

### **1. ABS-ASR with simulation of the coefficient of friction**

#### **MECHATRONIKA Wyposażenie Dydaktyczne Sp. z o.o.**

The stand is intended for presenting the operation of the automatic braking system (ABS), which controls the braking force, as well as the operation of the anti-skid system (ASR) in motor vehicles with the use of a microprocessor controller and the procedure of bleeding the brake system equipped with the ABS/ASR system. The stand is equipped with 4 independently controlled drive systems for wheel impulse rings and a switch enabling the simulation of changes in the friction coefficient between the vehicle wheel and the road surface. The stand is made for laboratory exercises aimed at measuring the voltages and waveforms of input signals and the controller's response to dynamic changes of these input signals, resulting in an increase / decrease in pressure in the system depending on adhesion (simulation of the ASR system by changing the rotational speed of the wheels driven), where changes can be observed through pressure changes in the hydraulic circuits. It is possible to present the normal operating states of the controller under simulated driving, braking and braking with the response of the ABS to prolonged delays. In addition, it is possible to demonstrate the operation of the ASR anti-skid system. The stand is also suitable for demonstrating responses of the system to the most common types of failures, i.e. interruptions in the circuits of wheel sensors or too low value of control signals (amplitude of these signals).

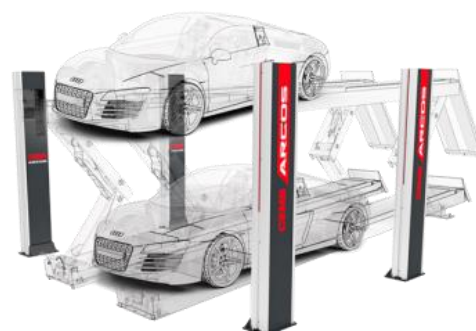


### **2. ARGOS-TYRE SCAN-BODY GUARD active reception desk system**

#### **CEMB S.p.A. / ITALCOM Sp. z o.o.**

The ARGOS-BODY GUARD car reception desk is another step in the revolution that is slowly taking place in car repair shops and it distinguishes dealers and servicing stations that look for new sources of income. The success of the investment is determined by:

- the ability to perform contactless inspection of 100% of vehicles visiting the servicing station
- the increase of revenues from the sale of services related to geometry and tires
- the protection of the investor against false claims of customers concerning the condition of the vehicle bodywork accepted for repair



### 3. ALPHA - a series of integrated diagnostic lines for vehicle inspection stations

#### UNIMETAL Sp. z o.o.

ALPHA diagnostic lines, manufactured by UNIMETAL, combine the company's best experience in the field of mechanical and measurement engineering, electronic technologies and information systems. Together with company's IT solutions, these lines form a complete equipment for vehicle inspection stations. The resulting devices have the power and durability to operate in the upper measuring ranges, and the applied control and mechanical solutions increase the ergonomics and efficiency of the diagnostician's work. The ALPHA lines seem to be one of the most modern products on the world market.



### 4. C 350 – automatic wheel balancer for truck wheels

#### CEMB S.p.A. / ITALCOM Sp. z o.o.

The CEMB C-350 wheel balancer for truck wheels is a long-awaited step forward in its sector. No technical innovations have emerged in this segment of machines for many years. CEMB has decided to transfer its proven solutions that improve the quality and precision of wheel balancing from the area of vehicles weighing up to 3.5 tonnes to the sector of trucks. This device helps to determine whether the cause of the incorrect behaviour of the vehicle on the road is, for example, damage to the side of the tire or the tread surface. This is possible thanks to the applied sonar technique. Comfort was also taken into account, eliminating the effort of the operator and using, for the first time, a mobile balancer shaft.



