Irizar and Irizar e-mobility present four latest-generation Irizar vehicles on stand 602 in hall 6 (1,710 sq m): an Irizar i8, an Irizar i6S Efficient vehicle, an Irizar ie tram electric vehicle and the new hydrogen-powered Irizar i6S Efficient.

All exhibited vehicles have significant innovations compared to current models in terms of technology, sustainability and fuel consumption reduction. They include the new hydrogen-powered vehicle and a range of vehicles with a new generation of integral Irizar chassis, which are lighter, more comfortable and consume up to 5% less fuel.

They also come with the most demanding safety and cyber security systems on the market, an improved driver station with a new dashboard design, weight reductions and therefore improvements in fuel consumption and emissions.

At Irizar, they focus all their efforts on decarbonisation, electrifying cities and reducing the consumption and emissions of their vehicles. They aim to be a key player in the sustainable mobility of the future. It is clear that the future for Irizar will be multi-technological and they are ready for it.

» continued article see p. 2
This first hydrogen vehicle has been developed exclusively by Irizar, in collaboration with the companies and technology centres involved.

The vehicle is currently in the testing phase and is undergoing various tests. The Irizar i6S Efficient Hydrogen has a range of up to 1,000 km and a minimum charging time of about 20 minutes.

If necessary, it can also run 100% electric at certain times. The future range of hydrogen vehicles, which currently consists of the Irizar i6S Efficient and Irizar i4 models, will feature significant improvements over the first version presented at Busworld, including more luggage space and passenger capacity, greater range and lower weight.

E-MOBILITY

For more than a decade, Irizar e-mobility has been electrifying cities. This year, a unit of the electric tram Irizar ie will be presented for the first time in Mexico.

Irizar e-mobility is present in 11 European countries and will have more than 1,000 vehicles on the road in Europe by early 2024. This new generation of buses includes improvements in terms of safety, with the new GSR2 ADAS standard, which includes vehicle cyber safety.

The buses are also equipped with a new generation of batteries with lower consumption and greater range, improving available energy in BOL and EOL by 30 per cent.
Deutsche Bahn goes for Ebusco

Up until 2026, Ebusco will remain Deutsche Bahn’s (DB) main supplier of 12- and 18-metre electric buses. To this end, the two directors signed a new framework agreement at a brief ceremony. The original framework agreement dates back to 2022 and ended in 2024. Via this framework agreement, DB now owns 100 Ebusco 2.2 buses, several of which are already on the road and will soon be used in more than 10 different projects. Furthermore, the companies are in final talks for definite orders, which will take the total to more than 100 buses. To date, Deutsche Bahn has ordered 100 Ebusco 2.2 buses, but the contract also offers the option of also ordering the lightweight Ebusco 3.0 buses. Patrick Oosterveld, Sales Director at Ebusco: “With this framework agreement, we expect two more fantastic years in which we will make a major contribution to emission-free transport in Germany.”

DB Ebusco
The new Busworld Digital Awards, spotlighting digitalization in bus and coach.

Acknowledging the growing importance of digital technologies in the bus and coach sector, Busworld, is proud to present the Busworld Digital Awards. This exciting new competition aims to recognize and celebrate the groundbreaking digital innovations that are transforming the bus and coach experience.

Shortlist in the 4 categories
Out of the 35 candidates, the jury selected a shortlist of 3 candidates per category. The final winners will be announced at the Digital Mobility Solutions Conference on Wednesday 11 October.

BUS
- Label of Excellence DESIGN
  VDL Bus & Coach - Citea New Generation
- Label of Excellence COMFORT
  Mercedes-Benz - e-Citaro
- Label of Excellence ECOLOGY
  Ebuso 3.0
- Label of Excellence SAFETY
  Anadolu Isuzu - Citivolt

GRAND Mercedes-Benz – e-Citaro
runner up Ebuso 3.0
runner up Anadolu Isuzu - Citivolt

COACH
- Label of Excellence DESIGN
  Yutong T15 E 14
- Label of Excellence COMFORT
  Setra 5 516 HDH
- Label of Excellence COMFORT
  Van Hool – T16 Astron
- Label of Excellence ECOLOGY
  Yutong T15 E 14
- Label of Excellence SAFETY
  Setra 5 516 HDH

GRAND Setra S 516 HDH
runner up MAN Truck & Bus - Neoplan Tourliner L
runner up Van Hool – T16 Astron

