

TADANO ROUGH TERRAIN CRANE

MODEL : GR-300EX

(Left-hand steering)

GENERAL DATA

CRANE CAPACITY 30,000 kg at 3.0 m

BOOM 4-section, 9.7 m - 31.0 m

<u>DIMENSION</u>

Overall length approx. 11,245 mm Overall width approx. 2,620 mm Overall height 3,535 mm approx.

<u>MASS</u>

Gross vehicle mass 26,370 kg approx. -front axle 12,420 kg approx. -rear axle 13,950 kg approx.

<u>PERFORMANCE</u>

Max. traveling speed 47 km/h computed Gradeability (tan θ) computed 78% (at stall)

CRANE SPECIFICATIONS

MODEL GR-300EX

<u>CAPACITY</u> 30,000 kg at 3.0 m

BOOM Four section full power partially synchronized telescoping

boom of round hexagonal box construction with 4 sheaves at boom head. The synchronization system consists of 2 telescope

cylinders, extension cables and retraction cables. Hydraulic cylinders fitted with holding valves.

Fully retracted length...... 9.7 m Fully extended length..... 31.0 m

Extension speed...... 21.3 m in 91 s

SINGLE TOP (AUXILIARY

BOOM SHEAVE)

Single sheave. Mounted to main boom head for single line

work.

<u>ELEVATION</u> By a double-acting hydraulic cylinder, fitted with

holding valve.

Automatic speed reduction and soft stop function.

Elevation speed...... 0° to 81° in 44 s

HOIST - Main winch Variable speed type with grooved drum driven by hydraulic

axial piston motor through winch speed reducer. Power load

lowering and hoisting.

Equipped with automatic brake (Neutral brake) and

counterbalance valve.

Controlled independently of auxiliary winch.

Single line pull......38.2 kN {3,900 kgf}

Single line speed......118 m/min (at the 4th layer)

Wire rope...... Spin-resistant type
Diameter x length......16 mm x 170 m

HOOK BLOCK -

30 t capacity

4 sheaves, swivel type hook with safety latch.

HOOK BLOCK-

Swivel hook with safety latch for single line use.

3.9 t capacity

SWING Hydraulic axial piston motor driven through planetary

speed reducer. Continuous 360° full circle swing on ball

bearing slew ring.

Equipped with manually locked/released swing brake.

Swing speed......2.7 min⁻¹ {rpm}

HYDRAULIC SYSTEM

Pumps.....Two variable piston pumps for telescoping,

elevating and winches.

Tandem gear pump for steering, swing and

optional equipment.

Control valves..... Multiple valves actuated by pilot pressure

with integral pressure relief valves.

Circuit..... Equipped with air cooled type oil cooler.

Oil pressure appears on AML display for

main circuit.

Hydraulic oil tank capacity...

approx. 380 liters

Filters..... Return line filter

CRANE CONTROL

By 4 control levers for swing, boom hoist, main winch, boom telescoping or auxiliary winch with 2 control pedals for boom hoist and boom telescoping based on ISO standard layout. Control lever stands can change neutral positions and tilt for easy access to cab.

CAB

Both crane and drive operations can be performed from one cab mounted on rotating superstructure. One sided one-man type, steel construction with sliding door access and tinted safety glass windows opening at side. Door window is powered control.

Operator's 3 way adjustable seat with headrest and armrest. Hot water cab heater and air conditioning.(Optional)

TADANO Automatic Moment Limiter (Model:AML-L)

Main unit in crane cab gives audible and visual warning of approach to overload. Automatically cuts out crane motions before overload. With working range (load radius and/or boom angle and/or tip height and/or swing range) limit function and adjustable boom elevation speed.

Automatic Speed Reduction and Soft Stop function on boom elevation and swing.

Nine functions are constantly displayed:

Either moment as percentage or main hydraulic pressure

Either boom angle or moment %

Either boom length or potential hook height

Either actual load radius or swing angle

Actual hook load

Permissible load

Either jib offset angle or number of parts of line of rope

Boom position indicator

Either outrigger position or on-tire indicator

OUTRIGGERS

Hydraulically operated H-type outriggers. Each outrigger controlled simultaneously or independently from the cab. Equipped with sight level gauge. Floats mounted integrally

with the jacks retract to within vehicle width. All cylinders fitted with pilot check valves.

