at your side since 1929.

# TO ST.

# CATALOGUE

Automotive Equipment

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at your side since 1929.



Wheel Aligner, Wheel Balancer, Tyre Changer



A/C Refill Station



Brake Tester, Emission Tester, Headlight Beam Tester



Lifts - Mobile Lifts



Customer Services Department



Our young company NOUVELLE FOG AUTOMOTIVE - heiress of Fabrication d'Outillage pour Garage (FOG), created in 1929, and Facom workshop equipment (FFB), created in 2000 - is now completely dedicated to offering its customers innovative high-quality, high-performance products.

One of the last french equipment manufacturers, independent, and workshop generalists, our goal is to permanently offer you products "Made in FOG":

On our new site in Cosne-sur-Loire, Our engineers design, develop and manufacture, ranges developped to meet the needs of Workshops, Garages and Technical controle Centers: Vehicle lift, Aligner, Tyre changer, Wheel balancer, A/C refill station, Brake and Suspension tester, Emission tester combo, etc.

We are proud to present this catalogue, symbol of our efforts of creation, innovation and commercial development with the goal to better answer your expectations.

We thank you for your trust and loyalty, and wish you success in your business. Enjoy discovering this catalogue!

Best regards,

Benoît de Maynadier Managing Director

#### NOUVELLE FOG AUTOMOTIVE

82, avenue du 85ème de Ligne 58200 COSNE SUR LOIRE - FRANCE Phone : +33 (0)2 38 37 28 28

Fax: +33 (0)2 38 37 28 29 E-mail: adv@fog-automotive.com

www.fog-automotive.com













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GTR.950

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# **ACCESSORIES** & SUMMARY TABLE

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# GTR.628



# Simple, quick and efficient



Passenger Cars and Light Duty Vehicles wheel aligner, equipped with 8 sensors and 4-point clamps

Ref. GTR.628RW4500P

Passenger Cars and Light Duty Vehicles wheel aligner, equipped with quick clamps

Ref. GTR.628RW4500P-GR

Passenger Cars and Light Duty Vehicles wheel aligner, equipped with a vehicle registration certificate scanner and 4-point clamps

Ref. GTR.628RW4500PSCAN

Passenger Cars and Light Duty Vehicles wheel aligner, equipped with a vehicle registration certificate scanner and quick clamps

Ref. GTR.628RW4500PSCAN-GR



#### DATABASE

- The FOG European vehicles database is incorporated into the GTR.628.
- Data updates are available upon order on a USB key, or freely for customers with a maintenance contract.

#### NEW!

## MEASUREMENT SYSTEM

- The ZIGBEE type of wireless communications protocol is secure, and is therefore unaffected by exterior sources of interference.
- The 4 high-performance batteries ensure more than 10 hours autonomy. They are incorporated in the measurement heads and recharged on the unit.
- Measurements are made by 4 heads and 8 high-resolution CCD sensors.
- With Spoiler mode you can work even if the front beam is cut.
- Left/right steering wheel +/- 10°.

- Camber and Toe checks with hanging wheels by compensation measurements.
- Checks can be carried out on all work surfaces.

## **SIMPLIFIED CONTROLS**

- The program can be sequenced and all the alignment steps validated thanks to a keyboard incorporated in the measurement heads (no need of a remote control).
- The back-lit LCD screen adjusts itself to all environments for an easier reading.

#### MANUFACTURERS' **PROCEDURES**

- The GTR.628 system incorporates the latest procedures of manufacturers such as **Peugeot**, **Citroën** (setting the pitch of the vehicle), Mercedes-Benz (entering the trim of the vehicle), Renault Passenger Car (taking heights under the body shell) and **Renault** Light Duty Vehicle (taking reference heights either empty or loaded).
- Manufacturers' help procedures for adjustments or repairs are available when specified (setting up the weight, compressing suspensions, etc.).



Large 24" monitor

Vehicle registration certificate scanner

Online database

## A SIMPLE, EFFICIENT SYSTEM SUITED TO DIFFERENT USE CASES







The operator carries out the rim runout compensation, centers the steering, and goes directly to the « Quick Test » screen, which immediately gives an indication of the condition of the inspected vehicle.











The operator accesses standard mode by selecting the inspections to be carried out on the vehicle.







The operator selects exactly the angles measured for the adjustment and accesses additional data (setback of the wheels and axles, angles included, thrust angles, etc.).

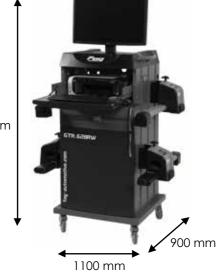
## STANDARD EQUIPMENT

- 4 measurement heads, 8 CCD sensors
- 4 universal clamp, 4 points 12-25"
- 2 mechanical turntables
- 1 steeringwheel holder
- 1 brake pedal depressor
- PC, colour printer (WiFi)
- 24" monitor

1700 mm

# OPTIONAL EQUIPMENT

- Vehicle registration certificate scanner for automatic licence plate recognition
- 2 rear sliding plates
- 4 quick clamps, 12-24"
- Set of 2 PSA compression bars
- Online database



**NET WEIGHT OF PRODUCT** 105 kg

**POWER SUPPLY** 230 V / AC / 50 Hz

**BATTERIES** NiMH 7.2 V / 3 Ah Slow and quick charge

**COMMUNICATIONS** ZIGBEE 2.4 GHz







# K-MELEON



The accuracy of CCD sensors at the service of the 3D program

8 - MELEON

Passenger Cars and Light Duty Vehicles 8 CCD sensor aligner, equipped with an encoder and 4-point clamps Ref. K-MELEON

Passenger Cars and Light Duty Vehicles 8 CCD sensor aligner, equipped with an encoder and quick clamps Ref. K-MELEON-GR

## **DATABASE**

- The FOG Passenger Cars and Light Duty Vehicles database is incorporated into the K-MELEON.
- Data updates are available upon order on a USB key, or freely for customers with a maintenance contract.

#### NEW!

# MEASUREMENT SYSTEM

- The ZIGBEE type of wireless communications protocol is secure, and is therefore unaffected by exterior sources of interference.
- The 4 high-performance batteries ensure more than 10 hours autonomy. They are incorporated in the measurement heads and recharged on the unit.
- Measurements are made by 4 heads and 8 high-resolution CCD sensors.
- With Spoiler mode you can work even if the front beam is cut.
- Left/right steering wheel +/- 20°.
- Checks can be carried out on all work surfaces.

# C LICENCE PLATE RECOGNITION

• K-MELEON reads and analyses the **licence plate.** For France, FOG assures you to find automatically the right vehicule thanks to the check between to the national database of vehicle registration certificates and the manufacturer's VIN infos.

#### SCENARIO MODE

 Whatever your speciality and your need: a simple inspection, a front alignment or a precision adjustment,

K-MELEON automatically adapts to your needs, thanks to its scenario mode and gives you the flexibility required to go back to basics.

#### **O** UPDATES AND REMOTE **ASSISTANCE**

- The FOG UPDATE system means that you automatically benefit from the latest updates. On each start-up, it connects to the FOG server to check whether new functionalities have been implemented.
- K-MELEON is a connected device that can be controlled remotely. This means that, if necessary, you can benefit from a diagnosis by an FOG expert who can answer your questions and further your training. In this way you can increase your workshop's profitability day by day.



Large 24" monitor



Automatic car positionning help



Remote control, encoder and back-lit LCD display

## SPEED, ERGONOMY, SIMPLICITY



Licence plate recognition by camera



Rapid runout compensation



A clear and precise diagnostic

# PROGRAM & DATABASE UPDATES AND REMOTE ASSISTANCE



Remote assistance by a FOG technician for a high-performance diagnosis



Automatic program updates in order to benefit from the latest features



Online database to immediately recover the manufacturers' latest versions

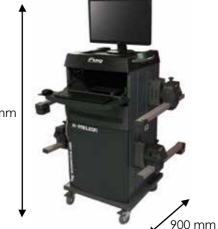
## STANDARD EQUIPMENT

- 4 heads, 8 CCD sensors, with encoder
- 4 universal clamp, 4 points 12-25'
- 2 mechanical turntables
- 1 steeringwheel holder
- 1 brake pedal depressor
- PC, colour printer (WiFi)
- 24''monitor
- 1 set of spare cables
- Camera for licence plate recognition

# 1700 mm

## OPTIONAL EQUIPMENT

- Vehicle registration certificate scanner for automatic licence plate recognition
- 4 quick clamps, 12-24'
- 2 electronic turntables for maximum
- Set of 2 PSA compression bars
- Online database



1100 mm

**NET WEIGHT OF PRODUCT** 105 kg

**POWER SUPPLY** 230 V / AC / 50 Hz

**BATTERIES** Lithium-ion 7.4 V / 2.25 Ah

COMMUNICATIONS ZIGBEE 2.4 GHz

Fac



# X-PERT





3D aligner equipped with 4-point clamps Ref. X-PERT

3D aligner equipped with quick clamps

Ref. X-PERT-GR



- The FOG Passenger Cars and Light Duty Vehicles database is incorporated into the X-PERT.
- Data updates are available upon order on a USB key, or freely for customers with a maintenance contract.

The **ONLINE database** allows you

# MEASUREMENT SYSTEM

- Measurements are made by 2 high-resolution CCD cameras and 4 targets (no cables, no batteries, no electronic at the wheel).
- Simultaneous runout compensation for all the wheels by moving backwards and then replacing the vehicle on the turntables.
- The end-of-beam mounted cameras permanently follow the movement of the targets positioned on the wheels and accompany the movement of the lift from its inspection position to its setting position.

# LICENCE PLATE RECOGNITION

• X-PERT reads and analyses the licence plate. For France, FOG assures you to find automatically the right vehicule thanks to the check between to the national database of vehicle registration certificates and the manufacturer's VIN infos.

#### 32" MONITOR **AND 2 DISPLAY REPEATERS**

• 2 end-of-beam display repeaters retransmit all the measurements recorded on a large 32" monitor. Thanks to this equipment, whatever your position in your work area, you can be as comfortable as possible while you check the adjustment you are making.

#### **UPDATES AND REMOTE ASSISTANCE**

• The FOG UPDATE system means that you automatically benefit from the latest updates. On each start-up, it

connects to the FOG server to check whether new functionalities have been implemented.

• X-PERT is a connected device that can be controlled remotely. This means that, if necessary, you can benefit from a diagnosis by an FOG expert who can answer your questions and further your training. In this way you can increase your workshop's profitability day by day.

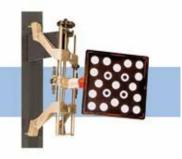
## SCENARIO MODE

- Whatever your speciality and your need: a simple inspection, a front alignment or a precision adjustment, X-PERT automatically adapts to your needs, thanks to its scenario mode and gives you the flexibility required to go back to basics.
- Parameters can be set for all waiting times to optimise operations.



Large 32" monitor





4 high-precision targets

# SPEED, ERGONOMY, SIMPLICITY



Licence plate recognition by camera



more comfortable working

Rapid push-pull runout compensation



A clear and precise diagnostic

## PROGRAM & DATABASE UPDATES AND REMOTE ASSISTANCE



Remote assistance by a FOG technician for a high-performance



Automatic program updates in order to benefit from the latest features



Online database to immediately recover the manufacturers' latest

## (O) STANDARD EQUIPMENT

- 4 targets
- 4 universal clamp, 4 points 12-25"
- 2 mechanical turntables
- 1 steeringwheel holder
- 1 brake pedal depressor
- PC, colour printer (WiFi)
- 32'' monitor
- Camera for licence plate recognition
- USB remote control

# 2900 mm

300 kg **POWER SUPPLY** 230 V / AC / 50 Hz

**NET WEIGHT OF PRODUCT** 

## OPTIONAL EQUIPMENT

- Vehicle registration certificate scanner for automatic licence plate recognition
- 4 quick clamps, 12-24'
- Set of 2 PSA compression bars

2900 mm











# GTR.950





Specially designed for working in the pit or in the driver's cab

> Light and Heavy Duty Vehicles wheel aligner, equipped with 6 CCD sensors and 4-point clamps Ref. GTR.950RW

> Light and Heavy Duty Vehicles wheel aligner, equipped with 6 CCD sensors and quick clamps

Ref. GTR.950RW-GR



#### **DATABASE**

- The FOG Light and Heavy Duty Vehicles database is incorporated into the GTR.950.
- Data updates are available upon order on a USB key, or freely for customers with a maintenance contract.

#### NEW!

# MEASUREMENT SYSTEM

- The ZIGBEE type of wireless communications protocol is secure, and is therefore unaffected by exterior sources of interference.
- The 4 high-performance batteries ensure more than 10 hours autonomy. They are incorporated in the measurement heads and recharged on the unit.
- Measurements are made by 4 heads with encoder and 6 high-resolution CCD sensors.
- Left/right steering wheel +/- 10°.
- Inspections can be carried out either on a lift or over a pit.

## SIMPLIFIED CONTROLS

- The program can be sequenced and all the alignment steps validated thanks to a keyboard incorporated in the measurement heads (no need of a remote control).
- The back-lit LCD screen adjusts itself to all environments for an easier

#### **O UPDATES AND REMOTE ASSISTANCE**

- The FOG UPDATE system means that you automatically benefit from the latest updates. On each start-up, it connects to the FOG server to check whether new functionalities have been implemented.
- GTR.950 is a connected device that can be controlled remotely. This means that, if necessary, you can benefit from a diagnosis by an FOG expert who can answer your questions and further your training. In this way you can increase your workshop's profitability day by day.





Large 24" monitor

Quick clamps without runout compensation

Online database

#### A SIMPLE AND USER-FRIENDLY SOFTWARE

SELECTION OF THE OF VEHICLE

















The user selects the angles to be checked or adjusted during the procedure.





The very complete inspection report includes all the values for all the axles in a single document, equally suitable for your customer or an automotive expert.

## STANDARD EQUIPMENT

- 1 ergonomic cabinet
- 4 heads, 6 CCD sensors
- 4 universal clamp, 4 points 12-25" with adapters for hub reducers
- 2 mechanical turntables
- 2 distributing plates
- 1 steeringwheel holder
- 1 brake pedal depressor
- PC, colour printer (WiFi)
- 24" monitor, height adjustable, can be seen from the pit and the cab
- 1 set of spare cables

# OPTIONAL EQUIPMENT

- 4 quick clamps, 12-24''
- Adjustment bar for trailers
- Online database



**NET WEIGHT OF PRODUCT** 160 kg **POWER SUPPLY** 230 V / AC / 50 Hz **BATTERIES** Lithium-ion 7.4 V / 2.25 Ah **COMMUNICATIONS** 

ZIGBEE 2.4 GHz















# ACCESSORIES



Steeringwheel holder



#### UB.7A-J2







#### UB.67S-KITVU-J4

Set of 4 adapters for Light and Heavy Duty Vehicles and camping-cars



#### UB.67S-J4



#### UB.67GR-HW-J4



#### UB.67GR-HW-VUJ6



#### UB.67B-GR-J2





#### **UB.BAR-J2-PEUG**



#### **UB.SUPGR**



#### SPECIAL ACCESSORIES FOR HEAVY **DUTY VEHICLES AND TRAILERS**

#### UB.7B-PL-J2



#### UB.6PL-J2



#### UB.67BPL-GR-J4



#### UB.69APL





# PRODUCT SUMMARY

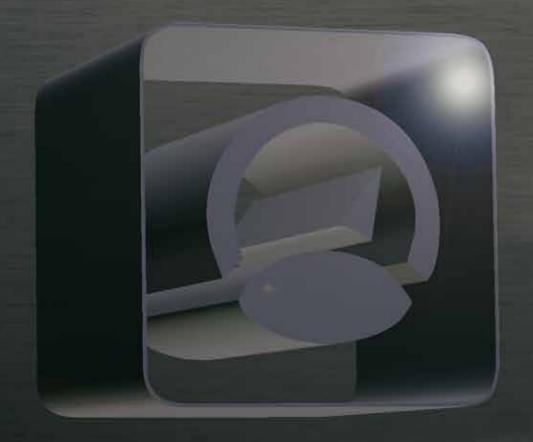
	GTR.628	K-MELEON	X-PERT	GTR.950
Work environment	VL/VU/4X4	VL/VU/4X4	VL/VU/4X4	VU/VI
Mobile cabinet	✓	✓		<b>V</b>
Number of sensors	8 CDD	8 CDD	4 cibles	6 CDD
Encoders		<b>√</b>		<b>V</b>
Monitor	24''	24''	32''	24''
WiFi printer	✓	<b>✓</b>	<b>√</b>	<b>V</b>
Runout compensation	2 points	2 points	2 points	2 points
Individual and total alignment	✓	<b>✓</b>	V	V
Front and rear camber	✓	<b>V</b>	V	V
Caster	✓	<b>√</b>	<b>√</b>	V
King pin inclination, Included Angle	✓	<b>✓</b>	<b>√</b>	V
RH-LH difference	✓	<b>✓</b>	<b>√</b>	<b>√</b>
Track differential	✓	<b>✓</b>	<b>√</b>	<b>V</b>
Wheel offset	✓	<b>✓</b>	V	V
Spoiler Mode	✓	<b>✓</b>		
Steering	+/- 10°	+/- 20°	+/- 20°	+/- 10°
Maximum steering wheel angle		✓	✓	
Automatic car positionning help on the lift		V	<b>√</b>	
Licence plate recognition		<b>✓</b>	<b>√</b>	
Scenario mode		<b>√</b>	<b>√</b>	
Vehicle registration certificate scanner	Option	Option	Option	Option
Remote assistance if connected	✓	<b>√</b>	V	<b>V</b>
Automatic program updating (if connected)	✓	<b>✓</b>	V	<b>V</b>
Online database updating	Contract	Contract	Contract	Contract
2 mechanical turntables	<b>✓</b>	<b>✓</b>	V	<b>V</b>
2 rear sliding plates		✓	V	✓
1 steeringwheel holder + 1 brake pedal depressor	✓	<b>✓</b>	V	<b>√</b>
Set of spare cables		<b>√</b>		<b>V</b>
Set of 4 x 12-25" 4-point clamps	✓	<b>√</b>	✓	✓
Set of 4 quick clamps	Option	Option	Option	Option

# A/C CUBE 1.0

Page 21

# A/C CUBE 2.0

Page 22



A/C EVO

Page 23

# **ACCESSORIES** & SUMMARY TABLE

Pages 24-25











# A/C REFILL STATION

# Designed to be transported

Semi-automatic refill station for recovering, recycling and recharging refrigerant R134A Ref. AC.NANO







# TECHNICAL CHARACTERISTICS

- SPECIALLY DESIGNED TO BE TRANSPORTED thanks to its unique mechanical locking system for the balance.
- Alphanumeric back-lit LCD display (16 characters on 4 lines).
- Digital control panel with electronic management to control all the processes.
- Built-in vehicle database on SD card.
- Class 1.0 HP and LP pressure aquaes with identification of operating
- LP and HP hoses (up to 6 m).
- Capacity of the R134A bottle: 12 kg.
- Recovery capacity of the tank: 400 gr/min.
- Vacuum pump: 100 l/min 0.1 mbar.
- Electronic scale: accuracy of +/- 5 g with instantaneous check of
- Acid-proof filter and high-capacity drier.
- 12 kg gas bottle capacity with safety valve.
- Operating temperature: +5°C to +40°C.



Class 1.0 pressure gauges with operating range



24-column thermal printer

# **STANDARD EQUIPMENT**

- 1 power cord
- 1 x 2.5 m High Pressure hose
- 1 x 2.5 m Low Pressure hose
- 1 adapter for refilling the bottle
- 24-column thermal printer



#### **OPTIONAL EQUIPMENT**

- 1 x 6 m High Pressure hose
- 1 x 6 m Low Pressure hose



**NET WEIGHT OF PRODUCT** 75 kg

**POWER SUPPLY** 230 V / AC / 50 Hz

**BOTTLE CAPACITY** 12 kg

COMPRESSOR 12 cc

**VACUUM PUMP** 100 I/min - 0,1 mbar

• 1 x 2.5 m High Pressure hose

• 1 x 2.5 m Low Pressure hose

• 1 adapter for refilling the bottle

• 1 x 24-column thermal printer

- 1 x 6 m High Pressure hose
- 1 x 6 m Low Pressure hose

• 1 power cord

# A/C CUBE 1.0 The completely automatic R134A refill station







Automatic refill station for recovering, recycling and recharging refrigerant R134A Ref. AC.CUBE 1.0

## TECHNICAL CHARACTERISTICS

- Functions: recovering, recycling, emptying used oil, checking tightness, refrigerant charging, injecting new oil, tracer charging, discharging non-condensables, refilling internal cylinders.
- Alphanumeric back-lit LCD display (16 characters on 4 lines).
- Digital control panel with electronic management to control all the
- Built-in vehicle database on SD card.
- Class 1.0 HP and LP pressure gauges with identification of operating
- LP and HP hoses (up to 6 m).
- Capacity of the R134A bottle: 10 kg.
- Compressor: 12 cc.
- Recovery capacity of the tank: 400 gr/min.
- Two-stage vacuum pump for better results.
- 3 electronic scales (oil, tracer and gas: accuracy of +/- 1g).
- · Heated belt.
- Filter/drier on the oil injection circuit to protect the oil from humidity in the injection tank.
- 2 "komo"-type integrated filters/driers, with simplified access.



Class 1.0 pressure gauges with operating range

STANDARD EQUIPMENT

**OPTIONAL EQUIPMENT** 



1060 mm





230 V / AC / 50 Hz

**BOTTLE CAPACITY** 10 kg

COMPRESSOR 12 cc

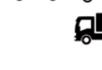
**VACUUM PUMP** 

Two-stage





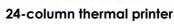






















# A/C REFILL STATION

# The connected **R134A** refill station with high-capacity

A/C CUBE 2.0





Super-automatic refill station for recovering, recycling and recharging refrigerant R134A Ref. AC.CUBE 2.0



## **TECHNICAL CHARACTERISTICS**

- Functions: recovering, recycling, emptying used oil, checking tightness, refrigerant charging, injecting new oil, tracer charging, discharging non-condensables, refilling internal cylinders.
- Alphanumeric back-lit LCD display (16 characters on 4 lines).
- Digital control panel with electronic management to control all the processes.
- Operations automatically archived on SD card.
- Built-in vehicle database on SD card.
- Remote assistance via the Internet network.
- LP and HP hoses (up to 6 m).
- Capacity of the R134A bottle: 20 kg.
- Compressor: 12 cc.
- Recovery capacity of the tank: 400 gr/min.
- Two-stage vacuum pump for better results.
- 3 electronic scales (oil, tracer and gas: accuracy of +/- 1g).
- Heated belt.
- Filter/drier on the oil injection circuit to protect the oil from humidity in the injection tank.
- 2 "komo"-type integrated filters/driers, with simplified access.



