



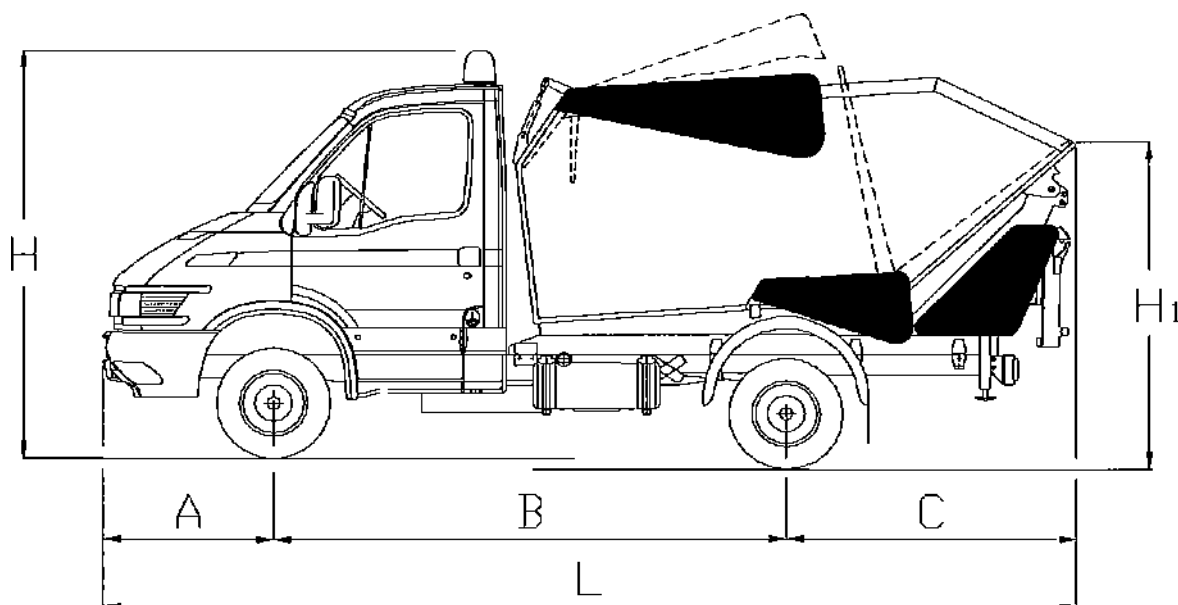
**DUMPER WITH ROTATING BLADE
REAR COMPACTION
(SATELLITE "PATENTED" VEHICLE)**



MODEL MOBY WASTE 5,7

TECHNICAL FEATURES OF THE UNIT

Assembled on IVECO DAILY 35C12 wb = 3000 mm.

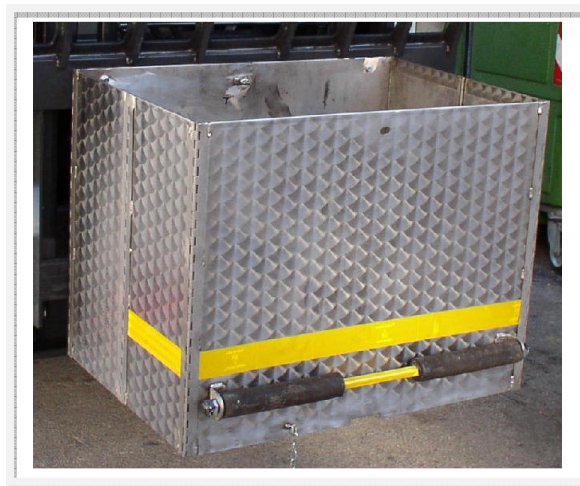
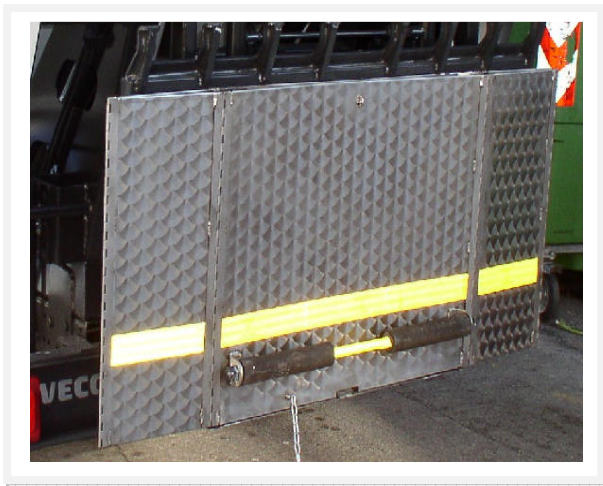


