



# CHOOSE THE BEST REFUELING SOLUTION FOR YOUR OFF ROAD VEHICLES WHEREVER YOUNEED I

**PIUSI goes "off road"** with its complete range of solutions suitable to manage any kind of vehicle refueling in every situation; from fixed to mobile and on board systems.

All the pumps and dispensers are specifically engineered to meet the demand for daily use in the building & construction industry, mining sector and agricultural field.

- Tailor made: to suit all the OEM needs;
- Partnership: co-design with customers' R&D department aimed to develop new products and solutions to meet the required standard;
- Flexibility and reliability: mobile, on board and stationary refueling equipment to suit every application;
- Cost and time efficiency: thanks to the possibility of a quick refueling operation wherever needed:
- Fully compliant: Tier 4 IIIB engines whether you use SCR, DPF or EGR systems (B2O versions).

Are you ready for the future? Go off road with PIUSI's range!





# > YOUR NEEDS, OUR SOLUTION

### **APPLICATION 01**



### **APPLICATION 03**



State-of-the-art pumps to satisfy the requirements for the **on board refueling** on heavy equipment and earthworks machinery.



Powerful and portable equipment, easy to handle, that allows refueling operations on-site in cases where reaching the refueling area is not simple.



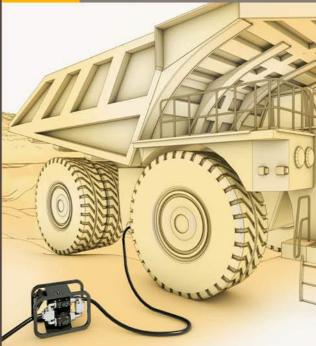
When **high flow** is required, this equipment is suitable for operating directly on worksites and on vehicles with large storage tanks.



> ON BOARD REFUELING



> MOBILE REFUELING



> HIGH FLOW REFUELING



### The mobile and fixed solutions easily suit a wide variety of applications:

a new and easy way to automatically and safely manage refueling operations of earthmoving machines, heavy duty vehicles and OEM equipment.

### **APPLICATION 04**

### **APPLICATION 05**

### **APPLICATION 06**



The complete range of fixed dispensers to set up a refueling area for any vehicle tank on the working site.



A complete range of explosion proof equipment suitable for refueling operation in a potentially explosive atmosphere.



Dedicated **AdBlue®** equipment both for high and low consumptions according to plant requirements.



