

**ECOTECHNICS®**



2017





**ECOTECHNICS®**

# Our services

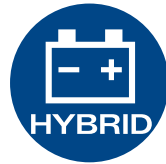


**Saniflux**



**PATENTED**

The first A/C system and passenger compartment air purification system combined with a charging station. 2 services in a single station!



**Hybrid**



**PATENT PENDING**

Ecotechnics' patented single-station solution for charging standard, hybrid and electric vehicles, with electric compressors.



**Diag**



**PATENTED**

Integrated system for diagnosis of electro-mechanical problems on A/C systems, featuring printout of diagnosis and problem solutions.



**Nitro**



A/C system leak testing by charging with nitrogen from an external tank (not included) and monitoring pressure drops, with leak alarm.



**Hermetic**



**PATENTED**

Collapsible, hermetic cartridges offer full protection against ambient humidity for oil and dye, to guarantee full product efficiency.







# The first air purification system combined with an A/C charging station

**Saniflux**

PATENTED

The Saniflux system applies **ultrasound** technology (the same used in aerosols) to passenger compartment air purification and evaporator sanitising, to eliminate annoying odours and infuse a pleasant scent.

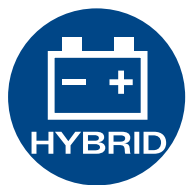
With the **certified Saniflux Liquid** in the tank, select the service time from the station menu according to **vehicle type** (small, medium, large) and start treatment, which may be carried out **simultaneously** with A/C system charging in full automation.

It is possible to **directing the flow** of nebulised product toward the evaporator, where

bacteria, moulds, and other irritants and **allergens** may hide.

The concentrated, continuous flow guarantees highly-effective and long-lasting **bactericide** treatment. It works also on stand alone mode.





## Suitable for all hybrid vehicles

# Hybrid

PATENT PENDING

The new A/C systems on many latest-generation vehicles, such as **hybrid or electric** vehicles, are equipped with compressors operated by **high-voltage** electric

motors containing a specific high-performance **electrical insulating oil**.

Use of other oils may prove dangerous for the operator during system testing if high

voltages are present. Preliminary **flushing** of the station and the service hoses is recommended before servicing a system of this type. Flushing eliminates the

risk that residues of different (non-insulating) oils may be injected into the A/C system, jeopardising its safety and good operation. The **patented** Ecotechnics

system permits running this flushing cycle automatically, thanks to the specific lateral couplings, integrated with the station, for connecting the service hoses.





# Diag

PATENTED

## The importance of patented diagnosis in recycling stations



### ALL THE ADVANTAGES

- Easy to use
- Fast, accurate diagnosis
- Printout of diagnosis and list of remedial actions
- Reliability
- Perfect integration with the stations

**Diagnosis** is an increasingly critical tool for anyone - climate-control specialists and not - wanting to expand their business to include A/C system repair. Ecotechnics offers the following patented solutions:

### 1 Static Diagnosis

The station uses the pressure and temperature values entered by the operator to perform automatic diagnosis.

### 2 Dynamic Diagnosis

With the pressure and temperature sensors A/C connected to the system, the station conducts analysis with no further need of operator intervention. The station prints a report for each type of diagnosis.





## Nitrogen leak testing

**Nitro**

The nitrogen leak testing system is an alternative to traditional leak detection methods (testing during the vacuum phase or dye injection). The advantage offered by nitrogen is that leak

testing may be conducted under **pressure** with an **inert** gas. It is useful above all in those cases in which use of a dye is not permissible (for example, in automobile manufacturing).

This system is fully integrated with the Ecotechnics recharging stations to eliminate the need for operator intervention during service. The system prints a leak test report at the end of testing.





# Hermetic

PATENTED

## Hermetic oil and dye cartridges



An A/C station equipped with **hermetic cartridges** offers the advantage of eliminating contact between the humidity naturally present in ambient air and the oil or dye, which are hygroscopic substances

(that is, substances that easily absorb humidity). The collapsible, accordion-type hermetic cartridges guarantee the **high quality of the product** charged and protect the internal components of

the station from possible damage from oils and/or dyes of uncertain provenance. Moreover, many vehicle manufacturers recommend use of hermetic cartridges in their authorised repair shops.