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- Label of Excellence DESIGN
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DIGITAL OPERATIONAL EXCELLENCE
- IVECO Bus
  IVECO ON Heavy Buses Digital Services
  Hall 4 | Booth 402B
- TOTT UP
  GPS Training Partner
  Hall 11 | Booth 1114
- ZF Group
  SCALAR
  Hall 5 | Booth 537

E-MOBILITY MANAGEMENT
- Chargepoint
  Battery Health Package
  HALL 9 | Booth 937
- MAN TRUCK & BUS
  eManager
  Hall 4 | Booth 401
- Rampini
  HyDrive
  Hall 6 | Booth 606A

DIGITAL ON-BOARD COMFORT
- ACTia
  ACTiVi solution
  Hall 4 | Booth 409
- MAN Truck & Bus
  New Digital Cockpit and MAN SmartSelect for Model Year 2024
  Hall 4 | Booth 401
- Navaho Technologies
  Navaho Transport Systems
  Hall 6 | Booth 689

In 2023, visitors can decide if an Innovation Nominee is innovative for them or not? Out of 26 candidates 10 nominees were selected by the Busworld Awards jury. Go to their booth, evaluate the new product, scan the voring QR code and… vote! If the product gets 50% or more YES votes, it will become an official Busworld Europe Innovation 2023.

In 2023, visitors can decide if an Innovation Nominee is innovative for them or not? Out of 26 candidates 10 nominees were selected by the Busworld Awards jury. Go to their booth, evaluate the new product, scan the voring QR code and… vote! If the product gets 50% or more YES votes, it will become an official Busworld Europe Innovation 2023.

The renowned Busworld Vehicle Awards

The 20th edition of this competition took place on 30 September with 14 competing vehicles: 8 buses and 6 coaches. And the winners are…

**BUS**
- Label of Excellence DESIGN
  VDL Bus & Coach - Citea New Generation
- Label of Excellence COMFORT
  Mercedes-Benz - e-Citaro
- Label of Excellence ECOLOGY
  Ebuso 3.0
- Label of Excellence SAFETY
  Anadolu Isuzu - Citivolt

**GRAND**

Mercedes-Benz - e-Citaro
runner up Ebuso 3.0
runner up Anadolu Isuzu - Citivolt

**COACH**
- Label of Excellence DESIGN
  Yutong T15 E 14
- Label of Excellence COMFORT
  Setra S 516 HDH
- Label of Excellence COMFORT
  Van Hool – T16 Astron
- Label of Excellence ECOLOGY
  Yutong T15 E 14
- Label of Excellence SAFETY
  Setra S 516 HDH

**GRAND**

Setra S 516 HDH
runner up MAN Truck & Bus - Neoplan Tourliner L
runner up Van Hool – T16 Astron

As always, the best performances in the different sub categories are awarded with a best of category label.
**TODAY**  
(***WEDNESDAY OCTOBER 11****TH, 2023)**

**ZERO EMISSION BUS CONFERENCE (PAID)**

**LOCATION:** MEETING CENTER  
**HALL 7, AUDITORIUM 500**

**ECONOMICS OF ZEBS**
- **09:30:** Opening Address
- **09:35:** Total Cost of Ownership Case Study on BEBs and FCBs
- **09:55:** Panel – Building a Strong Business Model for BEBs (Battery Electric Buses)
- **10:45:** Hydrogen Fuel Cells as Enabler for Mobility Decarbonization: Symbo’s Solution for Buses & Coaches

**THE FUTURE OF FUNDING MODELS FOR ZEBS AND ASSOCIATED INFRASTRUCTURES**
- **11:30:** Panel - Financing a Full Fleet Transition: Public Funding Options
- **12:20:** 1198 Buses Powered by REFIRE: A Journey by Hydrogen-Electric
- **12:30:** Panel – Building a Strong Business Model for FCBs (Fuel Cell Buses)

**DIGITAL MOBILITY SOLUTIONS CONFERENCE (FREE)**

**LOCATION:** MEETING CENTER  
**HALL 11, LEVEL 3, ROOM 1122**

- **09:30:** Opening - Welcome and Policy Making on Data Driven Mobility
- **10:00:** Bus & Coach in Next Generation Mobility Concepts
- **10:30:** Keynote 1 by ITxPT
- **10:45:** Keynote 2: Insights From the Bus Services Industry on the EU Multimodal Digital Mobility Services Initiative
- **11:30:** Digital Operational Excellence via Telematics
- **12:20:** 1198 Buses Powered by REFIRE: A Journey by Hydrogen-Electric
- **12:50:** Panel Debate