> EXPLOSION PROOF EQUIPMENT



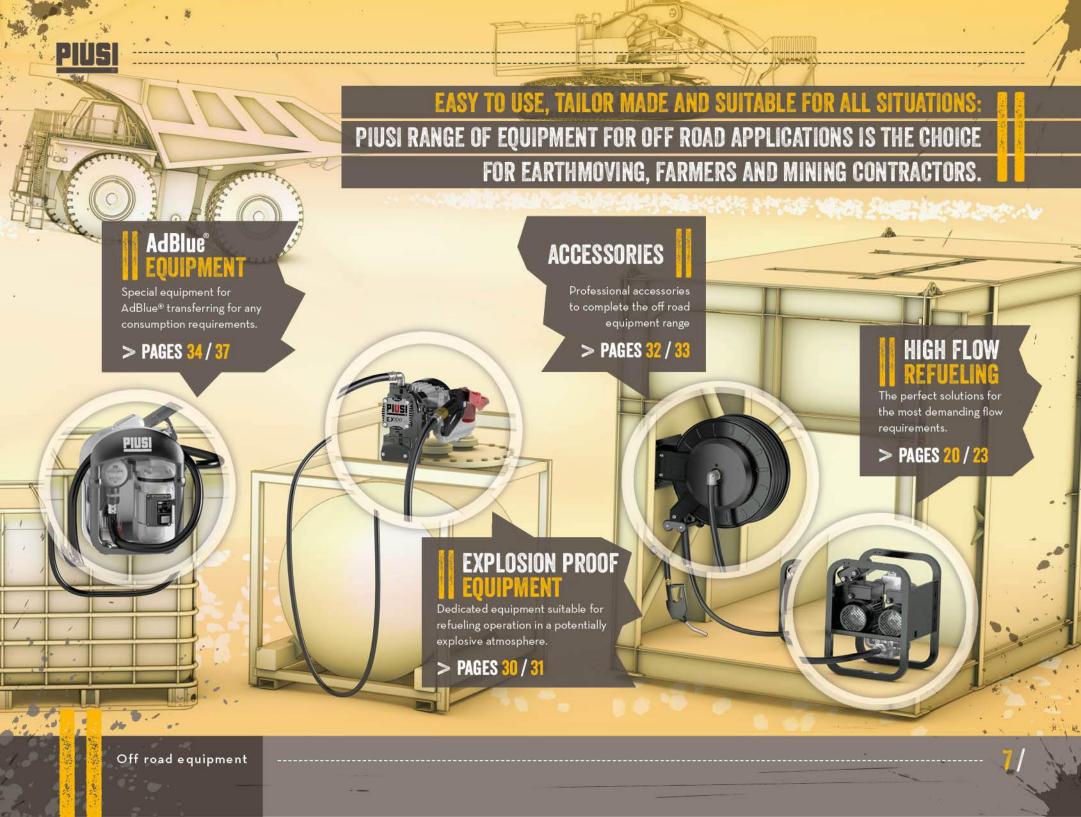
> FIXED REFUELING

> AdBlue® EQUIPMENT















### **BP** 3000



This long-lasting vane pump is equipped with a built-in by-pass valve. Available in both 12V and 24V versions, it represents the core of the on board range.





up to 50 l/min at 0.25 bar

- Max differential pressure
   1.0 bar
- 30 minutes duty time
- Self priming up to 3 meters depth
- Cast iron pump body
- Anti-corrosion finishing
- Sintered steel rotor and acetal resin vanes



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IP Protection Guaranteed



This DC pump maintains all the main structural features of the BP 3000 while being specifically engineered to be compatible with B20 Bio Fuel, B30 Bio Fuel and Tier 4 III B.







BP 3020 INLINE

#### FLOW-RATE

up to 50 l/min at 0.25 bar

- Max differential pressure
   1.O bar
- 30 minutes duty time
- Self priming up to 3 meters depth
- Resistant to dry running
- Cast iron pump body
- E-coat finishing on the whole body
- Mechanical seals
- PPS Vanes
- Thermally protected motor





### > VANTAGE 60

DIESEL

Smart fuel pump, available both in 12V and 24V versions, it can be installed on any vehicle thanks to its customized elements. Its intelligent control box guarantees a fully automatic performance in terms of self-refueling and overheating regulation.



#### FLOW-RATE

up to 🖍 🕅 I/min at 0.25 bar

- Max differential pressure
   1.0 bar
- Self priming up to 3 meters depth
- Incorporated by-pass valve
- Operation status LED
- Remotable control box







High performance and environment friendly pumps,

the 3O2O series perform all features of Vantage 6O while being fully compatible with **Tier 4 IIIB engines and biodiesel B2O**.



#### FLOW-RATE

up to fff I/min at 0.25 bar

- Max differential pressure 1.0 bar
- Self priming up to 3 meters depth
- Cast iron pump body
- E-coat finishing on the whole body
- Mechanical seal
- PPS Vanes
- Thermally protected motor
- Remotable control box









### > VANTAGE 100



Top-in-line vane pump with rotor specifically designed for on board refueling of heavy duty vehicles with tank capacity exceeding 400 liters. The pump is Tier 4 III B compatible and can transfer ultra-low-sulfur-diesel "ULSD" and biodiesel B2O.



