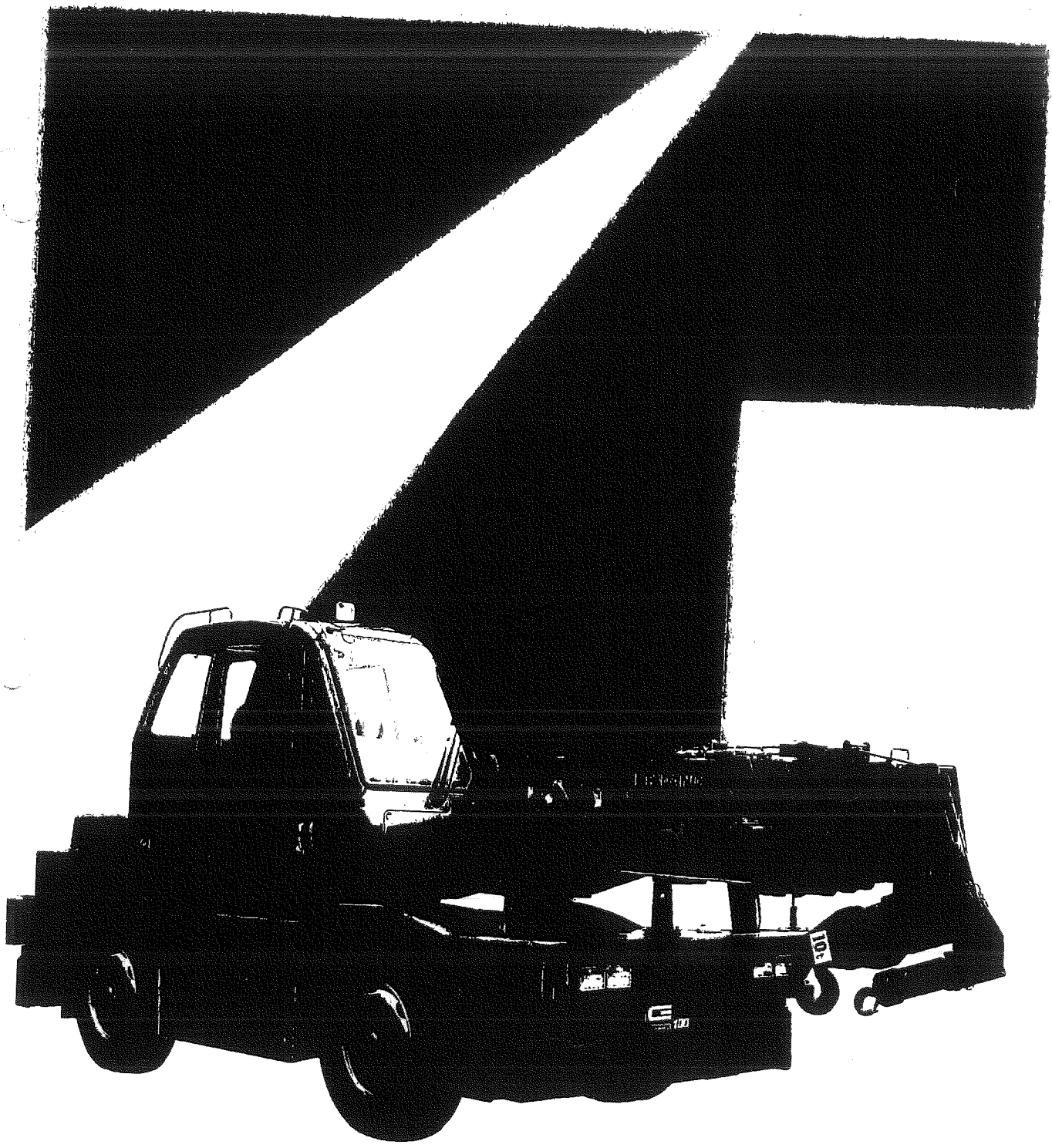
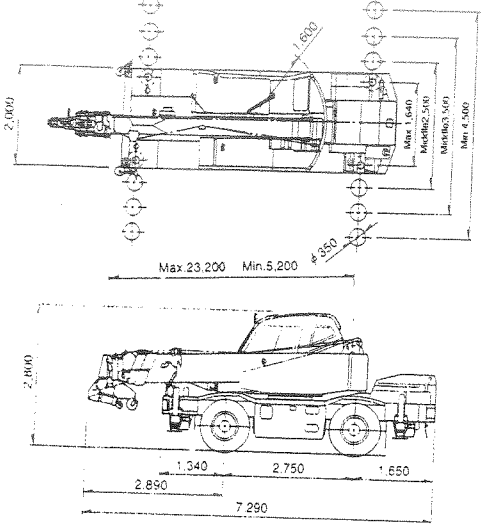
TADANO