Fully automatic station for recovering, recycling, and recharging R134a or HFO1234yf refrigerant with **Heavy Duty condenser** and **improved ventilation**



R134a	HFO1234yf
ECK1800	ECK1800-HFO
ECK1890	ECK1890-HFO

Type of refrigerant	R134a or HFO1234yf
Service procedure	Fully automatic or manual
Voltage	220-240V 50/60 Hz
Scale resolution	10 g
Oil scale resolution	5 g
Working temperature range	11/49°C
Filter system	1 filter for humidity
Vacuum pump	100 litre/min capacity, 0.1 mbar vacuum level
Compressor	1/3 HP
Recovery speed	300 g/min in liquid phase
Refrigerant tank	12 litres, refillable
Hoses	3 metres
Dimensions/Weight cm.	55 x 60 x 105 kg 60
Dimensions/Weight Packaging cm.	70x70x122 kg.70
Pressure gauges	Class 1
Bottle pressure gauge	Class 2.5
Bottle heater	Standard equipment

**ECOTECHNICS®**





**Automatic Dye Injection**  
With refillable containers and electronic scale.



**Thermal Printer**  
For a complete, detailed report.



**USB port** for software and Data Base ★

### Refrigerant Management

Each service is saved in station memory, offering the option of creating a customised archive of all refrigerant transactions.

### Automatic Leak Testing

The station checks for leaks during the vacuum phase. If leaks are found, it interrupts operation and gives an alarm.



**PATENTED**

## STANDARD FEATURES

## OPTIONS

### FLUSHING KIT

For cleaning A/C systems by flushing with refrigerant.



**PATENTED**





Fully automatic station for recovering, recycling, and recharging R134a or HFO1234yf refrigerant



R134a	HFO1234yf
ECK3500-UP	ECK3500-HFO
ECK3900-UP	ECK3900-HFO

Type of refrigerant	R134a or HFO1234yf
Service procedure	Fully automatic or manual
Voltage	220-240V 50/60 Hz
Scale resolution	10 g
Oil scale resolution	5 g
Working temperature range	11/49°C
Filter system	1 filter for humidity (112 g)
Vacuum pump	100 litre/min capacity, 0.1 mbar vacuum level
Compressor	1/3 HP
Recovery speed	300 g/min in liquid phase
Refrigerant tank	22 litres, refillable (12 litres for HFO)
Hoses	3 metres
Dimensions/Weight cm.	55 x 60 x 105 kg 90
Dimensions/Weight Packaging cm.	70x70x122 kg.100
Thermal printer	Standard equipment
Pressure gauges	Class 1
Bottle heater	Standard equipment





**5" Color Display** with icon messaging for easy use.



**Automatic HP-LP taps** with possibility to select from which port of the a/c system to recover /charge



**Nitro** Integrated Nitrogen and Nitrogen+Hydrogen leak detection with a connection for external tank



**Hybrid (patent pending)** Integrated function for service hoses flushing for use with vehicles equipped with electric compressors



**Hermetic containers,** for new oil and dye.

## STANDARD FEATURES

## OPTIONS

### FLUSHING KIT

For cleaning A/C systems by flushing with refrigerant.



### GAS IDENTIFIER

controlled by the machine.



### SANIFLUX

Passenger compartment air purification system.



### HERMETIC & REFILLABLE

containers, for new oils, and for dye (programmable).



### DIAG (only for R134a)

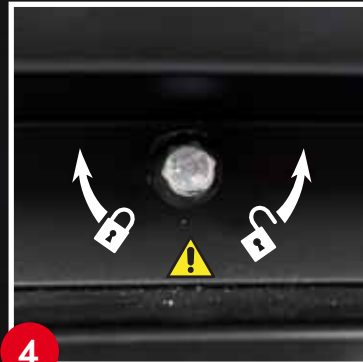
Dynamic diagnosis module.