Class 1.0 pressure gauges with operating range



Database and archiving on SD card



- 1 power cord
- 1 x 2.5 m High Pressure hose
- 1 x 2.5 m Low Pressure hose
- 1 adapter for refilling the bottle



#### **OPTIONAL EQUIPMENT**

- 1 x 6 m High Pressure hose
- 1 x 6 m Low Pressure hose



**NET WEIGHT OF PRODUCT** 68 kg

**POWER SUPPLY** 230 V / AC / 50 Hz

**BOTTLE CAPACITY** 20 kg

COMPRESSOR 12 cc

**VACUUM PUMP** Two-stage

# The mobile, connected HFO-1234YF refill station

Super-automatic refill station for recovering, recycling and recharging refrigerant HFO-1234YF Ref. AC.EVO











#### TECHNICAL CHARACTERISTICS

- Functions: recovering, recycling, emptying used oil, checking tightness, refrigerant charging, injecting new oil, tracer charging, discharging non-condensables, refilling internal cylinders.
- Alphanumeric back-lit LCD display (16 characters on 4 lines).
- Digital control panel with electronic management to control all the processes.
- Operations automatically archived on SD card.
- Built-in vehicle database on SD card.
- Remote assistance via the Internet network.
- Total counter for each cycle.
- Class 1.0 HP and LP pressure gauges with identification of operating ranges.
- Highly reliable LP and HP hoses, snap-fit coupler and manual opening for the HFO-1234YF.
- Mechanical locking for the bottle.
- Capacity of the HFO-1234YF bottle: 10 kg.
- Recovery capacity of the tank: 400 gr/min.
- Two-stage vacuum pump for better results.
- 3 electronic scales (oil, tracer and gas: accuracy of +/- 1g). · Heated belt.
- Filter/drier on the oil injection circuit to protect the oil from humidity in the injection
- Electronic management of the internal ventilation in compliance with safety standards for flammable fluids.
- 2 "komo"-type integrated filters/driers, with simplified access.



Class 1.0 pressure gauges with operating range

Database and archiving on SD card



**NET WEIGHT OF PRODUCT** 68 kg

**POWER SUPPLY** 

230 V / AC / 50 Hz **BOTTLE CAPACITY** 10 kg

**COMPRESSOR** 

12 cc

**VACUUM PUMP** Two-stage



## STANDARD EQUIPMENT

- 1 power cord
- 1 x 2.5 m High Pressure hose
- 1 x 2.5 m Low Pressure hose
- 1 adapter for refilling the bottle
- 1 x 24-column thermal printer















# ACCESSORIES

# PRODUCT SUMMARY





	AC.NANO VL/VU/VI	AC.CUBE 1.0	AC.CUBE 2.0	AC.EVO
Work environment Gas	VL/VU/VI			AC.EVO
Gas		VL/VU/VI	VL/VU/VI	VL/VU/VI
	R 134A	R 134A	R 134A	HFO-1234YF
Model	Semi-automatic	Automatic	Automatic	Automatic
LP and HP hoses 2,5 m	✓	✓	✓	<b>V</b>
Class 1.0 LP and HP pressure gauges with operating range	✓	✓	✓	✓
Database on SD card	✓	✓	✓	<b>V</b>
Alphanumeric back-lit LCD display (16 characters)	✓	✓	<b>✓</b>	$\checkmark$
24-column printer	✓	✓		✓
Automatic oil management		✓	<b>V</b>	$\checkmark$
Automatic identification of leaks	✓	✓	✓	$\checkmark$
Heated belt		✓	✓	<b>V</b>
Operations automatically archived on SD card			✓	V
Remote assistance via the Internet network			✓	V
Mechanical locking for the bottle	<b>V</b>			$\checkmark$
Electronic management of the internal ventilation				<b>V</b>
Compressor	12 cc 1/4 HP	12 cc 1/4 HP	12 cc 1/4 HP	12 cc 1/4 HP
Recovery flow rate	400 g/min	400 g/min	400 g/min	400 g/min
Vacuum pump		Two-stage	Two-stage	Two-stage
Final vacuum level	0,01 mbar	0,01 mbar	0,01 mbar	0,01 mbar
Accuracy of the fluid scales	+/- 5g	+/- 1g	+/- 1g	+/- 1g
Accuracy of the oil scales		+/- 1g	+/- 1g	+/- 1g
Number of filters	2	2	2	2
Non-condensables discharge management	Manual by valve	Automatic	Automatic	Automatic

Pages 28-29

# EQ.111V - EQ.112V

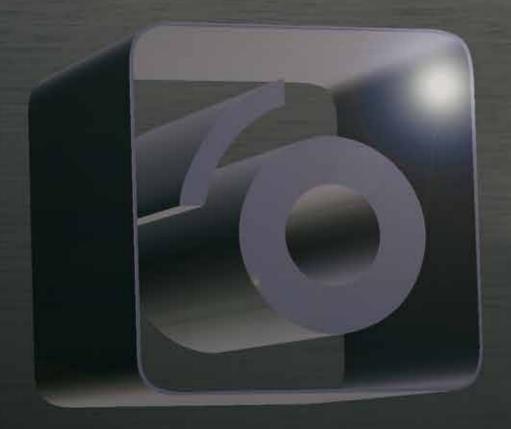
Page 30

EQ.211V-EQ.212V

Page 31

**EQ.312V** 

Page 32



U.680E

Page 33

ACCESSORIES & SUMMARY TABLE FOR PASSENGER CAR & HEAVY DUTY VEHICLE

Pages 34-35

CAL TYPE

TECHNICAL

2 POST LIFT

A POST

NGROUNI

SCISSORS

FTS SQ.

MOB

TER-SALES SERVICE











Max. 16"



Max. 34"(850 mm)

# EQ.110L - EQ.111L EQ.112L





LCD wheel balancers with 2 manual

Ref. **EQ.110L** 

LCD wheel balancers with 1 automatic rod

Ref. **EQ.111L** 

LCD wheel balancers with 2 automatic Ref. **EQ.112L** 



**EQ.110L** 

Balancer with manual

measurements





diameter and width



8"(200 mm) - 26"(650 mm)



diameter

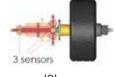
#### SHAFT AND FLANGE IN **A SINGLE UNIT**

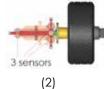
10110L

The new one-piece shaft(1) design makes it possible to:

- work with wheels with much larger dimensions - diameter 8'' (200 mm) to 26" (650 mm), width 16" (415 mm), and weight (75 kg).
- avoid all the inaccuracies caused by poor centring when the flange is loaded on the shaft.
- have very stable measurement process thanks to 3 sensors(2): the values are no longer upset by mechanical links or vibrations.







#### **TECHNICAL CHARACTERISTICS**

- An ultra-compact balancer with very advanced functions that ensure reliable, accurate balancing thanks to 16-bit technology.
- Very rare in this balancer range, the motor's low rotation speed (less than 100 rpm) reduces wear for the various mechanical components and significantly increases the machine's accuracy.
- Entering the measurements offset, diameter and distance between the **balancing weights** - by turning the wheel simplifies all the parameter settings considerably.
- The automatic rods (versions EQ.111L and EQ.112L) offer increased comfort. The balancer takes all the measurements itself and ensures optimum accuracy

• The motor is started automatically by lowering the cover.

#### A MULTITUDE OF **PROGRAMS**

- With the **SPLIT** program you can decide where to place each of the balancing weights, hiding them behind the spokes, or avoiding all obstacles (valves, etc.).
- The ALU-S/ALU-SE mode helps you to position the balancing weights exactly where the measurement was taken.
- The MARS mode cuts by a factor of 3 the inherent errors from residuals and from the inaccuracy of user actions.

# STANDARD EQUIPMENT

- 1 turntable axle for rims with a central hole (Ø 40 mm)
- 1 set of 3 cones (Ø 40-62 mm, Ø 54-81 mm, Ø 70-98 mm)
- 1 balancing weight clamp
- 1 calibration weight
- 1 compass for measuring the width of the



**NET WEIGHT OF PRODUCT** 59 kg **POWER SUPPLY** 230 V 50 Hz 60 W **BALANCING SPEED** 98 RPM

**ACCURACY** 1 g

## O OPTIONAL EQUIPMENT

- 1 automatic rod
- 2 automatic rods
- Universal flange

1110 mm **1**510 mm 990 mm







# EQ.111V - EQ.112V

# The video wheel balancer

Video wheel balancer with 1 automatic

Ref. **EQ.111V** 

Video wheel balancer with 2 automatic

Ref. **EQ.112V** 

## TECHNICAL CHARACTERISTICS

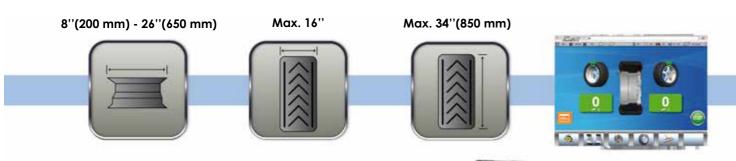
- · Video wheel balancer with very advanced functions that ensure reliable, accurate balancing thanks to 16-bit technology.
- A 17'' monitor and a keyboard enable easy navigation in all the menus.
- The motor's low rotation speed (less than 100 rpm) reduces the wear for the various mechanical components and significantly increases the machine's accuracy.
- Entering the measurements offset, diameter and distance between the **balancina weights** - by turning the wheel simplifies all the parameter settings
- The motor is started automatically by lowering the cover.
- The machine has a large platform with 9 compartments for holding balancing weights, cones and tools.

#### SHAFT AND FLANGE IN A SINGLE UNIT

See page 28 for details.

# A MULTITUDE OF PROGRAMS

See page 28 for details.



## STANDARD EQUIPMENT

- 1 turntable axle for rims with a central hole (Ø 40 mm)
- 1 set of 3 cones (Ø 40-62 mm, Ø 54-81 mm, Ø 70-98 mm)
- 1 balancing weight clamp
- 1 calibration weight
- 1 compass for measuring the width of the rim

1730 mm

1100 mm

1070 mm

**NET WEIGHT OF PRODUCT** 126 kg

**POWER SUPPLY** 230 V 50 Hz 50 W

**BALANCING SPEED** 98 RPM

**ACCURACY** 1 g

# O OPTIONAL EQUIPMENT

- 2 automatic rods
- Universal flange

# WHEEL BALANCER

# EQ.211V - EQ.212V

# Laser to work faster

Laser Video wheel balancer with 1 automatic rod

Ref. **EQ.211V** 

Laser Video wheel balancer with 2 automatic rods

Ref. **EQ.212V** 

## TECHNICAL CHARACTERISTICS

- The automatic laser helps you to apply all types of balancing weights accurately and quickly.
- Video wheel balancer with very advanced functions that ensure reliable, accurate balancing thanks to 16-bit technology.
- A 17" monitor and a keyboard enable easy navigation in all the menus.
- The motor's low rotation speed (less than 100 rpm) reduces the wear for the various mechanical components and significantly increases the machine's accuracy.
- Entering the measurements offset, diameter and distance between the balancing weights - by turning the wheel simplifies all the parameter settings
- The motor is started automatically by lowering the cover.
- The machine has a large platform with 9 compartments for holding balancing weights, cones and tools.

## **SHAFT AND FLANGE IN A SINGLE UNIT**

See page 28 for details.

## **A MULTITUDE OF PROGRAMS**

See page 28 for details.









# STANDARD EQUIPMENT

- 1 turntable axle for rims with a central hole (Ø 40 mm)
- 1 set of 3 cones (Ø 40-62 mm, Ø 54-81 mm, Ø 70-98 mm)
- 1 balancing weight clamp
- 1 calibration weight
- 1 compass for measuring the width of the rim

1500 mm



116 kg

# O OPTIONAL EQUIPMENT

- 2 automatic rods
- Universal flange











# EQ.312V

# Laser system, pneumatic wheel clamping and sonar for optimum accuracy

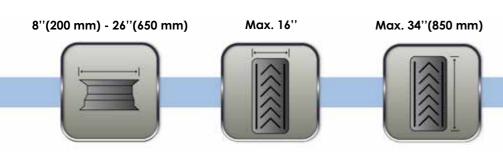
Video Balancer with 2 automatic rods, equipped with a laser, pneumatic clamping and a sonar Ref. **EQ.312V** 

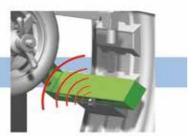
## TECHNICAL CHARACTERISTICS

- The automatic laser helps you to apply all types of balancing weights accurately and auickly.
- Pneumatic wheel clamping for perfect centring.
- The balancer is equipped with a sonar allowing the rim's lateral runout and the wheel's concentricity to be measured.
- Video wheel balancer with very advanced functions that ensure reliable, accurate balancing thanks to 16-bit technology.
- A 17" monitor and a keyboard enable easy navigation in all the menus.
- The motor's low rotation speed (less than 100 rpm) reduces the wear for the various mechanical components and significantly increases the machine's accuracy.
- The motor is started automatically by lowering the cover.
- The machine has a large platform with 9 compartments for holding balancing weights, cones and tools.

## A MULTITUDE OF PROGRAMS

See page 28 for details.





# STANDARD EQUIPMENT

- 1 turntable axle for rims with a central hole (Ø 40 mm)
- 1 set of 3 cones (Ø 40-62 mm, Ø 54-81 mm, Ø 70-98 mm)
- 1 balancing weight clamp
- 1 calibration weight
- 1 compass for measuring the width of the rim

1500 mm

**POWER SUPPLY** 230 V 50 Hz 50 W **BALANCING SPEED** 

# O OPTIONAL EQUIPMENT

Universal flange

# **NET WEIGHT OF PRODUCT** 116 kg 98 RPM **ACCURACY** 1130 mm

# Special Light Duty Vehicle/Heavy **Duty Vehicle**

Balancer with wheel lift for Light Duty Vehicle, truck and bus wheels Ref. U.680E

## TECHNICAL CHARACTERISTICS

- Easily movable thanks to 2 fixed wheels and one directional.
- · Motorised start for the wheel.
- Automatic static and dynamic unbalance detection.
- Pneumatic braking device for end-cycle stop.
- 5 programs for Light Duty Vehicle aluminium rims.
- 5 programs for Heavy Duty Vehicle aluminium rims.
- · No wheel covering protection required.



# 4"-20" 12"-28" Max. 1320 mm Max. 800 mm

## STANDARD EQUIPMENT

- 1 x 5 mm hexagonal key
- 1 x 6 mm hexagonal key
- 1 x 12 mm hexagonal key
- 1 x 100 g calibration weight • 1 x 300 g calibration weight
- 1 double centring cone, Ø 117-173 mm,
- with spacer ring • 1 threaded hub, Ø 46 mm, for Light

and Heavy Duty Vehicle wheels

## OPTIONAL EQUIPMENT

- Professional h wheel locking kit for Heavy Duty Vehicle
- Standard accessories kit for Heavy Duty Vehicle wheels
- Locking accessories kit for Passenger Car and Light Duty Vehicle wheels
- 1 flange for rims with 3, 4, 5 holes but no central hole



U.680E















# ACCESSORIES

# PRODUCT SUMMARY

Accessories for	Passenger Car:
EQL.1PDD Automatic offset diameter rod for version EQ.110L	
EQL.1PL Automatic width rod (if EQL.1PDD), for EQ.110L and EQ.111L	
EQV.1-2PL Automatic width rod for EQ.111L and EQ.211L	
<b>EQ.PU</b> Universal flange for 3, 4, 5 holes with centring rings	8
<b>EQ.CPL</b> Wheel cover protection for LCD balancer	
<b>EQ.CPV</b> Wheel cover protection for video wheel balancers	
EQ.PRL28 Offset diameter gauge extension for wheels up to 28''	18
<b>EQ.QLS</b> Quick lock	00%
<b>EQ.EP</b> Pneumatic lift	
EQ.PROBIKE Motorbike flange	J-711
EQ.PM Weight plier	4
<b>EQ.DM</b> Weight remover	
EQ.KU Cones and flange kit for utility vehicles and 4X4s (94-175 mm)	000
EQ.CF Cone for external centring (94 - 175 mm)	(3)

- E22C	KIED
EQ.CP Cone for internal centring (94 - 114 mm)	6
EQ.CVW Cone for VW Crafter	
EQ.SBC Set of 6 centring rings for conical flange	000
EQ.S11XL Base for EQ.11XL not fixed to the ground	
EQ.S21XV Base for EQ.21XV not fixed to the ground	
EQ.S31XV Base for EQ.31XV not fixed to the ground	
Accessories for He	avy Duty Vehicle:
UA.DXCBF Double centring cone, Ø 117-173 mm, with spacer for Light Duty Vehicle wheels	
UA.FRU/T Universal flange with 3, 4, 5 holes, for rims with no central hole	
UA.FTE Trilex centring turntable for 18'' - 20'' - 22.5''rims	
<b>UA.PB</b> Weight plier	
UA.RF Stud gauge for measuring bolt centre-to-centre distances	
UA.SCA Locking accessories kit for Passenger Car and Light Duty Vehicle wheels	0.0.
UA.SCT Standard locking accessories kit for Heavy	0

	EQ.110L	EQ.111L	EQ.112L	EQ.111V	EQ.112V	EQ.211V	EQ.212V	EQ.312V	U.680E
	Passenger Car / Light Duty Vehicle	Light Duty Vehicle / Heavy Duty Vehicule							
	<b>V</b>	<b>V</b>	<b>V</b>						✓
				✓	✓	✓	✓	✓	
Automatic offset diameter rod		✓	✓	✓	✓	✓	✓	✓	
Automatic width rod			✓		✓		✓	<b>V</b>	
Laser system						✓	<b>V</b>	✓	
								<b>V</b>	
								$\checkmark$	
	6	6	6	10	10	10	10	10	
	3	3	3	6	6	6	6	6	
Brake for applying balancing weight	✓	<b>~</b>	✓	<b>V</b>	✓	✓	<b>✓</b>	✓	
	✓	✓	✓	<b>~</b>	✓	✓	✓	✓	
	✓	<b>~</b>	✓	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
		<b>~</b>	<b>~</b>	<b>~</b>	<b>V</b>	<b>V</b>	<b>V</b>	✓	
Residuals minimization mode (MARS)	✓	<b>V</b>	<b>~</b>	<b>V</b>	<b>V</b>	✓	<b>✓</b>	✓	
Optimisation mode	<b>~</b>	✓	<b>~</b>	<b>~</b>	<b>~</b>	✓	<b>~</b>	✓	
Automatic calibration mode (AFC)	<b>~</b>	V	<b>~</b>	V	$\checkmark$	<b>~</b>	<b>~</b>	<b>~</b>	
		<b>~</b>	<b>~</b>	<b>~</b>	✓	<b>~</b>	<b>~</b>	<b>~</b>	
Motor power supply	230V 1ph 50Hz								
	50 W	160 W							
	98 RPM								
Standard rim diameter	8''(200 mm) 26''(650 mm)	12''-28''							
	23''	23''	23''	23''	23''	23''	23''	23''	12''-28''
Max. diameter for wheel with cover	34''(850 mm)								
Max. wheel width	16''	16''	16''						max. 800 mm
Max. wheel weight	75 kg	75 kg	75 kg	90 kg	150 kg				
Measurement time	8 - 15 secs	8 - 15 secs	8 - 15 secs	4 - 15 secs	6 - 16 secs				
Accuracy of the machine	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g

# UTM.445PRO

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UTM.445TPRO

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# UTM.710PRO

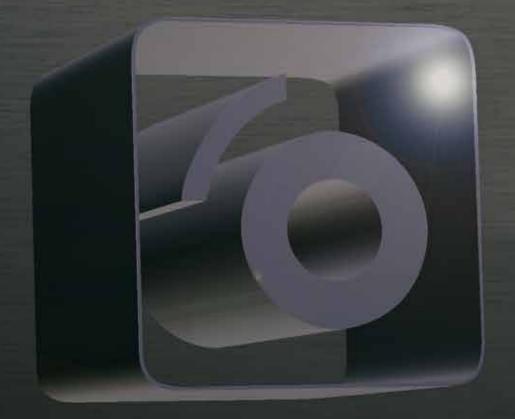
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UTM.730PRO

Page 43

# ACCESSORIES FOR PASSENGER CAR - UTM REF.

Pages 44-45



# ACCESSORIES FOR PASSENGER CAR - DP REF.

Page 39

# TYRE CHANGER >>>>>>

UTM.826PRO

Page 46

# UTM.856PRO

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UTM.856PROA

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ACCESSORIES FOR HEAVY DUTY VEHICLE & SUMMARY TABLE FOR CAR / HEAVY DUTY VEHICULE

Page 49

JER REFI

TECHNICAL

2 POSTUE

A POST LIFT

INGROUND/LIFE

CISSORS DFT

BIG CISSORS LIFT

MOBILE COLUMN LIFTS

LES MOB

AFTER-SALE SERVICE













# 1 or 2 rotation speeds

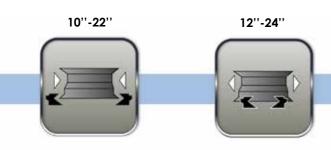
Single-speed automatic tyre changer Ref. **DP.111** 

Double-speed automatic tyre changer Ref. **DP.112** 

# TECHNICAL CHARACTERISTICS

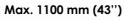
- Pneumatic tilting movement of the column and of the arm.
- Self-centring 4 jaws turntable for perfect centring of the rim.
- Two pneumatic clamping jacks.
- Simultaneous pneumatic horizontal vertical arm locking.
- High-performance double effect bead breaker cylinder (31 kN).
- Powerful bead breaker with articulated blade and enlarged
- Pneumatic safety valve in accordance with EC standards.
- Pressure regulator with lubricator and water filter.
- Plastic protection to prevent damage to aluminium rims.
- Removable pedals unit.
- Turntable can be rotated in 2 directions.