TADANO ROUGH TERRAIN CRANE

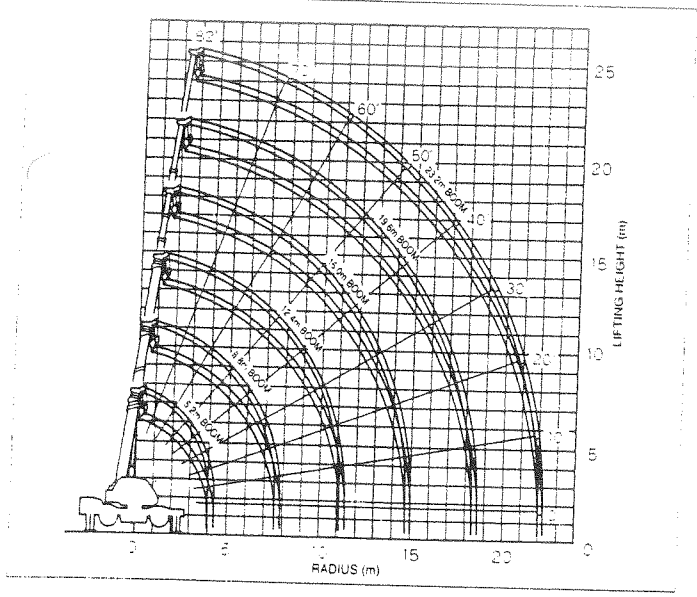
CREVO 100

TR-100ML 10 ton capacity





WORKING RANGE



RATED LIFTING CAPACITIES

ON OUTRIGGERS

Unit: kg

C \ B	Outriggers fully extended — 360° —					
	5.2m	8.8m	12.4m	16.0m	19.6m	23.2m
1.0 m	10,000	4,900				
1.5 m	10,000	4,900	4,900			
2.0 m	10,000	4,900	4,900	4,000		
3.0 m	10,000	4,900	4,900	4,000	3,500	
3.5 m	8,000	4,900	4,900	4,000	3,500	2,000
[illegible]	6,100	4,900	4,900	4,000	3,500	2,000
4.0 m	5,400 (3.9m)	4,900	4,900	4,000	3,500	2,000
4.5 m		4,600	4,200	4,000	3,500	2,000
5.0 m		4,200	3,800	3,550	3,150	2,000
5.5 m		3,800	3,450	3,150	2,900	2,000
6.0 m		3,350	3,150	2,850	2,700	2,000
7.0 m		2,750	2,650	2,380	2,300	1,800
8.0 m		2,450 (7.5m)	2,200	2,000	1,950	1,600
9.0 m			1,750	1,750	1,700	1,450
10.0 m			1,380	1,550	1,500	1,300
11.0 m			1,100	1,300	1,330	1,200
12.0 m				1,080	1,130	1,100
13.0 m				900	970	1,000
14.0 m				750	830	860
15.0 m				650 (14.7m)	700	750
16.0 m					600	660
17.0 m					500	570
18.0 m					420	500
19.0 m					400 (18.3m)	420
20.0 m						350
21.9 m						260
A (°)	0~82					