DESCRIPTION	U.M.	Data
TYPE		MOBY WASTE
Useful carrying capacity of the body	m ³	5J
Body outside width	mm	1.700
Body ground clearance, rear edge (H _i)	mm	1.980
Max compaction ratio		3:1
Electro-hydraulic working		Single automatic cycle
Waste water tank	l.	100 circa
Waste water unloading	a'/ ₂	Gate valve 2"
Lifting device for containers with comb connection	n. n.	2 bins of 120/240/360l. 1 container 660/1000/1100 c.p.
Garbage-bag holder made of stainless steel	l.	250 about
Rear unloading angle of the body		90° about
Weight of the equipped vehicle	Kg	3.000
Legal useful carrying capacity (+5% on 3.GVW)	Kg	500
Max load which can be reached (according to waste)	Kg	1500
Gross Vehicle Weight (GVW)	Kg	3.500
Dimensions of the equipped vehicle:	mm	998
- Front overhang (A)	mm	3.000
- Wheelbase (B)	mm	1.700
- Rear overhang (C)	mm	5.698
- Total length (L)	mm	2.490
- Total height (H)	mm	1.996
- Total width		

DESCRIPTION – WORKING - USE

The “Patented” Moby Waste equipment, assembled on trucks with light and medium loading capacity has been designed for the collection “door to door” of selective waste such as: Plastic, Paper, Organic waste, non-recyclable waste and, thanks to its reduced dimensions, it is particularly suitable in the historical centres where generally the open top containers are used.

Filling operation is carried out both by means of bin lifter (fitted with comb connection for single of double bin, or for one container, four-wheeled up to 1100 lit. with flat cover), and by means of the rear garbage-bag holder, built-in the lifter.



On the body floor there is a bearing axle on which a swinging wall is fixed, from 45° to 90°, which rests on the rear sloping gate.

Waste translation and compaction in the body is carried out by the swinging wall rotation which, at stop, returns at rest position, at 45° (automatic cycle).

The plate rotation can be hand-operated or controlled, but as well as for the automatic cycle, only with the bin lifter in rest position.

By the "START" push-button of the control panel, the rotation of the plate is driven; by the "AUT - MAN." selector the operator chooses the cycle phase (automatic or hand-operated).



In "hand-operated" phase, the plate rotation can be managed by the operator by two push-buttons: one forward and one in return.

Unloading by body tipping at 90° and it is also possible to discharge waste inside the hydraulic waste compactors fitted with universal hopper.

A bulkhead inside the body, connected with the tilting cover, allows the waste discharge during the tipping phase. Its working is hydraulically carried out by a hand-operated control.

The main components of the unit are:

1. Counter-chassis
2. Body
3. Upper cover
4. Rear stabilizers
5. Bin-lifter
6. Garbage-bag holder (optional item)
7. Rotating plate
8. Oil-dynamic unit
9. Electric unit
10. Safety devices
11. Controls
12. Painting
13. Outfit and standard accessories
14. Accessories upon request

1. COUNTER-CHASSIS

Structure placed between the vehicle chassis-cab and body, made of qualità steel sections, continuous wire electrically welded, suitably sized according to the instructions of the vehicle's manufacturer. Two rear pillars allow the body tipping to directly discharge waste inside the garbage collectors hopper.

