









End - of - life vehicle drainage equipment

ELV EQUIPMENT 19









The need to use specialized equipment for the dismantling and depollution of end-of-life vehicles is basing on the European Directive 2000/53/EC and the European Directive 2005/64/EC. It regulates that all vehicle manufacturers and importers of new vehicles are obliged, together with all other affected economical operators of this sector - to take back the end-of-life vehicles from the market and to make sure that their components are dismantled and depolluted in a way that guarantees a respectful treatment of the environment and that until the end of 2006 the recycling and recovery rate of 85 % of the material weight and until 2015 a rate of 95 % must be achieved.

For the vehicle owners the take-back must be free of charge and it concerns all vehicles for the transport of max. 9 passengers and a weight of max. 3.5 t.

The directive defines the free-of-charge take-back of the vehicles like this:

- the vehicle must be delivered to a permitted treatment facility indicated by the vehicle manufacturer that takes it back free of charge,
- the vehicle must be complete or at least must include all essential components such as motor, gearbox, vehicle body, electronic components and catalyzer,
- the vehicle must not include contain any type of garbage.

Environmental liability

The environmental liability is an important factor of the FLEXBIMEC company philosophy. Actually it gets involved with a continuous environmental protection as one of its essential company targets.

Depollution process

When an "end-of-life" vehicle has been delivered to a suitable facility, it will be dismantled and depolluted in a proper way, including the following operations:

- Drainage of all fluids,
- Dismantling of the battery and of the tyres,
- Neutralization of the airbag system.

Each marketable part that is dismantled can be sold, except of the safety components which content pyrotechnic material (f. ex. airbags, seat belt pretensioner).

FLEXBIMEC, thanks to the experience developed under the brand "Toolservice Fluid", is implementing its range of equipment for the dismantling and waste fluids drainage of end-of-life vehicles for professional users.

The "LIFE De-Bay" project has been developed to propose a complete installation for end-of-life vehicle drainage and dismantling.

Thanks to LIFE De-Bay dismantlers will be able to depollute ELV in one sixth of the time which is now required, and in much safer conditions for operators.

During the depollution project, the fluids are monitored and quantified in order to certify the correctness of the activity carried out.











Example of an installation for end-of-life vehicle drainage and dismantling





Collection tank for petrol, Art. no. 8229

Collection tank for diesel, Art. no. 8217

Vehicle ramp, Art. no. 3100



Metal staircase with working platform

Waste oil draining kit with wall mounted swivel arms, Art. no. 3106

Waste fluids suction kit, Art. no. 3125

Spill containment floor with grate

Tank drilling machine, Art. no. 3111 Brake fluid draining kit

Fuel suction pumps

Collection tanks for oils, antifreeze, brake fluid and windshield washer fluid, Art. nos. 7008 - 7009 – 7010











Art. no. 3100

Fixed structure in painted steel for the support of the vehicle, complete with metal safety grid for the collection of eventually leaking fluids, specially shaped.

The vehicle must be positioned by forklift.

Dimensions (LxWxH): 4900 x 2000 x 2000 mm. Bearing capacity: 3000 kg.







Art. no. 3101

One – column lifting ramp for vehicles, specifically manufactured for the use in end - of - life vehicle drainage.

Equipped with electro-hydraulic lifting brackets with column with supports for insertion of work arms.

Bearing capacity: 3500 kg.

Art. no. **3102**

Spill containment safety floor for a collection of eventually leaking fluids, specially shaped in a kit of 6 modules.

Dimensions single module (LxWxH): $1500 \times 900 \times 30$ mm. Total dimensions (LxWxH): $4500 \times 1800 \times 30$ mm.









Art. no. 3106

Waste oil gravity draining kit, consisting of two metal collection bowls, including removable anti splash grid and height-adjustable, telescopic tube, ball valves and hydraulic connectors for the connection of the suitable suction equipment. With wall mounted swivel arms, for the installation on the vehicle ramp (art. no. 3100 and 3101).









Art. no. 3111

Pneumatic tank drilling machine, portable version.

Allows to carry out the evacuation of petrol or diesel in vehicles in an easy, fast and safe way by drilling through the tank.

The machine is equipped with an interchangeable, nonarcing drill bit, an in-line filter with strainer, a flow control tube with transparent insert and connections for the discharge of the fuel by gravity into a can or by the suitable suction equipment into a collection tank.