# *Black line*







Fully automatic station  
for recovering, recycling,  
and recharging HFO1234yf  
refrigerant



HFO1234yf

ECK4000-HFO

ECK4000

Type of refrigerant	HFO1234yf
Service procedure	Fully automatic or manual
Voltage	220-240V 50/60 Hz
Scale resolution	10 g
Oil scale resolution	5 g
Working temperature range	11/49°C
Filter system	1 filter for humidity (112gr)
Vacuum pump	100 litre/min capacity, 0.1 mbar vacuum level
Sealed compressor	1/3 HP
Recovery speed	300 g/min in liquid phase
Refrigerant tank	12 litres refillable
Hoses	3 metres
Dimensions/Weight cm.	55 x 60 x 110 kg 90
Dimensions/Weight Packaging cm.	70x70x130 kg 100
Thermal printer	Standard
Pressure gauges	Class 1
Display	Graphic color touch screen
Bottle temperature sensor	Integrated
Bottle heater	Automatic

**ECOTECHNICS®**



**Eck 4000**

Special German OEM  
according to the VDA specifications



**Eck 4000-HFO**





**Large 7" Color Display** with touch-screen icon messaging for easy use.



**3 Hermetic & refillable** containers for new oils (PAG, POE) and for dye.



**Nitro** Integrated Nitrogen and Nitrogen+Hydrogen leak detection with a connection for external tank



**Hybrid (patent pending)** Flushing of station and service hoses for use with vehicles equipped with electric compressors.



**GAS IDENTIFIER** controlled by the machine (integrated) (ECK4000).

## STANDARD FEATURES

## OPTIONS

### FLUSHING KIT

For cleaning A/C systems by flushing with refrigerant.



### GAS IDENTIFIER

controlled by the machine (external) (ECK4000-HFO).



### SANIFLUX

Passenger compartment air purification system.





Fully automatic Dual-Gas station for recovering, recycling, and recharging R134a and HFO1234yf refrigerants.



Type of refrigerant	R134a and HFO1234yf
Service procedure	Fully automatic or manual
Voltage	220-240V - 50/60 Hz
Scale resolution	10 g
Oil scale resolution	5 g
Working temperature range	11/49°C
Filter system	2 filters for humidity (112 g)
Vacuum pump	100 litre/min capacity, 0.1 mbar vacuum level
Compressor	Hermetically sealed, 2x12 cc, high pressure
Recovery speed	300 g/min in liquid phase
Refrigerant tank	2x12 litres, refillable
Hoses	2 pairs, each 3 metres
Dimensions/Weight cm.	67 x 62 x 107 kg 122
Dimensions/Weight Packaging cm.	91x72x126 kg.132
Thermal printer	Standard equipment
Pressure gauges	Class 1
Display	Colour graphic, touch screen
Bottle temperature sensor	Integrated
Bottle heater	Automatic



**Eck twin-pro**

PATENTED



**Nitro** Integrated Nitrogen and Nitrogen+Hydrogen leak detection with a connection for external tank



**Hybrid** function, with service hoses flushing, for use with vehicles equipped with electric compressors



**4 separate lines for oil and dye** with hermetic containers



**"Puff free" couplers** to save refrigerant with every disconnection



## STANDARD FEATURES OPTIONS

### FLUSHING KIT

For cleaning A/C systems by flushing with refrigerant.



### GAS IDENTIFIER

controlled by the machine



### SANIFLUX

Passenger compartment air purification system.