Max. 390 mm (15")





# STANDARD EQUIPMENT

- 1 inflation gun
- 3 protections for standard tool-heads
- 4 protections for jaws
- 2 protections for the bead-breaker
- 1 tyre changing lever
- 1 grease bucket and 1 brush

2040 mm



**OPERATING PRESSURE** 8-10 bars

# O OPTIONAL EQUIPMENT

- 1 set of 4 adapters for 4" reduction
- 1 set of 4 motorbike adapters
- 1 quick-change device for tool-head
- 1 tool-head for rims with convex spokes

# ACCESSORIES FOR DP REF.























# UTM.445PRO

# Automatic swing arm for minimum space requirements

Variable-speed automatic tyre changer Ref. UTM.445PRO

## TECHNICAL CHARACTERISTICS

- Pneumatic swinging movement of the column to the right and of the arm, allowing a significant reduction in space requirements.
- Self-centring 4 jaws turntable with 2 clamping cylinders (dual-control flange) for perfect centring of the rim.
- Two pneumatic clamping jacks.
- Simultaneous pneumatic horizontal vertical arm locking.
- High-performance double effect stainless steel bead-breaker cylinder (31 kN).
- Powerful bead breaker with articulated blade and enlarged wheel-support.
- Adjustable bead-breaker blade angle.
- Pneumatic safety valve in accordance with EC standards.
- Pressure regulator with lubricator and water filter.
- Plastic protection to prevent damage to aluminium rims.
- Removable pedals unit.
- Turntable can be rotated in 2 directions.
- Electric inverter with acceleration ramp.



# 11"-22"







# STANDARD EQUIPMENT

- 1 inflation gun
- 5 protections for standard tool-heads
- 8 protections for jaws
- 2 protections for the bead-breaker
- 1 protection kit for tyre-changer lever
- 1 rim edge protection

2100 mm

## OPTIONAL EQUIPMENT

- 1 set of 4 adapters for 4" reduction
- 1 set of 4 motorbike adapters
- 1 quick-change device for tool-head
- 1 tool-head for rims with convex spokes
- 1 pneumatic lift
- 1 kit for UHP and Runflat wheels



**NET WEIGHT OF PRODUCT** 280 kg

**POWER SUPPLY** 230 V 1 ph / 50 Hz

**OPERATING PRESSURE** 8-10 bars

# UTM.445TPRO

# Swinging column, Leverless rod and 3rd hand

Variable speed automatic tyre changer with a Leverless rod and a mounting / dismountina aid

Ref. UTM.445TPRO

# TECHNICAL CHARACTERISTICS

- Leverless mounting/dismounting system.
- Bead pressing device to facilitate the operator's work, especially for Runflat and « difficult » low-profile tyres.
- Pneumatic swinging movement of the column and of the arm, allowing a significant reduction in space requirements.
- Self-centring 4 jaws turntable with 2 clamping cylinders (dual-control flange) for perfect centring of the rim.
- Two pneumatic clamping jacks.
- Simultaneous pneumatic horizontal vertical arm locking
- High-performance double effect stainless steel bead-breaker cylinder (31 kN).
- Powerful bead breaker with articulated blade and enlarged wheel-support.
- Adjustable bead-breaker blade angle.
- Pneumatic safety valve in accordance with EC standards.
- Pressure regulator with lubricator and water filter.
- Plastic protection to prevent damage to aluminium rims. • Removable pedals unit.
- Turntable can be rotated in 2 directions.
- Electric inverter with acceleration ramp.

12"-24"







Max. 350 mm (14")



Max. 1100 mm (43")

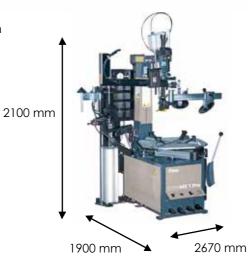


# STANDARD EQUIPMENT

- 1 mounting/dismounting aid (additional arm with disk)
- 1 inflation gun
- 5 protections for standard tool-heads
- 4 protections for jaws
- 1 protection for the bead breaker
- 1 rim edge protection

## OPTIONAL EQUIPMENT

- 1 set of 4 adapters for 4" reduction
- 1 set of 4 motorbike adapters
- 1 quick-change device for tool-head
- 1 tool-head for rims with convex spokes
- 1 pneumatic lift
- 1 kit for UHP and Runflat wheels



**NET WEIGHT OF PRODUCT** 380 kg

**POWER SUPPLY** 230 V 1 ph / 50 Hz

**OPERATING PRESSURE** 8-10 bars





# 

# UTM.710PRO

Special « Runflat » (Good-Year RunOnFlat, Pirelli P ZERO, Bridgestone RFT, Michelin ZP, Continental SSR, Dunlop DSST)

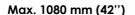
Super-automatic tyre changer up to 28'', with a Leverless system Ref. UTM.710PRO

## TECHNICAL CHARACTERISTICS

- Axial mounting turntable allows quick, secure wheel clamping and bead breaking on both sides with no need to turn the wheel over (wheel is clamped on the machine just once).
- Automatically adjustable self-centring turntable rotation.
- The torque remains at the best ratio also at maximum speed (6-15 rpm).
- All operating controls, for easier "dynamic" bead breaking, independent or simultaneous, of both the tyre beads by means of its telescopic system with double disk.
- New controlled penetration system gives effective bead breaking on the most difficult wheels (Patent Pending).
- Ergonomic wheel lift, supplied as standard, allows easy positioning off all wheels on turntable. The pedal unit allows the operator to always work in the same position when operating the wheel lift.
- Machine working height designed for perfect ergonomics with all kind of Max. 381 mm (15")









## STANDARD EQUIPMENT

- 1 pneumatic lift
- 2 bead pressing clamps
- 1 inflation system
- 1 tool protection kit
- 1 core-puller
- 1 plastic lever for removing the weights
- 1 valve-puller
- 1 ring for concave rims
- 1 set of centring cones and locking handle

2185 mm

# O OPTIONAL EQUIPMENT

- 1 adapter for concave rims and rims with no central hole
- 1 quick inflation system
- 1 quick clamping handle
- 1 kit for UHP and Runflat wheels



**NET WEIGHT OF PRODUCT** 

**POWER SUPPLY** 230 V 1 ph / 50 Hz

**OPERATING PRESSURE** 8-10 bars

# UTM.730PRO

# Fully automatic with hydraulic operation

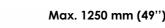
Fully automatic tyre changer with hydraulic operation Ref. UTM.730PRO

## TECHNICAL CHARACTERISTICS

- Super-automatic tyre changer with hydraulically motion of the work tools.
- « REVOLVER » three-in-one tool: combines tools for all processes in a single device (patented).
- Pneumatically operated articulated press-beads arm.
- Laser beam for accurate positioning of the work tools.
- Complete with wheel support plate featuring pneumatic rim clamping system with pressure multiplier (patented).
- Wheel rotation by means of two-speed motor (motorinverter) with pedal control.
- Leverless mounting/dismounting system.
- Clamping with cones by means of pneumatic system with pressure multiplier
- Hydraulically piloted demounting tool, assisted by the lower bead breaking dis, reduces stress on the tyre and simplifies work operations.
- Quick, safe mounting system, even for Run-Flat tyres, assisted by the pneumatic

Max. 420 mm (16,5")

• Bead pressing device to facilitate the operator's work, especially for Runflat and « difficult » low-profile tyres.







# O STANDARD EQUIPMENT

12"-34"

- 2 bead pressing clamps
- 1 inflation system
- 1 tool protection kit
- 1 core-puller
- 1 plastic lever for removing the weights
- 1 valve-puller
- 1 ring for concave rims
- 1 set of centring cones and locking handle

1900 mm



- 1 adapter for concave rims and rims with no central hole
- 1 quick clamping handle
- 1 quick inflation system
- 1 pneumatic lift
- 1 kit for UHP and Runflat wheels



**NET WEIGHT OF PRODUCT** 461 kg

**POWER SUPPLY** 230 V 1 ph / 50 Hz

**OPERATING PRESSURE** 8-10 bars

1590 mm 2180 mm













# **ACCESSORIES FOR** PASSENGER CAR

UTM.LPTSPRO Mounting/dismounting aid (additional arm) for PRO range	1
UTM.AR10 Adapters to reduce the outside clamping capacity by 2''	
UTM.AR24 Adapters to increase the outside clamping capacity by 4''	2222
UTM.ARM Adapter for motorbike wheels	5555
UTM.BPC Plastic bead pressing clamp	<b>D</b>
UTM.BPG Bead breaker protection	1
UTM.BPR Bead pressing roller with spacer	
UTM.CPK Clamp protections for aluminium rims	
UTM.CRU Quick exchange device for tool-head	1.
UTM.FPI Inflating system with pedal control and readout unit with deflating pushbutton	I I I
UTM.FRF730 Locking kit for concave rims	75
	401







Tubeless inflator for all tyre changers in the PRO











# UTM.826PRO

Up to 26''

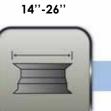


Electro-hydraulic tyre changer with manual carriage - up to 26'' Ref. UTM.826PRO

# TECHNICAL CHARACTERISTICS

- Universal self-centring chuck
- Anticlockwise or clockwise rotation of the chuck
- Carriage with hydraulic movement and tool-holder arm with manual translation
- Mobile control unit









Max. 1600 mm

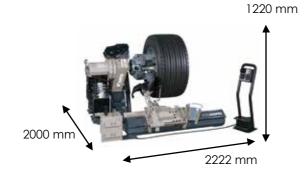


# STANDARD EQUIPMENT

- 1 Rim pliers
- 1 dismounting lever for ring wheels
- 1 grease bucket and 1 brush
- 1 mounting/dismounting aid lever

## OPTIONAL EQUIPMENT

- Tubeless roller for truck and bus wheels
- 1 set of Jaws for alloy rims with special plastic inserts



# **NET WEIGHT OF PRODUCT** 555 kg

POWER SUPPLY 400 V 3 ph / 50 Hz OPERATING PRESSURE 8-10 bars

# UTM.856PRO

# Up to 56'' (with extensions)

Electro-hydraulic tyre changer with manual carriage - up to 56'' (with extensions) Ref. UTM.856PRO

# **TECHNICAL CHARACTERISTICS**

- Universal self-centring chuck and locking capacity of 14''- 46'' up to 56'' (with extensions).
- 2-speed anticlockwise or clockwise rotation of the chuck.
- Carriage with hydraulic movement and tool-holder arm with manual translation.
- Mobile control unit.



14"-46" 14"-56" (with extensions)



Max. 1065 mm



Max. 2300 mm



## STANDARD EQUIPMENT

- 1 Rim pliers
- 1 dismounting lever for ring wheels
- 1 grease bucket and 1 brush
- 1 mounting/dismounting aid lever

# OPTIONAL EQUIPMENT

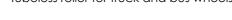
- Pneumatic bead pressing device
- Extensions to increase the locking capacity
- Tubeless roller for truck and bus wheels



**NET WEIGHT OF PRODUCT** 762 kg

POWER SUPPLY 400 V 3 ph / 50 Hz

**OPERATING PRESSURE** 8-10 bars



46













# UTM.856PROA

Up to 56'' (with extensions)



Electro-hydraulic tyre changer with automatic carriage - up to 56'' (with extensions) Ref. UTM.856PROA

# **TECHNICAL CHARACTERISTICS**

- Universal self-centring chuck and locking capacity of 14''- 46'' up to 56'' (with extensions).
- 2-speed anticlockwise or clockwise rotation of the chuck.
- Carriage with hydraulic movement and tool-holder arm with automatic side translation.
- Mobile control unit.



14"-46" 14"-56" (with extensions)



Max. 1065 mm



Max. 2300 mm



8-10 bars

# **STANDARD EQUIPMENT**

- 1 Rim pliers
- 1 dismounting lever for ring wheels
- 1 grease bucket and 1 brush
- 1 mounting/dismounting aid lever



NET WEIGHT OF PRODUCT 780 kg POWER SUPPLY 400 V 3 ph / 50 Hz OPERATING PRESSURE

# OPTIONAL EQUIPMENT

- Pneumatic bead pressing device.
- Extensions to increase the locking capacity to 56"
- Tubeless roller for truck and bus wheels

# ACCESSORIES FOR HEAVY DUTY VEHICLE

# UTM.LC Tyre changer lever for wheels with ring UTM.LG Bead guide lever for agricultural wheels UTM.MV Set of 2 clamps for rims

UTM.PC
Rim clamp for steel rim

UTM.PL
Rim clamp for aluminium
rim

UTM.SPI
Set of plastic protections

#### IM.PA et of extension

ncrease the locking capacity to 56''



# PRODUCT SUMMARY

For Passenger Car and Light Duty Vehicle tyre changer	DP.111	DP.112	UTM.445PRO	UTM.445TPRO	UTM.710PRO	UTM.730PRO
	automatic	automatic	automatic	automatic	super-automatic	super-automatic
Leverless system				✓	✓	✓
Chuck locking capacity for rims					12''-28''	12''-34''
Interior locking capacity of the jaws	10''-22'	10''-22'	11''-22''	12''-24''		
	12''-24''	12''-24''	13''-25''	14''-27''		
	390 mm (15'')	390 mm (15'')	350 mm (14'')	350 mm (14'')	381 mm (15'')	390 mm (15'')
	1100 mm (43'')	1100 mm (43'')	1100 mm (43'')	1100 mm (43'')	1080 mm (42'')	1250 mm (49'')
Rotation speed	7 RPM	7-14 RPM	6-15 RPM	6-15 RPM	6-15 RPM	7 - 15.6 RPM
Tyre changer force	30800 N	30800 N	31000 N	31000 N		
Operating pressure	8 - 10 bars	8 - 10 bars	8 - 10 bars	8 - 10 bars	8 - 10 bars	8 - 10 bars
	0.55 kW	0.55 kW	0.75 kW	0.75 kW	0.75 kW	0,6-0.8 kW
	400 V 3 ph 50 Hz	400 V 3 ph 50 Hz	230 V 1 ph 50 Hz	230 V 1 ph 50 Hz	230 V 1 ph 50 Hz	230 V 1 ph 50 Hz
For Heavy Duty Vehicle tyre changer	UTM.826PRO	UTM.856PRO	UTM.856PROA			
Function	semi-automatic	automatic	automatic			* with extensions
	14''-26''	14''-46'' (56'')*	14''-46'' (56'')*			
Max. tyre diameter	1600 mm	2300 mm	2300 mm			
	780 mm (30'')	1065 mm (42'')	1065 mm (42'')			
Max. tyre weight	1200 kg	1600 kg	1600 kg			
Carriage translation	manual	manual	automatic			
Tool-holder movement	manual	manual	automatic			
Motor power	1.5 kW	1.3 kW	1.3 kW			
Electric motor power supply	400V 3ph 50 Hz	400V 3ph 50 Hz	400V 3ph 50 Hz			

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# PASSENGER CAR AND LIGHT DUTY VEHICLE INSPECTION LINE

Pages 52-53

# EMISSION TESTER - GAS ANALYSER - OPACIMETER

Pages 54-55

# TECHNICAL CONTROL >>>>

# **HEADLIGHT BEAM TESTER**

Page 56

# ADDITIONAL EQUIPMENT & ACCESSORIES

Page 57

NOM

REFILE STAT

WHEEL

TRE CHANGER

2 POST LIFT

4 POSTER

INCROUND UP

SCISSORS UFT

SSORS LIFT

MOBILE COLUMN LIFTS

MOBILELIET

AFIER-SALE SERVICE





# TECHNICAL CONTROL



# CLS.750

# CLS.750



# Can be installed in any type of pit

Technical inspection line for < 3.5T passenger car and light duty vehicle Ref. CLS.750CT

Technical inspection line for < 3.5T passenger car and light duty vehicle with a larger track width Ref. CLS.750CT-VL+



#### **TECHNICAL CHARACTERISTICS**

- 1 x 0.5 m Side-slip plate, with lateral deviation of +/- 20 m/km,
- 1 suspension tester,
- 1 brake tester with 2 x 5 kW motor brakes,
- 1 x 24'' TFT monitor.
- 1 computer system consisting of 1 Windows PC, keyboard, mouse,
- 1 WiFi printer,
- 1 radio remote control,
- 1 wireless pedometer,
- Complies with SRV003D and OTCLAN.

## **SIMPLIFIED CONTROLS**

- The simplified remote control communicates all the information to the PC in radio mode to increase comfort, and eliminates problems linked to infra-red.
- The remote control has an additional connector to allow the wireless pedometer to be powered and operated.

• The motors of the brake tester are braked, allowing all vehicles to exit from the rollers easily.

#### REGULATORY METHODS **AND MEASUREMENTS**

After recovering all the vehicle's information, the inspection line helps you to measure:

- The side-slip measure.
- The vertical forces, by wheel and by axle, and the total force of the vehicle.
- Efficiency and dissymmetry levels for the suspension.
- Efficiency and imbalance levels for the service brake and emergency brake, and the Efficiency of the parking brake.

All the regulatory methods of working are included and can be configured easily:

• Reference method (Axle/Axle for imbalance, and Axle/Axle or Wheel/ Wheel for Efficiency)

- Specific methods: Axle/Axle (Axle/ Axle for imbalance and Efficiency), or Wheel/Wheel with free rollers and pedometer (Wheel/Wheel for imbalance and Efficiency + free rollers on the untested axle).
- · Reverse rotation method with pedometer (for imbalance and

#### **■■■** UPDATES AND REMOTE **ASSISTANCE**

- The FOG UPDATE system means that you automatically benefit from the latest updates. On each start-up, it connects to the FOG server to check whether new functionalities have been implemented.
- CLS.750 is a connected device that can be controlled remotely. This means that, if necessary, you can benefit from a diagnosis by an FOG expert who can answer your questions and further your training. In this way you can increase your workshop's profitability day by day.

# Large 24" monitor





Radio remote control

Wireless pedometer

#### **A SIMPLE, ERGONOMIC AND GRAPHIC INTERFACE**

Vehicle configuration Side-slip Suspension graphs **Braking bar graphs** Display showing all the results measurement



#### □□□ STANDARD EQUIPMENT

- 1 mobile cabinet equipped with a computer system
- 1 x 0.5 m Side-slip plate, with lateral deviation of +/- 20 m/km
- 1 suspension tester
- 1 brake tester with 2 x 5 kW motor brakes
- 1 pedometer
- 1 remote control

# □□□ OPTIONAL EQUIPMENT

- 1 set of 2 standard free rollers
- 1 set of 2 special free rollers
- 1 second remote control

## **BRAKE TESTER**

Net weight on the CLS.750CT: 470 kg Net weight on the CLS.750CT-VL+: 575 kg

Power supply: 400 V / 50 Hz Power: 2 x 5.5 kW

#### **SUSPENSION TESTER**

Net weight on the CLS.750CT: 320 kg Net weight on the CLS.750CT-VL+: 350 kg Power supply: 400 V / 50 Hz

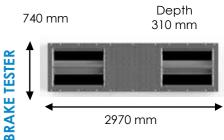
Power: 2 x 3 kW

#### **SIDE-SLIP PLATE**

Net weight of product: 45 kg

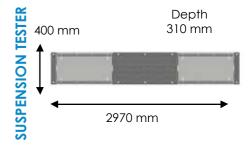
#### **CLS.750CT CONFIGURATION**

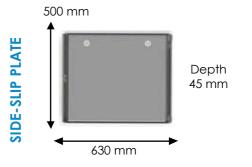
# Depth 670 mm 250 mm **BRAKE TESTER** 2350 mm

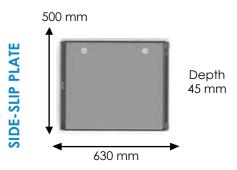


**CLS.750CT-VL+ CONFIGURATION** 

# **SUSPENSION TESTER** Depth 250 mm 420 mm 2350 mm



















# Touch-screen and connected

Emission tester combo with touch-screen, consisting of a 4-gas analyser and a wired opacimeter Ref. **SYS.9001-4T** 

Emission tester combo with touch-screen, consisting of a 4-gas analyser and a Bluetooth opacimeter Ref. SYS.9001BT-4T

Emission tester combo with touch-screen, consisting of a 4-gas analyser, a wired opacimeter and a Bluetooth EOBD reader Ref. SYS.9001-4T-CT

Emission tester combo with touch-screen, consisting of a 4-gas analyser, a Bluetooth opacimeter and a Bluetooth EOBD reader Ref. SYS.9001BT-4T-CT

Please consult us about:

- Stand-alone gas analyser (type
- Stand-alone opacimeter (type XR.943)

the recovery of default codes. • The **touch-screen** linked to a

> devices are transmitted to the centre's computer system using the OTCLAN communications protocol in force.

#### REGULATORY METHODS **AND MEASUREMENTS**

of your interactions.

After recovering all the vehicle's information, the emission tester combo guides you and measures:

teaching program increases the speed

- For the gas analyser: the rate of the CO and the lambda, according to engine types (standard or low-emission) and the entry into circulation's date of the vehicles.
- For the opacimeter: the opacity of the exhaust fumes, taking into account the different engine types (naturally aspirated, turbo-combustion) and the entry into circulation's date of the
- For the EOBD reader: the proper functionning of the MIL indicator and

you automatically benefit from the latest updates. On each start-up, it connects to the FOG server to check whether new functionalities have been

• All the results produced by these

#### ■■■ UPDATES AND REMOTE **ASSISTANCE**

• The FOG UPDATE system **means** that implemented.

• SYS.9001 is a connected device that can be controlled remotely. This means that, if necessary, you can benefit from a diagnosis by an FOG expert who can answer your questions and further your training. In this way you can increase your workshop's profitability day by day.





Touch screen

Bluetooth EOBD reader

Wireless rev counter and temperature probe

#### **A SIMPLE GRAPHIC INTERFACE**

Vehicle selection Vehicle preparation

Measurement at idling speed

Result of the inspection

Display showing the final results











#### **■■■** GAS ANALYSER

Equipped with an infra-red measurement unit complying with regulatory requirements.

#### **MEASUREMENT RANGES**

CO 0-10% volume CO2 0-20% volume O2 0-25% volume

HC 0-20000 ppm volume

0-4000 ppm volume (optional)

## ■■ OPACIMETER

Equipped with a measurement unit using light beam attenuation.

#### **FEATURES**

Light (4.5 kg), compact (23.5 x 38 x 9 cm), Ergonomics

with transport handle

Scale range from 0.00 m-1 to 9.99 m-1 K measure

Resolution 0.01 m-1

# □□□ STANDARD EQUIPMENT

- 1 4-gas analyser
- 1 wired or Bluetooth opacimeter
- 1 Bluetooth EOBD reader
- 1 temperature probe and Bluetooth rev counter jack
- 1 touch screen 24"
- · Linked by WiFi to a computer system (PC, keyboard, mouse)

WiFi printer

1700 mm

# □□□ OPTIONAL EQUIPMENT

- Extension
- 5th gas (NOx) kit



## **GAS ANALYSER**

Power supply: 230 V / 50 Hz Communications: Wired

#### **OPACIMETER**

Power supply: 230 V / 50 Hz Communications: Wired or

Bluetooth

via of the EOBD reader.