Crane operation with different extended length of each outrigger. Equipped with extension width detector for each outrigger.

Extended width

COUNTERWEIGHT

Integral with swing frame

Mass 2,380 kg

NOTE: Each crane motion speed is based on unladen conditions.

CARRIER SPECIFICATIONS

TYPE Rear engine, left hand steering, driving axle 2-way

selected type (by manual switch).

4 x 2 front drive

4 x 4 front and rear drive

FRAME High-tensile steel, all welded mono-box construction.

ENGINE Model..... Cummins QSB5.9-30TAA [EUROMOT Stage 2]

Type...... 4 cycle, turbo charged and after cooled, 6 cylinder in line, direct injection, water cooled

diesel engine.

Piston displacement.....5,900 cm³

Bore x stroke.......102 mm x 120 mm

<u>TRANSMISSION</u> Electronically controlled full automatic transmission.

Torque converter driving full powershift with driving axle

selector. 8 forward and 2 reverse speeds.

4 speeds - High range - 2 wheel drive ; 4 wheel drive

4 speeds - Low range - 4 wheel drive

AXLES FrontFull floating type, steering and driving axle with planetary

reduction.

Rear..... Full floating type, steering and driving axle with planetary

reduction.

Non-spin differential.

<u>STEERING</u> Hydraulic power steering controlled by steering wheel.

Three steering modes available:

2-wheel front

4-wheel coordinated

4-wheel crab

<u>SUSPENSION</u> Front......Semi-elliptic leaf springs with hydraulic lockout device.

RearSemi-elliptic leaf springs with hydraulic lockout device.

<u>BRAKE SYSTEM</u> Service.....Air over hydraulic disc brakes on all 4 wheels.

Parking / Emergency.....

Spring applied-air released brake acting on input

shaft of front axle.

Auxiliary...Electro-pneumatic operated exhaust brake.

ELECTRIC SYSTEM 24 V DC. 2 batteries of 12 V - 120 Ah capacity.

FUEL TANK CAPACITY 300 liters

TIRES Front......445 / 95 R 25(OR), Single x 2

Rear445 / 95 R 25(OR), Single x 2

<u>TURN RADIUS</u> Min. turning radius (at center of extreme outer tire)

2-wheel steering......9.55 m 4-wheel steering......5.7 m

EQUIPMENT

STANDARD EQUIPMENT

Automatic moment limiter(AML-L)

External lamp (AML)

Pendant type over-winding cutout Winch automatic fail-safe brake

Hook safety latch Pilot check valves

Holding valves

Counterbalance valves

Hydraulic pressure relief valves

Swing brake

Swing lock (360° positive swing lock)

Boom angle indicator Boom elevation foot pedal Boom telescoping foot pedal

Outrigger extension width detector

Sight level gauge Hydraulic oil cooler

Electric windshield wiper and washer

Roof window wiper and washer

Power window (Cab door) Tachometer/Speedometer

3 way adjustable cloth seat with seat belt, headrest and armrest

Cab floor mat

Sun visor (Front and roof)

Automatic drive system

Transmission neutral position engine start

Overshift prevention

Parking braked travel warning Tilt-telescope steering wheel

Back-up alarm

Air cleaner dust indicator

Air dryer

Water separator with filter Engine over-run alarm

Hydraulic lockout suspension Non-spin differential (Rear) Towing eyes - front and rear

OPTIONAL EQUIPMENT

Winch drum rotation indicator (Visual type)

