

SPECIFICATIONS

SPEC. No. CC-1261

**SPECIFICATIONS
HYDRAULIC CRANE**

MODEL: UNIC URW295WB3AR

Specifications are subject to change without notice.

FURUKAWA UNIC CORPORATION

UNIC CRANE PERFORMANCE
MODEL : URW295WB3AR

CRANE CAPACITY:

LIFTING CAPACITY : Max. 2.93t at 1.4m

HOOK HEIGHT

ABOVE GROUND LEVEL : Max. 8.9m

BELOW GROUND LEVEL : Max. 11.6m with 4-part line

WORKING RADIUS : Min 0.45m, Max. 8.41m

BOOM:

5-section box beam type telescoping boom

Boom Length

Retracted boom: 2.53m

Extended boom: 8.65m

Boom Extending Speed: 6.12m / 31sec. (Standard)

6.12m / 23sec. (High speed)

Boom Raising Speed: 0° to 78°/17sec. (Standard)

0° to 78°/12sec. (High speed)

WINCH:

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

Hoisting Speed

Single line speed: 28.0m/min. (Standard)

36.4m/min. (High speed)

Hook speed: 7.0m/min. (Standard)

9.1m/min. (High speed)

Hook Block:

2.9t capacity, 2 sheaves with safety latch

Wire Rope

Construction (JIS): IWRC 6 × WS(26) GRADE B

Diameter × Length: 8mm × 54.0m

Breaking strength: 42.4kN(4320kg)

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:

1.0 rpm (Standard)

1.5 rpm (High speed)

OUTRIGGERS:

2-section (with damper) for bend and 5-section (Front) / 4-section (Rear) extension.
Double acting hydraulic cylinder direct pushing type.
(Directly connected with hydraulic automatic lock device)

HYDRAULIC SYSTEM:

Hydraulic Pump

Type:

Rated pressure:

Rated delivery:

Rated revolution:

Gear pump

21.6MPa (220kgf/cm²)

18.2 ℓ / min. (Standard)

26.8 ℓ / min. (High speed)

1800rpm (Standard)

2650rpm (High speed)

Hydraulic oil tank:

27 ℓ capacity

Hydraulic Valves

Control valve:

Multiple control valve, spring centered, spool-type, with pressure relief valve

Pressure relief
valve setting:

For traveling: 21.6MPa (220kgf/cm²)

For crane: 20.6MPa (210kgf/cm²)

For steering: Ext. 6.4MPa (65kgf/cm²)
Ret. 12.7MPa (130kgf/cm²)

Counterbalance valve:

Boom raising and boom telescoping cylinders

Double 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

1 × Steering cylinder

DRIVING GEAR:

Driving type:	Wheel
Size of tire:	FRONT : 4.00-8 (Wheel rim 3.00D-8) REAR : 3.50-5 (Wheel rim 3.00SP-5)
Tread length:	1050mm
Ground contact pressure:	FRONT : 561kPa (5.72kgf / cm ²) REAR : 545kPa (5.56kgf / cm ²)
Steering angle:	L 50° , R 50°
Minimum turn radius:	outside 1990mm × inside 510mm
Traveling speed:	0~1.7km/h, forward/backward (Standard) 0~2.6km/h, forward/backward (High speed)
Hill climbing ability:	15°(10°) (It is followed to an operation manual at the time of operation)
Motor:	Rated output: 4.0kW/1800rpm (Standard) 6.0kW/2650rpm (High speed)
	Model: IA180-100B3 (Toyota Industries Co.,Ltd)
Steering:	Hydraulic drive independent of left/right

BATTERY:

Model:	EV27A-A (Discover)
Battery pack voltage:	DC48V
Battery pack capacity:	180Ah(5HR)
Battery pack composition:	4series × 2parallel
Consecutive operating time:	Approx.270min.(Standard) Approx.195min.(High speed)

BATTERY CHARGER:

Model:	SG3(ZIVAN)
Input voltage:	AC95~265V(50~60Hz), Single-phase
Input current:	15A(AC100V), 16A(AC200V)
Output voltage:	DC48V
Output current:	30A(AC100V), 60A(AC200V)
Charging time	
80%:	Approx. 6.5 hour(AC100V), 3.0hour(AC200V)
100%:	Approx. 9.0 hour(AC100V), 5.0hour(AC200V)

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. Boom angle indicator with load indicator
5. Hook safety latch
6. Automatic mechanical brake for winch
7. Automatic stop for overwinding
8. Overwinding alarm
9. Emergency stop button
10. Inter-lock device of crane and traveling levers
11. Level
12. Slewing restriction limit switch
13. Turnover prevention device
14. Automatic stop for leaving minimum wire rope (Option)
15. Three colored lamp (Option)
16. Digital load meter (Option)

VOICE MESSAGE:

[Remote control active]
[Stop winch up]
[Secure lifting hook]
[Low transmitter battery]
[Service remote control]
[Reset main switch]
[Change control mode]
[Crane mode]
[Outrigger mode Outriggers moving]
[Check error code]
[Control system error]

DIMENSIONS OF CRANE:

2730mm(L) × 750mm(W) × 1570mm(H))

MASS OF CRANE:

2280kg

REMOTE CONTROL DEVICE: (Radio controller model or Cable remote controller model)

:(Selection is possible)

System:	Manual/remote control combined system		
Control:	1. Selective control	Boom	Raise / Lower (Hook Release) Outrigger ^④ Ret / Ext
		Hook	Hoist / Lower (Shock-less ON / OFF) Outrigger ^③ Ret / Ext
		Boom	Extend / Retract Outrigger ^② Ret / Ext
		Slewing	C.W / C.C.W Outrigger ^① Ret / Ext
	2. Store hook	Hook storage	
	3. Start/Warning horn	Start radio remote control and recovered emergency stop/ Horn	
	4. Speed control lever	Hydraulic control and motor speed control	
	5. Mode select	Shock-less ON / OFF	
	6. Speed mode select	High speed mode(normal mode)/ Medium speed mode/Low speed mode	
	7. Key switch	Transmitter power on-off	
	8. Emergency-stop switch	Stop function of crane	
Power supply:	Controller	DC/DC Converter(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:	700g (with batteries)		
Ambient temperature:	-20 °C ~ +60 °C		
Storage temperature:	-30 °C ~ +75 °C		

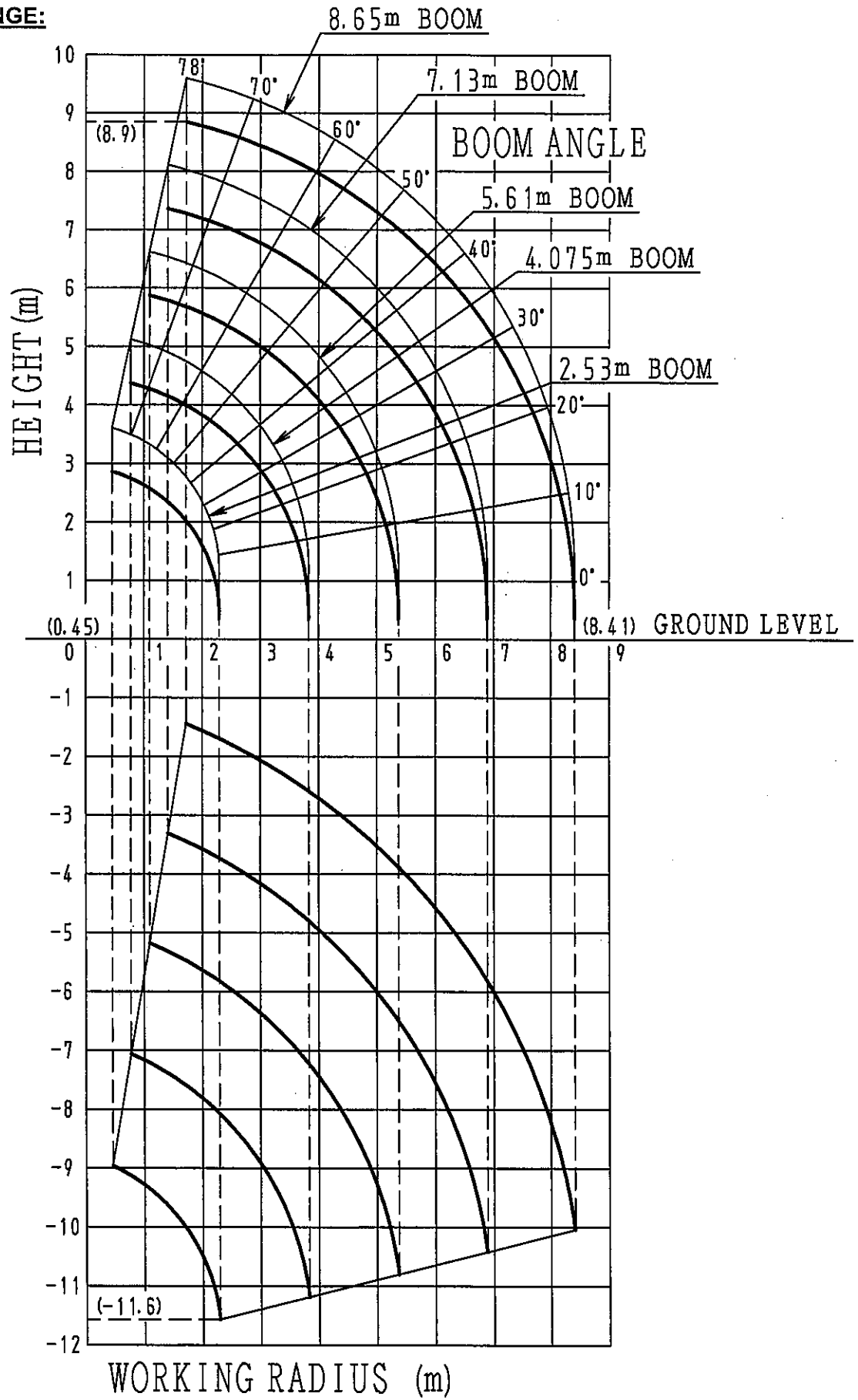
RADIO: (Radio remote controller model)

