

SPECIFICATIONS

SPEC. No. CC-1022

DATE APR 2006

**SPECIFICATIONS
HYDRAULIC CRANE**

MODEL: UNIC URW295CUR

Specifications subject to change without notice.

FURUKAWA UNIC CORPORATION

*EXPORT TECHNICAL DEPT
TOKYO JAPAN*

UNIC CRANE PERFORMANCE
MODEL : URW295CUR

CRANE CAPACITY:

LIFTING CAPACITY	: Max. 6450 lbs. (2930 kg) at 4.6 ft. (1.4m)
HOOK HEIGHT	
ABOVE GROUND LEVEL	: Max. 28.9 ft. (8.8m)
BELOW GROUND LEVEL	: Max. 32.5 ft. (9.9 m) with 4-part line
WORKING RADIUS	: Min 1.5 ft. (0.45 m) to Max 27.6 ft. (8.41 m)

BOOM:

5-section box beam type telescoping boom

Boom Length	
Retracted boom:	8.30 ft. (2.53 m)
Extended boom:	28.4 ft. (8.65 m)
Boom Extending Speed:	20.1 ft. (6.12 m) / 20 s
Boom Raising Speed:	0° to 78° / 11 s

WINCH:

Hydraulic motor driven, spur gear reduction, with automatic mechanical brake and wire rope retaining roller.

Hoisting Speed	
Single line speed:	131.2 ft. (40.0 m) / min at 4th layer
Hook speed:	32.8 ft. (10.0 m) / min at 4th layer with 4-part line
Hook Block;	6450 lbs. (2930 kg) capacity, 2 sheaves with safety latch
Wire Rope	
Construction (JIS):	IWRC 6×WS(26) GRADE B
Diameter × Length:	5/16 in. (8 mm)× 155 ft. (47.5 m)
Breaking strength:	9520 lbs. {42.4 kN (4320 kgf)}

SLEWING:

Trochoid motor, worm gear reduction, spur gear reduction, and worm self-locking brake (supported by ball bearings)

Slewing Range:	360° continuous rotation on a ball bearing race
Slewing Speed:	1.5 rpm

OUTRIGGERS:

2-section (with damper) for bend and 3-section extension.
Double acting hydraulic cylinders with pilot-operated check valves, direct pushing type.
(Directly connected with hydraulic automatic lock device)

HYDRAULIC SYSTEM:

Hydraulic Pump	
Type:	Variable delivery piston pump
Rated pressure:	3130 psi {21.6 MPa (220 kgf/cm ²)}
Rated delivery	10.0 gal. (38 ℓ)/min
Rated revolution:	2000rpm
Hydraulic oil tank:	7.13 gal. (27 ℓ) capacity
Hydraulic Valves	
Control valve:	Multiple control valve, spring centered, spool-type, with pressure relief valve
Pressure relief valve setting:	For crawling: 3,130 psi {21.6MPa (220kgf/cm ²)} For crane: 2,990 psi {20.6MPa (210kgf/cm ²)}
Counterbalance valve:	Boom raising and boom telescoping cylinders
Pilot-operated check valve:	Outrigger cylinders
Hydraulic Actuators	
Hydraulic motors:	Hoisting: Axial plunger type Slewing: Trochoid type
Hydraulic cylinders:	Double acting type 1 × Boom raising cylinder 3 × Boom telescoping cylinder 4 × Outrigger cylinder

CRAWLING GEAR:

Crawling:	Endless rubber crawler
Crawler:	7 1/8 (in.) × 40 links × 2 7/8 (in.) FR (180 (mm) × 40 links × 72(mm) FR)
Tread length:	3.44 ft. (1050 mm)
Ground contact pressure:	6.96 psi {0.048 MPa (0.49 kgf/cm ²)}
Crawling speed:	0~1.4 mph (2.3 km/h), forward/reverse
Hill climbing ability:	20°
Engine:	9.6 kW (13 hp)/2000 rpm, Rated output
Steering:	Hydraulic drive independent of left/right
Starter:	Starter motor (Recoil starter)
Fuel tank:	1.58 gal. (6 ℓ capacity)

Note: The figures in relation to the speed are on the basis of no-load running at rated oil flow condition.

