### THE FUTURE OF ALCOHOL TESTING TECHNOLOGY



life saving innovations

Presented by:

#### **ALCOHOL COUNTERMEASURE SYSTEMS**

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#### About Alcohol Countermeasure Systems



- International group of companies;
- Established in 1970 to create a technical solution to prevent drink driving;
- Leading manufacturer of breath alcohol testing instruments;
- Serving multiple markets: Law Enforcement, Automotive, Industrial, Public and Personal Safety
- Inventor of the ALCOLOCK<sup>™</sup> alcohol interlock for road traffic safety;
- Committed to research and development;
- Headquartered in Toronto, Canada
- Quality management systems:
  - ✓ ISO 9001, IATF16949 & ISO 14001;
  - ISO 17025 & ISO 17034







#### Customers



### Commercial Interlock: ALCOLOCK<sup>™</sup> V3 LE



#### ALCOLOCK<sup>™</sup> V3 LE



- Designed for both OEM and aftermarket installation; and commercial fleet safety management programs;
- Meets EN50436;
- Prevents vehicle from starting unless the driver provides a breath sample below the limit;
- Rugged construction and reliable operation;
- Monitor operational vehicles remotely through a secure network application and telematics integration;
- Compliance with:
  - UNECE Regulation 10 (EMC);
  - UNECE Regulation 118 (Flammability);
  - UNECE Regulation 155 (Cybersecurity)



#### Applications



- Trucks
- Buses
- Taxies
- Cars
- Tram cars
- Railway
- Construction Equipment
- Mining Equipment



#### Application of ALCOLOCK<sup>™</sup> V3 LE – Aftermarket



#### Installation into Commercial Vehicles

- Active safety to eliminate drink driving;
- The administrators can ensure that the driver is not drink driving in remote locations since alcohol interlocks stop vehicles from starting when the driver has a positive alcohol level over the preset limit;
- The test results are recorded in the handset or ECU and the event log may be uploaded at each service centre.



#### Application of ALCOLOCK<sup>™</sup> V3 LE – Fleet Solutions



- Fully compatible with telematic systems through CAN Bus and RS 232 data communication protocols;
- With an optional LTE module, event log data may be automatically transmitted from the vehicle in real time;
- With the Wi-Fi option the data may be transmitted from the ECU whenever the vehicle comes in range of the fleet Wi-Fi base station;
- Fleet managers can access the data online via a secure web application AlcoFleet<sup>™</sup>.



#### Application of ALCOLOCK<sup>™</sup> – OEM



#### **Automotive OEM**

- OEM installation into buses and trucks;
- Installation into lighter vehicles such as taxies;
- Applicable to a range of vehicles in the market.





#### **Proven Performance of ACS Products**



ACS alcohol interlock products are certified to CENELEC (EU) EN 50436 standards.



#### **Quality Certification**









# How does the **ALCOLOCK™ V3 LE** work?



#### How do Alcohol Interlocks work?



The control module receives alcohol measurement.

If the alcohol level is below the limit, the vehicle starts. Otherwise, the driver must try again later.



#### Installation of Alcohol Interlocks 1. Classic approach





#### Installation of Alcohol Interlocks 2. New Digital interface



The new digital interface as per EN50436-4 allows quick and safe installation of alcohol interlocks and defines communication protocol over CAN or LIN networks



#### Anti-circumvention Technology

- The ALCOLOCK<sup>™</sup> V3 LE is equipped with special sensors that prevent non humans, such as machines, from being able to provide a sample and start the vehicle;
- Any attempts to do this or interfere with the wiring will be logged in the data memory of the unit and can be viewed in the AlcoFleet<sup>™</sup> software program;
- Can be integrated with fleet management systems to provide real time alerts of any alcohol violations.



#### Benefits of installing an ALCOLOCK™

- Beneficial to your company's corporate image;
- Competitive advantage when soliciting new business shows your company takes measures to keep your drivers, cargo and passengers safe;
- Only way to verify that your driver has not been drinking before driving;
- Ensures that long distance drivers are following alcohol abstention policy while driving the company vehicles;
- Eliminates the problem of the random testing for alcohol;
- Administrators do not need to be present to check the drivers for alcohol;
- Potential for insurance premium reductions;
- Less down time and fewer accidents;



# ALCOHOL INTERLOCKS in the World



#### **Commercial Legislation Programs**

In many countries, the use of alcohol interlocks has been mandated for certain types of fleet vehicles.



#### Commercial Legislation Programs

**Finland:** mandated that all school buses should have alcohol interlocks installed by the end of 2012.

France: mandated that all school buses should have alcohol interlocks installed by the end of 2015.

Sweden: a government incentive is given for those vehicles with alcohol interlocks.

**Norway:** the Norwegian Road Directorate regulates alcohol interlocks in minibuses and buses from 2019.

Spain: Spanish Road Safety Law regulates alcohol interlocks in passenger transportation vehicles and trucks from July 2022.





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