Model / Radio frequency:	RC-500HA-AUS / 434 MHz Band	} :(Selection is possible)
	RC-500HA-KOR / 447 MHz Band	
	RC-500HA-USA / 458 MHz Band	
	RC-500HA-TWN / 480 MHz Band	
	RC-500HA-CHN / 419MHz Band	

Transmitted output power:	10mW
Operating range:	Approx. 100m
Unit address:	Special address combining a frequency and ID code is assigned to each unit.

Note: In accordance with our policy of constant product improvement, all specifications are subject to change without notice or obligations.

WORKING RANGE:



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

NET RATED LOADS:

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
Net rated load (t)	Outriggers extended to maximum	2.9	2.9	2.65	2.25	2.05	1.65	1.3	1.0	0.9
	Outriggers extended not to maximum	2.0	2.0	2.0	1.45	1.1	0.65	0.49	0.35	0.25

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
Net rated load (t)	Outriggers extended to maximum	1.35	1.35	1.35	1.25	1.0	0.8	0.65	0.52	0.43
	Outriggers extended not to maximum	0.8	0.65	0.53	0.5	0.38	0.28	0.22	0.16	0.12

Boom-sections extended: ①+②+③+④

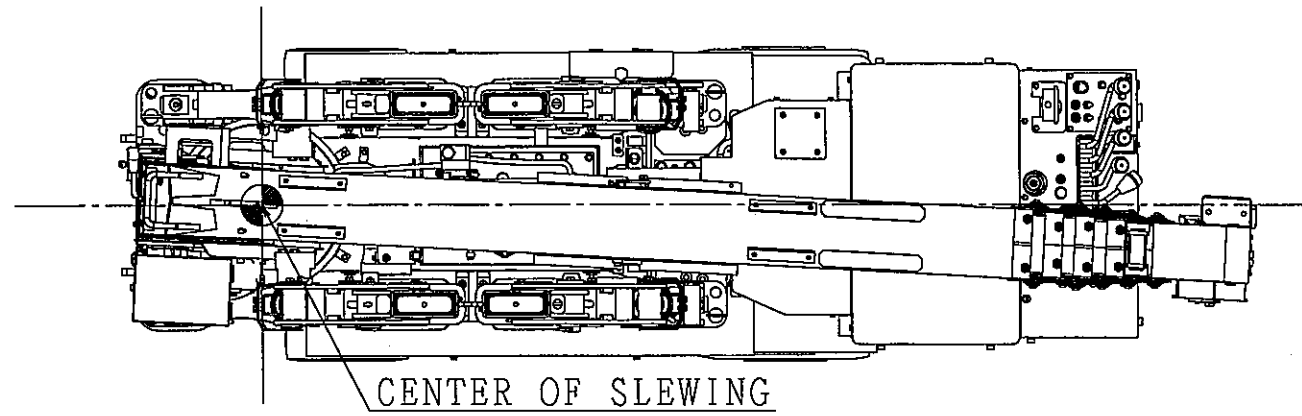
Working radius (m)		3.4	3.8	4.0	4.5	5.0	5.5	6.0	6.5	6.89
Net rated load (t)	Outriggers extended to maximum	0.85	0.85	0.75	0.6	0.5	0.42	0.36	0.32	0.27
	Outriggers extended not to maximum	0.42	0.34	0.3	0.25	0.19	0.14	0.1	0.08	0.06

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
Net rated load (t)	Outriggers extended to maximum	0.55	0.55	0.45	0.37	0.31	0.27	0.23	0.2	0.15	0.13
	Outriggers extended not to maximum	0.35	0.29	0.25	0.2	0.16	0.13	0.1	0.07	0.04	0.03

CAUTIONS

1. Net rated loads are performance when the crane is placed level and is based on an actual working radius including boom deflection under load.
Net rated loads are also based on strength and stability of the crane.
2. Net rated loads must be reduced in accordance with wind, ground condition and operating speed.
3. Net rated loads are the lifting capacities excepted for the mass of the hook.
4. When the outriggers are set without extending to their maximum, stability of the crane deteriorates remarkably.
Pay attention that the net rated loads are changed according to how far the outriggers are extended.
5. If any one of the four outriggers is not fully extended, operate with performance of not maximum extension.
6. The mass of the slings and any accessories attached to the boom or load line must be deducted from the above net rated loads in the chart.
7. In order to make correct operation, read the instruction manual carefully before crane operation.



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