The drill bit is activated by using a special, pneumatic drill machine with a low number of rotations and with reversal of the rotating direction.

Art. no. 3118

Conical silicone closing plugs, ø 7x12 mm, for sealing the

Packaging unit: 100 pieces.





Art. no. 3113

Pneumatic tank drilling machine art. no. 3111, mounted on a wheeled telescopic support and swivel arm, for the installation on the vehicle ramp (art. no. 3100 and 3101).







Art. no. **3122C** Art. no. **3123C**

Art. no. 3124C

Pneumatic waste fluids suction kit, low version, closed structure composed of a solid mounting shelf in painted steel installed on a spill containment pallet, pneumatic suction pumps with accessories, vacuometer for the control of the suction process, automatic rewind, spring-driven hose reels with 10 m – suction hoses 1/2", hydraulic quick couplings, suction probes in different diameters, lance for boring through the radiator, couplings for the suction of brake fluid and 3 m - connection hoses to the collection tanks.

Dimensions (LxWxH): 1350 x 830 x 1700 mm.

Art. no. 3122C Suction kit for 2 fluids
Art. no. 3123C Suction kit for 3 fluids
Art. no. 3124C Suction kit for 4 fluids

In order to install the suitable pumps and accessories it is important to specify when ordering the fluid type to be evacuated by choosing among the following: motor oil, gear oil, hydraulic oil, windshield washer fluid, brake fluid, antifreeze, diesel, petrol.









Art. no. **3122** Art. no. **3123** Art. no. **3124**

Pneumatic waste fluids suction kit, low version, composed of a solid mounting shelf in painted steel installed on a spill containment pallet, pneumatic suction pumps with accessories, vacuometer for the control of the suction process, automatic rewind, spring-driven hose reels with 5 m – suction hoses 3/4" (or alternatively 10 m – suction hoses 1/2"), hydraulic quick couplings, suction probes in different diameters, lance for boring through the radiator, couplings for the suction of brake fluid and 3 m - connection hoses to the collection tanks.

Dimensions (LxWxH): 1350 x 830 x 1700 mm.

Art. no. 3122 Suction kit for 2 fluids
Art. no. 3123 Suction kit for 3 fluids
Art. no. 3124 Suction kit for 4 fluids

In order to install the suitable pumps and accessories it is important to specify when ordering the fluid type to be evacuated by choosing among the following: motor oil, gear oil, hydraulic oil, windshield washer fluid, brake fluid, antifreeze, diesel, petrol.



Art. no. **3125** Art. no. **3126**

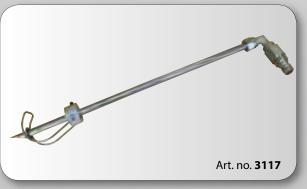
Art. no. **3127**

Pneumatic waste fluids suction kit, high version, composed of a solid mounting shelf in painted steel installed on a spill containment pallet, pneumatic suction pumps with accessories, vacuometer for the control of the suction process, automatic rewind, spring-driven hose reels with 10 m – suction hoses 1/2", hydraulic quick couplings, suction probes in different diameters, lance for boring through the radiator, couplings for the suction of brake fluid and 3 m - connection hoses to the collection tanks.

Dimensions (LxWxH): 1350 x 830 x 2350 mm.

Art. no. 3125 Suction kit for 4 fluids
Art. no. 3126 Suction kit for 3 fluids
Art. no. 3127 Suction kit for 2 fluids

In order to install the suitable pumps and accessories it is important to specify when ordering the fluid type to be evacuated by choosing among the following: motor oil, gear oil, hydraulic oil, windshield washer fluid, brake fluid, antifreeze, diesel, petrol.



Art. no. **3117**

Radiator boring lance, with quick coupling for connection to a suction kit.











Art. no. 3134

Mobile evacuation unit for LPG and methane cylinders.

LPG cylinders: recovery of the liquid part, combustion of the remaining gaseous part and final washing with nitrogen for total safety.

Methane cylinders: combustion of the residual gas and final washing with nitrogen for total safety.

Nitrogen cylinder not supplied.

In accordance with Directive Atex - Classification II 2 GD 70°.



Detail of the methane combustion torch.