## FLOW-RATE up to 100 I/min at 0.25 bar

- Tension 24V DC
- Cast iron pump body
- E-coat finishing on the whole body
- Mechanical seals
- PPS Vanes
- Thermally protected motor
- Remotable control box







### **VANTAGE DC INTELLIGENT PUMP**



**Discover here the Vantage intelligent system** in all the different conditions.

▲ / Switches off after 15 minute



Dry running: detects this condition and shuts down the pump



Stops when the tank is full



Overheating and overpressure: reduces power and allows refueling at a slower rate







# > TAILOR MADE SOLUTIONS

Each customer has his unique requirements. Thanks to our R&D department, we can supply highly "made to measure" co-designed solutions that meet both the customers' as well as the industry's specific needs.

Starting from the top-quality standard BP 3000 and Vantage range, PIUSI can design, create and industrialize the perfect solution in terms of connections, valves, base and cables.



O / CONNECTIONS

Wide range of heavy duty connectors.

#### Features:

- Different sizes and shapes
- Heavy duty
- Co-designed on customers' requests



02/SUPPORT

Custom designed pump support bracket to perfectly suit all vehicles.

#### Features:

- High-resistance support
- Maximum stability and correct fixing
- Co-designed on customers' requests









Customized electric plug.

#### Features:

- Long lasting pin
- Sturdy cable jacket



A new concept of valve for fuel suction hoses on machinery.

#### Features:

- Mesh filter for diesel fuel residues
- Anti shock materials to avoid damage caused by dropping
- Low pressure drop







# > TESTING

This range of pumps, expressly engineered to be used on the OEM machines, are 100% tested accordingly to the following inspections.

These wide range of mechanical and electronic tests are carried out on all components to guarantee the maximum reliability and long-lasting equipment.

Time of book			Test document reference:
	Type of test:		
01	>	HIGH TEMPERATURE TEST	Our Ref. test PIUSI Rdp 1742
02	>	LOW TEMPERATURE TEST	Our Ref. test PIUSI Rdp 1742
03	>	HIGH TEMPERATURE STORAGE TEST	Our Ref. test PIUSI Rdp 1742
04	>	LOW TEMPERATURE STORAGE TEST	Our Ref. test PIUSI Rdp 1742
05	>	VIBRATION TEST	Our Ref. CERMET 2011_00172
06	>	TEMPERATURE HUMIDITY CYCLE	Our Ref. test PIUSI Rdp 1742
07	>	THERMAL SHOCK TEST	Our Ref. REGGIO EMILIA INNOVAZIONE OI 2010
08	>	MECHANICAL SHOCK TEST	Our Ref. REGGIO EMILIA INNOVAZIONE PSO10411ENDE0571
09	>	WATER PROOF RESISTANCE	Our Ref. RES 80746
10	>	DUST PROOF RESISTANCE	Our Ref. RES 80746
11	>	SUPPLY VOLTAGE TEST	Our Ref. test PIUSI Rdp 1742
12	>	EMC TEST	Our Ref. REGGIO EMILIA INNOVAZIONE PSO40511EMC0571
13	>	DURABILITY TEST	Our Ref. PIUSI Rdp 1742
14	>	SALT SPRAY TEST	Our Ref. CERMET 2011_00255













### > PITSTOP



Dispenser unit with two DC pumps, hose reel, water filter and automatic nozzle integrated in a sturdy supporting structure. Versatile and compact, this dispenser is the all-in-one solution for setting up a perfect mobile refueling unit.



EXAMPLE OF MOBILE DINSTALLATION



#### FLOW-RAT

up to 🛂 🖣 l/min

- Two BP 3000 pumps 12/24V
- 30 minutes duty time
- Hose 3/4" 14 m (1" 10 m).
- Filter with water absorption cartridge
- Sturdy metallic structure
- Hose reel side safety guards
- Adjustable arms with end-of-travel hose stop
- ON/OFF switch
- K24 meter (on request)



DIESEL

Portable box integrated with a self-priming transfer pump, filter, check valve and manual nozzle suitable for quick and safe refuel operations in all the situations where an easy mobile refueling is required.