### 4 SEPARATE LINES

for oil and dye with hermetic and refillable containers (programmable)



## Fully automatic station for recovering, recycling, and recharging R134a refrigerant for agricultural and earth moving vehicles

- Strong steel coated casing
- Automatic new oil charging
- Compact size and easy to transport
- Large manometers easy to read
- Manual discharge of non-condensable gases
- Automatic service alarm
- Integrated database allowing the user to enter new vehicle models
- Automatic internal tank refilling
- Refrigerant management
- Guided leak test
- Scale protection with an easy lock

420 mm

510 mm

**Eck land**

**TROLLEY (OPTION)**  
540x440x500 mm, 11 kg

## STANDARD FEATURES

Type of refrigerant	R134a
Service procedure	Fully automatic or manual
Voltage	220-240 V- 50/60 Hz
Scale resolution	10 g.
Oil scale resolution	5 g.
Working temperature range	11/49 °C
Filter system	1 filter for humidity
Vacuum Pump	72 l/min, 0,1 mbar vacuum level
Compressor	1/3 HP
Recovery speed	300 g./min. in liquid phase
Refrigerant tank	7 l. rechargeable
Hoses	6 m.
Dimensions	51x42x44 cm
Dimensions packaging	70x70x80 cm
Weight	40 kg.
Gross weight	50 kg.
Thermal printer	standard
Manometers	Class1
Display	LCD
Bottle temperature sensor	integrated
Bottle heater	standard

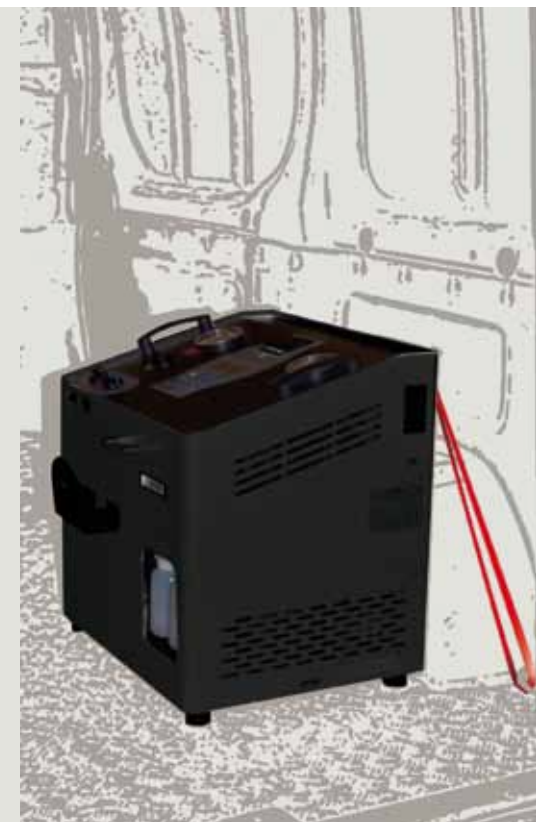
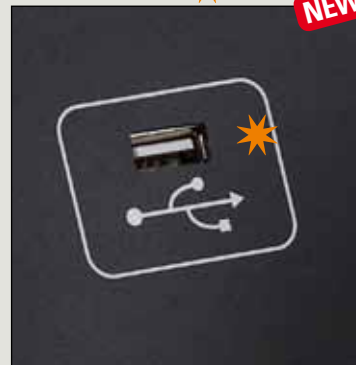
### PRINTER



### BOTTLE HEATER



### USB port for software and Data Base

**NEW**



Fully automatic station for recovering, recycling, and recharging R134a refrigerant, for use with buses and industrial vehicles.

#### Automatic Leak Testing

The station checks for leaks during the vacuum phase. If leaks are found, it interrupts operation and gives an alarm.

#### Automatic Discharge (PATENT PENDING)

of non-condensable gases via solenoid valves, with tank temperature and pressure sensors.



#### Gear Pump

for refrigerant charging.

