

# *SPECIFICATIONS*

SPEC. No.CS-1062

DATE-AUG. 2010

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SPECIFICATIONS  
HYDRAULIC CRANE

MODEL:UNIC UBV1204

Specifications subject to change without notice.

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**FURUKAWA UNIC CORPORATION**

EXPORT TECHNICAL DEPT  
TOKYO JAPAN

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## UNIC CRANE PERFORMANCE

MODEL:UBV1204

### CRANE CAPACITY:

LIFTING CAPACITY : Max.3050kg at 6.5m  
HOOK HEIGHT : Max.13.7m  
WORKING RADIUS : Min. 0.33m to Max. 12.5m

### BOOM:

Four-section box beam type telescoping boom

Boom Length  
    Retracted boom; 4.6m  
    Extended boom; 13.0m  
Boom Extending Speed; 8.4m/84s( at 40 ℓ/min) : 35s( at 95 ℓ/min)  
Boom Raising Speed; -0.5° to 82° /30s( at 40 ℓ/min) : 15s( at 95 ℓ/min)

### WINCH:

Hydraulic motor driven planetary gear reduction, with automatic mechanical brake and counterbalance valve.

Single Line Pull; 14.7kN{1500kgf}  
Hoisting Speed  
    Single line speed; 20.0m/min at 4th layer( at 40 ℓ/min)  
    48.0m/min at 4th layer( at 95 ℓ/min)  
    Hook speed; 10.0m/min at 4th layer with 2-Part line( at 40 ℓ/min)  
    24.0m/min at 4th layer with 2-Part line( at 95 ℓ/min)  
Hook Block; 3000kg capacity, 1 sheaves with Safety latch  
  
Wire Rope  
    Construction (JIS); IWRC 6 × Fi(29) Galvanized GRADE B  
    Diameter × Length; 10mm × 78m  
    Breaking strength; 78.4kN{8000kgf}

### SLEWING:

Hydraulic motor driven, worm gear Reduction, worm self-locking brake

Slewing Range; 360° continuous rotation on a ball bearing race  
Slewing Speed; 1.0 rpm( at 40 ℓ/min) : 2.0rpm( at 95 ℓ/min)

### SAFETY DEVICES:

1. Pressure relief valve for hydraulic circuit
2. Counterbalance valves for boom raising and boom telescoping cylinders, and winch motor
3. Boom angle indicator with load indicator
4. Hook safety latch
5. Automatic mechanical brake for winch
6. Load meter
7. Overwinding alarm and automatic stop

## **RUST PREVENTION:**

Inner and outer surfaces of structural parts : Zinc coating  
(excepting cylinders)  
Raising Cylinder rod : Hard chromium coating with  
double layers  
Gear cases for slewing : Zinc coating  
Raising Cylinder pipe : Stainless steel  
Couplings : Stainless steel  
Wire ropes : Coated type  
Miscellaneous parts : GEOMET finish, and other coatings  
Painting : With special rust prevention paint

## **CONTROL VALVES:**

4-valve interlocking type (with stainless steel lever)  
Mount the valve and lay piping by matching the actual  
valve dimensions.  
Take the hydraulic power source (pump, tank) out of  
the ship. (Prepare necessary pipes as they are not  
included in the valve.)

## **HYDRAULIC SYSTEM:**

### Hydraulic Valves

Control valve;	Multiple control valve, spring centered, spool-type, with pressure relief valve
Pressure relief Valve setting;	19.6MPa {200kgf/cm <sup>2</sup> }
Counterbalance Valve;	Boom raising and boom telescoping cylinders

### Hydraulic Actuators

Hydraulic motors;	Hoisting: Axial plunger type Slewing: Trochoid type
Hydraulic cylinders;	Double acting type 1 × Boom raising cylinder 1 × Boom telescoping cylinder

