

SPECIFICATIONS

SPEC. No. CS-1039
DATE APR. 2008

**SPECIFICATIONS
HYDRAULIC CRANE
FOR MARINE USE**

MODEL:UNIC UBV503J

Specifications subject to change without notice.

FURUKAWA UNIC CORPORATION
EXPORT TECHNICAL DEPT
TOKYO JAPAN

UNIC CRANE PERFORMANCE
MODEL : UBV503J

CRANE CAPACITY:

LIFTING CAPACITY : Max. 3030kg at 4.1m

**HOOK HEIGHT
ABOVE CRANE
INSTALLATION BASE LEVEL** : Max. 8.7m

WORKING RADIUS : Min 0.48m, Max. 8.10m

BOOM:

Three-section box beam type telescoping boom

Boom Length
 Retracted boom; 3.51m
 Extended boom; 8.34m
Boom Extending Speed; 4.83m / 17.5 s
Boom Raising Speed; 1° to 81° / 12.5 s

WINCH:

Hydraulic motor driven, spur gear reduction,
with automatic mechanical brake.

Single Line Pull; 7.35kN {750kgf}
Hoisting Speed
 Single line speed; 68.0m / min at 3rd layer
 Hook speed; 17.0m / min at 3rd layer with 4-part line
Hook Block; 3000kg capacity, 2 sheaves with safety latch
Wire Rope
 Construction(JIS); IWRC 6 x Fi(29) Galvanized GRADE B
 Diameter x Length; 8mm x 54m
 Breaking strength; 43.3kN {4420kgf}

SLEWING:

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

Slewing Range; 360° continuous rotation on a ball bearing race
Slewing Speed; 2.5 rpm

SAFETY DEVICES:

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

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 : Dacrotized 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.)

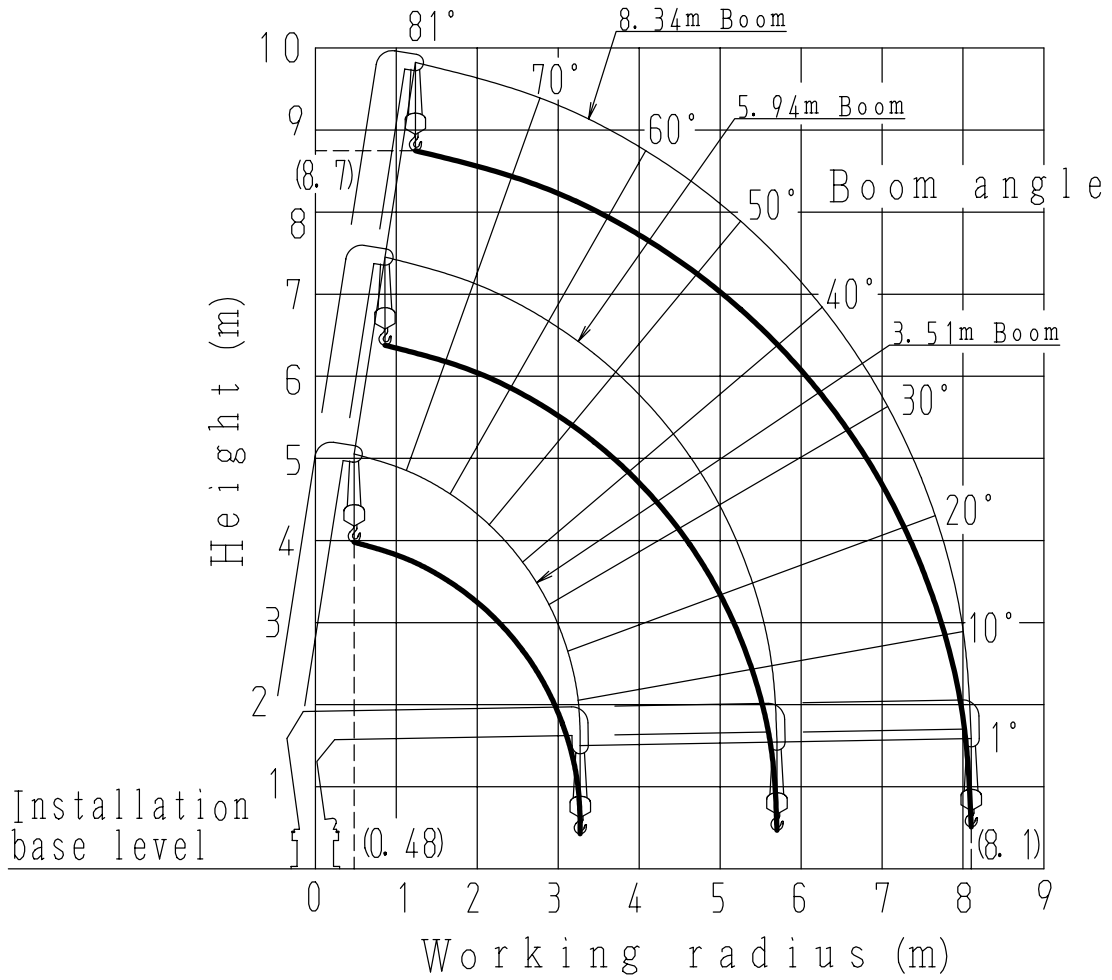
HYDRAULIC SYSTEM:

Engine	Engine with accelerator
Hydraulic Pump	
Rated pressure;	20.6MPa {210kgf/cm ² }
Rated delivery;	60 ℓ/min.
Hydraulic Valves	
Control valve;	Multiple control valve, spring centered, spool-type, with pressure relief valve
Pressure relief valve setting;	20.6MPa {210kgf/cm ² }
Counterbalance valve;	Boom raising and boom telescoping cylinders
Hydraulic Actuators	
Hydraulic motors;	Hoisting: Axial plunger type Slewing: Axial plunger type
Hydraulic cylinders;	Double acting type 1 x Boom raising cylinder 2 x Boom telescoping cylinder

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.

RATED LOADS:

Unit : kg

Working Radius (m)	Boom length		
	3.51m	5.94m	8.34m
3.0	3030	3030	3030
3.55	(3.27) 3030	3030	3030
4.1		3030	3030
4.5		2580	2580
5.0		2280	2280
5.5		2000	2000
6.0		(5.7) 1880	1730
6.5			1580
7.0			1430
7.5			1330
8.1			1230

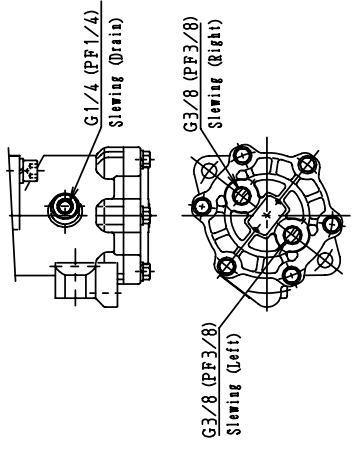
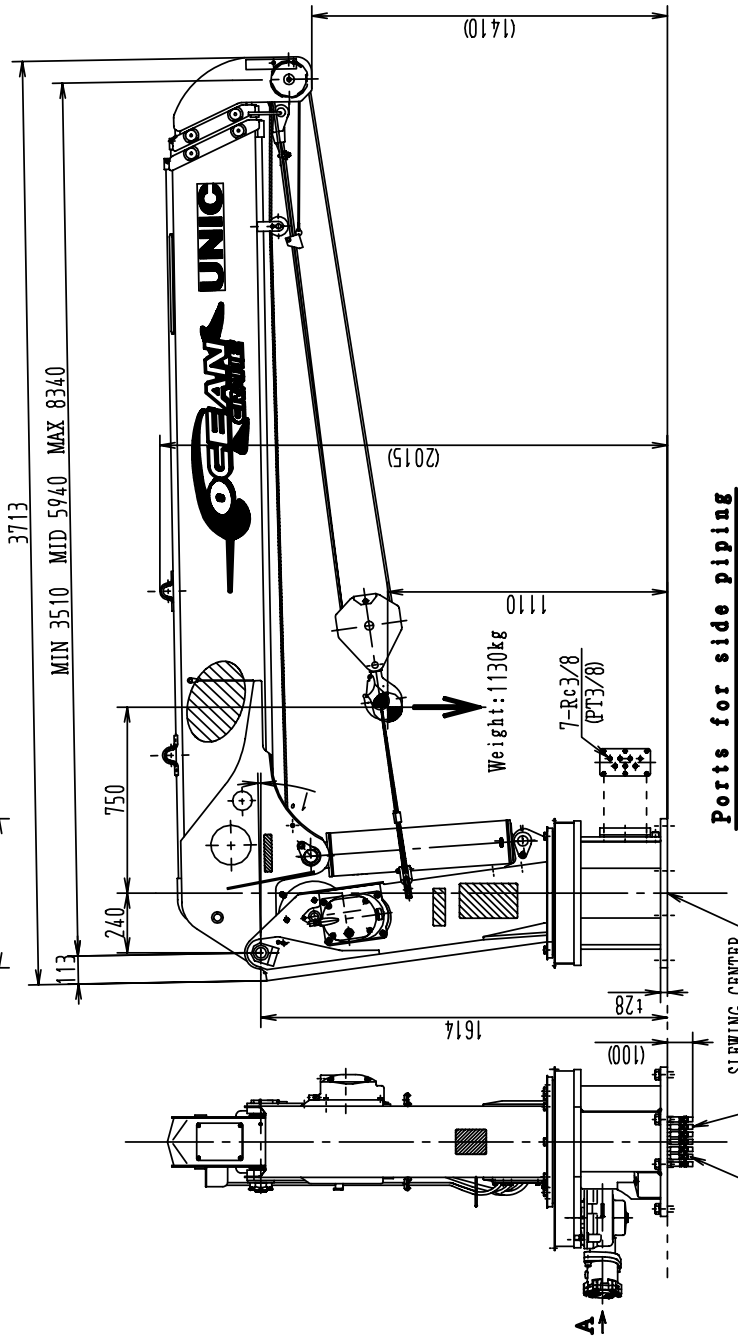
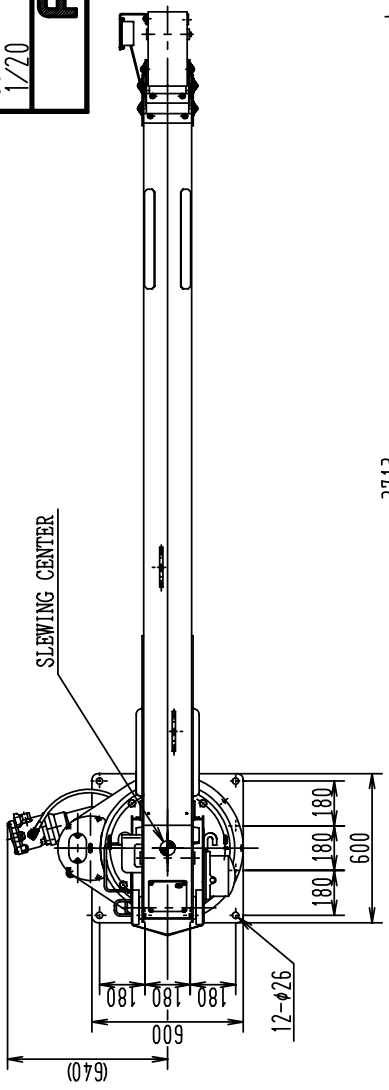
() : Working radius

Note :

