



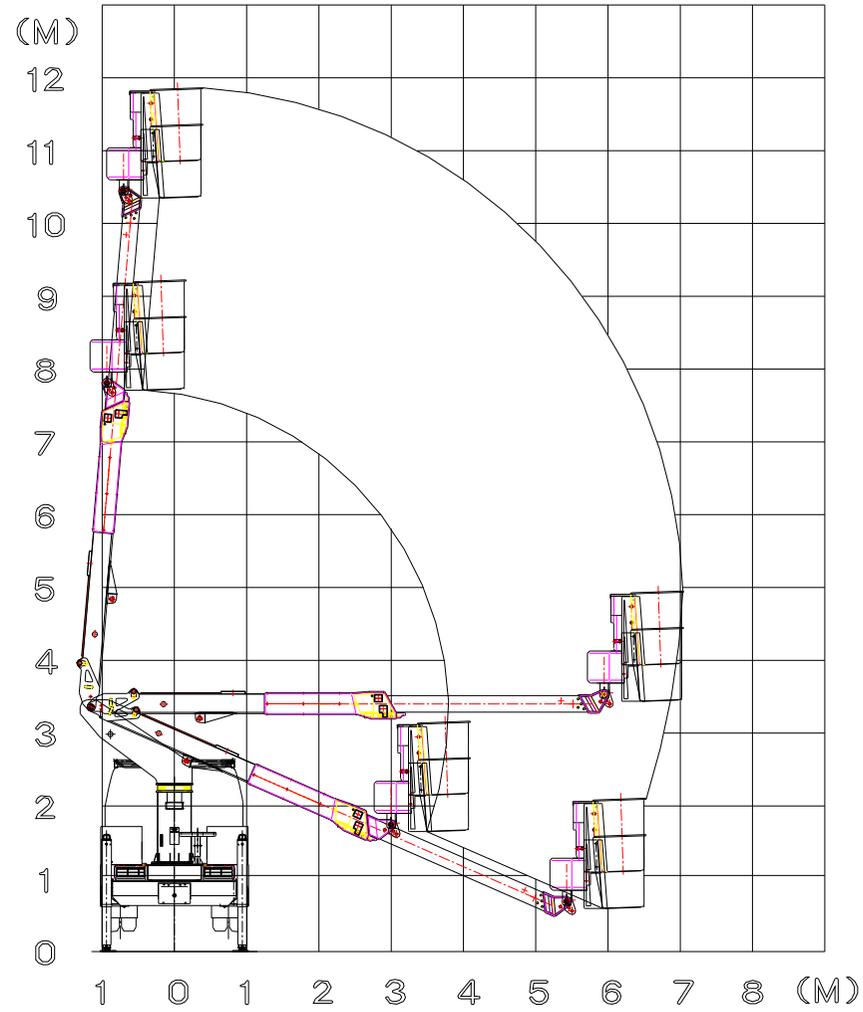
**DONGHAE MACHINERY & AVIATION Co., Ltd**

