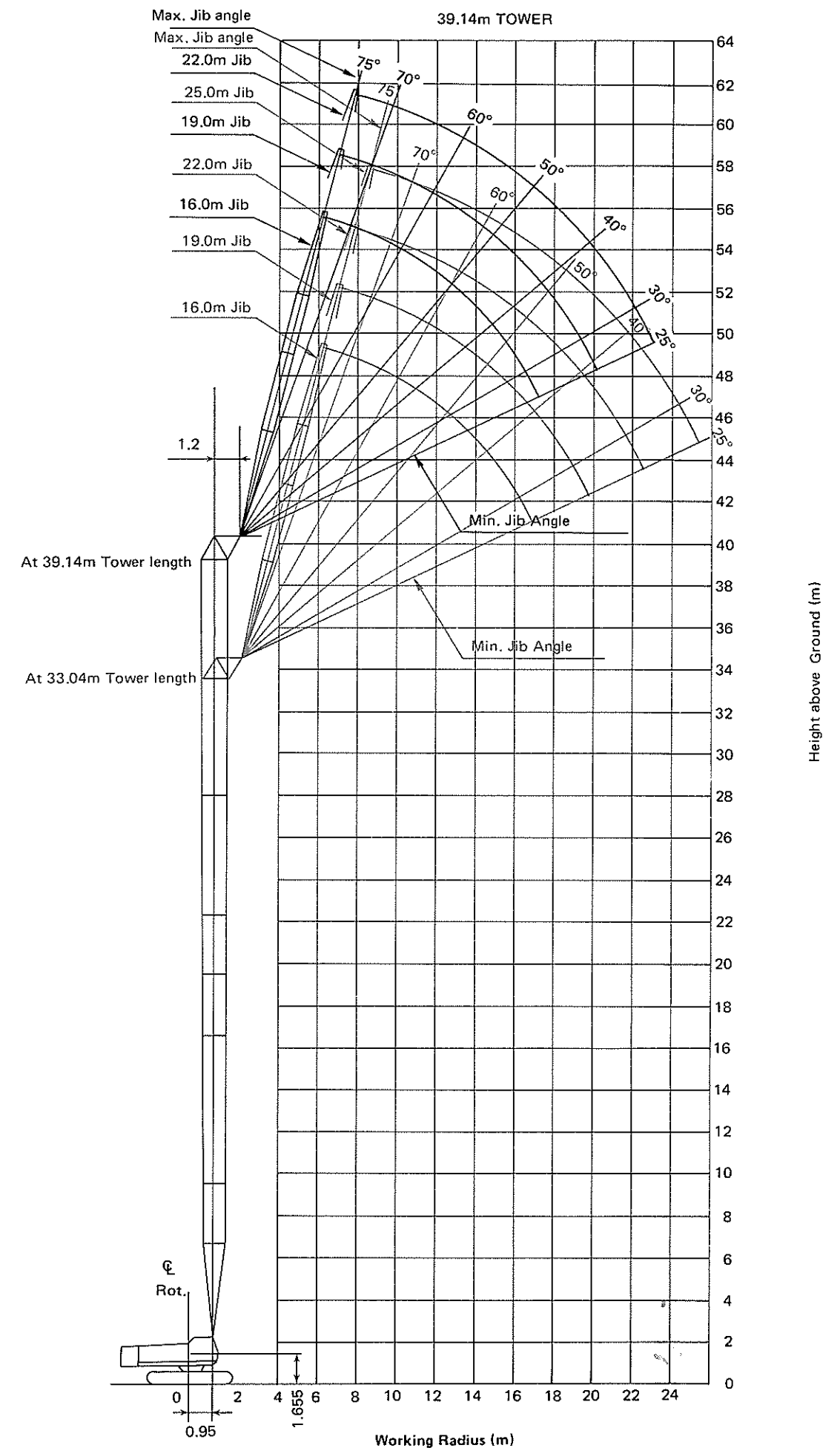
LS 118RH5 TOWER AND TOWER JIB COMBINATION:

○ : Available, X : Not available

Tower Jib	16.0	19.0	22.0	25.0
Tower				
20.85	○	X	X	X
23.90	○	○	X	X
26.95	○	○	○	X
30.00	○	○	○	○
33.04	○	○	○	○
36.09	○	○	○	X
39.19	○	○	○	X