■■■ TECHNICAL

option)

temperature

• WiFi printer

certificate.

• 1 touch screen 24"

(PC, keyboard, mouse)

**CHARACTERISTICS** 

• 1 4-gas analyser (5th gas as an

• 1 wired or Bluetooth opacimeter

collecting the engine speed and oil

• Linked by WiFi to a computer system

■■■ SIMPLIFIED INTERFACE

• The brand, model, type of engine

temperature and rev counter datas

thanks to the data from the registration

(diesel or petrol) are pre-selected

• The program obtains the oil

• 1 Bluetooth EOBD reader, for











# Headlight beam tester with photodiode or camera

**NET WEIGHT OF PRODUCT** 

**POWER SUPPLY** 

NiMH 2.4 V / 2.5 Ah

**COMMUNICATIONS** 

230 V / 50 Hz

**BATTERY** 

Bluetooth

Electronic headlight beam tester with photodiode for **Technical Inspection center** 

Ref. LUX.300A-CT

Electronic headlight beam tester with camera for **Technical Inspection center** 

Ref. LUX.400-CT

Electronic headlight beam tester with photodiode for

Ref. **LUX.300-G** 

## TECHNICAL CHARACTERISTICS

- The 4 high-performance batteries ensure more than 10 hours autonomy.
- The projector's vertical movement is made easier by a counterweight.
- Adjusts itself to all types of Passenger Car, Light and Heavy Duty Vehicles, and suitable for all dipped-beam headlamps (halogen, xenon, LED), main-beam headlamps and fog lights.
- The automatic positioning aid by photodiodes helps you for a precise alignment on the light beam.
- The simplified keyboard allows you to navigate through menus and to enter the data for vehicles.
- Data is easily read on the back-lit LCD display.
- OTCLAN data transmission by Bluetooth (Technical Inspection version).
- Integrated printer (Garage version).
- Movement on wheels base (Garage version) and guide rails (Technical Inspection version).





Rail kit **LUX.KITCT** 

**Battery-powered wired** printer (Technical Inspection version) LUX.300IMP

## □□□ STANDARD EQUIPMENT

- 1 photodiode (or camera) headlight beam tester
- 1 printer (Garage version)
- 1 Bluetooth module (Technical Inspection version)
- 1 rail kit (Technical Inspection version)
- 1 power supply adapter
- 1 positionning laser

1550 mm

# □□□ OPTIONAL EQUIPMENT

• 1 remote printer (Technical Inspection version)

# ADDITIONAL EQUIPMENT

#### **COMPRESSORS**

#### 528 9100

#### Standard air compressor with cast-iron head

- . Delivers the power required to operate jacking-up crossarms over pits or on lifts, and provides additional inflation for tyres.
- . Tank capacity: 150 L
- . Power: 3ch
- . 2 cylinders
- . Volume generated: 23 m3/hr
- . Pressure: 8 10 bars
- . Power supply: 220V/1 ph/50 Hz

#### 528 9101

#### Standard single-stage air compressor

- . Suitable only for providing additional inflation for tyres recommended by manufacturers.
- . Tank capacity: 200 L
- . Power: 3ch
- . 2 cylinders Volume generated: 23 m3/hr
- . Pressure: 8 10 bars
- . Power supply: 220V/1 ph/50 Hz



#### **OTHER**

## **UA.CT**

Tyre wear gauge



565 9055 Set of 2 mirrors



UTM.PGM/CE Inflator gun



## Suspension system accessories:

#### CLS.750-PF



**CLS.750-PP** 

CLS.750RIP50





CLS.750FR-ENS1



CLS.750FRSUS-CAS



CLS.750-TELEC



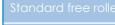
CLS.750RIP-CAS



# ACCESSORIES

#### **CLS.700RF**

**CLS.750-RF** 





#### **Emission tester accessories:**

#### XN.048E



# XN.050B



## 578 1015



#### XR.943-KITSONDEPL





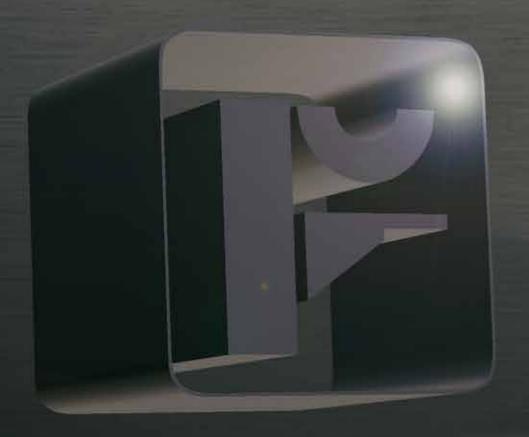
Page 60

**AZUR 4T** 

Page 61

**AZUR 5T** 

Page 62



AZUR 6,5T

Page 63

**ACCESSORIES** & SUMMARY TABLE

Pages 64-65

TYRE CHANGER BALANCER REPUL STATION WHEEL ALLIGNER

MOBILE SCISORS LIFT SCISSORS LIFT NGROUND LIFT

MOBILETIFT







# 2 POST LIFT

# AZUR 3T - 2 post lift

# 444 9530



2 electro-mechanical post lift (capacity 3T) with base frame

Ref. 444 9530

# TECHNICAL CHARACTERISTICS

• Transmission by chain

• Lifting capacity: 3000 kg • Extra-flat connecting frame: 50 mm • Min. lifting height for ultra-low vehicle: 99 mm

• Great width between columns: 2560 mm • Max. lifting height 1945 mm

• Interchangeable asymmetrical arms with 2 extensions:

- short arms: 515 - 845 mm 760 - 1200 mm - long arms: • Loaded lift lifting/lowering time: 57 / 51 secs

• Height of the lift: 2660 mm



# **AZUR 4T** - 2 motors 2 post lift

2 motors 2 electro-mechanical post lift with synchronisation of movement, without base frame Ref. 444 9550

# TECHNICAL CHARACTERISTICS

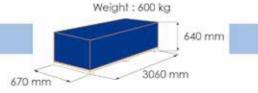
- No base frame between columns (arch-frame)
- 2 motors with high starting torque
- Protection stop for car door
- Internal security in case of overheating
- 4000 kg • Lifting capacity:
- Min. lifting height for ultra-low vehicle: 85 mm
- 2755 mm • Great width between columns:
- 1925 mm • Max. lifting height: • Interchangeable asymmetrical arms with 2 extensions:
- short arms: 640 - 1200 mm
- 1015 1550 mm - long arms:
- Loaded lift lifting/lowering time: 57 / 51 secs

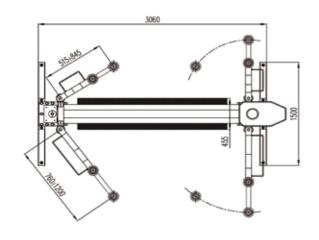
• Height of lift without arch-frame: 2585 mm 4540 mm • Max. height of the lift with arch-frame:

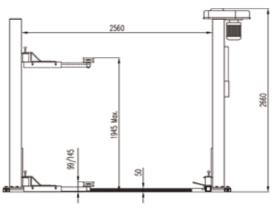
# 444 9550



# **PACKING**

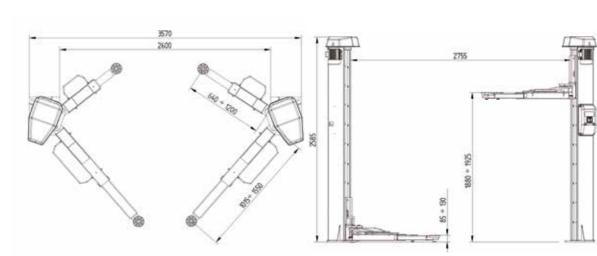






**NET WEIGHT OF PRODUCT** 490 kg **POWER SUPPLY** 

230 V 3 ph / 50 Hz / 19 A 400 V 3 ph / 50 Hz / 11 A **MOTOR POWER** 3.6 kW



PACKING

1120 mm -

**NET WEIGHT OF PRODUCT** 

**POWER SUPPLY** 

550 kg

230 V 3 ph / 50 Hz / 36 A 400 V 3 ph / 50 Hz / 22 A

**MOTOR POWER** 2 x 3.6 kW

# 2800 mm

Weight: 880 kg











# 2 POST LIFT

# **AZUR 5T** - 2 motors 2 post lift

443 9050



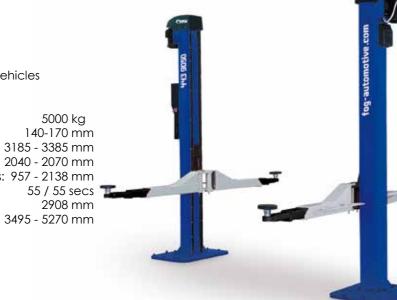
2 motors 2 electro-mechanical post lift (capacity 5T), without base frame Ref. 443 9050

# TECHNICAL CHARACTERISTICS

- No base frame between columns (arch-frame)
- Designed for passenger cars, 4x4s and light duty vehicles
- 2 motors with high starting torque
- Programmable end stop
- Lifting capacity:
- Min. lifting height:
- Great width between columns: • Max. lifting height:
- Interchangeable symmetrical arms with 3 extensions: 957 2138 mm
- Loaded lift lifting/lowering time: • Height of lift without arch-frame:

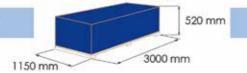
2908 mm

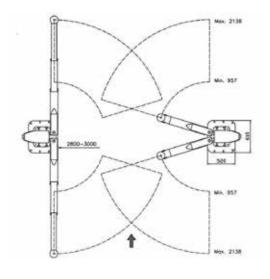
- Height of the lift with arch-frame:
- 3495 5270 mm

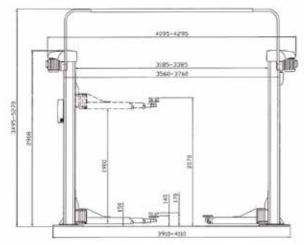


#### Weight: 1185 kg

# **PACKING**







**NET WEIGHT OF PRODUCT** 1123 kg **POWER SUPPLY** 400 V 3 ph + N / 50 Hz / 25 A MOTOR POWER 2 x 2.8 kW

# AZUR 6.5T - 2 motors 2 post lift

443 9065



2 motors 2 electro-mechanical post lift (capacity 6.5T), without base frame Ref. 443 9065

## **TECHNICAL CHARACTERISTICS**

- No base frame between columns (arch-frame)
- Designed for passenger cars, 4x4s, light duty vehicles and small trucks
- 2 motors with high starting torque
- Programmable end stop
- Internal security in case of overheating
- Lifting capacity:
- · Min. lifting height:
- Great width between columns:
- 2805 mm • Max. lifting height: 2045 - 2105 mm
- Interchangeable symmetrical arms with 3 extensions: 770 1640 mm
- Loaded lift lifting/lowering time: 35 / 35 secs
- · Height of lift without arch-frame:
- Height of the lift with arch-frame:
- 4910 5270 mm

6500 kg

2908 mm

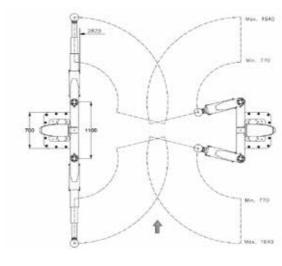
145 - 205 mm

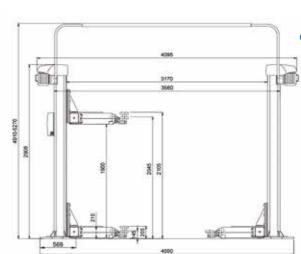


PLEASE CONTACT US

# PACKING







**NET WEIGHT OF PRODUCT** 1554 kg **POWER SUPPLY** 400 V 3 ph + N / 50 Hz / 25 A **MOTOR POWER** 2 x 4 kW















# ACCESSORIES

# SUMMARY TABLE



000





	444 9530	444 9550	443 9050	443 9065
Lifting capacity	3000 kg	4000 kg	5000 kg	6500 kg
Loaded lift lifting time	57 secs	57 secs	55 secs	35 secs
Loaded lift lowering time	51 secs	51 secs	55 secs	35 secs
Min. effective height	100-140 mm	85-130 mm	140-170 mm	145-205 mm
Max. effective height	1945 mm	1925 mm	2040-2070 mm	2045-2105 mm
Distance between columns	2560 mm	2755 mm	3185-3385 mm	2805 mm
Max. height of lift	2660 mm	2585 mm	2908 mm	2908 mm
Max. height of arch-frame		4540 mm	3495-5270 mm	4910-5270 mm
Max. width of lift	3060 mm	3350 mm	3910-4110 mm	4095 mm
Number of arm extensions	2	2	3	3
Symmetrical arms			✓	✓
Length of arms			957-2138 mm	770-1640 mm
Asymmetrical arms	✓	V		
Length of short arms	515-845 mm	640-1200 mm		
Length of long arms	760-1200 mm	1015-1550 mm		
50 Hz three-phase electric motor power supply	230 V / 19 A 400 V / 11 A	230 V / 36 A 400 V / 22 A	400 V + N / 25 A	400 V + N / 25 A
Motor power	3.6 kW	2 x 3.6 kW	2 x 2.8 kW	2 x 4 kW
Control circuit voltage	24 V	24 V	12 V	12 V
Net weight of the lift	490 kg	550 kg	1123 kg	1554 kg

444 8506

444 8507

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QUADRA 5T - AUXILIARY LIFT TABLE - FOR WHEEL ALIGNMENT

Page 70

**QUADRA 6.2T** 

Page 71

ACCESSORIES
& SUMMARY TABLE FOR PASSENGER CAR

Pages 73-74

ATLAS 10T

Page 75



**QUADRA 5T - FOR WHEEL ALIGNMENT** 

Page 69

**QUADRA 7.2T** 

Page 72

ATLAS 16T

Page 76

ATLAS 20T - 24T

Pages 77

ACCESSORIES & SUMMARY TABLE FOR HEAVY DUTY VEHICLE

Pages 78-79

JACKING BEAM FOR PASSENGER CAR

Page 80-81

JACKING BEAM FOR HEAVY DUTY VEHICLE

4 POST LIFT

Pages 82-83

CONTROL

2 POST LIFT

INGROUND

SCISSORS LIFT

BIG SCISSORS LIFT

MOBILE COLUMN LIFTS

ES MOBIL

SERVICE



**QUADRA 4T -**







# 493 9400

special for wheel alignment

4 post lift with flat tracks

4 electro-hydraulic post lift (capacity: 4T), flat tracks, special for wheel alignement Ref. 493 9400

## TECHNICAL CHARACTERISTICS

• Ideal for wheel alignment thanks to its front housing for turntables, and its side-slip plates and its great width between the columns.

• The great tracks width means that most light and utility vehicles can be lifted without having to move the tracks.

- Lifting capacity:
- Very low tracks:
- Tracks width:
- Tracks length:
- Width between columns:
- Max. lifting height:
- Loaded lift lifting/lowering time:
- Height of the lift:

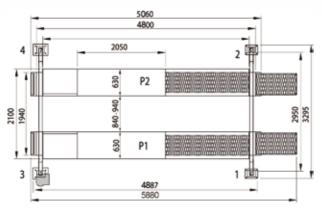
• Aligner front housing length: (optional front housing cover)

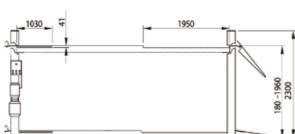


Weight: 1260 kg

# PACKING

640 mm





**POWER SUPPLY** 230 V 3 ph / 50 Hz / 12.8 A 400 V 3 ph / 50 Hz / 7.4 A **MOTOR POWER** 

2.6 kW

HYDRAULIC PRESSURE 180 bars

# **QUADRA 5T -**

4 post lift with flat tracks special for wheel alignment 494 9752



4 electro-hydraulic post lift (capacity: 5T), flat tracks, special for wheel alignement Ref. 494 9752

#### TECHNICAL CHARACTERISTICS

• Ideal for wheel alignment thanks to its front housing for turntables, and its side-slip plates and its great width between the columns.

• The great tracks width means that most light and utility vehicles can be lifted without having to move the tracks.

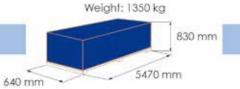
• Lifting capacity: 5000 kg • Very low tracks: 180 mm 630 mm • Tracks width: • Tracks length: 5100 mm 2950 mm • Width between columns: • Max. lifting height: 1960 mm

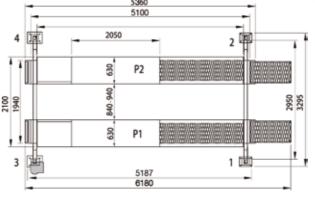
• Height of the lift:

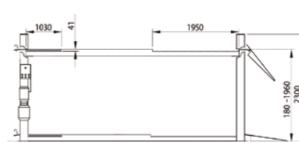
• Loaded lift lifting/lowering time: 42/34 sec 2300 mm • Aligner front housing length: 1035 mm (optional front housing cover)



**PACKING** 







**POWER SUPPLY** 230 V 3 ph / 50 Hz / 12.8 A 400 V 3 ph / 50 Hz / 7.4 A

**MOTOR POWER** 2.6 kW

**HYDRAULIC PRESSURE** 230 bars













# **QUADRA 5T -**

4 post lift with auxiliary lift table special for wheel alignment



4 electro-hydraulic post lift (capacity: 5T) with an auxiliary lift table special for wheel alignment Ref. 494 9750

#### TECHNICAL CHARACTERISTICS - MAIN LIFT

• Ideal for wheel alignment thanks to its front housing for turntables, and its side-slip plates and its great width between the columns.

• The great tracks width means that most light and utility vehicles can be

5000 kg
180 mm
665 mm
5200 mm
2950 mm
1995 mm
55/58 secs
2300 mm
1250 mm



494 9750

#### TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE

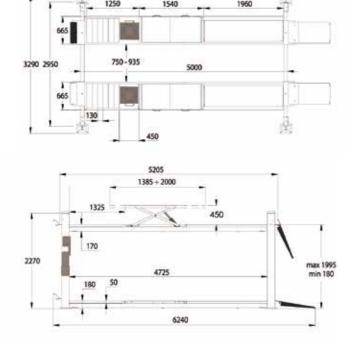
• Lifting capacity: 3500 kg • Loaded lift lifting/lowering tim: 13/17 secs

 Max. height - auxiliary lift: 450 mm • Platform dimensions of the auxiliary lift table: (1385-2000) x 610 mm

Weight: 1750 kg

# **PACKING**





#### **POWER SUPPLY**

230 V 3 ph / 50 Hz / 12.8 A 400 V 3 ph / 50 Hz / 7.4 A

**MOTOR POWER** 2.6 kW

**AIR PRESSURE** 6-8 bars

**HYDRAULIC PRESSURE** 255 bars

# QUADRA 6.2T -

4 post lift with flat tracks

494 9761



4 electro-hydraulic post lift (capacity: 6.2T) with flat tracks Ref. 494 9761

#### TECHNICAL CHARACTERISTICS

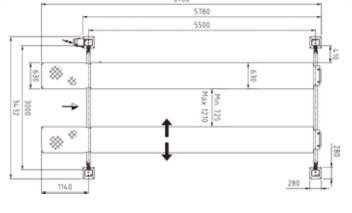
· Lifting capacity: 6200 kg • Very low tracks: 182 mm • Tracks width: 630 mm • Tracks length: 5500 mm • Length of the ramps: 1140 mm • Width between columns: 3000 mm • Max. lifting height: 1820 mm • Loaded lift lifting/lowering time: 44/44 secs • Height of the lift: 2235 mm



PACKING

5950 mm 670 mm

Weight: 1400 kg



**POWER SUPPLY** 230 V 3 ph / 50 Hz 400 V 3 ph + N / 50 Hz **MOTOR POWER** 3 kW













QUADRA 7.2T -4 post lift with flat tracks

4 electro-hydraulic post lift (capacity: 7.2T) with flat tracks Ref. 494 9821

### **TECHNICAL CHARACTERISTICS**

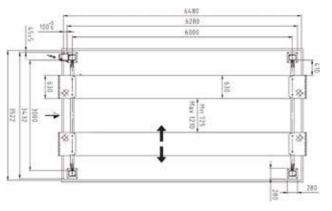
- Lifting capacity:
- Very low tracks:
- Tracks width:
- Tracks length:
- Length of the ramps:
- Width between columns:
- Max. lifting height:
- Loaded lift lifting/lowering time:
- Height of the lift:

7200 kg 182 mm 630 mm 6000 mm 1140 mm 3000 mm 1820 mm 40/58 secs 2235 mm



## PACKING

Weight: 1800 kg 900 mm 6440 mm 700 mm



**POWER SUPPLY** 230 V 3 ph / 50 Hz 400 V 3 ph + N / 50 Hz **MOTOR POWER** 

3 kW



# **ACCESSORIES FOR** PASSENGER CAR





#### SI.4-112681





#### 416 8037



Set of 4 x 50 mm high pads for auxiliary lift



#### 436 8025



#### SI.4-117935



#### SI.4-117936



#### 494 8122



#### 494 8770











# 4 POST LIFT



# SUMMARY TABLE FOR PASSENGER CAR

	493 9400	494 9752	494 9750	494 9761	494 9821
Lift					
Lifting capacity	4000 kg	5000 kg	5000 kg	6200 kg	7200 kg
Loaded lift lifting time	33 secs	42 secs	55 secs	44 secs	44 secs
Loaded lift lowering time	34 secs	34 secs	58 secs	44 secs	44 secs
Min. effective height	180 mm	180 mm	180 mm	182 mm	182 mm
Max. effective height	1960 mm	1960 mm	1995 mm	1820 mm	1820 mm
Tracks dimensions	4800x630 mm	5100x630 mm	5200x665 mm	5500x630 mm	6000x630 mm
Length for lifts on the ground with access ramps	5880 mm	6180 mm	6240 mm	6753 mm	7253 mm
Lift total width	3300 mm	3300 mm	3290 mm	3432 mm	3432 mm
Distance between columns	2950 mm	2950 mm	2950 mm	3000 mm	3000 mm
Height of the lift	2300 mm	2300 mm	2300 mm	2235 mm	2235 mm
50 Hz three-phase electric motor power supply	230 V / 12.8 A 400 V / 7.4 A	230 V / 12.8 A 400 V / 7.4 A	230 V / 12.8 A 400 V / 7.4 A	230 V 400 V + N	230 V 400 V + N
Three-phase motor power	2.6 kW	2.6 kW	2.6 kW	3 kW	3 kW
Auxiliary lift table					
Auxiliary lift table max. capacity			3500 kg		
Auxiliary lift lifting time			13 secs		
Auxiliary lift lowering time			17 secs		
Max. lifting capacity of the auxiliary lift table			450 mm		
Platform dimensions of the auxiliary lift table			1385x610 mm		
Platform dimensions of the auxiliary lift table with extension			2000x610 mm		