**TECHNICAL SPECIFICATION**  
**MODEL – DHT 105S**



Revised on May 16, 2012

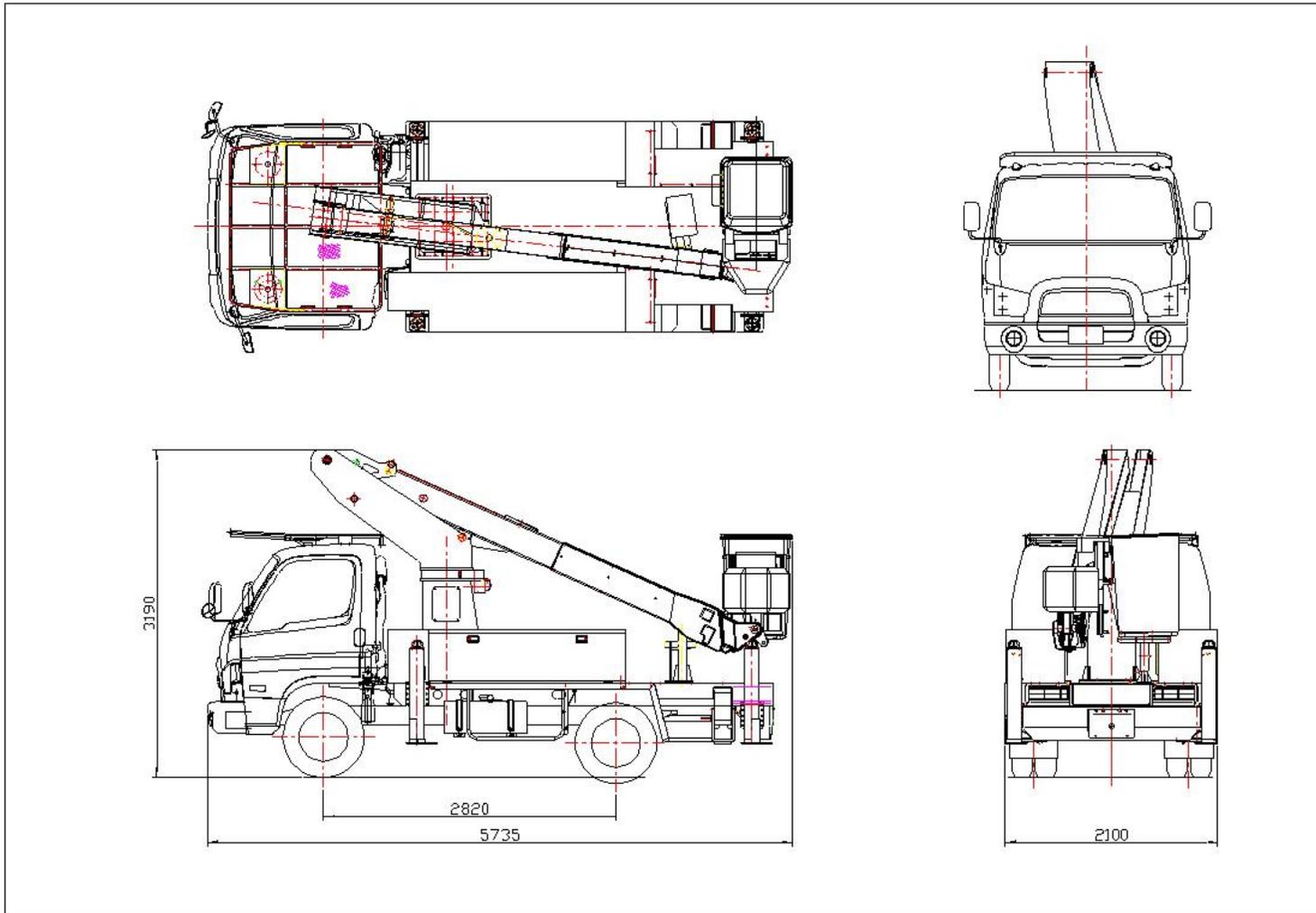
1. Working Radius/DHT 105S



DHT 105S

Hydraulic Crane Leader

2. OVERALL DIMENSION - DHT 105S



### 1. Introduction

The standard of the unit is applied to a low voltage insulated aerial platform, which will be used for repair and maintenance service of pole transformer of KEPCO.

### 2. Electrical Test

<Standard: ANSI A92.2-1990>

Test Item		Test Voltage	Permissible Voltage	Test Condition
Insulated boom		100 KV 60 HZ	Under 1mA	- Air Temperature: Ordinary - Test Time: 3 minutes
Insulated handle of hydraulic tools		100 KV 60 HZ	Under 1mA	- Air Temperature: Ordinary - Test Time: 3 minutes - Distance: 30cm
Bucket	Outer Surface	Fill in water in the inside and outside up to 15cm from the upper part and apply 20KV electricity for 1 minute both to the inside and outside. There should be no flashover and heat.		
	Inside	Same test condition like outer surface and apply 50 KV for 1 minute.		

### 3. Technical Specification

- (1), Chassis: Hyundai 3.5 ton payload short axle chassis (Including power steering and air conditioner)
- (2), Engine Power: 150ps
- (3), Overall Length: 5,735mm
- (4), Overall Width: 2,100mm
- (5), Overall Height: 3,190mm
- (6), Total Weight: 6,445kg

## **DHT 105S**

## **Hydraulic Crane Leader**

(7), Maximum Working Height: 10.55m (From ground to the bucket floor)

(8), Tire: Tubeless tire both front and rear wheel.