Cable follower Electric fan Tire inflation kit

Hot water cab heater, air conditioner and defroster

Emergency steering

RATED LIFTING CAPACITIES

ISO 4305

Unit: ×1000kg

ON OUTRIGGERS FULLY EXTENDED 6.3m SPREAD										
	ON OL	JTRIGGE	RS FUI	LY EXT	ENDED	6.3m SF	READ			
			360	$^{\circ}$ ROTAT	ION					
A	9.	.7m	16.8m		24	.4m	31	.0m		
B \	С		С		С		С			
3.0	60.6	30.0	74.4	19.2	79.7	12.5				
3.5	57.0	27.2	72.5	19.2	78.5	12.5				
4.0	53.1	23.4	70.9	19.2	77.5	12.5	80.8	8.4		
4.5	49.2	21.3	68.9	18.3	76.3	12.5	80.0	8.4		
5.0	44.7	19.6	67.1	17.0	75.0	12.5	79.1	8.4		
5.5	40.3	18.1	65.1	15.8	74.0	12.5	78.3	8.4		
6.0	34.9	16.6	63.3	14.7	72.8	12.5	77.3	8.4		
6.5	28.7	15.2	61.4	13.6	71.5	11.7	76.6	8.4		
7.0	18.3	14.1	59.4	12.9	70.3	11.0	75.6	8.1		
8.0			54.9	10.9	67.7	9.75	73.7	7.5		
9.0			50.5	9.0	65.0	8.75	71.8	6.8		
10.0			45.8	7.05	62.4	7.9	69.8	6.2		
11.0			40.3	5.8	59.5	6.6	67.6	5.8		
12.0			34.3	4.8	56.5	5.6	65.6	5.4		
13.0			27.0	4.05	53.6	4.75	63.5	5.0		
14.0			15.7	3.4	50.4	4.15	61.3	4.4		
15.0					47.0	3.6	59.0	3.85		
16.0					43.4	3.2	56.6	3.45		
17.0					39.6	2.75	54.2	3.05		
18.0					35.5	2.45	51.8	2.65		
19.0					30.7	2.05	49.2	2.4		
20.0					25.6	1.8	46.6	2.1		
22.0							40.8	1.7		
24.0							34.4	1.3		
26.0							26.2	1.0		
28.0							13.4	0.5		
D				()°					

Unit: ×1000kg

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE									
ON OUTRIGGERS FULLY EXTENDED 6.3m SPREAD 360° ROTATION									
A	9.	.7m	16	5.8m	24	.4m	31.0m		
C	В		В		В		В		
0°	7.2	13.4	14.3	3.2	21.9	1.2	28.5	0.5	

A:Boom length (m)

B:Load radius (m)

C:Loaded boom angle (°)

D :Minimum boom angle (°) for indicated length (no load)

Unit: ×1000kg									
	ON C	UTRIGG	ERS M	ID EXTE	NDED 5	.9m SPF	READ		
			360	°ROTAT	ION				
A	9.	.7m	16	5.8m	24	.4m		.0m	
B	С	•	С	•	С		С		
3.0	60.6	30.0	74.4	19.2	79.7	12.5			
3.5	57.0	27.2	72.5	19.2	78.5	12.5			
4.0	53.1	23.4	70.9	19.2	77.5	12.5	80.8	8.4	
4.5	49.2	21.3	68.9	18.3	76.3	12.5	80.0	8.4	
5.0	44.7	19.6	67.1	17.0	75.0	12.5	79.1	8.4	
5.5	40.3	18.1	65.1	15.8	74.0	12.5	78.3	8.4	
6.0	34.9	16.6	63.3	14.7	72.8	12.5	77.3	8.4	
6.5	28.7	15.2	61.4	13.6	71.5	11.7	76.6	8.4	
7.0	18.3	12.9	59.4	12.6	70.3	11.0	75.6	8.1	
8.0			54.9	9.65	67.7	9.75	73.7	7.5	
9.0			50.5	7.7	65.0	8.75	71.8	6.8	
10.0			45.8	6.25	62.1	7.05	69.8	6.2	
11.0			40.3	5.15	59.4	5.95	67.6	5.8	
12.0			34.3	4.2	56.5	4.95	65.5	5.3	
13.0			27.0	3.5	53.4	4.2	63.2	4.5	
14.0			15.7	2.9	50.2	3.55	61.1	3.85	
15.0					46.9	3.05	58.8	3.35	
16.0					43.3	2.6	56.5	2.85	
17.0					39.5	2.25	54.0	2.5	
18.0					35.2	1.85	51.6	2.2	
19.0					30.6	1.6	49.1	1.85	
20.0					25.1	1.35	46.4	1.6	
22.0							40.4	1.15	
24.0							33.6	0.8	
26.0							25.6	0.55	
D				()°				