Art. no.	Nominal thermal power	Max flow rate LPG pump	Weight	Dimensions (LxWxH) (mm)
3134	90000 Kcal/h - 105 kW	55 l/min	70 kg	580x640x1100





Art. no. 3135

Mobile evacuation and recycling kit for air conditioning gas, consisting of an evacuation unit with a compressor that works with refrigerant gas types R12 and R134A, with a

distillation system permitting the separation of the refrigerant from the oil, the filtration, the dehydration and the storage in 13 kg – standard gas cylinders. The kit includes also a pressure switch to enable a control when evacuation is finished and a protection against external pressure. Also included are a 250 ml – recipient for the collection of the oil eliminated from the gas, a 13 kg - gas cylinder, filling hoses of 1800 mm length and a 2 wheels - trolley.



Art. no.	compressor power	Recovery Capacity	Feeding	Weight	Dimensions (LxWxH) (mm)
3135	1/4 cv	375 g/min	230V - 50Hz	47 kg	550x530x920





Art. no. **3129**

Electronic airbag activating and blasting unit **BOOM-BAG**, enables a safe and easy dismantling of all airbags in a vehicle.

Suitable for all vehicle models. The unit can be used immediately and one operator is sufficient to carry out the dismantling. The unit is packed in a plastic case and includes also an electric cable with alligator clamps for battery connection and a kit with cables and push terminals for the activation of single or double

airbags.

Pag. 7













Art. no. 3130

Electric glass cutter, for a safe and versatile cutting of the windshield glass of end-of-life vehicles.

- Electric mechanism with special high speed drill machine and diamond milling cutter;
- Conveyor in aluminium for the evacuation of the generated glass dust;
- Vacuum cleaner with stainless steel container, power 2000 W, collection capacity 80 l.





Art. no. 3130

Art. no. 3132

Art. no. 3132+3025

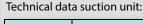
Evacuation unit for shock absorbers, composed of a drill machine and an air-operated suction unit.

The drill gun allows to drill through the shock absorbers and in the meantime the suction unit sucks the shock absorber oil and the hydro steer oil in a container of 24 l.

Technical data of the drill machine:

- Bore diameter: 15 mm;
- Drill stroke: 30 mm;
- Max diameter shock absorber: 60 mm.





Art. no.	Feeding	Max vacuum	Capacity collection container	Weight	Dimensions (LxWxH) (mm)
3025	7 – 10 bar	0.8 bar	24	11 kg	390x360x940





Art. no. **3136**

Wheeled kit with oil-pneumatic cutter with maximum blades opening of 130 mm.

Allows the cutting of catalysts of vehicles, sheet metal, aluminum profiles and copper cables with extreme speed and complete safety.

Supplied complete with trolley and power unit consisting of a pneumatic piston pump with a ratio of 1: 100 that allows the shear to reach a maximum pressure of 700 bar.

Art. no.	Compression ratio	Inlet pressure	Tank capacity	Weight	Dimensions (LxWxH) (mm)
3136	1:100	7 bar	5 l	50 kg	600x500x800











Art. no. 3142

Art. no. 3141

Press / cut filter cabins with paper press for the separation, compaction and recovery of filter elements and containers of used fuels / oils.

The integrated electronics in the control unit allows to minimize the laborious work and at the same time takes control of the operations, ensuring a high level of safety.

PRESSING DEVICE FEATURES:

- Pression power: 60000 N (6 ton)
- Stroke: 380 mm
- Max working pressure: 150 bar

CUT DEVICE FEATURES:

- Max working pressure: 150 bar
- Filter max diameter: 160 mm
- Filter max length: 400 mm

Art. no.	Power	Feeding	Oil tank capacity	Weight	Dimensions (LxWxH) (mm)
3141	3 kW (4 cv)	380V - 50 Hz	50 I	235 kg	600x1075x1180





Art. no. **3142**

Dismantling-tyre device equipped with hydraulic gear pump for the separation of the tire from the rim, with high-strength transparent Lexan protection.

Complete with manual control panel, safety stop button and 10 m L cable with threephase plug + earth cable.





Art. no.	Pressure	Max wheel diameter.	Work cycle down	Work cycle up	Power	Dimensions (LxWxH) (mm)
3142	10 ton.	20"	13 s	8 s	4 kW	750x1150x2310





Art. no. 3143

Industrial can crusher, ideal for compacting and reducing the volume of drums and cans with 30-litre max capacity through crushing.

Effective reduction in a small space.