### **4. Boom Rotation and Lowering**

Boom is installed on the rotary turntable and able to rotate 360° continuously. In emergency, boom rotation and lowering can be operated by emergency motor pump.

### **5. Bucket**

(1), Bucket Capacity: 1 Person

(2), Rated Bucket Load Capacity: 100kg

(3), Dimension: 0.6 x 0.6 x 1.0 m (L x W x H)

(4), Bucket Rotation: 90° to each right and left side

(5), Bucket sliding: 50cm

(6), Bucket tilting device to clean inside of the bucket.

### **6, Boom**

(1), It has 2 sections of quadrilateral shape boom and boom raising, lowering, extension and retraction are operated by hydraulic cylinder. It can be raised over 85°.

(2), It has holding valve to keep the boom position even though hydraulic device or power go out. Also, it has an emergency motor pump to rotate and lower the boom in emergency case.

(3), By an auto stowing switch, boom will return to its original driving position automatically operated retraction rotation and lowering.

(4), To identify auto stowing to an operator, it alarms when it is completely finished.

**DHT 105S****Hydraulic Crane Leader****7. Outrigger**

- (1), Outrigger is run by hydraulic cylinder and it is protected by steel box.
- (2), To secure stability of outrigger in emergency case, check valve is fitted.
- (3), Operator can control four outriggers by one lever control simultaneously and each outrigger can be controlled separately one by one.
- (4), To check chassis horizontality, surface level gauge is fitted near to the outrigger control lever.
- (5), When outriggers are fully stabilized, the tires of chassis will be lifted up around 150 ~ 200mm from the ground.
- (6), Outrigger control lever is protected from outside impact.

**8. Controls**

This machinery has three kinds of control devices like upper control, lower control and outrigger control.

**8-1, Upper control**

- (1), It is protected by protection cover and it is only available to control the boom when safety switch and joystick are controlled together.
- (2), For night operation, lighting systems is installed on the upper control to recognize lever location.
- (3), Boom joystick: Control device for boom extension/retraction, boom raising/lowering and boom rotation.
- (4), Lever: Control device for bucket rotation and bucket raising/lowering
- (5), Switch: Control device for selection of hydraulic outlet, engine rpm control (low speed, auto), engine start/stop, emergency pump, auto boom stowing, battery check, lightning and emergency stop.
- (6), Indication lamp: control device lamp, battery lamp, emergency stop lamp.

**8-2, Lower control**

- (1), It has priority to control the machinery than upper control.
- (2), Lever: Control device for boom extension/retraction, boom raising/lowering and boom rotation.

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(3), Switch: Control device for engine rpm control (low speed, auto), engine start/stop, emergency pump, lower control priority and emergency stop.

**8-3, Outrigger control**

(1), Lever: Control device for outrigger

(2), Switch: Engine rpm control (low speed, auto) and engine start/stop.

9, Hydraulic outlet for hydraulic tools

There is 2 set of hydraulic outlets in the bucket to connect hydraulic tools. It has cover to prevent foreign substance.

**10, Safety Devices**

(1), Safe working radius limit device

Regardless of bucket position, the machinery is capable of keeping the rated load to prevent overturning.

(2), Emergency stop device

It is fitted on the upper control and lower control.

(3), Outrigger and boom interlock device

To operate the boom, outrigger must be stabilized first. Since the boom operates, the outrigger control is not available to do.

(4), Emergency pump

For engine failure, emergency pump is fitted to operate boom and bucket operation.

(5), Cabin guard

To protect cabin roof from outside damage, the machinery fits cabin guard on the cabin roof.

(6), Outrigger lamp

To prevent negligent accident, the machinery fits 4 pieces of outrigger lamp on each outrigger top.

(7), PTO alarm device

If driver drives truck without PTO disengagement, alarm sound and flash light will be happened.

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## 11, Other Technical Features

- (1), water proof steel locker for tool is installed on the cargo deck.
- (2), Battery charge and extra battery are fitted in the steel locker.
- (3), Earth reel
- (4), Hour meter
- (5), Amplifier is fitted in the cabin.
- (6), Rear parking sensor
- (7), Design Standard: ANSI A 92.2-1990

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