LS-118RH5 TOWER CRANE WORKING RANGES:



STANDARD/OPTIONAL EQUIPMENT LIST:

		Standard	Optional
BASIC MACHINE		(Body) ● Main and auxiliary hoist drum ● Boom hoist drum ● Retractable high gantry ● Retractable side frames ● 760mm wide flat shoe ● Automatic shoe tensioner ● Cigarette lighter ● Wiper (Front and Roof) ● Working light ● Back mirror ● Level gauge inside of cab ● Hydraulic pressure gauge ● Fully adjustable reclining seat ● Socket for 24V supply ● Interior light ● Ash tray ● Engine tachometer ● Fuel level gauge ● Water temperature gauge ● Hydraulic oil temperature gauge ● Engine glow (heat indicator) lamp ● Service monitor lamps 1 Engine oil filter warning lamp 2 Engine oil pressure warning lamp 3 Overheat lamp 4 Radiator water level 5 Engine air cleaner warning lamp 6 Charge lamp 7 Battery electrolyte level 8 Swing brake ● Manual holder ● Hand throttle ● Foot throttle ● Standard tools ● Cord reel for boom	● Drum roller ● Fuel pump ● Sunvisor ● Cab radio ● Cab heater ● Cab air conditioner ● Cab fan ● Drum mirror ● Overload indicator lamp ● Cord reel for jib ● Sun shade
ATTACHMENT	CRANE	● 12.20m basic boom ● 50ton hook block ● Boom back stop ● Boom hoist rope ● Main hoist rope	● Boom extensions — 3.05m, 6.10m ● Short jib ● 6.10 basic jib ● Jib extensions 3.05m ● Hook blocks, 15 ton, and 5 ton ● Auxiliary hoist rope
	TOWER	● 20.85m basic tower ● 16.0m basic tower jib ● 10 ton hook block ● Tower hoist rope ● Tower jib hoist rope ● Main hoist rope ● Tower back stop ● Tower jib back stop ● Tower head machinery with posts	● Tower jib extension — 3.05m ● Tower extensions — 3.05m, 6.10m ● Tower front stay
	CLAMSHELL	● 12.2m basic boom ● 1.0m³ bucket ● Tagline winder (Single stage type) ● Clamshell rope	● Boom extensions — 3.05m, 6.10m ● 0.6m³ bucket ● 0.8m³ bucket ● 1.2m³ bucket ● Tagline winder (hydraulic type) ● Tagline winder (double stage type)
SAFETY DEVICE		● Automatic boom overhoist preventing device (crane) ● Automatic tower jib overhoist preventing device (tower) ● Anti-Two block device (crane/tower) ● Boom angle indicator (crane) ● Tower angle indicator (tower) ● Safety valve in hydraulic circuit ● Drum pawl locks for all drums ● Swing alarming device ● Swing lock ● Multi-disc friction type parking brake ● Automatic brake for all drums.	● Automatic overload preventing device (crane/tower) ● Anti-Two block device (crane jib) ● Anti-two block device (short jib)

LS 118RH5 MEASUREMENT AND WEIGHT IN TRANSPORTATION

Description	Dimensions (cm)	Gross Weight (kg)
LS 118RH5 Hydraulic Tower Crane Basic Machine Ass'y	765 x 330 x 323	29,800
Counterweight "A"	310 x 60 x 164	7,150
Counterweight "B"	310 x 70 x 104	7,250
Basic Boom Bottom Section Top Section	756 x 160 x 260	3,600
Basic Tower Jib Boom Ass'y Upper Tower Jib Boom 1 Lower Tower Jib Boom 1 Guide Post 1 Tower Jib Back Stop 2 Front & Rear Post 1 Tension Bar 2 Bridle 1	700 x 146 x 200	2,500
Tower Head Ass'y	391 x 164 x 159	660
6.10M Extension Boom	620 x 155 x 145	590
3.05M Extension Boom	315 x 155 x 145	360
1.5M Extension Boom	162 x 155 x 145	240
3.05M Extension Tower Jib Boom	308 x 98 x 90	150
3.05M Extension Tower Jib Boom (5 pcs. in the crate)	931 x 172 x 106	1,300
S.T.D. Spare Parts Tools & Accessories	200 x 180 x 150	4,200