2. BODY

It is made of high yield point quality steel. A sub-frame and perimeter reinforcements of side and gates, electrically continuous wire welded among them, make a heavy single and tight structure. The rear gate is sloped at 45° in order to facilitate the waste unloading during tipping phase; the front gate, against which waste are compressed, has a particular design to make body filling easier.

The platform is sloped toward the front of about 4° so that liquids go inside a reservoir communicating with the platform by a wide filtering grid.

3. UPPER COVER

The upper part of the body is covered 3/4 by means of a structure made of sheets made of mixed plastic-aluminium material - "Alucobond" – which is durable and lightweight. The cover is hinged at front and driver by two oil-dynamic cylinders. A plate is connected with this cover, in rest position it is on the front gate inside the body. During the body tipping phase, the upper cover can be lifted to increase the loading space to make easier the waste slipping and, at the same time, the inside plate moves toward the rear by facilitating the above waste slipping again.

4. REAR STABILIZERS

Two rear hydraulic stabilizers, one at each side, support the vehicle stability during the body tipping phase for the waste unloading. For maximum safety, the stabilizer drive is controlled by the tipping control of the body.

5. BIN-LIFTER

The bin-lifting device is located at rear and fitted with a lever system; it is driven by hydraulic cylinders, designed to avoid waste or liquids leakage during the phase of bin tipping.

The comb coupling height is adjustable by two hydraulic cylinders, for the ascent and for the descent; on the contrary, other two hydraulic cylinders control the rotation for the discharge inside the body.

6. GARBAGE-BAG HOLDER

Upon request, it is possible to apply on the bin-lifter a garbage-bag holder with hand operated opening and closing, pantograph type (Patented), which is particularly recommended for the door-to-door collection by garbage bags. When closed, the bag holder is about 20 mm deep, so it does not create any encumbrance on the reuse of containers. Moreover, the almost immediate opening-closing system, is driven by two actions only.

7. ROTATING PLATE

On the body bottom there is a rotating plate which shifts and compresses the waste inside the body. Rotation is carried out through two hydraulic cylinders placed on both side of the tank, one at each external side. The plate is made of bent sections with coating in quality steel sheet.

8. OIL-DYNAMIC SYSTEM

The power needed for the working of the unit comes from a high efficiency PTO and hydraulic gear self-balanced pump assy, which feeds the unit composed of:

- Oil tank of suitable capacity and filter on return;
- Hydraulic telescopic single-acting cylinder for the body tipping;
- Hydraulic double-acting cylinders for the plate rotation;
- Hydraulic double-acting cylinders for the translation of the bin-lifter comb;
- Hydraulic double-acting cylinders for the rotation of the bin-lifter;
- Hydraulic double-acting cylinders for the upper cover motion;
- Hydraulic cylinders for the rear stabilizers;
- Hydraulic electro-valve assy for the plate and bin-lifter;
- Hydraulic distributor for the body tipping and upper cover motion;
- Max pressure valve for all unit safety;
- Rigid and flexible pipeline and fittings;
- Anti-splash sheath as protection of flexible pipeline.

9. ELECTRIC UNIT

Essentially made of a control panel placed on the vertical rod of the rear right side of the sub-frame, easy access, complete with electronic card, push-buttons with visual indications of manoeuvres, electrical stop for the operator and equipment safety. All unit is according to CE norms, tightness according to IP65 and fed with tension at 12 V. d.c.

10. SAFETY DEVICES

All the unit has been designed and manufactured to achieve the better conditions of hygiene, robustness, reliability, reduced maintenance and low noise level in compliance with the current related norms and regulations.

The unit is fitted with CE mark and Certificate of CE Compliance with “Machinery Directive 2006/42/CE and subsequent amendments concerning safety devices for the operators and users, such as:

- Control push-buttons fitted with reinforcement against the accidental operation;
- Red mushroom-head push-button as emergency stop;
- Yellow push-button with holding action to operate lever controls for body tipping and cover motion;
- Warning light in cabin for the PTO all-on;
- Warning light in cabin and buzzer for the stabilizers motion and for the body tipping;
- Reverse buzzer;
- Warning buzzer for the plate in motion;
- Safety valve to protect oil-dynamic system;
- Block valve to the tipping cylinder;
- Oil anti-splash sheath as protection of flexible pipeline in case of burst;
- Safety signs and manoeuvres instructions;
- Control panel complete with coloured push-buttons for manoeuvres and symbols according to the current norms;
- Rotating yellow light as per art. 10 law n. 38 dated 10.02.1982.