**TOMORROW**  
(***THURSDAY OCTOBER 12****TH, 2023)**

**ZERO EMISSION BUS CONFERENCE (PAID)**

**LOCATION:** MEETING CENTER  
**HALL 7, AUDITORIUM 500**

**STATE OF PLAY FOR ZE COACHES AND LONG DISTANCE SERVICES**
- **09:30:** Opening Address
- **09:40:** Market Development and Demand for Zero-Emission Coaches – Focus On French Market
- **10:00:** Panel – Zero Emission Coaches: Meeting the Needs of Customers
- **10:50:** Daily Drive – Exploring the Technical Experience and Challenges of Operating a Fuel Cell Bus Fleet

**ZE COACHES/LDS CHALLENGES AND OPPORTUNITIES**
- **11:30:** Learnings From the Deployment of the Network to Support Deployment of the Zero-Emission Coach Ecosystem in Germany
- **11:50:** Zero Emission Coach Ecosystem - Technological Challenges and Business Adaptations (Infrastructure Focus)
- **12:50:** Closing Speech

**THE FUTURE OF COACH TOURISM (FREE)**

**LOCATION:** MEETING CENTER  
**HALL 11, LEVEL 3, ROOM 1122**

- **14:00:** Welcome & Introduction
- **14:20:** EU Policy on the Access to Cities for Coaches
- **14:40:** The New EU Drive and Rest Time Regulations for Coach Drivers
- **15:00:** The Future of Group Tourism in Europe
- **15:30:** Network Event
In 2021, Turkish company Habas, decided to leverage its 67-year-old experience in manufacturing to enter the bus market. The progress has been very rapid, with the company exhibiting four monocoque buses at Busworld Europe.

The COMFORTCITY e/Electric is a 12 metre super-low floor city bus featuring 353kW power, in a lightweight structure. The bus can accommodate as many as 106 passengers.

The ALFACITY -e/Electric 8.2 metre Super low floor urban midi bus, in three door configuration is powered by 282kW batteries and therefore optimally designed for narrow roads. The ALFALUX – e/Electric 8.2 midi coach is also powered by 282kW batteries and can carry as many as 35 passengers with large luggage capacity.

While the focus may be on electric buses, Habas is being practical by not neglecting diesel buses. The COMFORTCITY diesel 12 metre full low floor city bus has at its heart a 11-litre 300PS Euro 6e PACCAR engine.

All buses offered by Habas feature good design, LED daytime running lights, a modern digital and ergonomic instrument panel, a sporty steering wheel with adjustable height and depth, comfortable driver’s seat with lumbar support, armrests and a high hood, powerful air-conditioning. Intarders and hill holder support are standard features on the bus. Rear view mirrors with cameras, driver cabin air conditioning, automatic central lubrication system, passenger information system, passenger counting system, electric roof hatch are optional features.

Habas positions itself at the premium end of the Turkish market and is ambitious in its European foray with a capacity of 1,500 buses.

RICH ORIGINS

The foundation of the ‘Hamdi Basaran Topkapi Oxygen Factory’ were laid by Hamdi Basaran in 1956, Habas Industrial and Medical Gases Manufacturing Industry. The company has achieved a number of firsts in the industrial and medical gases, iron and steel, natural gas, energy, LPG, banking and finance, heavy machinery sectors.

To pave the way for its automotive industry foray, Habas acquired Honda Turkey’s manufacturing plant for commercial vehicle production.
The ZEB Conference kicked off with a bang yesterday, with several prominent European politicians emphasising the importance of the decarbonisation of buses and coaches in Europe.

Mike Dolman, Partner at ERM, and Redgy Deschacht, President of Busworld Foundation, representing the co-organisers of the conference, welcomed attendees to the first ever edition of the conference to be held alongside Busworld Europe and extended their gratitude towards the sponsors, speakers, and all participants of the conference. Mr Deschacht noted, ‘The European Zero Emission Bus Conference, in tandem with Busworld, offers opportunities for all stakeholders in our energy transition. We hope to deepen our collaboration in the years ahead. The sharing of knowledge and the developments of technology and solutions, will remain vital.’

The Flemish Minister for Mobility, Lydia Peeters, officially opened the conference (alongside conference organisers Busworld Foundation and ERM) to over 250 participants, highlighting Flanders’ commitment to reducing its CO2 emissions. ‘Flanders has intensified its climate ambitions: Mobility accounts for more than 20% of emissions in Flanders, which must be reduced to safeguard the climate, and our health.’ The Minister has been instrumental in agreeing a ban in sales of fossil fuel vehicles from 2029, advocating for the electrification of bus fleets and depots (equating to over 3600 buses in Belgium), and supporting bus and coach companies in their journey to zero emission. ‘There is no time to waste but we have the technology and knowledge needed for the transition.’