SAFETY DEVICES:

1. Pressure relief valve for hydraulic circuit
2. Counterbalance valves for boom raising and boom telescoping cylinders
3. Double pilot-operated check valves for outrigger cylinders
4. Hook safety latch
5. Automatic mechanical brake for winch
6. Automatic stop for overwinding
7. Overwinding alarm
8. Automatic stop for leaving minimum wire rope
9. Emergency stop button (Ignition cut)
10. Inter-lock device of crane and crawling levers
11. Inter-lock device of crane and outriggers
12. Turn over prevention device
13. Level

DIMENSIONS OF CRANE:

8.83 ft (L) & 1.97 ft (W) & 4.51 ft (H)
(2690mm(L) & 600mm(W) & 1375mm(H))

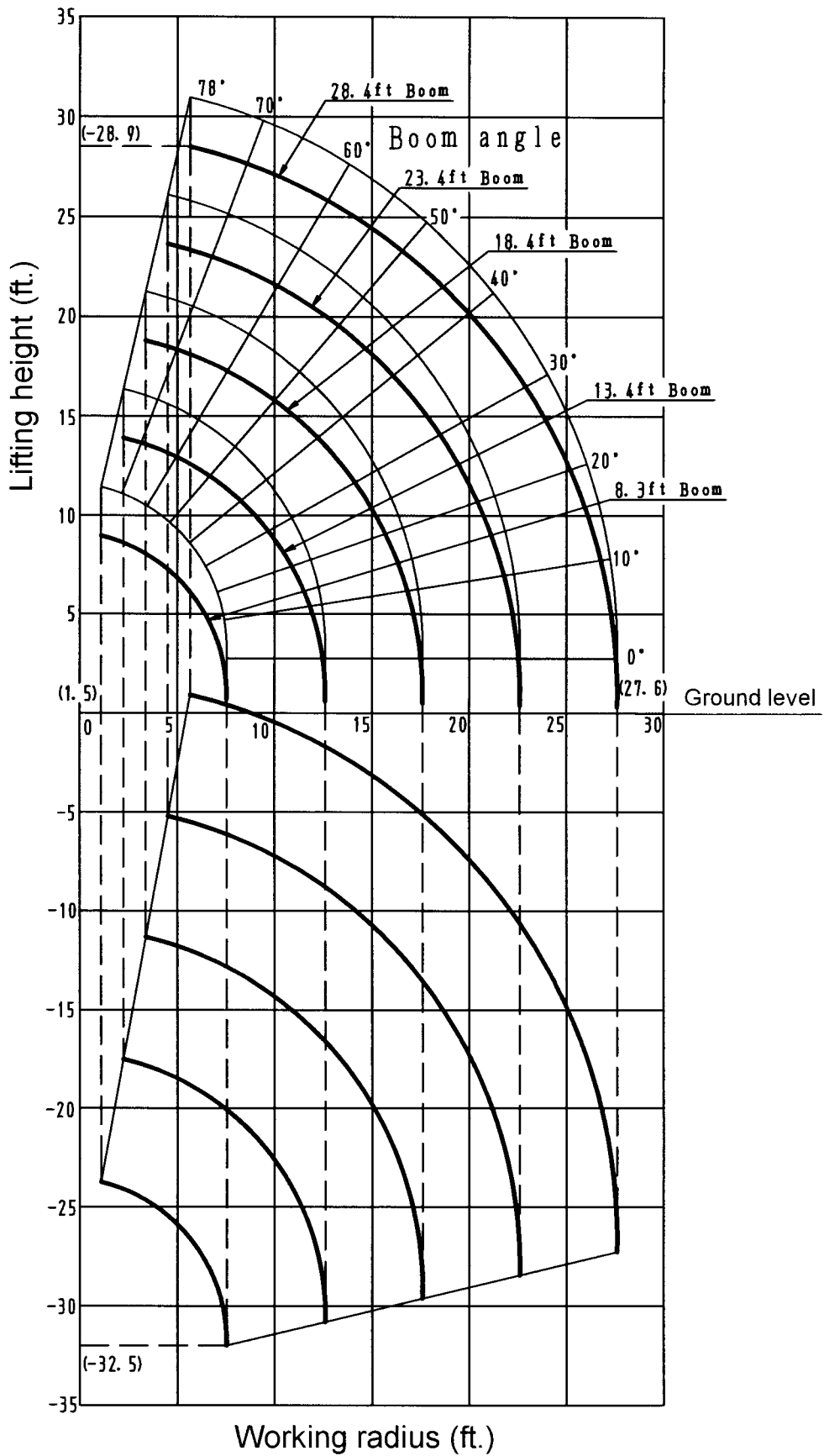
MASS OF CRANE:

4100 lbs. (1850 kg)

RADIO REMOTE CONTROLLER:

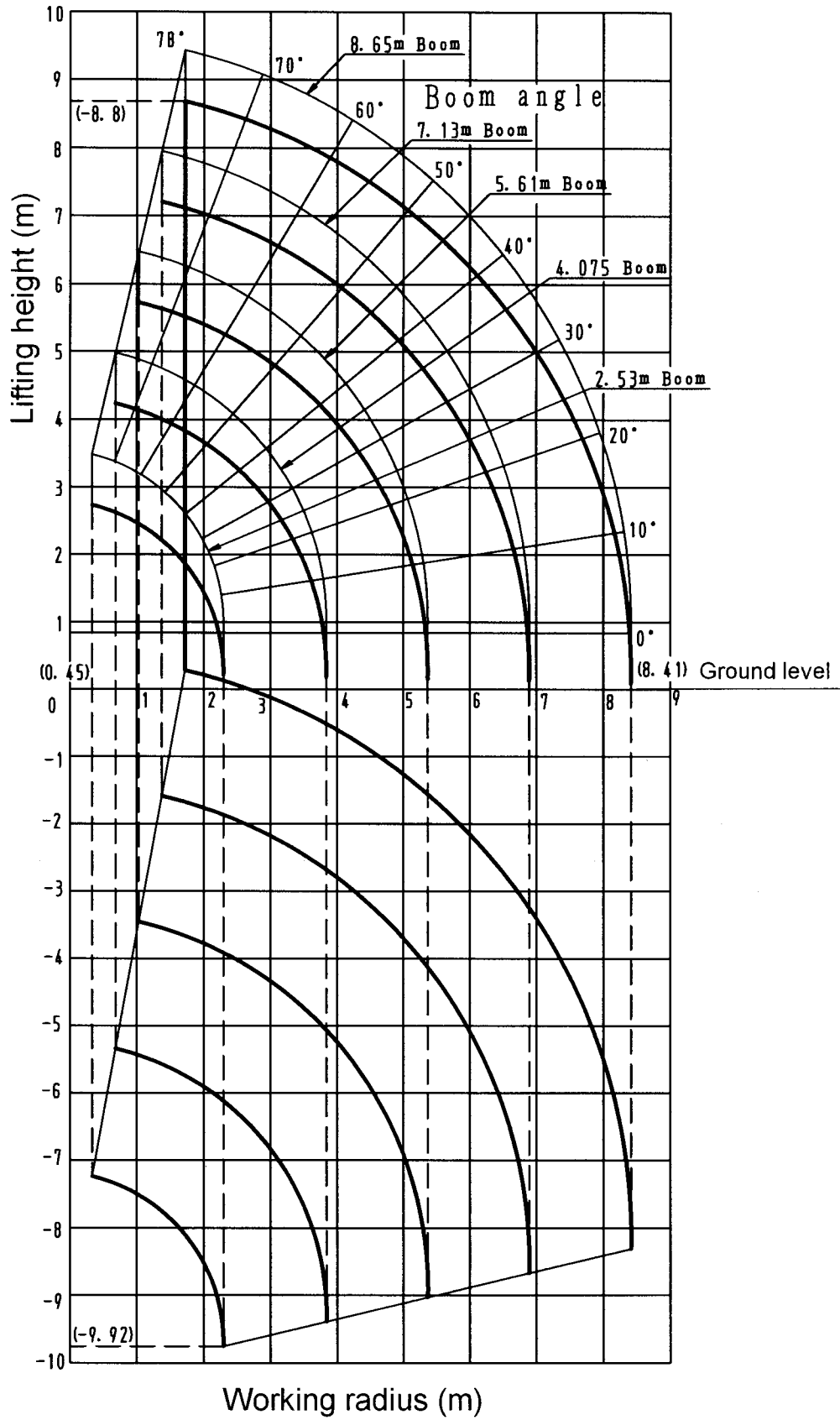
Model:	RC-500HA-USA		
System:	Manual/remote control combined system		
Control:	1. Selective control	Boom	Raise/Lower
		Hook	Hoist/Lower
		Boom	Extend/Retract
		Slewing	C.W./C.C.W. (Eng. start / stop)
		Hook storage	Store
	3. Start/Warning horn	Start radio remote control and recovered emergency stop/ Horn	
	4. Speed control lever	Hydraulic control and engine speed control	
	5. Key switch	Transmitter power on-off	
	6. Emergency-stop switch	Stop function of crane	
Power supply:	Controller	Crawler battery (DC12V)	
	Transmitter	Four R03 dry cells (DC6V)	
Power consumption:	Approx. 50 W (Single selective operation at maximum operating speed)		
Transmitter	Battery life more than 20 hours (of transmitter operation)		
Transmitter weight:	1.5 lbs (700g) (with batteries)		
Ambient temperature:	-4 °F ~ +140 °F (-20 °C ~ +60 °C)		
Storage temperature:	-22 °F ~ +167 °F (-30 °C ~ +75 °C)		