A: Range of boom angle (without load)
B: Boom length
C: Working radius

TRAVELLING SPEED(MAX.)	49 km/h (computed)
GRADEABILITY(TAN θ)	60% (computed)
MIN. TURNING RADIUS	2-weel steering: 6.9 m 4-weel steering: 3.9 m
BOOM	6-section full length power telescoping boom
Length	5.2 m-23.2 m
Extension speed	Mim.-Max.in 54 sec.
Elevation range/speed	-2° to 82° in 30 sec.
MAIN WINCH	Grooved drum driven by hydraulic axial piston motor. Power load lowering and hoisting
Single line pull	12.3 kN (1,250 kgf)
Single line speed	114 m/min. (at the 5th layer)
Wire rope	spin-resistant type (127 m×10 mm)
AUXILIARY WINCH	Grooved drum driven by hydraulic axial piston motor. Power load lowering and hoisting
Single line pull	13.7 kN (1,400 kgf)
Single line speed	98 m/min. (at the 3rd layer)
Wire rope	spin-resistant type (55 m×10 mm)
SWING	A hydraulic piston motor driven through planetary swing speed reducer.
Speed	2.8 rpm
Tail swing radius	1.6 m
HYDRAULIC SYSTEM	Tandem gear pump for telescoping,elevating and winches. Tandem gear pump for swing,steering and accumulator.
Circuit	Equipped with air cooled type oil cooler.
Filiter	Return line filter
TADANO AUTOMATIC MOMENT LIMITER (MODEL: AML-L)	Main unit in crane cab. gives audible and visual warning of approch to overload. Automaticallly cuts out crane motions before overload. With working range limit function. Digital display on panel: Moment as persentage Boom angle Boom length Working radius Potential hook height Actual hook load Permissible load Outriggers condition Bar graphical display: Moment as percentage
OUTRIGGERS	4 hydraulically operated H-type outriggers. Each outrigger controlled simultaneously or independently from the cab.
Extension width	Max. : 4,500 mm Middle: 3,500 mm, 2,500 mm Min. : 1,640 mm
ENGINE	Model: HINO W04D-T
Type	4 cycle, turbo charged, 4 cylinder in line, direct injection,water cooled diesel engine.
Piston displacement	4,009 cm³
Max.output (JIS)	110 kW (150PS) at 3,000 rpm
Max.torque (JIS)	372 N·m (38 kgf·m) at 1,800 rpm
TRANSMISSION	Full automatic transmission Torque converter driving full powersift
STANDARD EQUIPMENTS	Pendant type over-winding cutout Winch automatic fail-safe brake Hook safety latch Sight level gauge AM/FM radio Cab floor mats Air dryer Central lubricating system
OPTIONAL EQUIPMENTS	Tool kit Fire extinguisher Drum rotation indicator Spring lock Non spin differential

(note) Front cover photo shows X-type of outriggers configuration, but H-type of outnggers is standard as mentioned in above specification data.

Continuing technical development requires Tadano to retain the right to make specification, equipment and price changes without notice.

TADANO

TADANO LTD.

4-12, Kamezawa 2-chomeSumida-ku, Tokyo130-0014, Japan
Tel: 81-(0)3-3621-7750 / Fax: 81-(0)3-3621-7785
URL http://www.tadano.co.jp E-mail tdnihq@tadano.co.jp

SPEC. SHEET No. TR-100M-1-00102/EX-10
DATE June, 1997

TADANO ROUGH TERRAIN CRANE

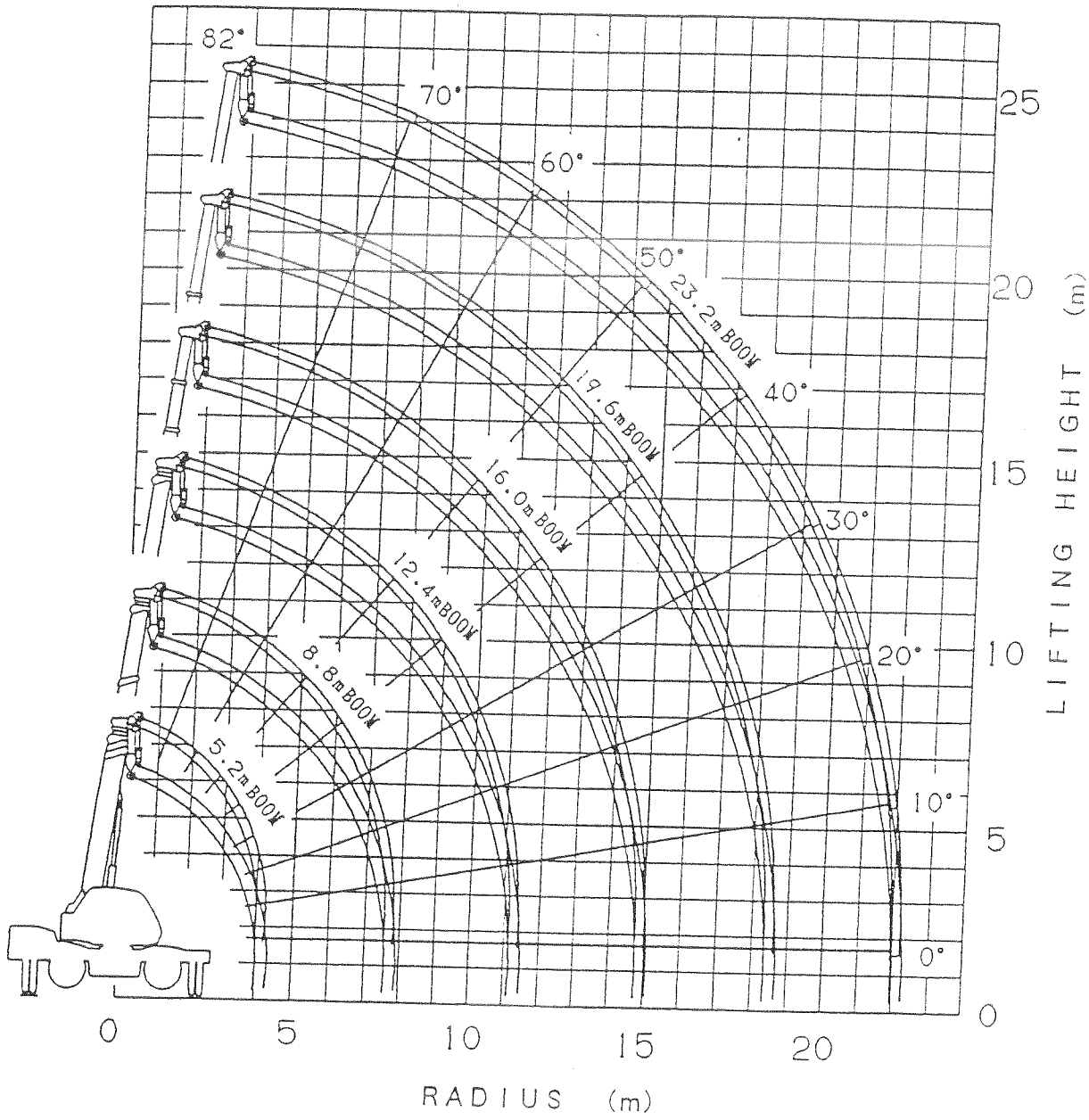
MODEL : TR-100ML
(Right-hand steering)