Unit: ×1000kg

	LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE									
ON OUTRIGGERS MID EXTENDED 5.9m SPREAD 360° ROTATION										
A	9.	.7m	16	5.8m	24	.4m	31.0m			
c \	В		В		В		В			
0°	7.2	12.0	14.3	2.7	21.9	0.9	28.5	0.3		

A:Boom length (m)

B:Load radius (m)

C:Loaded boom angle (°)

D :Minimum boom angle (°) for indicated length (no load)

ON OUTRIGGERS MID EXTENDED 5.0m SPREAD									
	ON C	UTRIGG	ERS M	ID EXTE	NDED 5	5.0m SPF	READ		
			360	°ROTAT	ION				
A	9.	7m	16	3.8m	24	.4m	31.0m		
В	С		C		C		С		
3.0	60.6	30.0	74.4	19.2	79.7	12.5			
3.5	57.0	27.2	72.5	19.2	78.5	12.5			
4.0	53.1	23.4	70.9	19.2	77.5	12.5	80.8	8.4	
4.5	49.2	21.3	68.9	18.3	76.3	12.5	80.0	8.4	
5.0	44.7	19.6	67.1	17.0	75.0	12.5	79.1	8.4	
5.5	40.3	15.7	65.1	15.0	74.0	12.5	78.3	8.4	
6.0	34.9	13.2	63.3	12.65	72.8	12.5	77.3	8.4	
6.5	28.7	11.3	61.4	10.85	71.5	11.7	76.6	8.4	
7.0	18.2	9.65	59.4	9.5	70.1	10.4	75.6	8.1	
8.0			54.9	7.3	67.5	8.2	73.7	7.5	
9.0			50.5	5.8	64.8	6.7	71.8	6.8	
10.0			45.8	4.7	62.0	5.5	69.5	5.8	
11.0			40.3	3.8	59.3	4.65	67.3	4.9	
12.0			34.3	3.1	56.3	3.9	65.2	4.25	
13.0			27.0	2.55	53.0	3.25	63.0	3.6	
14.0			15.7	1.9	49.9	2.75	60.8	3.1	
15.0					46.6	2.3	58.5	2.65	
16.0					43.0	1.9	56.1	2.25	
17.0					39.4	1.6	53.8	1.95	
18.0					35.2	1.35	51.3	1.65	
19.0					30.5	1.1	48.7	1.4	
20.0					24.9	0.75	46.0	1.2	
22.0		40.3 0.8							
D				0°			2	26°	

Unit: ×1000kg

	LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE										
ON OUTRIGGERS MID EXTENDED 5.0m SPREAD 360° ROTATION											
A	9.	9.7m 16.8m 24.4m									
C	В		В		В						
0°	0° 7.2 9.0 14.3 1.8 21.9 0.5										

A:Boom length (m)

B:Load radius (m)

C:Loaded boom angle (°)

D: Minimum boom angle (°) for indicated length (no load)

	ON C	UTRIGG	ERS M	IN EXTE	NDED 2	2.2m SPF	READ	ON OUTRIGGERS MIN EXTENDED 2.2m SPREAD									
				°ROTAT													
A	9.	.7m		5.8m		.4m	31.0m										
В	С		С		С		С										
3.0	60.6	13.2	74.2	13.0	79.5	12.5											
3.5	57.0	10.25	72.2	9.8	78.4	10.9											
4.0	53.1	8.0	70.5	7.8	77.2	8.8	79.9	8.0									
4.5	49.2	6.7	68.4	6.45	75.9	7.25	79.0	7.2									
5.0	44.7	5.7	66.8	5.3	74.6	6.2	77.9	6.05									
5.5	40.3	4.7	64.6	4.4	73.3	5.2	77.0	5.45									
6.0	34.9	3.85	62.8	3.65	72.0	4.4	76.1	4.8									
6.5	28.7	3.3	60.9	3.05	70.6	3.8	75.1	4.25									
7.0	18.3	2.7	58.7	2.6	69.5	3.3	74.1	3.65									
8.0			54.6	1.85	66.7	2.4	72.3	2.75									
9.0			50.2	1.2	64.1	1.75	70.3	2.05									
10.0			45.1	0.55	61.3	1.35	68.3	1.5									
11.0					58.7	0.95	66.2	1.2									
12.0					55.9	0.55	64.3	0.9									
13.0							62.2	0.5									
D		0°	4	40°	5	53°	6	60°									