WORKING RANGE (in US customary units):



Note: The above figures are based on no-load condition and do not include the deflection of the boom.

WORKING RANGE (in SI units):



RATED LOADS (in US customary units):

Boom-sections extended: ①, ①+②

Working radius (ft.)		3.0	4.5	5.0	6.0	7.0	8.0	10.0	11.0	12.58
Rated load (lbs.)	Max extended outriggers	6450	6450	5850	4950	4350	3800	2850	2450	2000
	Not max extended outriggers	4450	4450	4450	3150	2250	1600	1100	950	600

Boom-sections extended: ①+②+③

Working radius (ft.)		7.0	8.0	9.5	10.0	11.0	12.0	14.0	15.0	17.62
Rated load (lbs.)	Max extended outriggers	3050	3050	3050	2750	2450	2150	1650	1450	1000
	Not max extended outriggers	1850	1550	1250	1150	1000	850	600	550	300



Boom-sections extended: ①+②+③+④

Working radius (ft.)		11.0	12.5	13.0	15.0	16.0	17.0	18.0	20.0	22.61
Rated load (lbs.)	Max extended outriggers	1950	1950	1750	1350	1200	1100	1000	850	660
	Not max extended outriggers	1000	800	750	600	510	450	370	280	200

Boom-sections extended: ①+②+③+④+⑤

Working radius (ft.)		12.5	13.5	15.0	16.0	18.0	19.0	21.0	23.0	25.0	27.59
Rated load (lbs.)	Max extended outriggers	1280	1280	1050	920	750	700	590	500	400	350
	Not max extended outriggers	850	700	600	530	420	380	300	220	180	130