## **ATLAS 10T -**4 post lift with flat tracks

4 electro-hydraulic post lift (capacity: 10T), with 4.60 m flat tracks and 2.80 m width between columns Ref. 435 9901

4 electro-hydraulic post lift (capacity: 10T), with 4.60 m flat tracks and 3.12 m width between columns Ref. 435 9902

4 electro-hydraulic post lift (capacity: 10T), with 7.00 m flat tracks and 3.52 m width between columns Ref. 435 9903

#### TECHNICAL CHARACTERISTICS

Lilling capacity:	10000 kg
<ul> <li>Very low tracks:</li> </ul>	265 mm
<ul><li>Tracks width:</li></ul>	650 mm
• Tracks length:	
435 9901	4600 mm
435 9902	4600 mm
435 9903	7000 mm
<ul> <li>Length of the ramps:</li> </ul>	1100 mm <sup>(1)</sup>

• Width between columns: 435 9901 2800 mm 435 9902 3120 mm 435 9903 3520 mm • Max. lifting height: 1700 mm

> 45/45 secs 2354 mm

• Loaded lift lifting/lowering time: Height of the lift:

(1) Please consult us about 1600 mm ramps

# ATLAS 10T

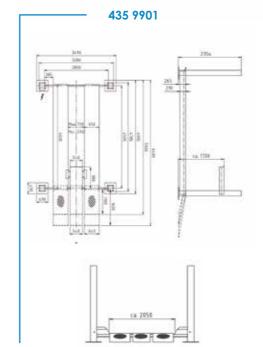


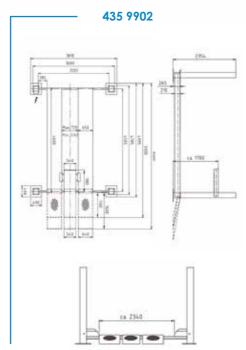


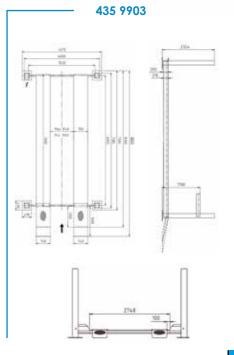
PLEASE CONTACT US

## PACKING

















## ATLAS 16T -4 post lift with flat tracks

ATLAS 16T



4 electro-mechanical post lift (capacity: 16T), 7.50 m flat tracks Ref. 451 9801

4 electro-mechanical post lift (capacity: 16T), 8.00 m flat tracks

Ref. 451 9802

4 electro-mechanical post lift (capacity: 16T), 3.95 m flat tracks

Ref. 451 9803

### TECHNICAL CHARACTERISTICS

• Lifting capacity: • Very low tracks: • Tracks width:

• Tracks length: 451 9801 451 9802

451 9803 • Length of the ramps:

• Width between columns: • Max. lifting height:

• Loaded lift lifting/lowering time:

• Height of the lift:

(1) Please contact us about a 3rd track (2) Please contact us about 2000 or 2800 m ramps 16000 kg 295 mm 700 mm

7500 mm 8000 mm 3950 mm<sup>(1)</sup> 1260 mm<sup>(2)</sup> 3200 mm 1850 mm

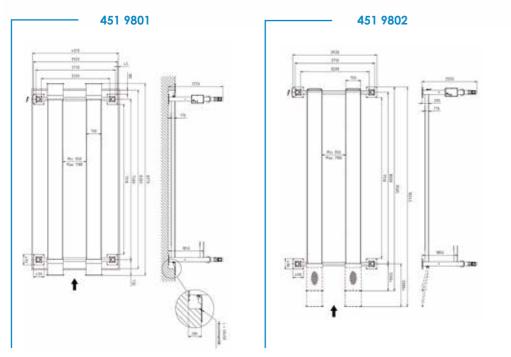
120/120 secs 2550 mm



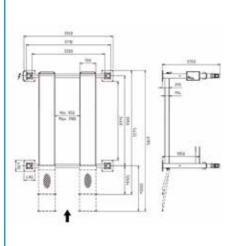
PLEASE CONTACT US

### PACKING





451 9803



# ATLAS 20T - 24T

## **ATLAS 20T and 24T -**4 or 6 post lift with flat tracks

4 electro-mechanical post lift (capacity: 20T), 7.50 m flat tracks

Ref. 451 9811

6 electro-mechanical post lift (capacity: 24T), 8.00 m flat tracks

Ref. 451 9812

**POWER SUPPLY** 

451 9811: 400 V / 3 ph + N / 50 Hz / 35 A

**MOTOR POWER** 

451 9811: 4 x 2.2 kW

#### TECHNICAL CHARACTERISTICS

· Lifting capacity:

451 9811 451 9812

• Very low tracks: • Tracks width:

• Tracks length: 451 9811

451 9812 • Length of the ramps:

• Width between columns: 451 9811

451 9812 • Max. lifting height:

• Loaded lift lifting/lowering time: • Height of the lift:

(1) Please consult us about 2000 or 2800 mm ramps

451 9812: 400 V / 3 ph + N / 50 Hz / 50 A

451 9812: 6 x 2.2 kW



PLEASE CONTACT US

### PACKING



#### 451 9811

20000 kg

24000 kg

295 mm

700 mm

7500 mm

1260 mm<sup>(1</sup>

3470 mm

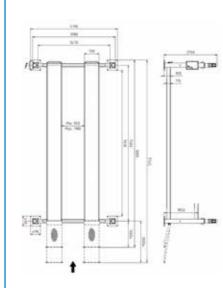
3200 mm

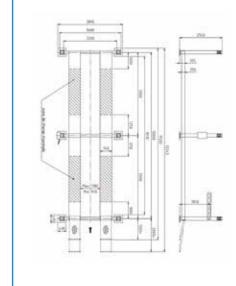
1850 mm

2550 mm

120/120 secs

2 x 5000 mm

















# SUMMARY TABLE FOR HEAVY DUTY VEHICLE

**ACCESSORIES FOR** 435 9901 - 435 9902 - 435 9903

#### 435 8901

#### 435 8902

#### 435 8904

#### 435 8905

Set of 2 additional 1600 mm ramps for 7.00 m tracks

### 435 8903

#### 435 8906

#### 435 8907

Lighting kit for 4.60 m tracks

#### 435 8909



ACCESSORIES FOR 451 9801 - 451 9802 - 451 9803 - 451 9811 - 451 9812

#### 451 8901

#### 451 8903



#### 451 8904



#### 451 8905

#### 451 8906



	435 9901	435 9902	435 9903	451 9801	451 9802	451 9803	451 9811	451 9812
Lifting capacity	10000 kg	10000 kg	10000 kg	16000 kg	16000 kg	16000 kg	20000 kg	24000 kg
Loaded lift lifting time	45 secs	45 secs	45 secs	120 secs	120 secs	120 secs	120 secs	120 secs
Loaded lift lowering time	45 secs	45 secs	45 secs	120 secs	120 secs	120 secs	120 secs	120 secs
Min. effective height	265 mm	265 mm	265 mm	295 mm	295 mm	295 mm		
Max. effective height	1700 mm	1700 mm	1700 mm	1850 mm				
Tracks dimensions	4600x650 mm	4600x650 mm	7000x650 mm	7500x700 mm	8000x700 mm	3950x700 mm	7500x700 mm	(5000+5000) x 700 mm
Length for lift on the ground with 1100 mm access ramps	5900 mm	5900 mm	8300 mm					
Length for lift on the ground with 1600 mm access ramps	6400 mm	6400 mm	8800 mm					
Length for lift on the ground with 1260 mm access ramps				9005 mm	9505 mm	6345 mm	9005 mm	14005 mm
Length for lift on the ground with 2000 mm access ramps				9745 mm	10245 mm		9745 mm	14745 mm
Lift total width	3490 mm	3810 mm	4210 mm	3920 mm	3920 mm	3920 mm	4190 mm	3890 mm
Distance between columns	2800 mm	3120 mm	3520 mm	3200 mm	3200 mm	3200 mm	3470 mm	3200 mm
Height of the lift	2354 mm	2354 mm	2354 mm	2550 mm				
Three-phase electric motor power	400V + N 50hz							
supply	3.0 kW	3.0 kW	3.0 kW	4 x 2.2 kW	4 x 2.2 kW	4 x 2.2 kW	4 x 2.2 kW	6 x 2,2 kW









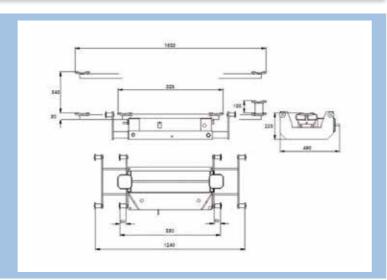


# 4 POST LIFT

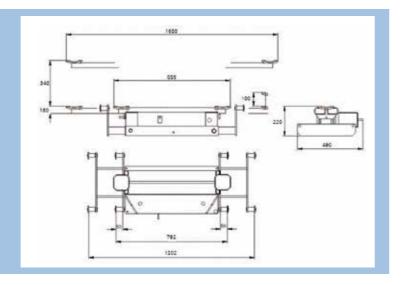
# JACKING BEAM FOR PASSENGER CAR

2 T

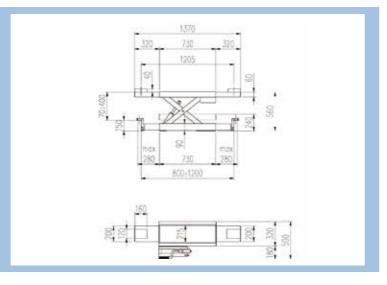




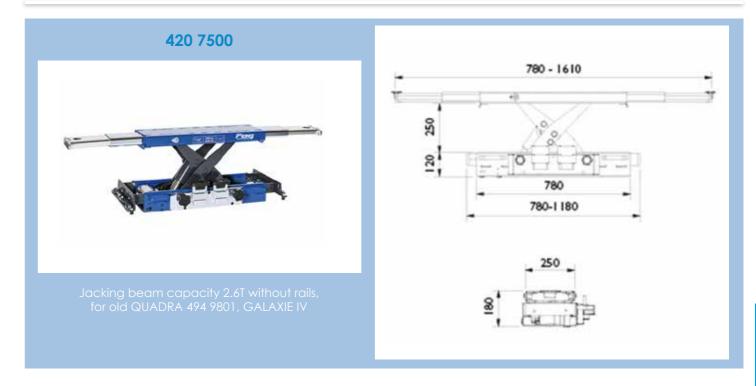




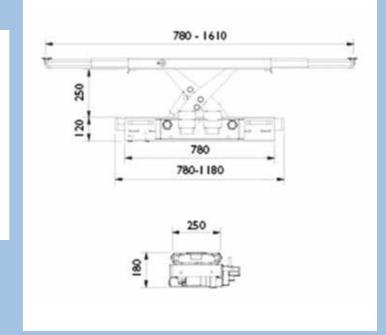




### 2,6 T







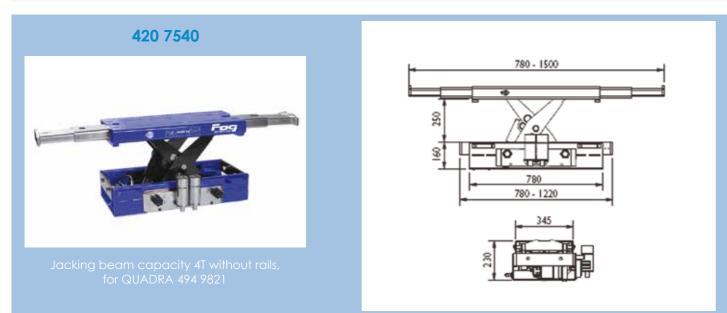




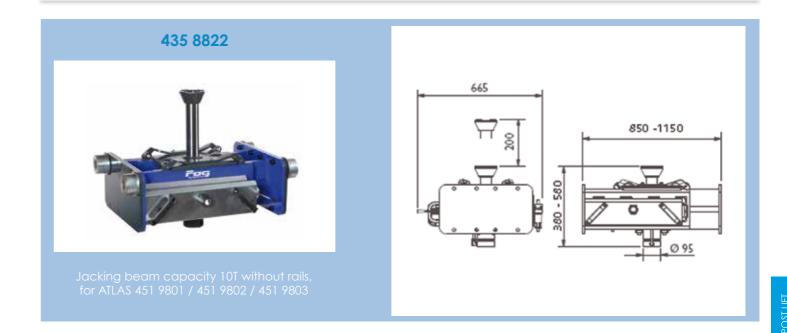


# JACKING BEAM FOR HEAVY DUTY VEHICLE

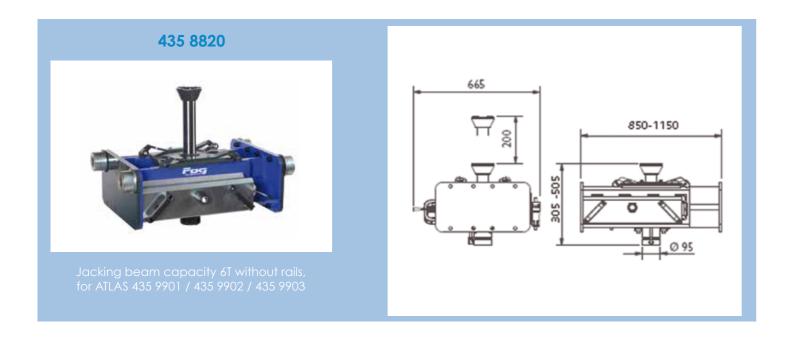
4 T



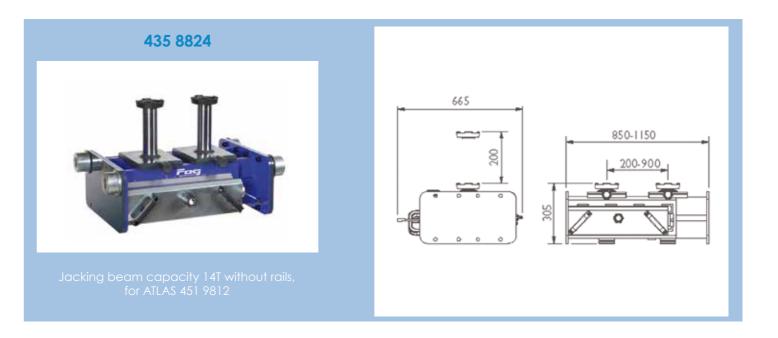
10 T



6 T



14 T



4 POST LI

AFTER-SALES SERVICE

VISION III 3.5T WITH SIMPLE PLATFORMS

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## **VISION III 3.5T WITH XY PLATFORMS**

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VISION III 3.5T WITH V ARMS

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## VISION III 3.5T WITH V ARMS / LARGE

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## VISION III 3.5T WITH V ARMS / EXTRA-LARGE

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## VISION III 5T WITH V ARMS

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# INGROUND LIFT

VISION III 5T WITH V ARMS / LARGE

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**ACCESSORIES** 

Page 93



## Twin-ram inground lift with simple adjustable platforms

Cassette 1315 - 1335 mm equipped with the hydraulic unit (cylinders 1950 mm), with cables and oil Ref. V.12275E

Superstructure with 1200 - 1800 mm simple platforms and rubber blocks Ref. V.20829E

Superstructure with 1400 - 2000 mm simple platforms and rubber blocks Ref. V.20828E

Superstructure with 1600 - 2200 mm simple platforms and rubber blocks Ref. V.20830E

### TECHNICAL CHARACTERISTICS

- Ultra-silent and very rapid lifting
- Platforms adjustable in length: 1200 1800, 1400 2000 or 1600 - 200 mm
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic circuits
- Extremely robust foolproof connection shaft, ensuring perfect levelling

# VISION III

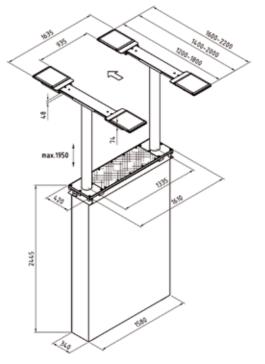




#### **IDEAL FOR:**

### STANDARD EQUIPMENT

Stable support rubber blocks



LIFTING CAPACITY 3500 kg

**DISTANCE BETWEEN CYLINDERS** 

1335 mm

**CYLINDER STROKE** 

1950 mm

**EFFECTIVE HEIGHT** 

2020 mm

LIFTING/LOWERING TIME

About 30 secs

**CYLINDER DIAMETER** 2 x 123 mm

**FOUNDATION DEPTH** 

2615 mm

**MOTOR PUMP UNIT** 3.0 kW

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A

## Twin-ram inground lift with XY adjustable platforms

Cassette 1315 - 1335 mm equipped with the hydraulic unit (cylinders 1950 mm), with cables and oil Ref. V.12275E

Superstructure with 1200 - 1800 mm XY platforms and rubber blocks Ref. V.20829EXY

Superstructure with 1400 - 2000 mm XY platforms and Ref. V.20828EXY

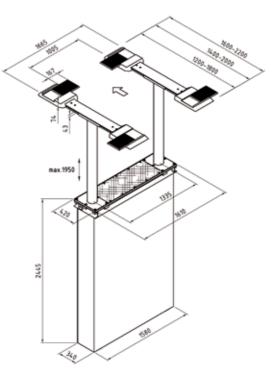
Superstructure with 1600 - 2200 mm XY platforms and rubber blocks Ref. V.20830EXY

### TECHNICAL CHARACTERISTICS

- Ultra-silent and very rapid lifting
- Platforms adjustable in length: 1200 1800, 1400 2000 or 1600 - 200 mm
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- · Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic
- Extremely robust foolproof connection shaft, ensuring perfect levelling

## STANDARD EQUIPMENT

- Stable support rubber blocks
- XY platforms



# VISION III



#### **IDEAL FOR:**

LIFTING CAPACITY 3500 kg

**DISTANCE BETWEEN CYLINDERS** 1335 mm

**CYLINDER STROKE** 1950 mm

**EFFECTIVE HEIGHT** 2020 mm

LIFTING/LOWERING TIME

About 30 secs

**CYLINDER DIAMETER** 2 x 123 mm

**FOUNDATION DEPTH** 2615 mm

**MOTOR PUMP UNIT** 3.0 kW

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A





# Twin-ram inground lift with V arms (adjustable in width)

Cassette 1315 - 1335 mm equipped with the hydraulic unit (cylinders 1950 mm), with cables and oil Ref. V.12275E

Superstructure with adjustable arms - min. height 70 mm

Ref. V.20780E

Superstructure with adjustable arms - min. height

Ref. V.20788E



VISION III

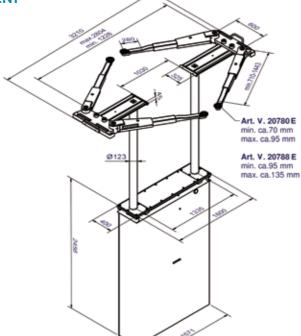
### TECHNICAL CHARACTERISTICS

- Ultra-silent and very rapid lifting
- Double-telescoping multi-function arms (710 1443 mm)
- Automatic locking of the arms
- Arm supports adjustable in width (1226 2304 mm)
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic circuits
- Extremely robust foolproof connection shaft, ensuring perfect levelling

IDEAL FOR:

- Repairs and maintenance

# • Stable bearing pads



LIFTING CAPACITY 3500 kg

DISTANCE BETWEEN CYLINDERS

1335 mm

**CYLINDER STROKE** 

1950 mm

**EFFECTIVE HEIGHT** 

2020 - 2370 mm (depending on bearing pads)

LIFTING/LOWERING TIME

About 30 secs

CYLINDER DIAMETER

2 x 123 mm

FOUNDATION DEPTH

2615 mm

**MOTOR PUMP UNIT** 

3.0 kW

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A

# Twin-ram inground lift with V arms- large distance between cylinders

Cassette 2265 - 2285 mm equipped with the hydraulic unit (cylinders 1950 mm), with cables and oil Ref. V.12276E

Superstructure with 'Sport' arms and  $\emptyset120/70/95$  pads Ref. V.20777E

Superstructure with 'Universal' arms and Ø120/95/135 pads

Ref. V.21068E

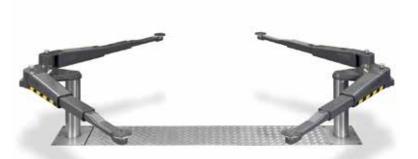
## TECHNICAL CHARACTERISTICS

- Ultra-silent and very rapid lifting
- Double-telescoping multi-function arms (710 1443 mm)
- Automatic locking of the arms
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic circuits
- Extremely robust foolproof connection shaft, ensuring perfect levelling

# VISION III





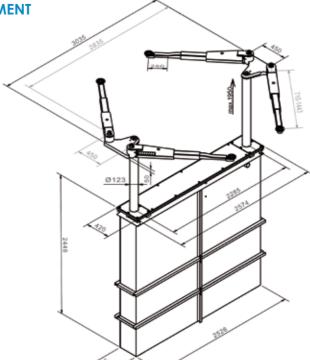


#### **IDEAL FOR:**

Bodywork
Repairs and maintenance

## STANDARD EQUIPMENT

Stable bearing pads



LIFTING CAPACITY 3500 kg

DISTANCE BETWEEN CYLINDERS

2285 mm

CYLINDER STROKE

1950 mm

EFFECTIVE HEIGHT

2020 - 2370 mm

MIN. PADS HEIGHT

'Sport' version: 70 mm

'Universal' version: 95 mm

LIFTING/LOWERING TIME About 30 secs

CYLINDER DIAMETER

2 x 123 mm

2 x 123 mm

FOUNDATION DEPTH 2615 mm

26131111

MOTOR PUMP UNIT 3.0 kW

POWER SUPPLY

230 V 3 ph / 50 Hz / 25 A

400 V 3 ph / 50 Hz / 25 A

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# INGROL









V arms- extra-large distance between cylinders

Twin-ram inground lift with VISION III



Cassette 2600 mm equipped with the hydraulic unit, with cables and oil Ref. V.12107E

