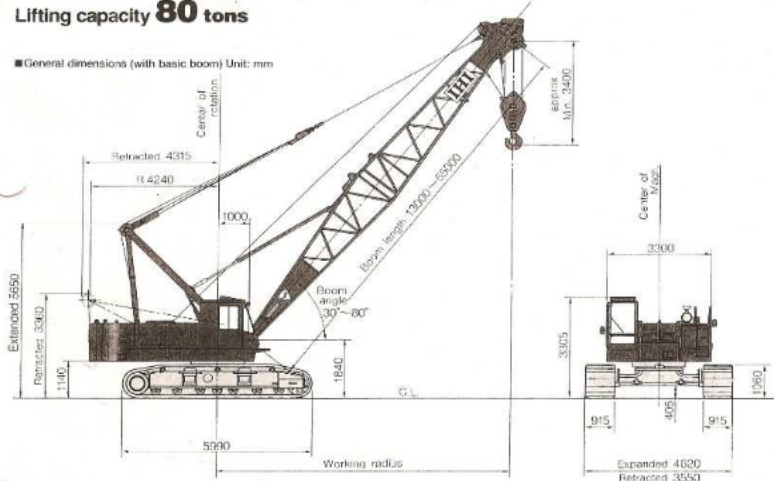


DCH800

Fully Hydraulic Crawler—Spanner Crane

Lifting capacity **80 tons**

■ General dimensions (with basic boom) Unit: mm



The world is our stage.
IHI Technology—on land or sea.

DCH800: a muscular crawler crane, the kind of machine that can be equipped with the proper attachments and used at nearly any foundation or digging job at most construction sites. This hard-worker does equally well on land or water—excellent for the heavy construction needed for harbors, for example.

The superstructure is equipped with a lattice boom that uses an independently arranged two-drum-on-a-single-shaft (DOUBLE WING) system with a maximum lifting capacity of 80 tons and a drum winding speed of 70 meters per minute. And the big diesel puts out 230ps, maximum, at 2,100rpm.

Operations are 100% hydraulic, to take full advantage of the power of this machine. Further, hydraulic spanner crawlers are used to provide the safe stability operators want when working. And its turning radius is a mere 4.24 meters, a definite improvement.

The crawler frame itself is a compact as possible, and can be transported with a trailer.

Heavy equipment benefits from the application of IHI technology: Witness the multi-purpose, multi-use, fully hydraulic DCH800 crawler crane.

■ Specifications

Performance	
Swing speed	3.0 rpm
Travel speed	1.5 km/h
Gradeability	40% (22°)
Operation system	
Power source	Hydraulic
Transmission system	Hydraulic
Drum type	Independent two drum on single shaft (DOUBLE WING)
Swing system	Swing bearing
Hydraulic pump	Variable displacement axial plunger pump×3 Gear pump×1
Engine	
Model	Hino EF100T
Type	4 cycle, water cooled Direct injection diesel
Cylinder bore stroke	6-120mm×130mm
Total displacement	6.82l
Rated output	230 PS/2100 rpm
Max. torque	7.1 kg·m/1400 rpm
Rated fuel consumption rate	172 g/PS·h
Fuel tank capacity	250 l

NOTE: Speeds change with load level.

Crane

■ Specifications

Maximum lifting load x working radius	80ton x 3.7m	
Basic boom length	13.0m	
Max. boom length	55.0m	
Max. length of boom + fly jib	62.0m (46.0m + 16.0m)	
Rope speed	Boom hoisting and lowering	*68m/min
	Load hoisting and lowering	High speed 70m/min, Low speed 35m/min
	Jib load hoisting and lowering	High speed 70m/min, Low speed 35m/min
	Boom hoisting	12-part lines
Part lines	80ton hook	8-part lines
	10ton hook	1-part line
	Counterweight	23.0tons
Crane total weight (with 13m boom and 80 ton hook block)	78.8tons (Basic Boom)	
Average ground bearing pressure	0.76kg/cm ²	

NOTE: Speeds change with load level.

