

AIRPORT EQUIPMENT SERVICES PTE. LTD.

41 Kallang Pudding Road, #03-10 Golden Wheel Building, Singapore 349316 Phone: (65) 65421160 Fax: (65) 65421160

Email: aessg@singnet.com.sg Website: www.aessg.com

(Business Registration No: 199400661M)

Model TD60SP - CATERING TRUCK



SPECIFICATIONS

TD60SP - Aircraft Catering Truck

1. SCOPE:

This technical description outlines the characteristics of a refrigerated commissary catering service vehicle for servicing all type of Aircraft with door sill heights ranging from 2750mm up to 5800mm.

DIMENSIONS

A.	Van Body External length	-	7500MM
B.	Van Body External height	-	2400MM
C.	Van Body External width	-	2480 MM.
D.	Bridge height fully lowered	-	2750 MM.
E.	Bridge height elevated	-	5800 MM
F.	Bridge length	-	2438 MM.
G.	Bridge width	-	2480 MM.
H.	Bridge extension length	-	500 MM.
I.	Bridge extension width	-	1200 MM.
J.	Vehicle overall length	-	9800MM
K.	Vehicle overall height	-	3800MM
L.	Vehicle overall width	-	2480 MM
M.	Max.weight in the van body	-	4000KG

2. CHARACTERISTICS:

The unit is self containing unit and be mounted on commercial truck chassis and have the necessary provision for lifting and lowering of the van-body by hydraulically scissor mechanism. During lifting and loading procedure the unit to be stabilized through stabilizer jacks. Which are completely welded to the Hi-Lift frame and become part of the Hi-Lift unit.

The unit is designed to interface easily and promptly with aircraft galley door, while providing the maximum safety to the personnel and protection to the aircraft structure.

3. CHASSIS:

Chassis is **ISUZU FVR**

i) Power output of Engine : 240hp

i) Gross vehicle weight : 18000 Kg

iii) Engine :6HK1-TCL, EU V, Turbocharged, water cooled.

iv) Transmission : Auto transmission

v) Steering : Power steering

vi) Drive : Left hand drive

vii) Brake system : disc/drum

viii) Chassis frame wheels, types and suspension: Sufficient rated capacity to support the scissors lift, van body, over cab access platform and related component's weight.

04. VAN BODY:

The van body side panels are made of sandwich type insulated FRP plywood or inner-outer wells of fiber-glass reinforced plastic with enough insulating material in between to reduce the sensible heat inside the van body.

- i) <u>Floor Height</u>: Van body floor height when fully retracted or fully in down position, about 1500mm from ground in vehicles normal unlade condition.
- ii) Pay load capacity: Van body pay load capacity shall be minimum 4000 Kg.
- iii) <u>Doors:</u> Hand Operated insulated narrow roll up doors having sizes: 2400x1500mm (Approx) on both ends with sealed floor contact.
 - iv) Length of Van Body: 7200mm.
- v) 06mm thick Aluminum chequered plate for floor and can be washed & cleaned easily.
 - vi) Wall protection: Inner walls are protected by pvc bumper.
- vii) <u>Cargo Safety:</u> Steel Cargo restraint or locking mechanism is to be installed in side walls with necessary fixing/lashing belt with buckle for safe transportation of meal cart.
- viii) <u>Shelves:</u> Stainless steel foldable shelves for both long end sides of cabin as picture
 - ix) <u>Lighting:</u> 4 lights are to be provided inside the van body.
 - x) <u>Working Light:</u> 2 lights are to be installed for front platform.
- xi) <u>Beacon Light</u>: amber flashing beacon lights are provided for operational movement of vehicles.
 - xii) Painting: Single Color (White)

05. PLATFORM:

Over cab access platform is welded construction, using structural steel tubing with followings specification.

- i) 05 mm (Min) thick Aluminum chequered plate for flooring.
- ii) 4-way movable porch and front platform as per truck cabin
- iii) Extension is hydraulically powered with controls mounted in van body control panel with four way movement (Forward & back; Left&right).
- iv) Loading capacity is 800 Kg for fixed platform and 400 Kg for extension part.
- v) Rubber bumper is provided for safe interface with Aircraft with Micro Switch cut-out on contact.
- vi) Fixed & sliding guard rail for safe loading & unloading with spring loaded foot paddle for sliding rail.