Superstructure with arms - min. height 70 mm Ref. V.20786E

Superstructure with arms - min. height 90 mm Ref. V.20787E



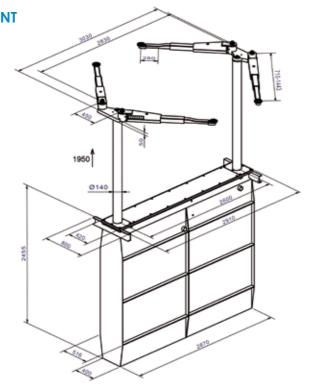
#### **TECHNICAL CHARACTERISTICS**

- Ultra-silent and very rapid lifting
- Double-telescoping multi-function arms (710 1443 mm)
- Automatic locking of the arms
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic circuits
- Extremely robust foolproof connection shaft, ensuring perfect levelling

### **IDEAL FOR:**

## STANDARD EQUIPMENT

• Stable bearing pads



LIFTING CAPACITY 3500 kg

**DISTANCE BETWEEN CYLINDERS** 2600 mm

**CYLINDER STROKE** 

1950 mm

**EFFECTIVE HEIGHT** 

2020 - 2370 mm

LIFTING/LOWERING TIME About 30 secs

**CYLINDER DIAMETER** 

**FOUNDATION DEPTH** 

2615 mm

**MOTOR PUMP UNIT** 

3.0 kW

2 x 140 mm

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A

Twin-ram inground lift with V arms (adjustable in width)

VISION III



Cassette 1350 mm equipped with the hydraulic unit, with cables and oil Ref. V.12399E

Superstructure with adjustable arms Ref. V.20773E



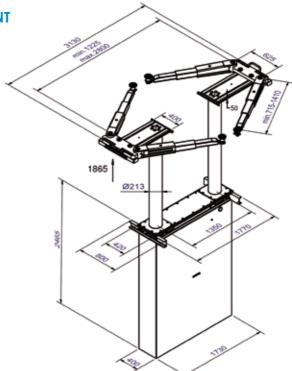
### **TECHNICAL CHARACTERISTICS**

- Ultra-silent and very rapid lifting
- Double-telescoping multi-function arms (715 1410 mm)
- Automatic locking of the arms
- Arm supports adjustable in width (1225 2800 mm)
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil
- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic
- Extremely robust foolproof connection shaft, ensuring perfect levelling

### **IDEAL FOR:**

## STANDARD EQUIPMENT

Stable bearing pads



LIFTING CAPACITY 5000 kg

**DISTANCE BETWEEN CYLINDERS** 

1350 mm

**CYLINDER STROKE** 

1865 mm

**EFFECTIVE HEIGHT** 

2010 - 2070 mm

LIFTING/LOWERING TIME About 45 secs

CYLINDER DIAMETER 2 x 213 mm

**FOUNDATION DEPTH** 2665 mm

**MOTOR PUMP UNIT** 3.0 kW

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A









HEIGHT EXTENSION (in combination with bearing blocks)

## Twin-ram inground lift with V arms - large distance between cylinders

# VISION III



Cassette 2150 mm equipped with the hydraulic unit, with cables and oil Ref. V.12103E

Superstructure with arms Ref. V.20775E



- Ultra-silent and very rapid lifting
- Double-telescoping multi-function arms (715 1410 mm)
- Automatic locking of the arms
- Water-proof cassette
- Hard-chrome plated cylinders
- Corrosion-free guiding elements
- Electronic control
- Ecological oil

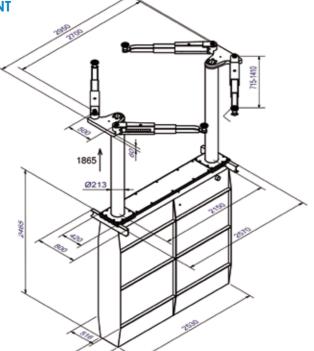
perfect levelling

- Pneumatic emergency descent
- Safety device consisting of 2 independent hydraulic circuits
- Extremely robust foolproof connection shaft, ensuring

#### **IDEAL FOR:**

## STANDARD EQUIPMENT

• Stable bearing pads



LIFTING CAPACITY 5000 kg

**DISTANCE BETWEEN CYLINDERS** 

2150 mm

**CYLINDER STROKE** 

1865 mm

**EFFECTIVE HEIGHT** 

2010 - 2070 mm

LIFTING/LOWERING TIME About 45 secs

CYLINDER DIAMETER 2 x 213 mm

**FOUNDATION DEPTH** 

2625 mm

**MOTOR PUMP UNIT** 

3.0 kW

**POWER SUPPLY** 

230 V 3 ph / 50 Hz / 25 A 400 V 3 ph / 50 Hz / 16 A

# ACCESSORIES

leight extension ø 120 mm Min. height: 0 mm/max. height: 95 mm (1 Piece)

leight extension ø 120 mm Min. height: 35 mm/max. height: 195 mm (1 Piece)

eight extension ø 120 mm Min. height: 30 mm/max. height: 420 mm (1 Piece)

### SUPPORT BLOCKS

ubber pads h = 20 mm (1 set = 4 piece llack - Surface area base: 270 x 210 mr

ubber pads h = 40 mm (1 set = 4 piec

Rubber pads h = 80 mm (1 set = 4 piece black - Surface area: base 50 x 150 mm/top 110 x 110 mm

V.11030

ubber pads h = 100 mm (1 set = 4 eces) black - Surface area: base

Pad ø 120 mm Min. height: 95 mm/ nax. height: 135 mm (1 Piece)

Pad ø 120 mm Min. height: 135 mm/ max. height: 195 mm (1 Piece)

J-shaped pad 100 mm Min. height: '2 mm/max. height: 122 mm (1 Piece)

U-shaped pad 100 mm Min. height: 122 mm/max. height: 182 mm (1 Piece)

J-shaped pad 100 mm Min. height: 82 mm/max. height: 287 mm (1 Piec

Pads for Superstructure V.20777 ø 120 mm Min. height: 70 mm/max. height: 75 mm (1 Piece)

**BEARING PADS** 

# V.11001

V.11028

# V.11002

### WHEEL SUPPORT FRAME

et of 4 « off-road » wheel supports (875 kg/



V.11013

V.11032

### **SPECIAL PADS**



ads for Superstructure V.2 V.20786, V.20787 Ø 120 mm Min. height 25 mm/max. height: 135 mm (1 Piece)







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## **SATELLITE 3T - SURFACED-MOUNTED**

Page 97



# SATELLITE 3.2T - SURFACED-MOUNTED

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# SMALL SCISSORS LIFT

ACCESSORIES & SUMMARY TABLE

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REFULS

BALANCI

NIROL TYR

2 POST LI

600

NGROUND LIF

ORS LIT

MOBILE COLUMN LIFTS

MOBILETIFT

AFTER-SALES SERVICE





## SMALL SCISSORS LIFT



## SATELLITE 3T -

## **Recessed-mounted version**

436 9523B



SATELLITE 3T - Small scissors lift, recessed-mounted

Ref. 436 9523B

### TECHNICAL CHARACTERISTICS

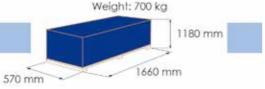
- Extension device for platforms.
- Excellent clearance around and under the vehicle.
- Platforms hydraulically synchronised by master-slave circuits.

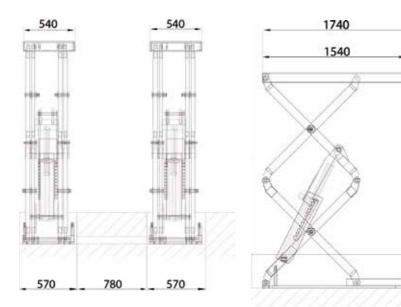
<ul> <li>Lowering speed self-regulated.</li> </ul>	
<ul> <li>Lifting capacity:</li> </ul>	3000 kg
<ul> <li>Min. height of the lift:</li> </ul>	0 mm
<ul><li>Max. lifting height:</li></ul>	1820 mm
<ul><li>Total width:</li></ul>	1880 mm
<ul> <li>Width of the platforms:</li> </ul>	540 mm
<ul> <li>Length of the platforms:</li> </ul>	1540 - 1740 mm
<ul> <li>Distance between platforms:</li> </ul>	800 mm
<ul> <li>Width of the pits:</li> </ul>	570 mm
<ul><li>Length of the pits:</li></ul>	1580 mm
<ul> <li>Space between pits:</li> </ul>	780 mm
<ul> <li>Loaded lift lifting/lowering time:</li> </ul>	55/35 secs



## **PACKING**

1





**NET WEIGHT OF PRODUCT** 700 kg **POWER SUPPLY** 400 V 3 ph + N / 50 Hz / 6 A **MOTOR POWER** 1.8 kW **AIR PRESSURE** 6-8 bars

HYDRAULIC PRESSURE

210 bars

SATELLITE 3T - Extra-flat, surfaced-mounted version 436 9301



SATELLITE 3T - Small scissors lift, surfaced-mounted

Ref. 436 9301

### TECHNICAL CHARACTERISTICS

- Snap-on ramps can be used as platform extensions.
- Excellent clearance around and under the vehicle.
- Platforms hydraulically synchronised by double master-slave crossed
- Lowering speed self-regulated.
- Lifting capacity:
- Min. height of the lift:
- Max. lifting height:
- Total width:
- Width of the platforms:
- Length of the platforms:
- Distance between platforms:
- Loaded lift lifting/lowering time:
- 3000 kg 105 mm 1900 mm
- 1990 mm 635 mm 1500 - 2080 mm

720 mm 50/60 secs



## PACKING

Weight: 850 kg 650 mm 1600 mm

> **NET WEIGHT OF PRODUCT** 850 kg

**POWER SUPPLY** 400 V 3 ph + N / 50 Hz / 7.5 A

**MOTOR POWER** 2.2 kW

**HYDRAULIC PRESSURE** 280 bars











## SMALL SCISSORS LIFT



## SATELLITE 3.2T - Extra-flat, surfaced-mounted version

436 9201



SATELLITE 3.2T - Small scissors lift, surfaced-mounted

Ref. 436 9201

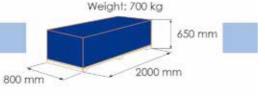
### TECHNICAL CHARACTERISTICS

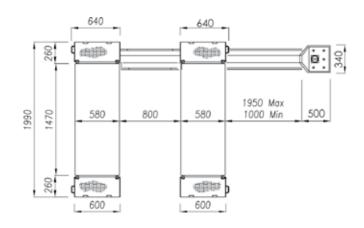
- Snap-on ramps can be used as platform extensions.
- Excellent clearance around and under the vehicle.
- Platforms hydraulically synchronised by double master-slave crossed circuits.
- Lowering speed self-regulated.

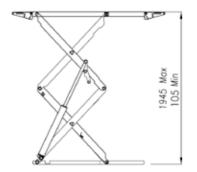
<ul> <li>Lifting capacity:</li> </ul>	3200 kg
<ul> <li>Min. height of the lift:</li> </ul>	105 mm
<ul> <li>Max. lifting height:</li> </ul>	1945 mm
• Total width:	2080 mm
<ul> <li>Width of the platforms:</li> </ul>	580 mm
<ul> <li>Length of the platforms:</li> </ul>	1470 - 1990 mm
<ul> <li>Distance between platforms:</li> </ul>	800 mm
<ul> <li>Loaded lift lifting/lowering time:</li> </ul>	35/40 secs



PACKING







**NET WEIGHT OF PRODUCT** 700 kg

**POWER SUPPLY** 230 V 3 ph / 50 Hz / 14.4 A 400 V 3 ph / 50 Hz / 7.5 A

**MOTOR POWER** 2.2 kW

**HYDRAULIC PRESSURE** 270 bars

# ACCESSORIES



436 8569 Brackets kit for recessed -mounting for 436 9201	
436 8570 Extension (+ 4 meters) kit for 436 9201 recessed-mounting version Please consult us	
436 8571 Extension (+ 4.5 meters) kit for 436 9201 recessed-mounting version Please consult us	
436 8431 Extension (+3 meters) for installing the control unit at 6 meters - for 436 9523B	
436 8301 Brackets kit for recessed	

# SUMMARY TABLE

	436 9523B	436 9301	436 9201
Lifting capacity	3000 kg	3000 kg	3200 kg
Lifting time	55 secs	50 secs	35 secs
Lowering time	35 secs	60 secs	45 secs
Min. height	0 mm	105 mm	105 mm
Max. effective height	1820 mm	1900 mm	1945 mm
Length of the platforms	1540 - 1740 mm	1500 - 2080 mm	1470 -1990 mm
Width of the platforms	540 mm	635 mm	580 mm
Distance between the platforms	800 mm	720 mm	800 mm
Length of the pits	1580 mm		
Width of the pits	570 mm		
Distance between the pits	780 mm		
Electric motor power supply	400 V 3ph + N 50Hz	400 V 3ph + N 50Hz	400 V 3ph 50Hz
Air pressure	6-8 bars		

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GALAXIE IV 5T -AUXILIARY LIFT TABLE, WHEEL ALIGNMENT

Page 105

GALAXIE IV 5T -FLAT TRACKS, AUXILIARY LIFT TABLE

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GALAXIE IV 4.5T - FLAT TRACKS

Page 102

GALAXIE IV 4.5T - AUXILIARY LIFT TABLE, WHEEL ALIGNMENT

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GALAXIE IV 5T - SPECIAL TECHNICAL INSPECTION

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BIG SCISSORS LIFT >>>>

ACCESSORIES & SUMMARY TABLE

Pages 108-109

A/ REFILE

BALANCE

TYRE CHAN

CONTROL

2 POST!

4 POST LI

NGROUND

SMALL SCISSORS LIF

OLUMN LIFTS

WOBLELIF

AFTER-SALES SERVICE

4500 ka

0 mm









## **GALAXIE IV 4.5T -**Flat tracks

GALAXIE IV 4.5T - Big scissors lift, flat tracks, surfaced-mounted version Ref. 412 9301D

GALAXIE IV 4.5T - Big scissors lift, flat tracks,

recessed-mounted version

Ref. 412 9310D

# 412 9301D 412 9310D



### TECHNICAL CHARACTERISTICS

- Excellent clearance around and under the vehicle.
- Tracks with hydraulic synchronization without connection shaft for practical access to accessories such as oil collectors and support jacks.

**Recessed-mounted version** 

- « Deadman's Handle » type of control.
- Lifting capacity:
- Min. height of tracks: if recessed-mounted version:
- Tracks width:
- Tracks length:
- Max. lifting height:
- Loaded lift lifting/lowering time:

4500 kg 330 mm 0 mm 700 mm 4800 mm 2100 mm



(850 avec

traverse de levage)

## Weight: 1655 ka PACKING 1280 mm ~ 2200 (2250 avec traverse de levage) **NET WEIGHT OF PRODUCT** 1600 kg **POWER SUPPLY** 230 V 3 ph / 50 Hz / 16.4 A **Surfaced-mounted version** 400 V 3 ph / 50 Hz / 9.5 A **MOTOR POWER** 4 kW **HYDRAULIC PRESSURE** 270 bars

## **GALAXIE IV 4.5T -**Flat tracks with auxiliary lift table

GALAXIE IV 4.5T - Big scissors lift - flat tracks with auxiliary lift table, recessed-mounted version Ref. 412 9311D

412 9311D



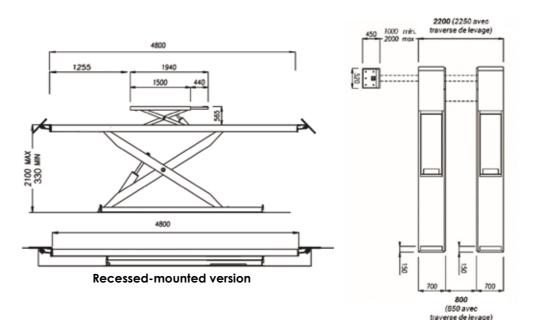
#### **TECHNICAL CHARACTERISTICS - MAIN LIFT**

- Excellent clearance around and under the vehicle.
- Tracks with hydraulic synchronization without connection shaft for practical access to accessories such as oil collectors and support jacks.
- « Deadman's Handle » type of control.
- Capacity of the main lift: • Min. height of tracks for recessed-mounted lift:
- Tracks width:
- 700 mm • Tracks length: 4800 mm
- Max. lifting height of the main lift: 2100 mm
- Loaded main lift lifting/lowering time: 30/30 secs

#### **TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE**

- Capacity of the auxiliary lift table: 4000 kg
- Max. lifting height of the auxiliary lift table: 565 mm
- Platforms length of the auxiliary lift table: 1500-1940 mm
- Loaded auxiliary lift lifting/lowering time: 9/9 secs

Weight: 1800 kg PACKING 1280 mm



**NET WEIGHT OF PRODUCT** 1750 kg

#### **POWER SUPPLY**

230 V 3 ph / 50 Hz / 16.4 A 400 V 3 ph / 50 Hz / 9.5 A

**MOTOR POWER** 4 kW

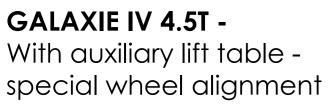
**HYDRAULIC PRESSURE** 270 bars











GALAXIE IV 4.5T - Big scissors lift with auxiliary lift table, surfaced-mounted version, special for wheel alignment Ref. 412 9302D

GALAXIE IV 4.5T - Big scissors lift with auxiliary lift table, recessed-mounted version, special wheel alignment Ref. 412 9312D

# 412 9302D 412 9312D



#### **TECHNICAL CHARACTERISTICS - MAIN LIFT**

- Ideal for wheel alignment.
- Excellent clearance around and under the vehicle.
- Tracks with hydraulic synchronization without connection shaft for practical access to accessories such as oil collectors and support jacks.
- « Deadman's Handle » type of control.

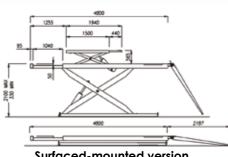
" Doddinan shanalo " typo of comio.	
Capacity of the main lift:	4500 kg
<ul> <li>Min. height of tracks:</li> </ul>	330 mm
if recessed-mounted version:	0 mm
• Tracks width:	700 mm
• Tracks length:	4800 mm
<ul> <li>Max. lifting height of the main lift:</li> </ul>	2100 mm
<ul> <li>Loaded main lift lifting/lowering time:</li> </ul>	30/30 secs

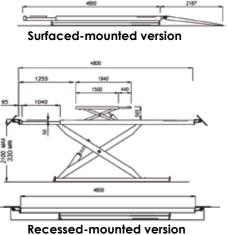


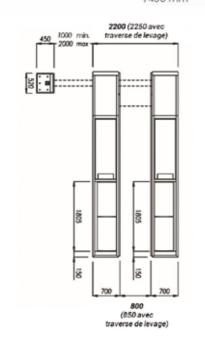
### TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE

• Capacity of the auxiliary lift table: 4000 kg • Max. lifting height of the auxiliary lift table: 565 mm 1500-1940 mm • Platforms length of the auxiliary lift table: Loaded auxiliary lift lifting/lowering time: 9/9 secs

Weight: 2500 kg 5250 mm







**NET WEIGHT OF PRODUCT** 2450 ka

**POWER SUPPLY** 230 V 3 ph / 50 Hz / 16.4 A 400 V 3 ph / 50 Hz / 9.5 A

**MOTOR POWER** 4 kW

**AIR PRESSURE** 8-10 bars

**HYDRAULIC PRESSURE** 270 bars

# **GALAXIE IV 5T -**

With auxiliary lift table special wheel alignment

GALAXIE IV 5T - Big scissors lift with auxiliary lift table, surfaced-mounted version, special wheel alignment Ref. 412 9305D

GALAXIE IV 5T - Big scissors lift with auxiliary lift table, recessed-mounted version, special wheel alignment Ref. 412 9315D

# 412 9305D 412 9315D



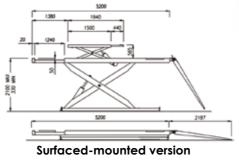
#### TECHNICAL CHARACTERISTICS - MAIN LIFT

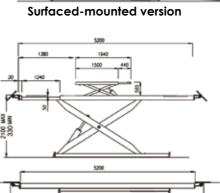
- Ideal for wheel alignment.
- Excellent clearance around and under the vehicle.
- Tracks with hydraulic synchronization without connection shaft for practical access to accessories such as oil collectors and support jacks.
- « Deadman's Handle » type of control.
- Capacity of the main lift: 5000 kg • Min. height of tracks: 330 mm if recessed-mounted version: 0 mm • Tracks width: 700 mm • Tracks length: 5200 mm • Max. lifting height of the main lift:
- 2100 mm • Loaded main lift lifting/lowering time: 30/30 secs

## TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE

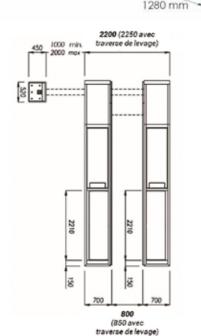
· Capacity of the auxiliary lift table: • Max. lifting height of the auxiliary lift table: 565 mm • Platforms length of the auxiliary lift table: 1500-1940 mm · Loaded auxiliary lift lifting/lowering time: 9/9 secs

Weight: 2600 kg





**Recessed-mounted version** 



**NET WEIGHT OF PRODUCT** 2550 kg

### **POWER SUPPLY**

230 V 3 ph / 50 Hz / 16.4 A 400 V 3 ph / 50 Hz / 9.5 A

#### **MOTOR POWER** 4 kW

**AIR PRESSURE** 8-10 bars

#### **HYDRAULIC PRESSURE**

280 bars





lift table







GALAXIE IV 5T - Big scissors lift with flat tracks and auxiliary lift table, surfaced-mounted version Ref. 412 9306D

GALAXIE IV 5T - Big scissors lift with flat tracks and auxiliary lift table, recessed-mounted version Ref. 412 9316D

# 412 9306D 412 9316D



#### **TECHNICAL CHARACTERISTICS - MAIN LIFT**

• Capacity of the main lift: • Min. height of tracks:

if recessed-mounted version:

• Tracks width:

• Tracks length:

• Max. lifting height of the main lift:

Loaded main lift lifting/lowering time:

5000 kg 330 mm 0 mm 700 mm 5200 mm 2200 mm 30/30 secs

### TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE

• Capacity of the auxiliary lift table:

• Max. lifting height of the auxiliary lift table:

• Platforms length of the auxiliary lift table:

Loaded auxiliary lift lifting/lowering time:

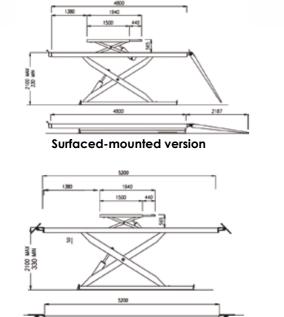
4000 kg 565 mm 1500-1940 mm 9/9 secs



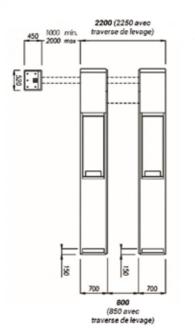
### PACKING



Weiaht: 2600 ka



**Recessed-mounted version** 



**NET WEIGHT OF PRODUCT** 2550 kg

**POWER SUPPLY** 230 V 3 ph / 50 Hz / 16.4 A

400 V 3 ph / 50 Hz / 9.5 A

**MOTOR POWER** 4 kW

**HYDRAULIC PRESSURE** 280 bars

## **GALAXIE IV 5T -**

GALAXIE IV 5T - Big scissors lift, Hi-Speed with auxiliary lift table, surfaced-mounted version, with play detectors Ref. 412 9306D-PJX

GALAXIE IV 5T - Big scissors lift, Hi-Speed with auxiliary lift table, recessed-mounted version, with play detectors Ref. 412 9316D-PJX

# 412 9306D-PJX Technical Inspection 412 9316D-PJX



### **TECHNICAL CHARACTERISTICS - MAIN LIFT**

Capacity of the main lift:

· Min. height of tracks:

if recessed-mounted version:

• Tracks width:

• Tracks length:

• Max. lifting height of the main lift:

• Loaded main lift lifting/lowering time:

5000 kg 330 mm  $0 \, \text{mm}$ 700 mm 5200 mm 2200 mm 22/30 secs



## TECHNICAL CHARACTERISTICS - AUXILIARY LIFT TABLE

• Capacity of the auxiliary lift table:

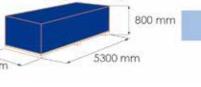
• Max. lifting height of the auxiliary lift table:

• Platforms length of the auxiliary lift table: Loaded auxiliary lift lifting/lowering time:

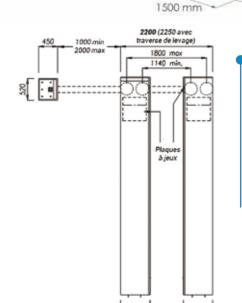
4000 kg 565 mm 1500-1940 mm 9/9 secs



## PACKING



Weight: 2600 kg

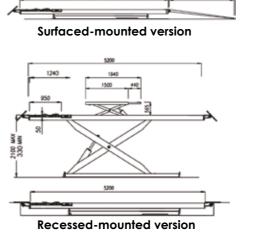


**NET WEIGHT OF PRODUCT** 2550 kg

**POWER SUPPLY** 230 V 3 ph / 50 Hz / 16.4 A

400 V 3 ph / 50 Hz / 9.5 A **MOTOR POWER** 4 kW **HYDRAULIC PRESSURE** 280 bars (850 avec

















# ACCESSORIES





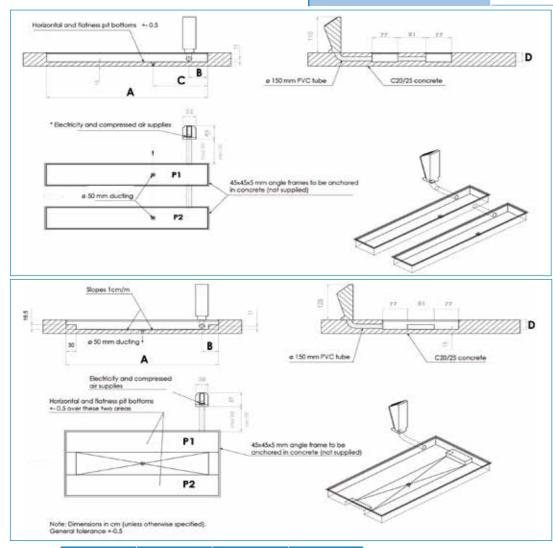


#### W.S3023



ACCESSORIES FOR 412 9302D - 412 9312D 412 9305D - 412 9315D





	Α	В	С	D
412 9310D	527 cm	70 cm	170 cm	33 cm
412 9311D	527cm	70 cm	170 cm	33 cm
412 9312D	527 cm	70 cm	170 cm	33 cm
412 9315D	567 cm	100 cm	200 cm	33 cm
412 9316D	567 cm	100 cm	200 cm	33 cm

To install the lifts, centre the tracks

Distance between the rails: 85 cm minimum for jacking beam

# SUMMARY TABLE

	412 9301D	412 9310D	412 9311D	412 9302D	412 9312D	412 9305D	412 9315D	412 9306D	412 9316D	412 9306D -PJX	412 9316D -PJX
Capacity of the main lift	4500 kg	5000 kg	5000 kg	5000 kg	5000 kg	5000 kg	5000 kg				
Lift lifting time	30 secs	30 secs	30 secs	30 secs	30 secs	22 secs	22 secs				
Lift lowering time	30 secs	30 secs	30 secs	30 secs	30 secs	30 secs	30 secs				
Min. effective height	330 mm	0 mm	0 mm	330 mm	0 mm	330 mm	0 mm	330 mm	0 mm	330 mm	0 mm
Max. effective height	2100 mm	2100 mm	2665 mm	2665 mm	2665 mm	2665 mm	2665 mm	2665 mm	2665 mm	2665 mm	2665 mm
Tracks dimensions	4800 x 700 mm	5200 x 700 mm	5200 x 700 mm	5200 x 700 mm	5200 x 700 mm	5200 x 700 mm	5200 x 700 mm				
Length for lifts on the ground with access ramps	6987 mm	4800 mm	4800 mm	6987 mm	4800 mm	7387 mm	5200 mm	7387 mm	5200 mm	7387 mm	5200 mm
Lift total width	2200 mm	2200 mm	2200 mm	2200 mm	2200 mm	2200 mm	2200 mm				
50 Hz three-phase electric motor power supply	230V 16.4A 400V 9.5A		230V 16.4A 400V 9.5A								
Three-phase electric motor power	4 kW	4 kW	4 kW	4 kW	4 kW	4 kW	4 kW				
Surfaced-mounted	<b>V</b>			<b>V</b>		<b>V</b>		<b>V</b>		<b>V</b>	
		<b>V</b>	<b>V</b>		<b>V</b>		<b>~</b>		✓		<b>~</b>
	<b>~</b>	<b>✓</b>	<b>V</b>					<b>V</b>	<b>V</b>		
Special wheel alignment				<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>				
Housings for turntables and side-slip plates				<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>				
				<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>				
										<b>V</b>	<b>V</b>
			<b>~</b>	<b>V</b>	<b>\</b>	<b>~</b>	$\checkmark$	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
			4000 kg	4000 kg	4000 kg	4000 kg	4000 kg	4000 kg	4000 kg	4000 kg	4000 kg
Auxiliary lift lifting time			9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs
Auxiliary lift lowering time			9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs	9 secs
Max. lifting capacity of the auxiliary lift table			565 mm	565 mm	565 mm	565 mm	565 mm	565 mm	565 mm	565 mm	565 mm
			1500-1940	1500-1940	1500-1940	1500-1940	1500-1940	1500-1940	1500-1940	1500-1940	1500-1940
Pneumatic supply				8-10 bars	8-10 bars	8-10 bars	8-10 bars				

## **DIAPASON V - 5.5T**

Page 112

## **DIAPASON V - 7.5T**

Page 113

# **DIAPASON V - 8.5T**

Page 114



## ACCESSORIES & SUMMARY TABLE

Page 115

MOBILE COLUMN LIFTS >>>









DIAPASON V 5.5T - 4 electro-hydraulic mobile column lifts with adjustable forks

Ref. 454 9605-4

#### TECHNICAL CHARACTERISTICS

- Forks adjustable from 500 to 1120 mm.
- Does not require civil construction.
- Optimum accessibility under the vehicle.
- Control unit with stop button on each column.
- Column synchronization and managment of the number
- of columns from the master column.
- Lifting heights permanently displayed and monitored on the screen.
- Double safety system.
- Lifting time: 120 secs
- Max. effective height: 1700 mm.

# 454 9605

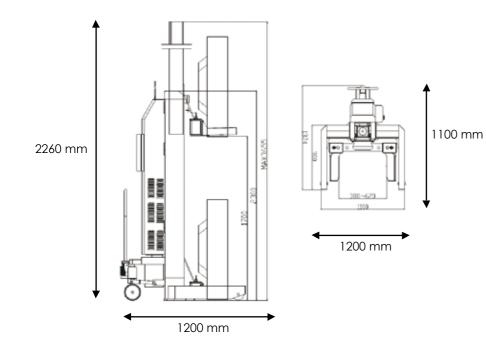




Weight: 480 kg per column

## PACKING





**NET WEIGHT OF PRODUCT** 480 kg per column **POWER SUPPLY** 400 V 3 ph / 50 Hz **MOTOR POWER** 2.2 kW per column

## DIAPASON V 7.5T -Mobile column lifts, wired or WiFi

DIAPASON V 7.5T - 2 electro-hydraulic mobile column lift with adjustable forks Ref. 454 9607-2

DIAPASON V 7.5T - 4 electro-hydraulic mobile column lifts with adjustable forks, wired or WiFi version Ref. 454 9607-4 or Ref. 454 9607-4WLAN

DIAPASON V 7.5T - 6 electro-hydraulic mobile column lifts with adjustable forks, wired or WiFi version Ref. 454 9607-6 or Ref. 454 9607-6WLAN

#### TECHNICAL CHARACTERISTICS

- Forks adjustable from 500 to 1120 mm.
- Does not require civil construction.
- Optimum accessibility under the vehicle.
- Control unit with stop button on each column.
- Column synchronization and managment of the number of columns from the master column.
- Lifting heights permanently displayed and monitored on the screen.
- Double safety system.
- Lifting time: 120 secs
- Max. effective height: 1700 mm.

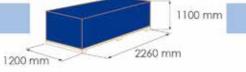
# 454 9607

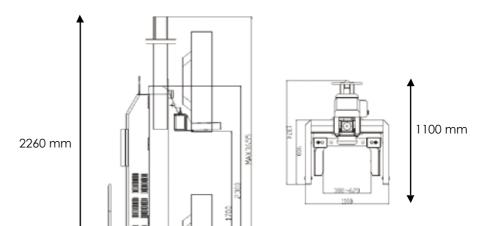


Weight: 580 kg per column

## PACKING

1200 mm





1200 mm

**NET WEIGHT OF PRODUCT** 580 kg per column **POWER SUPPLY** 400 V 3 ph / 50 Hz **MOTOR POWER** 2.2 kW per column













# DIAPASON V 8.5T - Mobile column lifts, from heavy duty

454 9608



DIAPASON V 8.5T - 2 electro-hydraulic mobile column lift with adjustable forks

vehicle to articulated bus

Ref. 454 9608-2

DIAPASON V 8.5T - 4 electro-hydraulic mobile column lifts with adjustable forks

Ref. 454 9608-4

DIAPASON V 8.5T - 6 electro-hydraulic mobile column lifts with adjustable forks

Ref. 454 9608-6

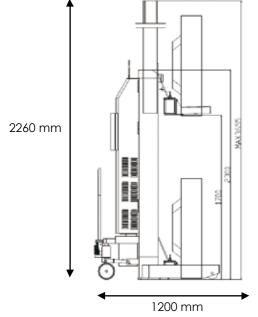
### TECHNICAL CHARACTERISTICS

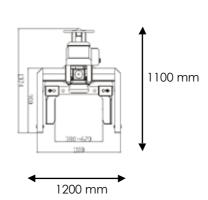
- Forks adjustable from 500 to 1120 mm.
- Does not require civil construction.
- Optimum accessibility under the vehicle.
- Control unit with stop button on each column.
- Column synchronization and management of the number of columns from the master column.
- Lifting heights permanently displayed and monitored on the screen.
- Double safety system.
- Lifting time: 120 secs
- Max. effective height: 1700 mm.



Weight: 680 kg per column

### PACKING 1100 mm 1200 mm





**NET WEIGHT OF PRODUCT** 680 kg per column **POWER SUPPLY** 400 V 3 ph / 50Hz **MOTOR POWER** 2.2 kW per column

# **ACCESSORIES**

## 454 8301

Set of 4 x 7.5T type A jack stands (1335-1920 mm)

#### 454 8304

#### 454 8306



# SUMMARY TABLE

454 9607- 454 9607- 454 9607- 454 9607-

	454 9605-4	454 9607-2	454 9607-4	454 9607-6	4WLAN	6WLAN	454 9608-2	454 9608-4	454 9608-6
Lifting capacity	5.5T	7.5T	7.5T	7.5T	7.5T	7.5T	8.5T	8.5T	8.5T
Number of columns	4	2	4	6	4	6	2	4	6
Wired communications	<b>V</b>	<b>V</b>	<b>✓</b>	<b>√</b>			<b>V</b>	<b>V</b>	✓
WiFi communications					<b>~</b>	<b>V</b>			
Lifting time	120 secs	150 secs	150 secs	150 secs					
Lowering time	120 secs	120 secs	120 sec	120 secs	120 secs	120 secs	150 secs	150 secs	150 secs
Max. lifting height	1700 mm								
Max. height of the column	3655 mm								
Width of the column	1100 mm								
Three-phase electric motor power supply	400V 3ph 50Hz								
Three-phase electric motor power	2.2 kW per column								
Diameter of the wheels	500 à 1120 mm								

## AIR HYDRAULIC TROLLEY JACKS

Pages 118-119

# PNEUMATIC JACKS & AXLE STANDS

Page 121

## **BOTTLE JACKS**

Page 120

## AIR OLEOPNEUMATIC TROLLEY JACKS

Pages 122-123

## HYDRAULIC CRANES

Page 124

HYDRAULIC LIFTING TABLES & TRANSMISSION JACKS

Page 125



# HYDRAULIC TRANSMISSION JACKS & WHEEL DOLLIES

Page 126

SUSPENDED AND WHEELED PIT JACKS

Page 127

## HYDRAULIC PRESSES

Pages 128-129

MOBILE LIFT >>>>>











# AIR HYDRAULIC TROLLEY JACKS

1.5T « high lift » jack Ref. 100 9501

2T jack Ref. 100 9502

2T « long chassis » jack Ref. 100 9552

3T jack Ref. 100 9503

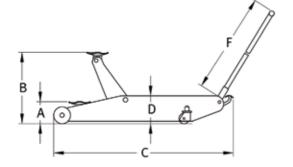
6T, 10T, 12T and 20T jacks

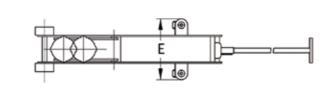
Ref. 100 9506, 100 9510, 100 9512, 100 9520

## TECHNICAL CHARACTERISTICS

- Ergonomic handle
- Quick approach pedal
- Large diameter castor wheels
- Over-loading valve
- Safety pilot valve ensuring a secure descent, even with a maximum load
- Protective cover for hydraulic jack
- Finish: powder paint coating
- Nylon wheels on 1.5T, 2T, 3T • Cast-iron wheels from 6T









Elastomer pad for 1.5T to 3T jacks 100 8071



Height extension (+40 mm) for 2T «long chassis » and 3T jacks 100 8072



Pneumatic wheels kit for 6T to 20T jacks 100 8073



3T jack - The small height and large reach of the chassis facilitates access to the distant lifting points under most vehicles 100 9503



6T, 10T, 12T, and 20T jacks -The large reach of the chassis facilitates access to the distant lifting points under most vehicles. 100 9506, 100 9510, 100 9512, 100 9520

	100 9501	100 9502	100 9552	100 9503	100 9506	100 9510	100 9512	100 9520
Technical information	« high lift »		« long chassis »					
Lifting capacity (tons)	1,5	2	2	3	6	10	12	20
	98	80	90	115	155	165	170	200
B (mm)	800	500	500	500	570	580	670	600
	1050	730	950	1015	1395	1410	1700	1790
	160	160	126	170	210	225	280	325
	380	380	380	380	470	435	470	475
F (mm)	925	925	925	925	1045	1045	1045	1480
Weight (kg)	52	37	41	42	90	106	140	164













## Hydraulic bottle jacks



### TECHNICAL CHARACTERISTICS

- Confirming with the Machinery Directive 98/37/EC
- Extension screw
- Over-loading valve



	169 9303	169 9305	169 9310	169 9315	169 9320	169 9325	169 9330	169 9311
Technical information								Telescopic
Lifting capacity (tons)	3	5	10	15	20	25	30	10
A (mm)	170	202	228	222	211	246	235	233
B (mm)	100	111	153	127	137	158	147	258
C (mm)	60	75	90	69	61	62	56	47
D (mm)	330	388	471	418	409	466	438	538
E (mm)	105x108	115x118	136x139	135x138	140x153	155x168	172x173	170x173
F (mm)	25	32	40	41	46	50	57	40
Weight (kg)	3.6	4.7	8.0	8.6	9.8	12.3	15.9	14.4

## Oleopneumatic bottle jacks

Oleopneumatic bottle jack Ref. 163 9040



### TECHNICAL CHARACTERISTICS

- Over-pressure valve
- « Deadman's handle » safety system
- LCS controlled descent system
- Hydraulic stroke limiter
- Piston surface treated



### LIFTING CAPACITY

30 tons

MIN. HEIGHT 255 mm

MAX. HEIGHT 470 mm

**WEIGHT** 25.5 kg

**COMPRESSED AIR SUPPLY** 

7-10 bars

**COMPRESSED AIR CONSUMPTION** 270 liters/minute

# PNEUMATIC JACKS

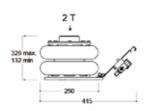
Portable pneumatic jacks

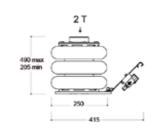
Portable pneumatic jacks Ref. 409 2100, Ref. 409 2200



### TECHNICAL CHARACTERISTICS

- Silent and light
- High-resistance membrane
- Internal telescopic slide
- Stop at end of stroke
- Overload valve
- 50 and 100 mm extensions









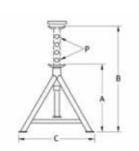


MOBILE LIFT

	407 2100	407 2200
Technical information		
Lifting capacity (tons)	2	2
Min. height (mm)	132	205
Max. height (mm)	326	490
Weight (kg)	14	17
Supply pressure (bars)	8-10	7-10

# **AXLE STANDS**

2T to 12T axle stands







	182 9102	182 9103	182 9105	182 9108	182 9158	182 9112	182 9162
Technical information					HIGH		HIGH
Lifting capacity (tons)	2	3	5	8	8	12	12
Min. height A (mm)	430	315	365	370	550	320	475
Max. height B (mm)	740	540	605	600	970	500	725
Wheelbase C (mm)	445	330	420	430	600	230	395
Number of positions P	6	6	6	6	7	SPINDLE	SPINDLE
Weight (kg)	5.8	3.9	6.5	9.7	13.8	11.6	15











# MOBILE LIFT

# AIR OLEOPNEUMATIC TROLLEY JACKS

## A complete range that meets users' needs

15T, 30T, 60T jack Ref. 163 9070

20T, 40T jack Ref. 163 9071

13T, 23T, 43T, 70T jack Ref. 163 9072

18T, 30T, 60T jack Ref. 163 9073

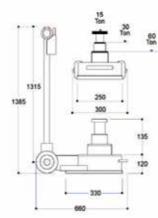
20T, 40T « high lift » jack Ref. 163 9074

30T jack Ref. 163 9075

25T, 50T, 80T jack Ref. 163 9076



15T, 30T, 60T jack - 120/255 mm lifting height, 3 cylinder stages



#### TECHNICAL CHARACTERISTICS

- Confirming with the Machinery Directive 98/37/EC
- Approved in accordance with European regulations EN 1494
- Controlled constant descent speed
- Perfect load-bearing even if an air or oil hose is accidentally breakaged
- Compressed air supply: 8/12 bars
- Supplied with two extensions (70 and 120 mm)







20T, 40T jack - 217/467 mm lifting height, 2 cylinder stages 163 9074



	163 9070	163 9071	163 9072	163 9073	163 9074	163 9075	163 9076
Technical information					« high lift »		
Number of pistons	3	2	4	3	2	1	3
Lifting capacity (tons)	60/30/15	40/20	70/43/23/13	60/30/18	40/20	30	80/50/25
Min. height (mm)	120	150	150	180	217	350	300
Max. height (mm)	255	300	400	418	467	580	825
Height (mm)	1385	1400	1430	1430	1400	1415	1430
Width (mm)	300	300	350	350	300	300	350
Length (mm)	660	525	1000	1000	525	725	1000
Weight (kg)	50	39	78	75	46	57	146











# MOBILE LIFT

# HYDRAULIC CRANES

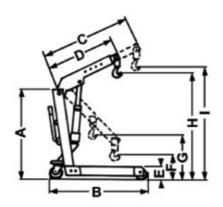
Hydraulic floor cranes



#### TECHNICAL CHARACTERISTICS

- Chrome-plated cylinder rod
- « Deadman's handle » safety system
- Low-profile chassis
- Finish: powder paint coating







Δ	~	F	22	0	RI	F٩

182 1011



	182 92/0	182 92/5	182 9280
Technical information			
Capacity (kg)	500/400/350/250	1000/800/600/300	2000/1800/1700/1600
A (mm)	1490	1480	1700
B (mm)	1530	1600	2000
C (mm)	1320	1300	1540
D (mm)	1010	1000	1240
E (mm)	80	80	200
F (mm)	100	110	0
G (mm)	400	400	300
H (mm)	1990	2160	2520
I (mm)	2140	2340	2770
L (mm)	730	880	1055
M (mm)	860	1000	1220
N (mm)	430	540	620
Weight (kg)	87	117	175

# HYDRAULIC LIFTING TABLES

## Hydraulic lifting tables

Hydraulic lifting tables, 650 kg lifting capacity Réf. 461 9310

Hydraulic lifting tables, 1500 kg lifting capacity Réf. 461 9315

### TECHNICAL CHARACTERISTICS

- « Deadman's handle » safety system
- Safety valve
- Regulated descent speed
- Hydraulic stroke limiter
- Quick load approach pedal
- Safe space between the scissors, platform and bas for increased safety of use





	461 9310	461 9315
Technical information		
Lifting capacity (kg)	650	1500
Min. height A (mm)	320	210
Max. height B (mm)	755	880
Length C (mm)	830	1020
Width (mm)	500	500
Weight (kg)	74,5	135

# TRANSMISSION JACKS FOR HEAVY DUTY VEHICLE

### **TECHNICAL CHARACTERISTICS**

 Effective and useful device for fitting and removing gearboxes, axle assemblies, transfer boxes, engines, etc.

• Perfectly suited to heavy duty vehicles. The jack head is equipped with safety chains.

• Supplied with a self-contained pump, can be used remotely.