GENERAL DATA

CRANE CAPACITY		10,000 kg at 2.5 m
BOOM		6-section, 5.2 m – 23.2 m
DIMENSIONS		
Overall length	approx.	7,290 mm
Overall width	approx.	2,000 mm
Overall height	approx.	2,800 mm
MASSES		
Gross vehicle mass	approx.	118.7 kN {12,115 kg}
-front axle	approx.	59.3 kN { 6,050 kg}
-rear axle	approx.	59.4 kN { 6,065 kg}
PERFORMANCE		
Max. travelling speed	computed	49 km/h
Gradeability (tan θ)	computed	60 %

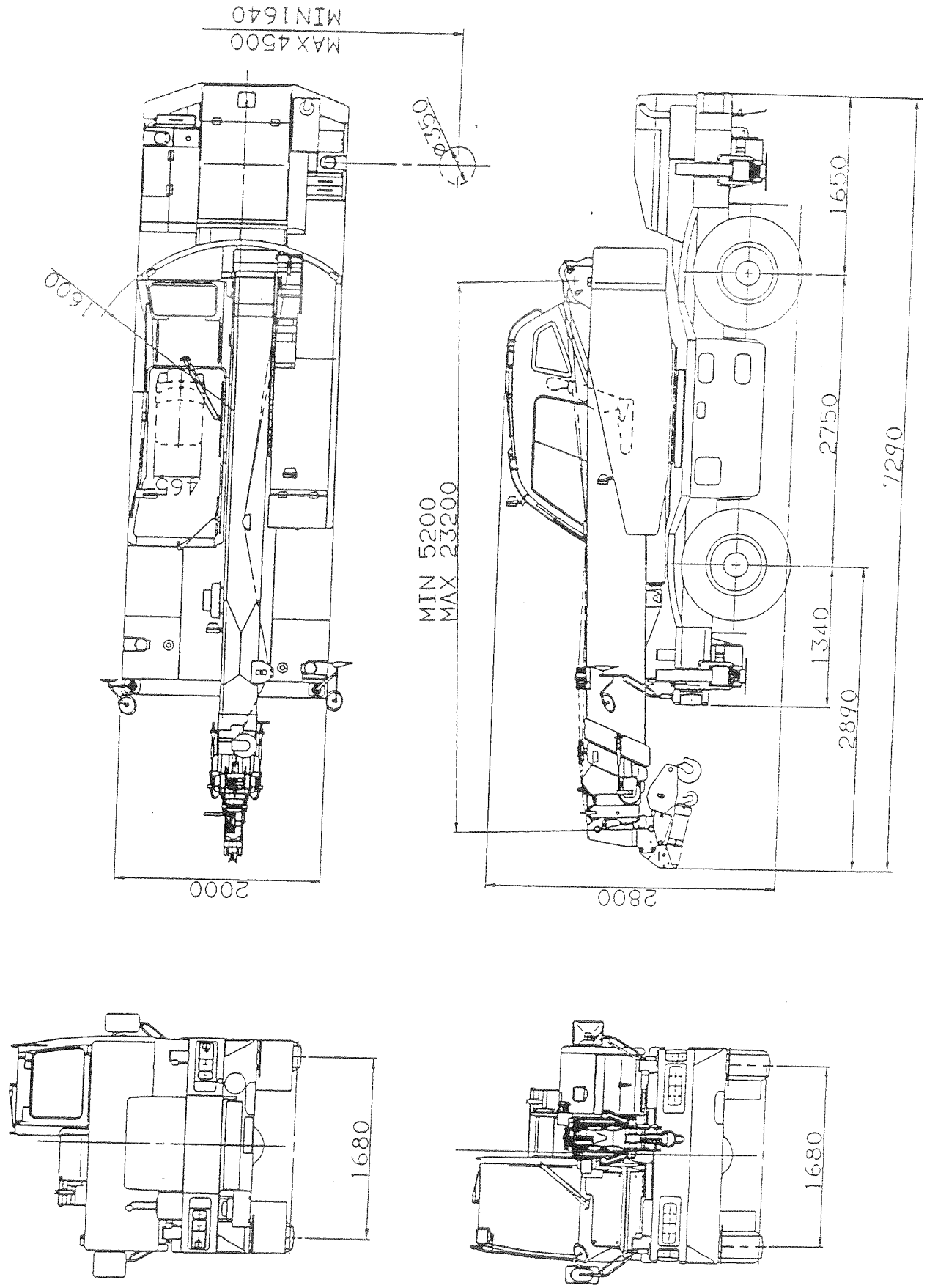
Specifications are subject to change without notice.