11. CONTROLS

On the unit there are the following controls to facilitate the operation set:

- **On the rear right side:**

Control panel complete with : red push-button as emergency stop; selector for automatic or hand-operating working; start push-button for the automatic cycle; push-buttons for hand-operated plate rotation; small lever for the translation of bin-lifter comb, small lever for the bin-lifter rotation,

- **in cabin:**

On then lower left side of the driver seat, lever for PTO all-on and on the dashboard there is the rotating light switch; the push-button enabling the body tipping and lifting-descent of the body cover.

- **On the rear left side:**

Lever controls for the body tipping and for the upper cover motion and inside plate. (These controls are enabled to the use only if the push-button placed on the lower left side of the driver seat is pushed).

12. PAINTING

The painting cycle includes the following phases: degreasing, bonderizing of surface, sanding with cloths, application of two zinc-phosphate anti-rust coating, drying, finishing with two cross coats of synthetic enamel in the requested colour.

13. OUTFIT AND STANDARD ACCESSORIES

- Double bin-lifting device (comb connection) for bins of 120/240/360 l and 660/1000 1100 l flat lid;
- Yellow rotating light;
- Lower tank for leachate collection and hose with unloading gate valve of 2";
- Side inspection footboards with handle;
- Reflecting panel according to the Road Circulation norms;
- Rear mudguards complete with splashguards;
- Rear hydraulic stabilizers;
- Warning light in cabine and buzzer for stabilizers motion and for body tipping;
- Warning light for PTO all-on;
- Reverse buzzer and for the plate in motion;
- Safety prop for the maintenance under the body;
- Plates and stickers according to CE norms;

Electric system complying with the New Road Code;

- Use and maintenance manual;
- Certificate of EC Compliance;
- Test according to M.C.T.C. of the equipped vehicle.

15. ACCESSORIES UPON REQUEST

- Rear garbage-bag holder, pantograph type, connected to the bin-lifter;
- Remote controlled push-button panel with spiral cable, for the bin-lifter operation.

**TABLE OF MATERIALS AND RELATED MECHANICAL FEATURES
USED IN THE CONSTRUCTION OF THE UNIT**

MATERIAL	BREAKAGE Rm N/mm ²	YIELD Rs N/mm ²	HARDNESS HB
* Fe 430	430/560	275	
**Fe510	510/650	355	
*** Domex Wear	780/930	690	270
**** Alucobond			
* quality steel. ** high yield limit quality steel *** Antiwear steel, high yield limit, high corrosion resistance and high hardness. **** Rolled material composed of plastic aluminium, very resisting, light and pliable.			

SUB-FRAME

- Longitudinal members and cross thick mm;
members made of "Fe 430" 3
- Vertical rods made of "Domex mm
Wear" thick 4mm

BODY:

- platform made of "Fe 510" thick. 2,5 mm
- Side walls made of "Fe 510" thick. 2,5 mm
- Rear gate and front gate made of "Fe 510" thick 2,5 mm
- Longitudinal members sub-frame bent made of "Fe 430" thick. 3 mm

UPPER COVER:

- structure made of Fe430" 2 mm
- cover made of "Alucobond" thick. 1.5 mm.

INSIDE PLATE:

- made of "Fe 430" thick. 2 mm with rusticated ashlar

PROTECTION PANELS

- Made of "Alucobond" thick. 1.5 mm.

BAG-HOLDER

- made of thi 4 mm. or S.S. 1,5 mm
"Alucobond" ck.
- hinges made of SS »

FULCRUM MATERIAL:

- Bushes made of "Fe510"
- Pivots and pins made of 39NCMQ3

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