Unit: ×1000kg

	LIFT	ING CAPA	CITIES A	T ZERO D	EGREE E	BOOM AND	GLE				
ON OUTRIGGERS MIN EXTENDED 2.2m SPREAD 360° ROTATION											
A	9.7m										
C	В	•									
0°	7.2	2.5									

A :Boom length (m)
B :Load radius (m)

C:Loaded boom angle (°)

D: Minimum boom angle (°) for indicated length (no load)

NOTES FOR "ON OUTRIGGERS" TABLE

- 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 based on crane stability are according to ISO 4305.
- 3. The mass of the hook (270kg for 30 t capacity, 100kg for 3.9 t capacity), slings and all similarly used load handling devices must be considered as part of the load and must be deducted from the lifting capacities.
- 4. For rated lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reduction for auxiliary load handling equipment. Capacities of single top shall not exceed 3,900 kg including main boom hook mass and the net capacity must be so reduced.
- 5. Standard number of parts of line for each boom length is as shown below. Load per line should not surpass 38.2 kN {3,900 kgf} for main winch.

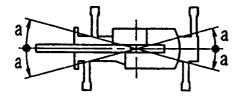
Boom length	9.7m	9.7m to 16.8m	16.8m to 31.0m	Single top
Number of parts of line	9	6	4	1

The lifting capacity data stored in the AUTOMATIC MOMENT LIMITER (AML-L) is based on the standard number of parts of line listed in the chart.

Maximum lifting capacity is restricted by the number of parts of line of AUTOMATIC MOMENT LIMITER (AML-L).

6. The lifting capacity for over-side area differs depending on the outrigger extension width. Work with the capacity corresponding to the extension width. The lifting capacities for over-front and over-rear areas are for "outriggers fully extended". However, the areas (angle **a**) differ depending on the outrigger extension width.

Outriggers extended width	5.9m	5.0m	2.2m
	(middle)	(middle)	(minimum)
Angle a °	45	40	15



RATED LIFTING CAPACITIES

ISO 4305

Unit: ×1000kg

				ON R	UBBE	R STA	TIONA	RY			J	rooong
			Over	Front					360° Rotation 16.8m C C 1.0 9.0 7.3 5.7 68.5 5.5 4.9 66.3 4.5 4.0 64.6 3.7 3.2 62.5 3.1 2.75 60.9 2.5 2.27 58.6 2.1 54.6 1.4 66.9 49.9 0.85 64.3 61.6 58.7			
\ A	9.	7m	16	.8m	24	.4m	9.	7m	16	.8m	24	.4m
В	С		С		С		C		C		C	
3.0	60.6	18.0					60.6	11.0				
3.5	56.8	17.0					57.1	9.0				
4.0	53.0	15.0					53.5	7.3				
4.5	49.2	12.7	68.8	11.0			49.7	5.7	68.5	5.5		
5.0	44.9	10.6	66.9	9.5			45.4	4.9	66.3	4.5		
5.5	39.9	9.0	64.9	8.0			40.8	4.0	64.6	3.7		
6.0	34.6	7.7	63.1	7.0			35.3	3.2	62.5	3.1		
6.5	27.7	6.6	61.1	6.1			28.9	2.75	60.9	2.5		
7.0	17.7	5.7	59.0	5.3			20.5	2.27	58.6	2.1		
8.0			54.6	4.25	67.2	5.0			54.6	1.4	66.9	2.2
9.0			50.0	3.45	64.3	3.9			49.9	0.85	64.3	1.6
10.0			45.2	2.65	61.6	3.15					61.6	1.1
11.0			40.1	2.1	58.8	2.55					58.7	8.0
12.0			33.8	1.6	55.9	2.1						
13.0			26.5	1.2	52.9	1.75						
14.0			15.7	0.75	49.7	1.4						
15.0					46.7	1.1						
16.0					43.1	0.85						
17.0					39.4	0.6						
D		C) ^o		2	28°	(O^o	4	16.8m C 68.5 5.5 66.3 4.5 64.6 3.7 62.5 3.1 60.9 2.5 58.6 2.1 54.6 1.4 66 49.9 0.85 64		56°