WORKING RANGE



NOTE: 1. The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.
2. The above working range is shown on condition with outriggers fully extended. (360°)

EXTERNAL VIEWS



RATED LIFTING CAPACITIES

ON OUTRIGGERS

Unit : kg

Outriggers fully extended — 360° —						
C \ B	5.2 m	8.8 m	12.4 m	16.0 m	19.6 m	23.2 m
1.0 m	10,000	4,900				
1.5 m	10,000	4,900	4,900			
2.0 m	10,000	4,900	4,900	4,000		
2.5 m	10,000	4,900	4,900	4,000	3,500	
3.0 m	8,000	4,900	4,900	4,000	3,500	2,000
3.5 m	6,100	4,900	4,900	4,000	3,500	2,000
4.0 m	5,400	4,900	4,900	4,000	3,500	2,000
4.5 m	(3.9m)	4,600	4,200	4,000	3,500	2,000
5.0 m		4,200	3,800	3,550	3,150	2,000
5.5 m		3,800	3,450	3,150	2,900	2,000
6.0 m		3,350	3,150	2,850	2,700	2,000
7.0 m		2,750	2,650	2,380	2,300	1,800
8.0 m		2,450	2,200	2,000	1,950	1,600
9.0 m		(7.5m)	1,750	1,750	1,700	1,450
10.0 m			1,380	1,550	1,500	1,300
11.0 m			1,100	1,300	1,330	1,200
12.0 m				1,080	1,130	1,100
13.0 m				900	970	1,000
14.0 m				750	830	860
15.0 m				650	700	750
16.0 m				(14.7m)	600	660
17.0 m					500	570
18.0 m					420	500
19.0 m					400	420
20.0 m					(18.3m)	350
21.9 m						260
A (°)	0 ~ 82					

A : Range of boom angle (without load)
B : Boom length
C : Load radius

RATED LIFTING CAPACITIES

ON OUTRIGGERS

Unit : kg

Outriggers extended to middle (2.5 m) – Over-side –						
C \ B	5.2 m	8.8 m	12.4 m	16.0 m	19.6 m	23.2 m
1.0 m	10,000	4,900				
1.5 m	10,000	4,900	4,900			
2.0 m	10,000	4,900	4,900	4,000		
2.5 m	7,000	4,900	4,900	4,000	3,500	
3.0 m	5,200	4,900	4,900	4,000	3,500	2,000
3.5 m	4,100	3,950	3,700	3,800	3,500	2,000
4.0 m	3,400	3,150	2,950	3,100	3,250	2,000
4.5 m	(3.9m)	2,500	2,350	2,550	2,650	2,000
5.0 m		2,000	1,900	2,100	2,200	2,000
5.5 m		1,650	1,550	1,750	1,850	1,900
6.0 m		1,350	1,300	1,450	1,600	1,650
7.0 m		920	900	1,050	1,170	1,250
8.0 m		750	600	750	870	950
9.0 m		(7.5m)	380	530	650	720
10.0 m			200	370	450	540
11.0 m					300	400
12.0 m						280
A (°)	0 ~ 82		17~82	36~82	50~82	51~82