-0	
	00

	163 9055
Technical information	
Lifting capacity (kg)	1000
Min. platform height (mm)	160
Max. platform height (mm)	730
Weight (kg)	86













### TECHNICAL CHARACTERISTICS

- Chrome-plated piston
- « Deadman's handle » safety system
- Foot pump
- Safety valve

#### **ACCESSORIES**

461 8012

« Orbital » platform - Capacity 100 kg





	461 9121	461 9122	461 9123	461 9124	461 9125
Technical information					Telescopic
Lifting capacity (kg)	300	500	1000	1500	500
Min. height (mm)	1100	1130	1150	1150	860
Max. height (mm)	1910	1930	1930	1930	1860
Base (mm)	400x480	410x540	530x530	550x610	550x610
Piston end diameter (mm)	30	30	35	45	30
Weight (kg)	22	33	40	60	48

# HEAVY DUTY VEHICLES WHEEL DOLLY

Heavy duty vehicle wheel dolly Ref. 163 9060



#### TECHNICAL CHARACTERISTICS

- 700 kg capacity
- For removing and refitting single or dual wheels
- Remote foot pump
- Hydraulic safeties:
  - Controlled descent speed
  - Overload valve
  - « Deadman's handle » safety system
  - Hydraulic stroke limiter



# SUSPENDED PIT JACK

MOBILE LIFT

10T suspended pit jack Ref. 461 9220

10T suspended jack for wide pit Ref. 461 9221

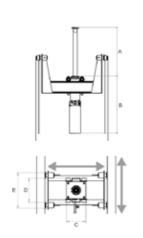
15T suspended pit jack Ref. 461 9225

10T low-slung suspended pit jack Ref. 461 9230

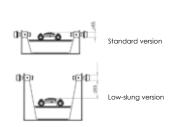
10T low-slung suspended jack for wide pit

Ref. 461 9231

15T low-slung suspended pit jack Ref. **461 9235** 



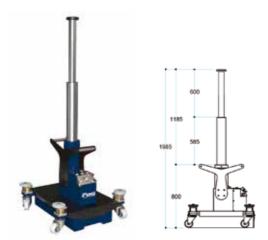




Réf.	Capacity	Pit width	Jaking beam height	Pressure	Α	В	С	D	Е
461 9220	10T	850 - 1015	65	8-12 bars	600	775	310	350	550
461 9225	15T	850 - 1015	65	8-12 bars	600	775	310	350	550
461 9230	10T	850 - 1015	-265	8-12 bars	800	975	310	350	550
461 9235	15T	850 - 1015	-265	8-12 bars	800	975	310	350	550
461 9221	10T	1015 - 1180	65	8-12 bars	600	775	310	350	550
461 9231	10T	1015 - 1180	-265	8-12 bars	800	975	310	350	550

# WHEELED PIT JACK

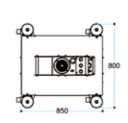
Telescopic jack (capacity: 15T/30T) Ref. 461 9517



NET WEIGHT OF PRODUCT 250 kg

LIFTING CAPACITY 15/30T

PRESSURE 8-12 bars





#### 161 8030

point jacking beam capacity: 15T) for uspended and theeled pit jacks



#### 461 8031

Swivelling plate (capacity: 11)











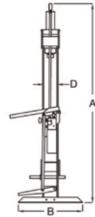


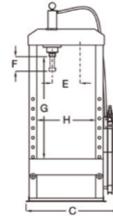


# HYDRAULIC PRESSES

## TECHNICAL CHARACTERISTICS

- Mobile jacks
- Supplied with two vees
- Finish: powder paint coating
- Ideal for automotive workshops and for industry









B	-C——						
	254 9510	254 9610	254 9515	254 9615	254 9715	254 9815	
	1	OT		1:	5T		
EQUIPMENT							
	✓		✓				
		<b>V</b>		<b>~</b>	<b>~</b>	✓	
2-speed manual hydraulic pump	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>			
2-speed manual hydraulic pump + pedal					<b>~</b>		
Hydro-pneumatic foot pump						✓	
Electro-hydraulic pump							
Work table winch							
TECHNICAL INFORMATION							
A (mm)	1030	1830	1030	1850	1850	1850	
	500	600	500	600	600	600	
	830	830	830	830	830	830	
	125	125	125	125	125	125	
	310	310	310	310	310	310	
<sup>=</sup> (mm)	150	150	150	150	150	150	
	330	1000	330	1000	1000	1000	
	530	530	550	550	550	550	
Weight (kg)	100	110	110	120	120	120	



### ACCESSORIES

Extraction kit, consisting of D10/D18/D24 mm chuck + adapter + plate

254 7110

for 10/15T pres **254 7125** 

for 25T press

254 7130

**254 7150** 

for 50T press



100T press protection device

254 9950

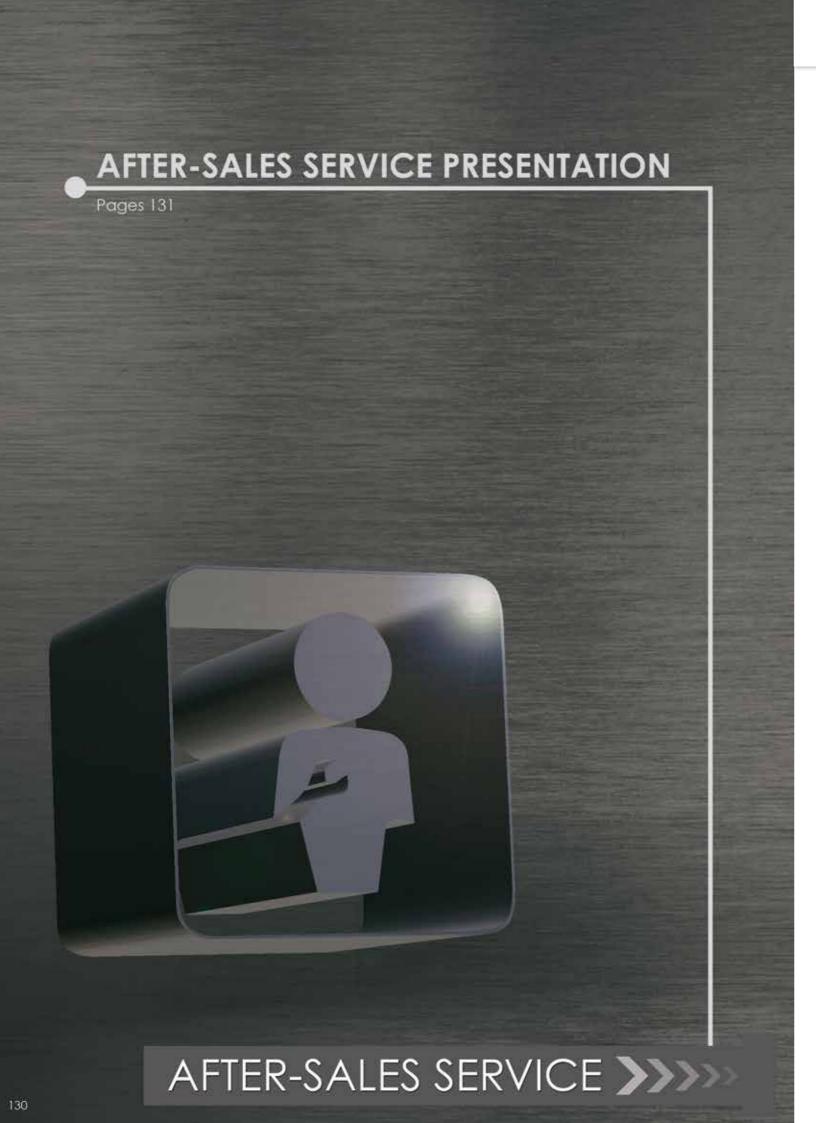
60T press protection

254 9910

10/15/20/25/30T pres



	254 9625	254 9725	254 9825	254 9630	254 9730	254 9750	254 9101	254 9100
	<b>25</b> T		30T		50T	100T		
EQUIPMENT								
	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>V</b>	<b>V</b>	<b>V</b>
2-speed manual hydraulic pump	<b>✓</b>						<b>~</b>	
2-speed manual hydraulic pump + pedal		<b>✓</b>		<b>~</b>	<b>~</b>	<b>~</b>		
			<b>√</b>					
								✓
Work table winch					✓	✓	<b>V</b>	✓
TECHNICAL INFORMATION								
	1920	1920	1920	2110	2110	2110	2400	2400
	600	600	600	650	650	750	850	850
	980	980	980	980	1140	1350	1660	1660
	155	155	155	160	160	230	270	270
	320	320	320	340	340	480	400	400
	150	150	150	150	150	165	300	300
	1100	1100	1100	1150	1150	1000	1280	1280
H (mm)	600	600	600	700	700	790	1000	1000
Weight (kg)	180	180	180	230	230	350	1075	1075













# **AFTER-SALES SERVICE** PRESENTATION





#### At your service wherever you are

Our export technician FOG is specially trained to support you on all your machines.

#### Local expertise in our factory

Our team of specialists are testing materials on benches in our factory if necessary.



### **CALL CENTER**

#### A team dedicated to you

Our 4 customer service people answer your assistance's request. With the export team (export manager & export technician), they schedule and organize your installation.

#### A technical request

Our hotline expert answer and advice you on the use of our products.

Do you need a quick repair? Over 50% of your request are solved with technical explanations or remote

As a safety guarantee for your business, FOG hotline ensures you a swift and efficient help.



#### **INSTALLATION**

#### Ensures the safety of your workshop

If necessary, the installation of our materials can be done by our FOG technician or different partners.



#### **COMMISSIONNING**

#### The necessary complement of installation

Once you are equipped with one of our material, we are committed to share our knowledge with you. During the commissioning of your new machine, our technician assist you in order to show you the use of equipment.

He advice you on the maintenance, explains safety awareness, and reminds you all legal provisions you are

## **GENERAL SALES TERMS AND CONDITIONS**

#### 1 - Purpose

These general terms and conditions of sale apply ipso jure to all orders for equipment placed by the Customer with the NOUVELLE FOG AUTOMOTIVE SAS (hereinafter FOG). The term « equipment » is understood to refer to all items sold by FOG, including spare parts and accessories. FOG and its customers are referred to below as « the Parties »

#### 2 - Sales offers, quotations and catalogue

**2.1** The sales offers and quotations are valid for a period of one month from the date when they were issued, and are not contractually binding.

**2.2** The descriptions of any type (weight, dimensions and illustrations of equipment, etc.) included in the catalogues issued by FOG are not contractually binding.

#### 3 - Orders

3.1 The purchase of equipment from FOG will be the subject of a purchase order on the Customer's letterheaded stationery, dated and signed by the Customer. The purchase order will include all of the equipment, parts and accessories ordered (product reference and quantity), the unit price excluding tax and including tax, the delivery address and any particular manufacturing specifications specific to the Customer.

**3.2** Until the Customer's order has been expressly accepted by FOG, FOG has not made a commitment to sell to the Customer.

**3.3** The order may be placed and addressed to FOG by any means (post, e-mail, fax, telephone with written confirmation).

**3.4** The order shall only be taken into account by FOG on the date when FOG receives the first payment on account. Any delay in settling this payment on account may entail, at the Customer's risk, a delay in delivery that FOG cannot be held liable for.

3.5 Any modification or cancellation, partial or total, of the Customer's order, except if the parties reach a better agreement and if the delivery deadlines are extended, may only occur within a maximum period of 8 (eight) days from FOG's receipt of the initial purchase order. FOG reserves the right to invoice the Customer for the equipment supplied, the labour costs and any costs incurred by FOG in preparing and/or executing the cancelled or modified order.

#### 4 - Warranty - Complaint

**4.1** The warranty form must be returned to FOG with a period of one (1) month following delivery.

4.2 All new equipment is guaranteed for twelve (12) months with effect from its delivery. All used equipment is guaranteed for three (3) months with effect from its delivery.

**4.3** All equipment delivered must be inspected by the Customer to make sure that it conforms to the order and to the specifications of FOG or the manufacturer and, if applicable, to the particular manufacturing specifications defined by the Customer

**4.4** In the event of a claim with regard to an obvious defect or non-compliance of the equipment delivered, the customer must also notify FOG of this at the latest within fifteen (15) days following delivery, without prejudice to recourse against the transporters under the terms and conditions of article 5 below. The customer will be responsible for providing any proof concerning the reality of the defects or anomalies observed.

It must give FOG every facility for investigating these defects and rectifying them. It will refrain from intervening itself or having a third party intervene thereunto, under penalty of losing the benefit of the warranty. Except if the Parties reach a better agreement, any challenge that is not made as stipulated above shall be inoperative and the customer shall lose all right to make a claim against FOG. Under no circumstances can the partial non-conformity of the delivery be grounds for a total or partial cancellation of the order or for the return of the equipment.»

**4.5** Should the delivered equipment turn out to be flawed for reasons not attributable to the Customer, or in cases where it is found that these defects could not reasonably have been observed during the above-mentioned inspections, the Customer must immediately notify FOG of its claims in this regard. FOG's liability because of an obvious or hidden defect of a piece of equipment shall be limited to the exchange or repair of parts or equipment recognised as non-conforming or flowed by FOG's technical services department during the warranty period.

or flawed by FÖG's technical services department during the warranty period.

4.6 Exceptionally, and should the circumstances justify this, FOG may take back a piece of equipment, after examination of the dossier and prior written agreement on its part. In the case of a new piece of equipment, the take-back value will be equal to the price invoiced less a fixed-price amount of 25% (corresponding to administration and take-back costs, and to the costs of reconditioning the product, incurred by FOG). Under no circumstances will consumables be taken back. Said exceptional take-back will lead to a credit note being generated for the benefit of the Customer. The costs of the parts and shipping costs will be borne by FOG. The costs of labour and of travel, excluding French overseas departments and territories, will be borne by the FOG distributor or reseller in the case of an indirect purchase, or by FOG in the case of a direct purchase.

**4.7** No warranty shall be due by FOG if (i) the equipment sold is the subject of modifications, whatever these may be, by the Customer without prior written agreement from FOG, or of repair or maintenance operations by persons not approved in advance by FOG; (ii) the equipment sold is used in an abnormal way or in abnormal conditions with reference to the catalogue and/or to the instructions manual supplied by FOG or by the manufacturer; (iii) the non-conformity arises from the equipment's normal wear or from negligence, lack of maintenance or incorrect storage by the Customer; (iv) the non-conformity is the result of faulty installation not carried out by FOG; or (v) the non-conformity is the consequence of a force majeure event or any other event outside FOG's control. Under no circumstances can FOG be held liable for direct or indirect, incidental or consequential, damages caused, such as loss of margin, loss of use, cost of substitute products, nor for claims received by the customer from its own customers or sub-purchasers. Any bailiff's report or any ex parte proceedings evidencing a defect of the equipment shall not be binding on FOG.

#### 5 - Deliveries - transfer of risks - transport

**5.1** The equipment travels at the receiving Customer's own risk and responsibility. On arrival, should there be any complaint, it is up to said Customer to make all proper reservations or recourse with regard to the transporter. Under no circumstances can FOG be held liable as a result of the transport or of its consequences.

**5.2** The risks linked to the transport of the equipment through to the delivery address are the responsibility of the Customer who, in particular in the event of late delivery, must take action against the transporter itself. Any complaint made by the Customer must be notified to FOG within a period of fifteen (15) days following receipt of the piece(s) of equipment in question, so that FOG may, if necessary and insofar as possible, provide assistance to the customer. After this period, no claim shall be accepted or taken into account by FOG.

**5.3** Acceptance of the equipment with no reservation made to the transporter upon delivery precludes the Customer from making any subsequent complaint to FOG.

5.4 Unless expressly stipulated, time-scales are given by FOG for information pur-

poses. Delays cannot, under any circumstances, give rise to the payment of damage of any sort whatsoever, in particular for loss of use, or to the retention of all or part of the price, or to the cancellation of the current order.

**5.5** In general, the delivery of equipment can only occur if the customer is up to date with its obligations, in particular of payment to FOG.

#### 6 – Prices – terms and conditions of payment

**6.1** Sales are transacted at the price in force on the date of the order.

**6.2** Prices are indicated net of tax. The Customer is responsible for any taxes, duties, delivery charges, fees or other charges to be paid in accordance with French regulations or those of an importing country or a transit country.

**6.3** The Customer is also responsible for the cost of transport.

6.4 The prices net of tax shown on FOG's price list do not include the cost of installing and commissioning the equipment, which will be the subject of separate quotations at the Customer's request. Where the installation requires work beforehand, in particular construction work, this is carried out under the Customer's responsibility and in compliance with the plans provided by FOG. The carrying out of tests, mandatory in particular for lifting equipment, is also under the Customer's responsibility. The Customer is also responsible for the costs of the work, in particular construction work, and the costs of the above-mentioned tests. The tests may be carried out by one of the service providers approved by FOG. On the other hand, if the Customer decides to make use of a person other than FOG, the latter declines all responsibility for this.

6.5 Any preferential price, take-back, refund, discount, or any other benefit that FOG may grant to the Customer shall only be granted on an exceptional and ad hoc basis, and may not constitute in any way a benefit conferred permanently for the Customer.

6.6 The payment of an order must be made by cheque or bank transfer according to the methods agreed upon and specified on the purchase order, the FOG acknowledgement of receipt and/or the invoice. A first payment on account of 50% of the total price excluding tax will be payable by the Customer on the day when the Purchase Order is sent to FOG. The balance will be payable, unless otherwise stipulated, at the latest upon acceptance of the delivery or, if expressly agreed to by FOG, by bill of exchange. Where payment is by bill of exchange, this must be accepted beforehand by FOG, signed and domiciled with maturity of 30 days end of month.

**6.7** In the event of non-payment by the due date, any sum due shall automatically lead to late payment interest charges, the applicable rate for which shall be the rate for European Central Bank advances in force when the invoice was issued, plus ten (10) points. The failure to pay the amount owing by the due date by the Customer shall in addition automatically lead to (i) all sums owing to FOG arising from the Sale Agreement becoming due and payable; and (ii) under a penalty clause, a 15% surcharge on the amount not paid on the due date; and (iii) a minimum fixed-rate indemnity of 40 Euros for recovery costs, it being understood that if the recovery costs actually incurred are greater than this fixed charge, an additional indemnity amount shall, upon proof, be due by the customer.

**6.8** Should the due payment still not have been made, after a formal demand sent by registered letter has remained without response for eight (8) days, FOG may ipso jure and with no special formality suspend or cancel the current orders without prejudice to the recovery of the sums due to it, including surcharges and indemnities. The suspension or termination shall apply not only to the order in question but may also, at FOG's discretion, apply to all prior unpaid orders, whether they have been delivered or are in the course of delivery. The termination of the sale agreement shall lead to the automatic suspension of any maintenance contract concluded with FOG.

6.9 Partial payments shall be applied in order of priority against the late payment charges, the interest charges and the oldest amounts owing.

#### 7 - Retention of ownership

7-1 FOG will retain ownership of the equipment until the actual payment in full by the Customer of the principal and other charges.

7.2 It is nevertheless understood that simply delivering a bill of exchange does not constitute a payment within the meaning of this clause; FOG's original claim on the Customer will remain in force with all the guarantees pertaining thereto, including the retention of ownership, until said bill of exchange has actually been paid.

7.3 While the price has not been paid in full, the Customer undertakes not to grant any security whatsoever on the equipment, not to transform it, not to transfer it as a guarantee, nor to mix it with other equipment of the same type from other suppliers. In the absence of ascertainment, FOG may demand its payment.

7.4 The above provisions shall not preclude, upon delivery of the equipment, the transfer of risks to the customer as specified in the aforementioned article 5.

7.5 In the event of seizure (sequester or garnishee), or any other conveyance by a third party on the equipment, while FOG has not been paid the sale price in full, the Customer must immediately inform FOG of this to allow it to challenge this and preserve its rights.

7.6 Should FOG grant the Customer a deferment of the payment date, by derogation to the payment terms and conditions specified by these terms and conditions, such a deferment would extend the effects of this retention of ownership clause by a similar period.

#### 8 – Force majeure

FOG is exempted from any obligation in cases of force majeure, an external event outside its control and not resulting from a fault or negligence on its part, in particular fires, a declared or undeclared state of war, strikes, floods, natural disasters. Should one of the events defined above occur, FOG will notify the customer of this and its obligations will be suspended until the end of the difficulty, without indemnity. The contractual time-scales shall be extended accordingly. However, should the difficulty last for more than three moths, unless specifically agreed each of the parties may de jure terminate the contract that binds them, by registered letter with acknowledgement of receipt.»

#### 9 – General provisions

9.1 Except if the Parties reach a better agreement, in the event of a difference or contradiction between these general terms and conditions and the contractual documents signed by FOG and the Customer, these general terms and conditions shall prevail over the other contractual documents.

9.2 If one or more stipulations herein are held to be not valid or declared as such by the application of a law, a regulation, or following a court decision having the force of res judicata decided on the merits of the case with no right of appeal, or of any other regulation, the other stipulations shall retain all their power and scope.

10 - Applicable law - jurisdiction clause
 10.1 These general terms and conditions of sale and the sale agreement itself are governed by French law.

10.2 Jurisdiction is hereby allocated to the Courts of Nevers for any disputes relating to the maintenance contract or to these general terms and conditions, regardless of their nature.









## PERSONAL NOTES









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### **NOUVELLE FOG AUTOMOTIVE**

82, avenue du 85ème de Ligne 58200 COSNE SUR LOIRE - FRANCE

Phone: +33 (0)2 38 37 28 28

Fax: +33 (0)2 38 37 28 29

E-mail: adv@fog-automotive.com www.fog-automotive.com



at your side since 1929.

### EQUIPMENT AND/OR SPARE PARTS ORDER

Phone. +33 (0)2 38 37 28 28

Fax. +33 (0)2 38 37 28 29

E-mail: adv@fog-automotive.com

### SERVICE CALL REQUEST

Phone. +33 (0)2 38 37 28 28

E-mail: sav@fog-automotive.com

#### MAINTENANCE CONTRACTS

Phone. +33 (0)2 38 37 28 28

E-mail: contrat@fog-automotive.com

### . CUSTOMER HOTLINE

Phone. +33 (0)2 38 37 28 28

E-mail: hotline@fog-automotive.com

## NOUVELLE FOG AUTOMOTIVE

82, avenue du 85ème de Ligne 58200 COSNE SUR LOIRE - FRANCE

Phone: +33 (0)2 38 37 28 28

Fax: +33 (0)2 38 37 28 29

E-mail: adv@fog-automotive.com www.fog-automotive.com