#### FLOW-RATE

up to 🕼 l/min

- BP 3000 pumps 12/24V
- 30 minutes duty time
- Integrated filter (PRO version)
- Rotating connection
- ON/OFF switch
- Foot valve
- K24 meter (on request)
- Easy to repack after use

EXAMPLE OF DRUM IIII APPLICATION



## > BATTERY KIT

DIESEL

OIL

Portable diesel transfer unit with a self-priming electric vane pump. Its modular composition allows to have different pumps accordingly to the required flow-rates and different usages. It is always supplied with integrated nozzle and a set of accessories.



#### FI OW-RATE

ıp to RM I/min\*

- 12/24V DC pumps
- 30 minutes duty time
- Self priming up to 2 meters
- Cast iron body
- Fixed brush motor with permanent magnet stator
- Terminal board with switches and fuses to protect against overload
- ON/OFF switch
- Drum kit (on request)

\*Depending on pump model

### KIT WITH AVAILABLE PUMPS



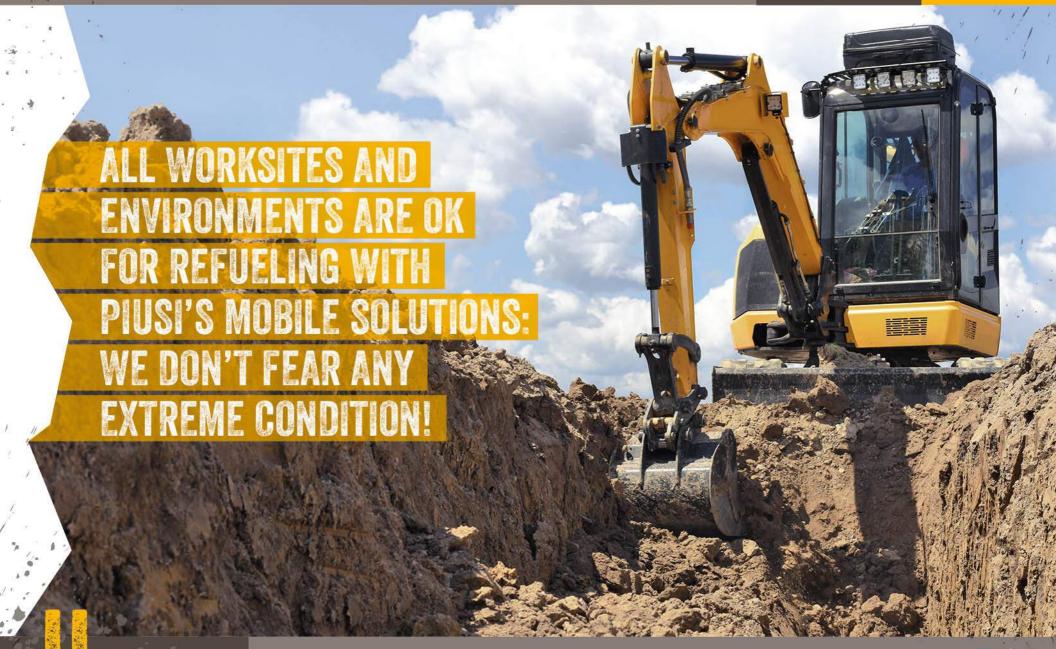
Battery Kit 3000 BIPUMP



Battery Kit OIL











### > ST 200 AC

DIESEL

This dispenser allows high flow refueling thanks to the two integrated E12O self priming rotary electric vane pumps.

Fitted with by-pass valve and elevated reliability seal, the dispenser works even at low working temperatures and in every condition on worksites.



#### FLOW-RATE

o to 700 l/mir

- AC 230V
- Continuous duty
- Sturdy steel frame
- Wheels and handle available as accessories
- Suction hose up to 10 m
- Flow-rate up to 170 l/min with 20 m hose lenght (hose kit 1" 1/2)
- Self priming



HANDY KIT: version with wheels and handle



DIESEL

24V portable dispensing unit for high flow applications. The low weight of the unit makes it easy to handle and suitable for operating on worksites.