## **RECOMMENDATION:**

### Hydraulic Pump

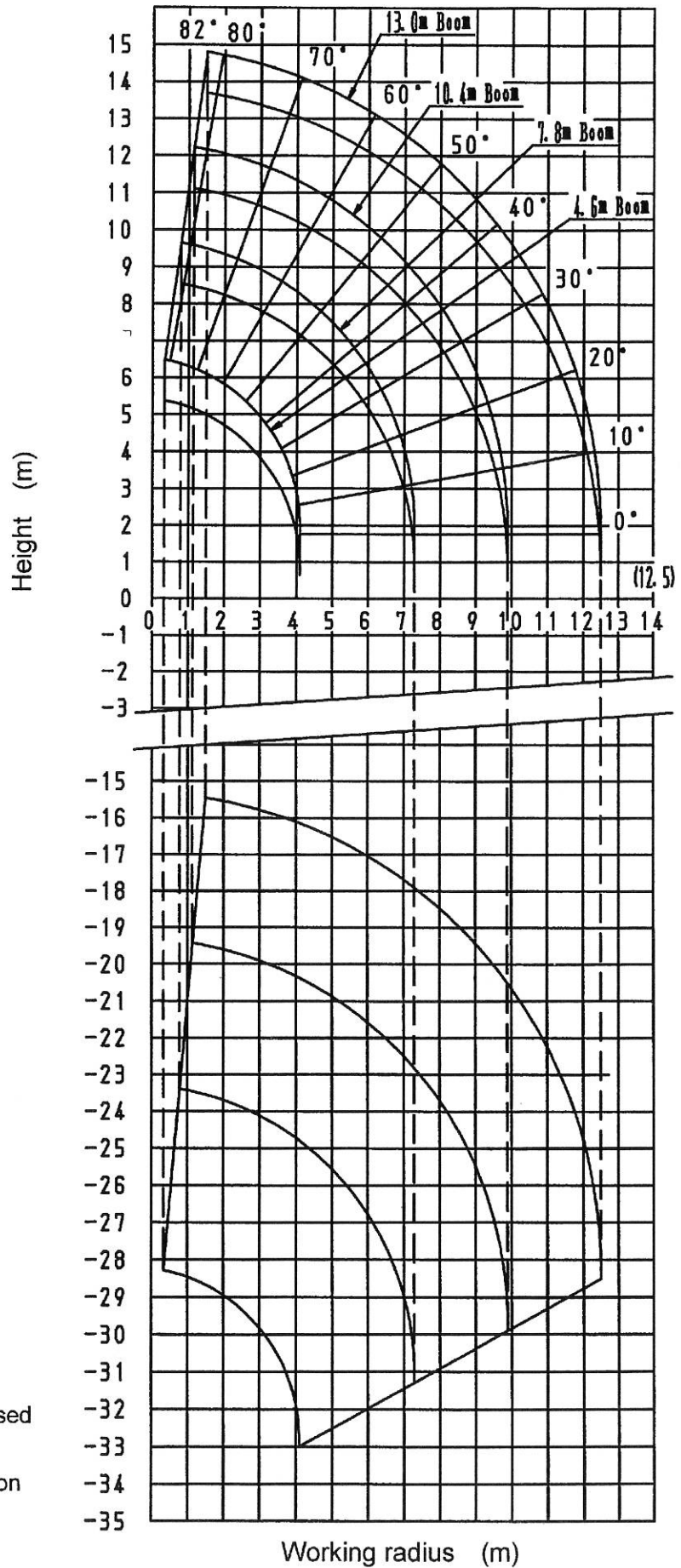
Rated pressure;	19.6MPa {200kgf/cm <sup>2</sup> }
Rated delivery;	40 ℓ/min (when an electric motor drive system) 95 ℓ/min (when engine drive with the accelerator)

**Note:** When an engine with accelerator drive system set the rated delivery at a maximum  
less than 90 ℓ/min.

**Note:** When an electric motor drive system which regulates pump delivery constant is  
employed, set the rated delivery at a level less than 40 ℓ/min.

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

**WORKING RANGE:**



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

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**RATED LOADS:**

Unit:kgf

Working Radius (m)	Boom length			
	4.6m	7.8m	10.4m	13.0m
3.0	3050	3050	3050	3050
3.5	3050	3050	3050	3050
4.0	3050	3050	3050	3050
4.5	(4.1) 3050	3050	3050	3050
5.0		3050	3050	3050
6.0		3050	3050	3050
6.5		3050	3050	3050
7.0		2850	2850	2850
8.0		(7.3) 2000	2500	2500
9.0			2200	2200
10.0			(9.9) 1400	2050
11.0				1700
12.0				1500
12.5				1000

( ) : Working radius

**CAUTION**

1. The table shows actual working radius including a possible boom deflection with a load applied when the crane has been installed horizontally.
2. Rated load is based only on the suspending strength of the crane and stability of the crane mounted ship is not considered.  
Therefore, operate the crane while paying utmost attention to the stability of the ship.
3. The weight of hook 50 kg, slings, and any accessories attached to the boom or landline must be deducted from the above rated loads in the chart.
4. Do not to overload crane. If causes the crane breaks.
5. In accordance with our policy of constant product improvement, all specifications are subject to change without notice or obligations.

UNIC HYDRAULIC CRANE FOR MARINE USE		MODEL UBV1204
SCALE 1/20	UNIT mm	DRN A. FURUKAWA
DATE AUG. 2010	DRAWING NO. B-24437	CKD APPD H. WAKAMATSU T. TOMIZAWA
<b>FURUKAWA CO., LTD.</b>		