Art. no.	Installed power	Compressing chamber (mm)	Cycle time	Pressure	Weight	Dimensions (LxWxH) (mm)
3143	6/8 bar	336x331x580	12"	2,5 ton	85 kg	409x504x1673











Art. no.. 8834 WFK - Waste Fluid Keeper

Modular system for monitoring the quantities of recovered liquids.

The different fluids of each reclaimed vehicle are recorded on an electronic board, transmitted to a PC and managed by an intuitive Windows based software.

The level of each collection tank is automatically and continously updated, blocking the system when the maximum level (settable) is reached.

The fluid passage is quantified by a special meter and displayed through a large remote display, whose value is reset after a time set by the operator.







Art. no. 7008 - 300 | - Art. no. 7009 - 260 | - Art. no. 7010 - 500 |

Waste oil storage tank, with double wall in polyethylene (one internal in contact with the oil and one external which serves as a spill containment and security container for the internal one).

The tank is equipped with a wide dome with raisable cover. In its interior there is a removable basket for the drain of oil filters and the opening for charging and discharging the tank.

At the rim of the dome a mechanical level gauge is installed that permits the control of the filling level and a transparent indicator on the side of the external tank allows to detect eventual leakages of the internal tank immediately.

The tank is available in different colours for the storage of different liquids, such as mineral oils, vegetable oils, break fluid, oil-based emulsions or antifreeze.

Art. no.	Capacity (l) Weight		Dimensions (LxWxH) (mm)
7008	300	26	820x820x1080
7009	260	23	800x800x1170
7010	500	37	960x960x1240





Art. no. **8218**

Storage tank for the external use, made of first class carbon steel, equipped with:

- spill containment tray in painted steel with a collection capacity of 100 % of the tank content,
- stable, anti-slip tray base,
- dome with ø 400 mm, including connections,
- external finishing with anti-rust priming and gloss finish. OPTIONAL

Galvanized porch roof.

Art. no.	8218/1100	8218/1500	8218/2200	8218/3000
Capacity (m ³ - I)	1,1 - 1100	1,5 - 1500	2,2 - 2200	3 - 3000
External diameter storage tank (mm)	Ø 950	Ø 1100	Ø 1100	Ø 1430
Total length (mm)	1650	1650	2400	2300
Width spill containment tray (mm)	1200	1400	1400	1500
Length spill containment tray (mm)	2000	2000	2700	2500
Height spill containment tray (mm)	500	550	600	850

Art. no. 8218









Art. no. 8217

Art. no. 8217

Double wall tank, external tank in galvanized steel and internal tank in high density polyethylene, suitable for the storage of waste oil. Including 4 connections in 2" on top of the tank, mechanical level indicator, optical leakage detector for eventual leakages in the internal tank, carrying handles and pallet feet for the lifting and the transport with a pallet truck or a forklift from 4 sides. Approved for indoor installations.



Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
8217/400	400 l	55 Kg	700x730x1170
8217/750	750 l	82 Kg	770x980x1460
8217/1000	1000 l	110 Kg	770x1280x1460
8217/1500	1500 l	165 Kg	700x1630x1870





Art. no. 8229

Petrol storage tank in painted steel, mounted in a wire protection cage, with spill containment pallet, hermetically sealed dome of ø 300 mm with cover panel and counterflange of 10 mm wall thickness, refill tube and 2" – security valve.

The unit is equipped with a pneumatic, selfpriming rotary vane pump for the transfer of petrol, earth cable to enable an electrostatic discharge, pressure regulator, 3 m – rubber hose 3/4" with static wire and automatic dispensing nozzle.



Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
8229	258 l	155 kg	920 x 830 x 1200





Storage container for waste car batteries.

The external material is hermetically sealed painted steel with a retaining function, whereas the internal material is an impact-proof, oil- and acid-resistant polyethylene with UV-treatment to become suitable for a permanent exposure to atmospheric influences in accordance to the relevant international norms.

Due to its structure in reinforced steel the container is stackable, can be lifted with a forklift or a pallet truck due to its pallet skids or can also be moved by a crane thanks to 4 lateral crane loops. The container is available in 3 different sizes and includes a detachable cover.



Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
3138/250	250 l	28 kg	920x710x840
3138/500	500 l	35 kg	1130x830x1040
3138/850	850 l	46 kg	1350x1170x1040









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