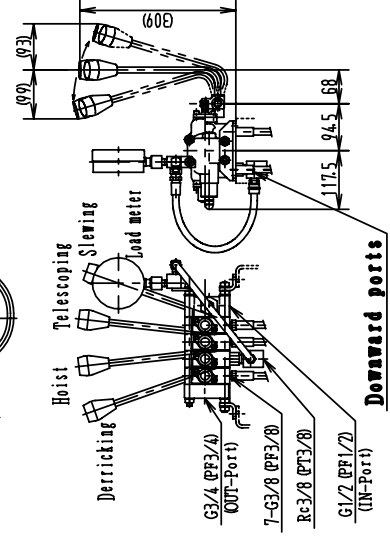
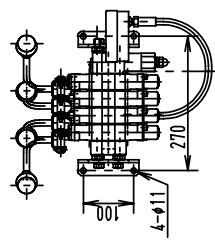
1. The table shows actual working radius including a possible boom deflection with a load applied when the crane has been installed horizontally.
2. Rated load is based only on the suspending strength of the crane and stability of the crane mounted ship is not considered.
Therefore, operate the crane while paying utmost attention to the stability of the ship.
3. The mass of hook(30kg), slings, and any accessories attached to the boom or loadline must be deducted from the above rated load in the chart.
4. In accordance with our policy of constant product improvement, all specifications are subject to change without notice or obligations.

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TITLE		MODEL	
UNIC HYDRAULIC CRANE		UBV503J	
FOR MARINE USE		DRN	CKD
		T. NAKAJIMA	N. OKUMA
		T. TOMIZAWA	
SCALE	UNIT	DATE	DRAWING NO.
1/20	mm	AUG. 2007	B-24100
FURUKAWA CO., LTD.			



Arrow A (S=1/5)



A A

B B

C C

1 2 3 4