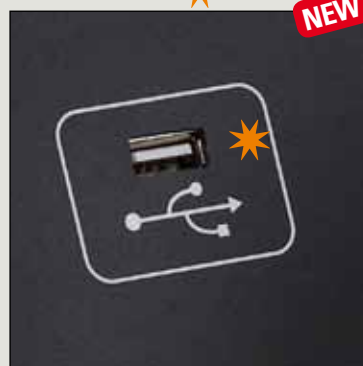


**Nitro** Integrated Nitrogen and Nitrogen+Hydrogen leak detection with a connection for external tank

## STANDARD FEATURES

Type of refrigerant	R134a
Service procedure	Fully automatic or manual
Voltage	220-240V - 50/60 Hz
Scale resolution	10 g
Oil scale resolution	5 g
Working temperature range	11/49°C
Filter system	2 filters for humidity
Vacuum pump	170 litre/min capacity, 0.1 mbar vacuum level
Compressor	Hermetically sealed, 21 cc, high pressure
Gear pump	1 kg/min capacity
Refrigerant tank	40 litres, refillable
Hoses	6 metres
Dimensions/Weight cm.	80x120x115 kg.127
Dimensions/Weight Packaging cm.	91x72x126 kg.137
Thermal printer	Standard equipment
Display	LCD
Pressure gauges	Class 1

USB port for software and Data Base






Italia

**Eck bus-pro**

# Leak Detection Products & Consumables

	AEK 203	COBRA KIT HD - Leak detector kit for A/C circuits including goggles, UV Cobra lamp, hermetic dye cartridge 55 ml for 7 applications, dye injector (R134a)
	AEK 203-C-5	Box of 5 sealed bottles of tracer (55 ml) (R134a)
	AEK322	Bottle of Saniflux Liquid (1000 ml)
	AEK207-A	A Manual oil injector kit for R134a
	AEK207-B	Manual oil injector kit for HFO1234YF
	AEK145	UV COBRA LED LAMP, fluorescent enhanced goggles
	AEK177	Electronic LEAK DETECTOR: one instrument for identifying R134a, HFO1234yf and Hydrogen

	REFRIGERANT	CODE	BOTTLE TYPE	VISCOSITY	Q.TY	PACKAGING	COMPRESSOR TYPE	
	R134a	AEK250-N-6	Hermetic not refillable	PAG 46	250 ml	6 pcs	Mechanical	
	R134a	AEK255-N-6	Hermetic not refillable	PAG 100	250 ml	6 pcs	Mechanical	
UNIVERSAL	R134a - HFO1234yf	<b>NEW</b> AEK285-N-6	Hermetic not refillable	POE 68	250 ml	6 pcs	Mechanical-Electrical	
	R134a - HFO1234yf	AEK265-N-6	Hermetic not refillable	PAG 100	250 ml	6 pcs	Mechanical	
UNIVERSAL	R134a - HFO1234yf	AEK270-N-6	Hermetic not refillable	-	125 ml	6 pcs	Mechanical-Electrical	
	R134a	AEK280-6	Plastic bottle	PAG 46	250 ml	6 pcs	Mechanical	
	R134a	AEK281-6	Plastic bottle	PAG 100	250 ml	6 pcs	Mechanical	
	R134a	AEK283-6	Plastic bottle	POE 100	250 ml	6 pcs	Electrical	
UNIVERSAL	R134a - HFO1234yf	AEK276-6	Plastic bottle	PAG 46	250 ml	6 pcs	Mechanical-Electrical	
UNIVERSAL	R134a - HFO1234yf	AEK275-6	Plastic bottle	PAG 100	250 ml	6 pcs	Mechanical-Electrical	
UNIVERSAL	R134a - HFO1234yf	AEK290-6	Plastic bottle	-	250 ml	6 pcs	Mechanical-Electrical	
		RAC9000	Adapter for oil cartridges with previous type connector					
		RAC8088	Adapter for dye cartridges with previous type connector					


**DB.AUTO**

Data Base update for car/commercial vehicles


**DB.AGRI**

Data Base update for agricultural vehicles


**DB.AUTOAGRI**

Data Base update for car/commercial vehicles + agricultural vehicles


**SCH8220**

USB-RS232 Adapter for SW, data base, refrigerant management download


**AEK304N**

Universal nitrogen leak detection kit with nitrogen-hydrogen bottle (950ml)