■ Wire rope

Place of use	Rope diameter (mm)	Guaranteed strength (t)	Rope type
Main hoisting	φ26	49.9	C
Boom hoisting	φ20	30.0	C
Boom suspension	φ40	120.0	C
Aux hoisting	φ26	49.9	C
Jib boom suspension	φ28	59.3	E
Jib strut suspension	φ28	59.3	E

NOTE: Rope type

C 6×19 (28)

E 6×19 (28)

1WRC, preformed, regular Z lay.

2WRC, preformed, regular Z lay.

■ Rated lifting loads (90% of 25% of breaking load, however, the duty factor is over 1.0)

Working Radius (m)	Boom length (m)																	
	13.0	16.0	19.0	22.0	25.0	28.0	31.0	34.0	37.0	40.0	43.0	46.0	49.0	52.0	55.0			
3.7	80.0																	
4.0	75.0																	
4.5	70.5	64.0																
5.0	58.8	58.6	56.0															
5.5	50.3	50.2	50.1	50.0														
6.0	43.9	43.8	43.7	43.6	43.5													
7.0	35.0	34.8	34.7	34.6	34.5	34.4	34.3											
8.0	28.9	28.8	28.7	28.6	28.5	28.4	28.3	28.2	28.1									
9.0	24.6	24.5	24.4	24.3	24.2	24.1	24.0	23.9	23.8	23.7	23.5							
10.0	21.4	21.3	21.2	21.1	21.0	20.9	20.8	20.7	20.6	20.5	20.4	19.0	17.2					
12.0	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.0	15.9	15.8	15.7	14.9	12.7				
14.0		13.6	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.6	12.5	10.7	9.6			
16.0			11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.5	10.4	9.5	8.3			
18.0				9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7	8.5	7.3			
20.0				8.3	8.2	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3	6.4			
22.0					7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	5.5			
24.0						6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	4.6			
26.0							5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.2			
28.0								4.8	4.7	4.6	4.5	4.4	4.3	4.2	3.6			
30.0								4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.2			
32.0									3.8	3.7	3.6	3.5	3.4	3.3	2.6			
34.0										3.3	3.2	3.1	3.0	2.9	2.2			
36.0												2.8	2.7	2.6	1.8			
38.0													2.5	2.4	2.3	2.1	1.4	

1. The weight of the sling, hook and auxiliary string devices are excluded a part of the load.

Main hook 80 ton hook block 1,100 kg
Main hook 50 ton hook block 720 kg
Main hook 30 ton hook block 400 kg
Jib hook 10 ton hook block 400 kg

2. The following weights must be subtracted from the rated load when lifting by the main hook while the jib hook is attached.

1.0m jib boom 600kg
2.0m jib boom 1,200kg
3.0m jib boom 1,800kg
4.0m jib boom 2,400kg

3. Recommended hoist cable parts:

For loads up to: 10 tons 1-part line
For loads up to: 20 tons 2-part line
For loads up to: 30 tons 3-part line
For loads up to: 40 tons 4-part line
For loads up to: 50 tons 5-part line
For loads up to: 60 tons 6-part line
For loads up to: 70 tons 7-part line
For loads up to: 80 tons 8-part line

4. 1.0m jib boom can be attached to 13.0m to 32.0m main boom. While the jib is attached, available lifting capacity is 500kg (one of the rated lifting capacity of main boom).

5. The total weight of the main hook and the jib hook must be subtracted from the rated load when lifting with the jib hook while the main hook is attached.

6. The allowable load when lifting by a jib at a radius less than the center of rotation of the machine at the same load that may be lifted by the main boom with the hook lowered to that radius, but is not to exceed the following:

Jib length (m)	1m	1.5m	2.0m	2.5m	3.0m
Allowable load (kg)	100	150	200	250	300

7. The angle between the extended center line of the main boom and the center line of the jib should not exceed 30° when a load is lifted.