### 5. CERTUS MultiTest

#### W.S.O.P. Sp. z o.o.

MultiTest is a new functionality of the CERTUS diagnostic line that allows users to simultaneously control the technical condition of many vehicles on one or more lines. This module increases by up to 2.5 times the number of tests that can be carried out, while maintaining the inspection time and scope as required by valid regulations. This is of particular importance in the context of the implementing the provisions of Directive 2014/45/EU in Polish law. This feature is available for the second and third generation CERTUS devices.



## 6. F24 Workshop

### ASCO Systemy Informatyczne Sp. z o. o Sp. k.

It is a mobile system designed specifically to optimize and accelerate the work as well as to improve the quality of servicing and repair shops. It supports portable devices (mobile phones, tablets), running both on Android and iOS operating systems. An innovative approach to customer service and increased comfort of work make it an ideal solution for workshops that want to stand out from the competition.



## 7. FluidPRO® ATX 280 - Device for dynamic oil replacement in automatic gearboxes

### MAHLE Aftermarket Italy S.p.A / SOSNOWSKI Sp. z o.o. sp.k

MAHLE FluidPRO® ATX 280 - is a device for dynamic oil change designed by professionals for professionals! This product replaces 100% of oil in all popular automatic transmissions: DSG, CVT, Triptronic and in classical automatic gearboxes. It is offered with a two-day training covering the design of automatic transmissions and dynamic oil change + access to the online database + a set of adapters for the Polish market.



## 8. Integra Connect 2.0 (edition 2022)

### Integra Software

### CDS MIODUSZEWSKI Maciej Mioduszewski

Integra Connect 2.0 is an innovative application for drivers that enables quick communication with servicing stations. The most important functions include:

- Online booking of appointments.
- Access to vehicle data and electronic service book. Information about repair status and service contact details.
- Cost estimates for repairs with online quote approval by drivers
- Reminders regarding periodic service, inspections and reserved dates
- Access to websites with promotions and advice for drivers.



## 9. Integra eCommerce B2C Tyre 6.0

### Integra Software

#### CDS MIODUSZEWSKI Maciej Mioduszewski

Integra eCommerce B2C Tyre 6.0 is an innovative online platform for selling tires, integrated with a catalogue of over 50 tire manufacturers with photos, technical specifications and EU labels. The platform is integrated with the systems of the largest tire manufacturers and suppliers as well as with the online scheduler module, which is designed for booking tire replacement dates. Integration with online payment systems, courier companies, price comparison websites and Google tools contributes to effective promotion of the platform on the Internet.



## 10. iSKP - system of electronic data flow and exchange for the vehicle inspection stations

### IT.NORCOM Sp. z o.o. Sp. k. / UNIMETAL Sp. z o.o.

iSKP is a revolutionary integrated workflow system for vehicle inspection stations. It shortens the time of customer service and increases the quality of services. It automates administrative activities and data flow, allowing the diagnostician to focus on the technical condition and safety of the vehicle. At the same time, it ensures compliance with legal requirements in the field of communication with CEPiK and data archiving. iSKP is the result of cooperation between NORCOM and UNIMETAL, offering an innovative and universal standard for data exchange between applications.



## 11. EmissionPRO® PMU 400 particle counter

### MAHLE Aftermarket GmbH / SOSNOWSKI Sp. z o.o. Sp.k.

MAHLE EmissionPRO® PMU 400 is a device for measuring the concentration of solid particles in the exhaust gas of motor vehicles. The device uses and popularizes CPC technology in car servicing and inspection stations, as the most accurate method of measuring solid particles used previously only in certification laboratories. The device detects particles with a diameter 100 times smaller than a human hair and it provides a high measurement accuracy even at low concentrations. With traditional opacimeters, it is impossible to detect such fine contaminants.



## 12. MAHLE TechPRO - vehicle electronics tester with a database containing technical and diagnostic information based on HaynesPro

**MAHLE Aftermarket GmbH / SOSNOWSKI Sp. z o.o. Sp.k.**

A multifunctional vehicle electronics tester with a database containing technical and diagnostic information based on HaynesPro. It supports 95% of vehicles from the European market. The tester is offered as a stand-alone VCI diagnostic plug or in a set with a dedicated industrial tablet.