Sliding door



The front platform

Products are subject to engineering changes.

06. SCISSOR MECHANISM:

Steel constructed heavy duty scissors mechanism having twin single stage lift cylinders to be mounted within the scissors frame avoiding the major modification to the truck chassis cross members and drive train components. The scissors mechanism is to be design in such a way that the total loads will be evenly distributed along the entire length of the chassis frame during the critical lifting & lowering moments. Cylinders are hard chrome plated for corrosion resistance and equipped with self adjusting seals.



The strong scissors

7. STABILIZERS:

The vehicle is equipped with 4 individually controlled (via a pressure switch) hydraulic stabilizers. The elevation of van body can be only controlled when the stabilizers are down position at ground. The maximum wind speed when the scissors are fully extended is 80KM/H.



8. HYDRAULIC SYSTEM:

The main hydraulic pump shall be driven by a transmission mounted electric shift power take off (P.T.O.). <u>Hydraulic oil tank</u>, <u>emergency electric pump</u>, <u>solenoid valve</u>, <u>non-returns valve</u>, <u>regulation valve</u>, <u>locking device</u>, <u>speed adjusting device</u>, <u>lift cylinders</u> and <u>stabilizers cylinders</u> are the part of hydraulic system.

9. STANDARD SAFETY:

- Safety interlock is to be provided to prevent raising the van body until the stabilizer outriggers are fully extended and set.
- ii) An safety interlock is to be provided to prevent retracting.The stabilizer outriggers, until the van body is fully lowered.
- iii) Interlock prevents lowering platform without first retracting front platform.
- iv) Interlock not permit the vehicle operation without fully retracting the stabilizers/P.T.O. is not released/van body not in lowest position.
- v) Limit switch prevents the further movement of front platform and elevation of compartment when it touches the aircraft.
 - vi) Warning buzzer alarms when van body & stabilizers are operated.
- vii) Emergency DC pump will be operated during engine or main pump failure.
 - viii) Manual hand pump will be operated during total power failure.
- ix) Stop push buttons of engine are available out cab and van body control panel.

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10. CONTROL PANEL:

FROM OUT DRIVING CAB:

- i) Emergency push button.
- ii) DC pump push button
- iii) Van body raising/lowering switch.
- iv) Stabilizer extension/retraction switch.
- v) Stabilizer extension/retraction lamp.
- vi) Van body fully down indicator lamp.



The panel of out the cab

11. FROM THE VAN BODY:

- i) Emergency push button.
- ii) Van body raising/lowering switch.
- iii) Front platform assy movement switch.
- iv) Front platform assy fully retracted indicator lamp.
- v) Van body listing switch.

vi) Emergency sound signal push button.

12. ELECTRIC SYSTEM:

24 V DC Control System including relay, fuses control switch, electric connection, circuit breaker, contactor, operating panel, indicator light, proximity switches, Timer, Solenoid valve and other standard components.

13. REFRIGERATION SYSTEM: (OPTION)

Van body cabin is refrigerated for transportation of food items in controlled temperature. The design of refrigeration system is as following:

- a) Air condition: CARRIER 750S 850U
- b) Insulated Van body with enough thickness.
- c) Narrow type insulated roll up door.
- d) Power: Compressor is run by a diesel Engine. A heavy duty electric motor is to get stand by power to run the unit at parking bay by getting power from building.
- e) Control Unit: The Micro processor control unit will be installed at suitable position in the driver cabs or in a weather proof enclosure on the truck body. Type: Split type refrigerator, ceiling mounted evaporator, compact type compressor, CFC free refrigerant.

14. VARIABLE HEIGHT

The Catering truck is compatible with the

A300、A310、A318、A319、A320、A330、A340、A350、A380 (MIDDLE LEVEL)

B707、B727、B737、B747、B757、B767、B777、B787、DC8、DC9、1L—18、1L—62、MD11、MD80 and so on.

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