CAUTION

- Rated loads show the performance of the crane on the level ground and are based on an actual working radius including boom deflection under load conditions.
Rated loads are also based on the strength of the crane and the stability of the crawler.
- The mass of hook (70 lbs), slings, and any accessories attached to the boom or loadline must be deducted from the rated load in the chart.
- Rated loads must be reduced in accordance with wind effects, ground conditions and operation speeds.
- “Max extended outriggers” means inner boxes are extended to the max extended position and a swing jack pin of each outrigger arm is inserted into the normal position. Other than the above, operate according to figures of “not max extended outriggers”.
- Improper set-up of outriggers may cause a turnover of the crane. Extend outriggers fully and set them on the firm and level ground. Make sure all lock pins are inserted properly.
- If even one outrigger is not fully extended, operate according to figures of “not max extended outriggers”. Operate the crane with care in this case as the stability must be changed remarkably.
- “Boom ①+②+③+④” means boom ④ is extended up to  mark.
- Operate according to the figures of ①+②+③ when boom ③ is extended even a bit. Do according to ①+②+③+④ when boom ④ is extend even a bit. Do according to ①+②+③+④+⑤ when  mark on the side of boom ④ moves away from boom ③ even a bit.
- In order to operate the crane safely, read operation and maintenance manual carefully before operation.

RATED LOADS (in SI units):

Boom-sections extended: ①, ①+②

Working radius (m)		1.0	1.4	1.5	1.8	2.0	2.5	3.0	3.5	3.835
Rated load (kg)	Max extended outriggers	2930	2930	2680	2280	2080	1680	1330	1030	930
	Not max extended outriggers	2030	2030	2030	1480	1130	680	520	380	280

Boom-sections extended: ①+②+③

Working radius (m)		2.2	2.5	2.9	3.0	3.5	4.0	4.5	5.0	5.37
Rated load (kg)	Max extended outriggers	1380	1380	1380	1280	1030	830	680	550	460
	Not max extended outriggers	830	680	560	530	410	310	250	190	150



Boom-sections extended: ①+②+③+④

Working radius (m)		3.4	3.8	4.0	4.5	5.0	5.5	6.0	6.5	6.89
Rated load (kg)	Max extended outriggers	880	880	780	630	530	450	390	350	300
	Not max extended outriggers	450	370	330	280	220	170	130	110	90

Boom-sections extended: ①+②+③+④+⑤

Working radius (m)		3.8	4.1	4.5	5.0	5.5	6.0	6.5	7.0	8.0	8.41
Rated load (kg)	Max extended outriggers	580	580	480	400	340	300	260	230	180	160
	Not max extended outriggers	380	320	280	230	190	160	130	100	70	60

CAUTION

1. Rated loads show the performance of the crane on the level ground and are based on an actual working radius including boom deflection under load conditions.
Rated loads are also based on the strength of the crane and the stability of the crawler.
2. The mass of hook (30kg), slings, and any accessories attached to the boom or loadline must be deducted from the rated load in the chart.
3. Rated loads must be reduced in accordance with wind effects, ground conditions and operation speeds.
4. "Max extended outriggers" means inner boxes are extended to the max extended position and a swing jack pin of each outrigger arm is inserted into the normal position. Other than the above, operate according to figures of "not max extended outriggers".
5. Improper set-up of outriggers may cause a turnover of the crane. Extend outriggers fully and set them on the firm and level ground. Make sure all lock pins are inserted properly.
6. If even one outrigger is not fully extended, operate according to figures of "not max extended outriggers". Operate the crane with care in this case as the stability must be changed remarkably.
7. "Boom ①+②+③+④" means boom ④ is extended up to  mark.
8. Operate according to the figures of ①+②+③ when boom ③ is extended even a bit. Do according to ①+②+③+④ when boom ④ is extend even a bit. Do according to ①+②+③+④+⑤ when  mark on the side of boom ④ moves away from boom ③ even a bit.
9. In order to operate the crane safely, read operation and maintenance manual carefully before operation.