## 13. Maxicharger AC Wallbox

**Autel Europe / Autel Europe GmbH**

MaxiCharger is a complete solution for any type of charging need. It not only includes AC wallboxes, but also upcoming DC wallboxes and DC fast chargers. Autel AI smart charging system includes state-of-the-art hardware and software services. Autel software provided as a service is suitable for installers, recharging point operators and E-mobility service providers. It can help in managing the networks of charging points of any size and provides a complete view of your business in terms of managing payments, invoicing customers and monitoring the charging stations via a fixed connection in real time.



## 14. Scope DT workshop oscilloscope

**DeltaTech Electronics Joanna Bogusz**

Scope DT automotive oscilloscope is a breakthrough in the automotive industry. It provides fast, accurate and safe diagnostics of even the most difficult workshop cases. Scope DT offers two insulated and two differential channels, which virtually eliminates the risk of damaging the device or the tested components by an error of the operators. In addition, the diagnoscope and built-in help provide unique features, making the device suitable for both beginners and advanced users.



## 15. Series of lightbar lamps: W221, W222, W223 Pantera

### Przetwórstwo Tworzyw Sztucznych WAŚ Józef i Leszek Waś Sp. j.

WAŚ is a manufacturer of car lighting, which presents a series of front lightbar units: W221 – W223. The lights are available in road and off-road versions. They include a modern solution – a decorative light showing an illuminated national flag – which is a patent-pending in the Patent Office of the Republic of Poland. The light units are available with 3 different versions of the casings: standard, dimmed (dark) and super dark. An interesting feature is the animation of decorative light (light or shadow). WAŚ lightbars are extremely efficient, combining the advantages of road and work lights. In the road-approved version, the light output reaches 215 000 candelas, which provides the illuminated distance up to approx. 1 km in front of the vehicle.



## 16. Series of rear light units: W243, W244, W245(DD)

### Przetwórstwo Tworzyw Sztucznych WAŚ Józef i Leszek Waś Sp. j.

W243, W244, W245 and W245DD light units produced by WAŚ are the smallest rear light units in the world having the shape of an equilateral triangle and containing all the light functions with such a large light-emitting surface with a reflector. The unique design and technical solutions used in such a small unit allowed us to submit it to the Patent Office of the Republic of Poland in order to patent four inventions and two utility models. In addition, the W245 light units are available in the DD version, i.e. with a dynamic direction indicator light.



## 17. Series of rear light units: W247 - W249, W250 - W252

### Przetwórstwo Tworzyw Sztucznych WAŚ Józef i Leszek Waś Sp. j.

Series of W247 - W249, W250 – W252 light units is one of the most technically advanced product series offered by WAŚ. The main feature of the light units is their red, spatial outer lampshade. A unique solution used in the light units is a patent-pending display that shows manufacturer's logo. In addition, the logo acts as a position light and a direction indicator. In addition, we offer our clients customization option, instead of the 'WAŚ' logo, we can apply the client's logo, which increases the competitiveness of the lamps on the market.



## 18. CNC ELEGANCE wheel rim lathe

**UNI-TROL Sp. z o.o.**

CNC ELEGANCE, give your rims a unique look and shine. In several minutes and without the help of a technologist, you can get a diamond look out of an aluminium rim and remove scratches or discolouration.



## 19. ADAS calibration device

**MAHLE Aftermarket Italy S.p.A**  
**SOSNOWSKI Sp. z o.o. Sp.k.**

The fastest multi-brand device on the market with patented Keystone Correction technology for simple, reliable calibration of driver assistance systems (ADAS). The calibration procedure consists in connecting the TechPRO® diagnostic tester to the diagnostic connector, selecting the vehicle model in the tester's menu and following the step-by-step instructions displayed on the tester's screen.