### FLOW-RATE

up to 🎧 l/min

- 20 minutes duty time
- Thermal protection
- Suction hose up to 10 m
- Flow-rate up to 170 l/min with 20 m hose lenght (hose kit 1" 1/2)
- Self priming

IP 55

D------







DIESEL

This volumetric, self-priming vane pump is versatile, easy to install and suitable for use inside diesel dispensers and for fixed fuel transfer systems.

Thanks to its sturdy structure, it is fully reliable even at low temperatures.





- AC version
- Heavy duty applications
- High flow-rate
- ON/OFF switch





With a flow-rate of up to 550 l/min\*, this self-priming electric pump with open impeller is suitable for all applications in which high flow-rates are required.

Thus, it is the ideal equipment for topping up and transferring diesel from all kinds of tanks.



### FLOW-RATE

- AC continuous duty
- Max operation pressure
   1.8 bar
- Open impeller

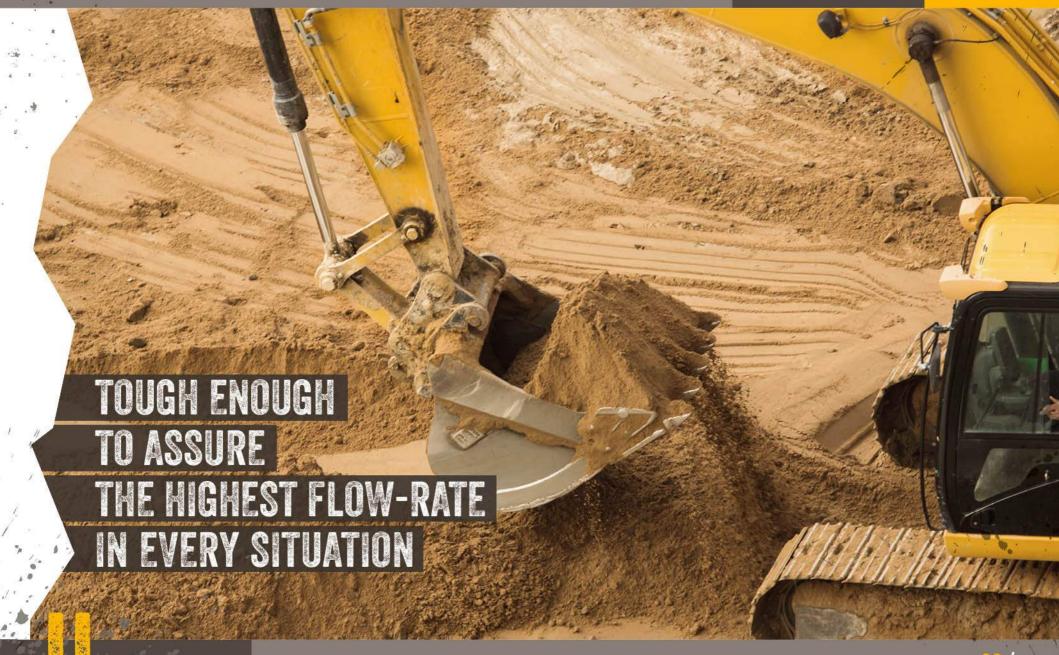
\*Nominal flow-rate without automatic nozzle

D------

IP Protection











### > DRUM

DIESEL

This is a modular diesel and oil transfer unit for noncommercial use that can be easily installed on drums thanks to a quick 2" coupling. It is available in different versions according to the type of pump required.



### FLOW-RATE up to R I/min\*

- AC/DC versions
- 4 meters delivery hose
- Self priming
- Telescopic suction tube
- Nozzle holder above the drum for easy & clean operations
- Quick drum connection
- Suction filter accessible for inspection

\*Depending on pump model

IP 55
IP Protection
Gusranteed

### **AVAILABLE PUMPS**





AC pump VISCOMAT 70/200





Off road equipment





WITH METER



Diesel transfer station that can be used to fill mobile tanks or interact with distribution units. Its sturdy structure makes this dispenser suitable to be used in the harshest environments. It can be integrated with a protective metal box and water separating filter. Diesel transfer station for fixed installations composed by AC or DC pump, nozzle (manual or automatic) and precision meter - both mechanical (K33) or electronic (K6OO/3 B) - for safe and controlled refueling operations.