A : Range of boom angle (without load)
B : Boom length
C : Load radius

RATED LIFTING CAPACITIES

ON OUTRIGGERS

Unit : kg

Outriggers extended to minimum (1.64 m) — Over-side —						
C \ B	5.2 m	8.8 m	12.4 m	16.0 m	19.6 m	23.2 m
1.0 m	8,000	4,900				
1.5 m	7,000	4,900	4,900			
2.0 m	5,000	4,900	4,900	4,000		
2.5 m	3,600	3,450	3,400	3,200	3,200	
3.0 m	2,600	2,500	2,450	2,550	2,550	2,000
3.5 m	2,000	1,850	1,800	2,000	2,050	2,000
4.0 m	1,600	1,400	1,350	1,550	1,650	1,700
4.5 m	(3.9m)	1,050	1,000	1,200	1,330	1,400
5.0 m		800	750	950	1,050	1,120
5.5 m		600	550	750	850	920
6.0 m		450	400	580	680	750
7.0 m				300	430	500
8.0 m						300
A (°)	0～82	26～82	55～82	61～82	65～82	69～82

A : Range of boom angle (without load)
B : Boom length
C : Load radius

RATED LIFTING CAPACITIES

ON TIRES (When not activating a spring lock)

Unit : kg

Traveling with load on hook (1.6 km/h or less) — Over-front —		
C \ B	5.2 m	8.8 m
1.0 m	1,000	500
3.5 m	1,000	500
7.0 m		500
A	0° ~ 82°	

ON TIRES (When activating a spring lock)

Unit : kg

Load radius	Traveling with load on hook (1.6 km/h or less)					
	5.2 m Boom		8.8 m Boom		12.4 m Boom	
	Over front	360°	Over front	360°	Over front	360°
1.0 m	3,200	1,700	3,200	1,700		
1.5 m	3,200	1,700	3,200	1,700	3,200	1,700
2.0 m	3,000	1,400	3,000	1,350	3,000	1,350
2.5 m	2,600	950	2,550	900	2,550	900
3.0 m	2,150	650	2,100	550	2,100	550
3.5 m	1,800	400	1,750	300	1,750	300
4.0 m			1,450	180	1,450	150
4.5 m			1,200		1,200	
5.0 m			1,000		1,000	
5.5 m			850		850	
6.0 m			700		700	
7.0 m			400		450	
8.0 m					250	
A (°)	0 ~ 82	0 ~ 82	0 ~ 82	53 ~ 82	39 ~ 82	68 ~ 82

A : Range of boom angle (without load)
B : Boom length
C : Load radius

NOTES FOR "ON OUTRIGGERS" TABLES

1. Rated lifting capacities shown in the table are based on condition that crane is set on firm level surface. Those above bold lines are based on crane strength and those below, on its stability.
2. Rated lifting capacities below bold lines do not exceed 75 % of tipping load.
3. The mass of the hook (80 kg for 10 ton capacity, 20 kg for 1.4 ton capacity), slings and all similarly used load handling devices must be added to the weight of the load.
4. For rated lifting capacity of single top, reduce the 80 kg from the relevant boom total rated load.
   Rated lifting capacity of single top should not exceed 1,400 kg.
5. Free-fall operation should be performed without any load on the hook.
6. Standard number of part lines for each boom length is as shown below. Load per line should not surpass 12.3 kN {1,250 kgf } for main winch and 13.7 kN {1,400 kgf} for auxiliary winch.

Boom length (m)	5.2	8.8	12.4	16.0	19.6	23.2	Single top
No. of part lines	8	4	4	4	4	4	1

7. The over-side rating depends on outrigger extension. Load rating over-front and over-rear assume fully extended outrigger position. Working area for each outrigger position are given separately and must be followed accordingly during operation.

Outriggers position	Extended to middle (3.5 m)	Extended to middle (2.5 m)	Extended to minimum (1.64 m)
Angle a°	25	15	15