Unit: ×1000ka

											Jilit. X	TOUCKS	
		LIFTI	NG CA	APACIT'	Y AT Z	ZERO D	EGRE	E BOO	M ANG	GLE			
ON RUBBER STATIONARY													
	Over Front									360° Rotation			
\ A	9.	7m	16	.8m		_	9.7m						
C	В		В				В						
0°	7.2	5.4	14.3	0.7			7.2	2.1					

- A:Boom length (m)
- **B**:Load radius (m)
- **C**:Loaded boom angle (°)
- **D**: Minimum boom angle (°) for indicated length (no load)

	ON RUBBER CREEP								oookg			
	Over Front						360° Rotation					
\ A	9.7m		16.8m		24.4m		9.7m		16.8m		24.4m	
В	С		С		С		С		С		С	
3.0	60.6	18.0					60.6	10.0				
3.5	56.8	15.45					57.0	8.0				
4.0	53.0	13.0					53.3	6.5				
4.5	49.0	11.1	68.6	9.7			49.2	5.1	68.6	5.1		
5.0	44.7	9.3	66.6	8.4			44.4	4.3	66.6	4.2		
5.5	39.8	7.95	64.6	7.0			39.6	3.7	64.7	3.5		
6.0	34.7	6.7	62.8	6.0			34.0	3.0	62.7	2.7		
6.5	28.0	5.75	60.8	5.3			27.0	2.5	60.7	2.35		
7.0	18.2	5.0	58.7	4.65			18.1	1.95	58.9	1.85		
8.0			54.4	3.6	67.0	4.3			54.5	1.3	67.0	1.9
9.0			49.9	2.8	64.3	3.4			50.2	0.75	64.3	1.35
10.0			45.1	2.3	61.7	2.8					61.7	0.9
11.0			39.6	1.8	58.8	2.25					58.8	0.6
12.0			33.3	1.35	56.0	1.8						
13.0			26.0	1.0	52.9	1.5						
14.0			14.6	0.6	49.7	1.2						
15.0					46.4	0.95						
16.0					42.9	0.6						
D	0°			3	i1°	(0°		14°	5	56°	

Unit: ×1000kg

	Sim viosal											
LIFTING CAPACITY AT ZERO DEGREE BOOM ANGLE ON RUBBER CREEP												
	Over Front							360° Rotation				
\ A	9.	7m	16	.8m			9.7m					
C	В		В				В					
0°	7.2	4.7	14.3	0.5			7.2	1.8				

- A:Boom length (m)
- **B**:Load radius (m)
- **C** :Loaded boom angle (°)
- **D**: Minimum boom angle (°) for indicated length (no load)

NOTES FOR "ON RUBBER" TABLES

- Rated lifting capacities shown in the table are based on condition that crane is set on firm level surface, with suspension lock applied. Those above bold lines are based on tire capacity and those below, on crane stability. They are based on actual working radii increased by tire deformation and boom deflection.
- 2. Rated lifting capacities based on crane stability are according to ISO 4305.
- 3. The mass of the hook (270 kg for 30 t capacity, 100 kg for 3.9 t capacity), slings and all similarly used load handling devices must be considered as part of the load and must be deducted from the lifting capacities.
- 4. For rated lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reductions for auxiliary load handling equipment. Capacities of single top shall not exceed 3,900 kg including main hook.
- 5. Maximum permissible boom length is 24.4 m.
- 6. CREEP is motion for crane not to travel more than 60 m in any 30 minute period and to travel at the speed of less than 1.6 km/h.
- 7. During "CREEP" duties travel slowly and keep the lifting load as close to the ground as possible, and especially avoid any abrupt steering, accelerating or braking.
- 8. Do not operate the crane while carrying the load.
- 9. Tires should be inflated to their correct air pressure of 0.9 MPa {9.0 kgf/cm²}.
- 10. For CREEP operation, set Drive select switch to "4-WHEEL(Lo)" and set gear shift lever to "1".
- 11. Standard number of parts of line for on tires operation should be according to the following table.