- AC/DC versions
- Check valve
- Filter and nozzle support
- 4 meters delivery hose (6 meters on request)

\*Depending on pump model





- Accuracy +/- 1%
- AC/DC versions
- Check valve
- Filter and nozzle support
- 4 meters delivery hose (6 meters on request)
- Safety box available

\*Depending on pump model







## > ST WITH METER AND FILTER OFFICE OF STATE OF ST

>ST BOX

DIESEL

### This range of dispensers is particularly indicated for all applications in which a filtration is required.

The stations integrate PIUSI clear or water captor filters and are available both with mechanical meter K33 or electronic meter K24.



up to 🤼 🖥 l/min\*

- Accuracy +/- 1%
- AC version
- Check valve
- Filter and nozzle support
- 4 meters delivery hose (6 meters on request)

\*Depending on pump model

### meter and filter, with lockable metal protection box. The unit is complete with antistatic hose for diesel fuel and automatic

A diesel refueling station complete with pump, flow

The unit is complete with antistatic hose for diesel fuel and automati dispensing nozzle. The Pro version features the electronic access control box Access 85.





- Accuracy +/- 1%
- AC version
- Check valve
- Water captor filter
- 6 to 8 meters delivery hose
- Access control

\*Depending on pump model

IP Protection Guaranteed IP 55
IP Protection
Guaranteed

Off road equipment





Diesel dispenser for non-commercial use. The sturdy structure is designed for different applications: can be fixed to walls, tanks, cisterns, drums, special pedestals. It features a self-priming vane pump fitted with by-pass, installed on anti-vibration supports.



up to 1/min

- Accuracy +/- 1%
- AC/DC versions
- Mechanical seal
- Induction motor with thermal overload protection
- Integrated nozzle holder with stop/start pump lever
- Mesh filter

### > GUBE 70



#### This diesel dispenser is available both AC and DC

versions and features all the main characteristics of the Cube 56 while featuring a higher flow rate. It is also available with filter.



- Accuracy +/- 1%
- AC/DC versions
- Mechanical seal
- Induction motor with thermal overload protection
- Integrated nozzle holder with stop/start pump lever
- Mesh filter







DIESEL

**Top-in-line of mechanical Cube dispensers in terms of flow-rate**, CUBE 9O is available in AC version only and features all the main characteristics of the CUBE range in terms of sturdy structural elements and applications.



#### FLOW-RATE

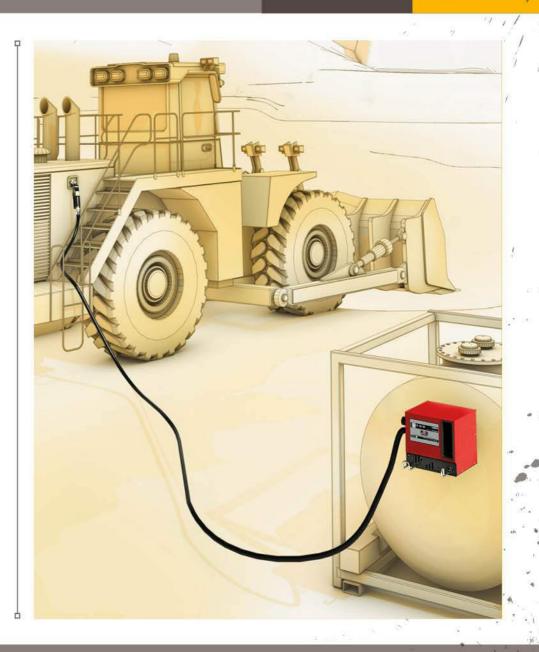
up to 911 I/min

- Accuracy +/- 1%
- AC/DC versions
- Mechanical seal
- Induction motor with thermal overload protection
- Integrated nozzle holder with stop/start pump lever
- Mesh filter