**AEK305**

Nitrogen + H2 bottle (950ml)


**GRCNT16**

Refillable and hermetic container (260 ml)


**GRCNT17**

Refillable and hermetic container (260 ml)


**GRCNT18**

Refillable and hermetic container (260 ml)


**GRCNT19**

Refillable and hermetic container (260 ml)


**AEK224-A**

HP "puff free" coupler for R134a

**AEK224-B**

LP "puff free" coupler for R134a


**AEK218-A**

HP "puff free" coupler for HFO

**AEK218-B**

LP "puff free" coupler for HFO


**CNT4012**

40 L bottle for R134a, R22, R404a, R507, R407C


**AEK102-N7-R5**

Bypass adapters set for Flushing Kit


**FLT8006**

Filter for flushing kit AEK 102-N14


**XK184.000049**

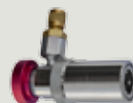
EASYREC PLUS  
Refrigerant recovery machine

**XK185.000000**

EASYREC HFO  
Refrigerant recovery machine HFO1234yf compatible

**AEK317**

Double valve extractor screwdriver


**AEK211**

Special quick-connect coupling


**AEK302**

ELECTRONIC SCALE 100kg capacity


**AEK120-E**

Digital Thermometer


**AEK116-1**

Adapter for refrigerant bottles for ACME hoses


**AEK319**

Fitting for Honeywell bottle


**AEK318**

Fitting for Dupont bottle


**AEK109A**

Terminal valve, high pressure


**AEK109B**

Terminal valve, low pressure


**KIT.UP006**

Retrofit Kit to convert "UP" machines from R134a to HFO1234yf


**AEK213**

Nitrogen coupler for A/C machines



	R134a				HFO1234yf			
	ECK 1890 ECK 1800	ECK 3900-UP ECK 3500-UP	ECK BUS-PRO	ECK LAND	ECK 1890-HFO ECK 1800-HFO	ECK 3900-HFO ECK 3500-HFO	ECK TWIN-PRO	ECK4000-HFO ECK4000
HIGH PRECISION	●	●	–	–	●	●	●	●
AUTOMATIC LEAK CHECK	●	●	●	–	●	●	●	●
REFRIGERANT MANAGEMENT	●	●	●	●	●	●	●	●
DATA BASE	●	●	●	●	●	●	●	●
DISPLAY	LCD	COLOR 5"	LCD	LCD	LCD	COLOR 5"	TOUCH 7"	TOUCH 7"
HERMETIC CONTAINERS	–	●	–	–	–	●	●	–
REFILLABLE CONTAINERS	●	–	●	●	●	–	–	–
HERMETIC & REFILLABLE CONTAINERS	–	○	–	–	–	○	○	●
OIL/DYE CONTAINERS	1+1	1+1	1+1	1+1	1+1	1+1	2+2	2+1
STATUS LIGHT	–	–	–	–	–	–	–	●
AUTOMATIC TAPS	–	●	–	–	–	●	●	●
AUTOMATIC AIR PURGE	–	●	●	–	–	●	●	●
GEAR PUMP	–	–	●	–	–	–	–	–
FLUSHING SW	●	●	–	–	●	●	●	●
USB PORT	●	●	●	●	●	●	●	●
GAS IDENTIFIER	–	○	–	–	–	○	○	○/●
SANIFLUX	–	○	–	–	–	○	○	○
HYBRID	–	●	–	–	–	●	●	●
NITRO	–	●	●	–	–	●	●	●
DIAG	–	○	–	–	–	–	–	–
PRINTER	●	●	●	●	●	●	●	●
BOTTLE HEATER	●	●	–	●	●	●	●	●
AUTOMATIC DYE	●	●	●	–	●	●	●	●
FLUSHING KIT	○	○	–	–	○	○	○	○

● STANDARD EQUIPMENT    – NOT AVAILABLE    ○ OPTIONAL

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Images shown may include higher specification accessories.

# ECOTECHNICS®

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*a unico socio*

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MADE  
IN ITALY 