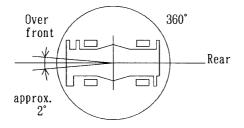
Load per line should not surpass 38.2 kN {3,900 kgf} for main winch.

D 1 4		Over Front		360° Rotation			
Boom length	9.7m	16.8m	24.4m	9.7m	16.8m	24.4m	
Number of parts of line	6	4	4	4	4	4	
(Single top)	(1)	(1)	(1)	(1)	(1)	(1)	

The lifting capacity data stored in the AUTOMATIC MOMENT LIMITER (AML-L) is based on the standard number of parts of line listed in the chart.

Maximum lifting capacity is restricted by the number of parts of line of AUTOMATIC MOMENT LIMITER (AML-L).

WORKING AREA



Without outriggers "Over front" operation should be performed within 2 degrees in front of chassis.

RANGE

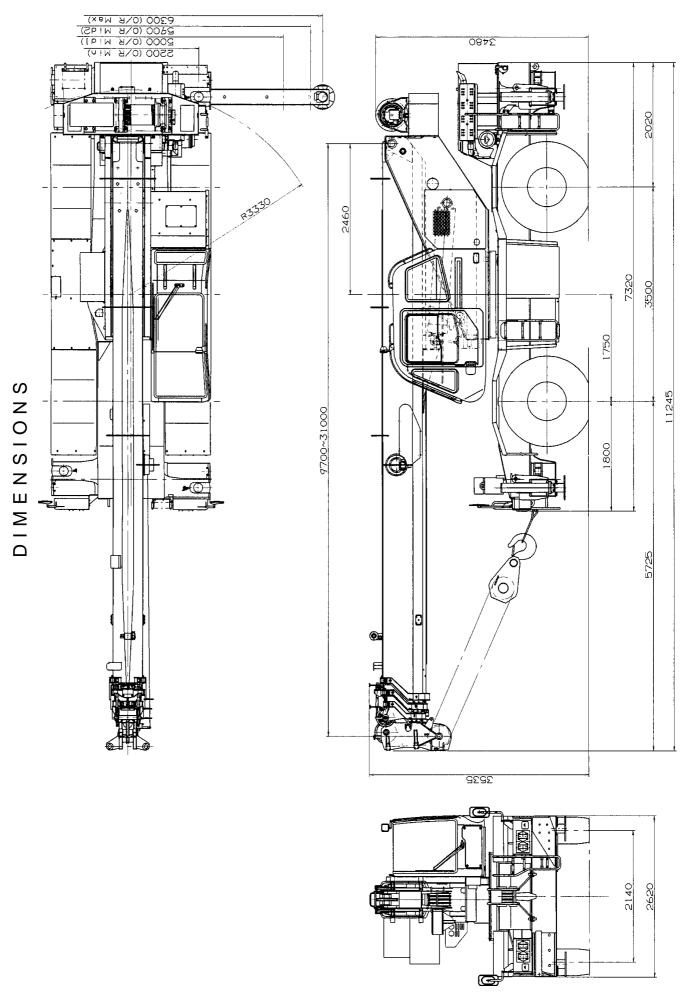
40 35 30 HEIGHT 25 LIFTING 20 15 10 5 Ο 5 10 15 20 25 30 35 RADIUS (m) Boom Length 16.8m 24.4m

WORKING

NOTE: The above lifting height and boom angle are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

The above working range is shown on condition with outriggers

The above working range is shown on condition with outriggers fully(6.3m) extended.



GR-300EX Axle Weight Distribution Chart

UNIT : kg

	GVW	Front	Rear
Basic standard machine includes: 4-section boom (9.7 m - 31.0 m) Cummins QSB5.9-30TAA 445 / 95 R 25 tires Single top 3.9 ton hook ball	26,370	12,420	13,950
Add: 1. Hot water cab heater, air conditioner and defroster	+95	+26	+69
Remove:			
1. 30 ton 4 sheaves hook block	-270	-480	+210
2. 3.9 ton hook ball	-100	-140	+40