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# EXPLOSION PROMENT



















### > EX100

This highly performing pump is particularly suitable for heavy duty applications, i.e. for the most demanding fleets that need to dispense fuels such as gasoline, diesel or kerosene







This AC continuous duty transfer pump is engineered to transfer gasoline and diesel quickly while ensuring high

performance and maximum safety in potentially explosives atmospheres.

> EX140











FLOW-RATE

up to 1/min

- Thermally protected motor
- AC continuous duty
- ATEX/cULus certified
- Constant flow-rate even in complex systems

Our pumps complies with the following marking ATEX/IECEx:



 II
 2
 G
 Ex
 d
 IIA
 T4

 Group
 Category
 Type of explosive atmosphere
 Permanent prefix
 Protection method
 Gas glass
 Temperature class

Equipment

protection level





### > FILTROLL

OII

Double filter, triple control. This filtering unit provides double filtering for oil and diesel fuel and absorbs any water and impurities. The unit features a supply and suction pipe with integrated bottom valve.



#### **OPERATING PRESSURE**

up to 🦰 ba

- Two step filtration
- AC/DC versions
- Filtering capacity: first stage
   30µ with water absorption /
   second stage 5µ for impurities
- Sturdy wheeled structure
- Large-diameter wheels



DIESEL

OIL

The automatic hose reels for diesel and oil have been designed to ensure high efficiency in the off road sector. The sturdy structure can guarantee the best performance also in heavy duty conditions.



### HOSE LENGHT

up to **2**0

- Reduced pressure loss
- Rotating support plate
- Adjustable arm positions
- Hose stop
- Lateral protective covers

Off road equipment 33/









### > THREE25



AdBlue® turnkey dispensing system for IBC tanks featuring a built-in AdBlue® 3D filter which prevents contamination of AdBlue® and therefore guaranteeing long life of the catalyst.



- 20 minutes duty time
- Accuracy +/- 1%
- AC versions
- 6 meters delivery hose
- Built-in 3D filter
- Integrated automatic nozzle
- Available with in-built meter
- Steel support and ergonomic bracket system
- SEC connection
- Available bottom valve connection for IBC



### > SUZZARABLUE DRUM



AdBlue® dispensing system provided with a stainless steel adjustable base that allows it to be moved easily from one drum to another.



- 20 minutes duty time
- AC/DC versions
- 6 meters delivery hose
- ON/OFF switch
- Stainless steel base
- AF2 connection

Off road equipment





### > PIUSI HAND PUMP ABBUT



Stainless steel rotary hand pump certified for an easy and immediate transfer of AdBlue®. Its manufacturing tolerances, along with wear-resistant materials, guarantee many years of perfect operation.



up to 381/100 revolutions

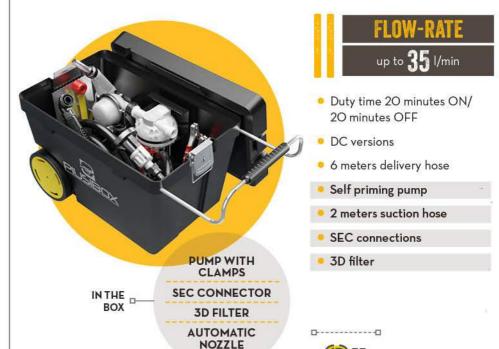
- 2,5 meters delivery hose
- Sturdy construction
- Suction hose and bung adapter

### PIUSI BOX FOR AdBlue®



Portable AdBlue® dispenser designed to perform quick & clean AdBlue® transfer and filling operations,

when environmental conditions may be among the leading causes of fluid contamination.











available worldwide through

partner to order your dispenser or contact PIUSI





piusi.com



#### piusi.com

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