Eamonn Mulholland, researcher at ICCT, celebrated that the sales of electric city buses overtook those of diesel for the first time in Europe – and indeed, for the first time in any European transport sector. 1 in 3 city buses registered are now electric, driven by both demand and supply. The study highlights, however, that Europe is far from a global leader (e.g., 97% of new city buses are electric in China), although some member states have been keeping pace (e.g., Netherlands, Finland, Denmark, etc.).

Radiant miss and mister Busworld

A big smile, efficiency and industry knowledge: these are the ingredients to crown themselves Miss and Mister Busworld. Julia Wills and Ali Murat are honoured to hold the coveted title for a year.

Traditionally, the Miss and Mister Busworld titles are awarded to two remarkable persons. The honour of Miss Busworld went to Julia Will of the German company OMR Omnibushandel based in Untersteinach. ‘I was totally surprised when I was awarded the title. This makes me incredibly proud and happy. Of all the fairs, Busworld is the most professional fair I have experienced. There is also a family atmosphere here,’ says Julia enthusiastically.

Ali Murat (52) of Otokar was crowned Mister Busworld. Ali is an established name in the bus world. ‘24 years of experience has given me many friends. Now I will meet even more,’ says Ali. From now on, I will go through life with two identities: that of Ali and that of Mister Busworld. Maybe I should get my title tattooed,’ jokes the awarded laureate.
There is music in bus and coach

Bus and coach have been inspiring numerous lyricists and composers for years. If it’s not about the long rides, the tough driver or the bus stop, then even wheels and windscreen wipers can inspire. In a nutshell, there is more than enough music in bus and coach for anyone who may be interested in creating a Busworld playlist on their Spotify account.

Below, in no particular order, you can find a list of 45 songs. Who will further complete the list to 50 or more? Let us know at (email address DailyTimes@busworld.org).

1. Wheels on the bus (children’s song)
2. Hail to the bus driver (children’s song)
4. Bus Stop (The Hollies)
5. Thank God and Greyhound (Roy Clark)
6. Buses and Trains (Bachelor Girls)
7. The Power is on (The Go Team)
8. New York State of Mind (Billy Joel)
9. Blame it on the Bus (Mo Kamikaze)
10. What if God was one of us (Joan Ozborne)
11. Double Dutch Bus (Frankie Smith)
12. National Express (The Divine Comedy)
13. Does this bus stop at 82nd Street (Bruce Springsteen)
14. Another One rides the Bus (Weird Al Yankovic)
15. America (Simon and Garfunkel)
16. Under the Boardwalk (The Drifters)
17. Kiss me on the Bus (The Replacements)
18. Trailways Bus (Paul Simon)
19. Get on the Bus (Destiny’s Child)
20. Mark on the Bus (Beasty Boys)
21. Bus to Baton Rouge (Lucinda Williams)
22. Bus Rider (The Guess Who)
23. On a Bus (INXS)
24. Slow Bus Movin’ (Fishbone)
25. If you miss me at the back of the Bus (Pete Seeger)
26. Bus Driver (Muddy Waters)
27. Backseat of a Greyhound Bus (Sara Evans)
28. Kneeling Bus (Pavement)
29. On the Bus Mall (The Decemberists)
30. Make the Bus (Janelle Monae)
31. Brief Bus Stop (Ani Di Franco)
32. Bus Named Desire (Soul Asylum)
33. Back o da Bus (Limp Bizkit)
34. Waitin’ for the bus (ZZ Top)
35. Roll Bus Roll (Jeffrey Lewis and the Junkyard)
36. You’re crazy for taking the bus (Jonathan Richman)
37. Bus 22 to Bethlehem (Bobby Cole)
38. Busload of Faith (Lou Reed)
39. Heikki’s Suburbia Bus Tour (Sixto Rodriguez)
40. Oh Susanna’s Greyhound Bus
41. Country Bus (Jack Thackray)
42. Twenty Seven Strangers (Villagers)
43. Venga Bus (Venga Boys)
44. The Bus Driver Song (Flight of the Concorids)
45. School Bus Driver (Trampled by Turtles)

… ■
CATERING POINTS

1. 4 Eat: Fastfood
   Belgian Fries & burgers
2. Nina
   Assortment of Italian pasta & pinsa
3. Poêle et Poulette
   Chicken nuggets, chicken wings and fries, soup, tom ka kai & wrap with chicken
4. Pico Bello
   Assortment of pasta & paninis
5. Thai Café
   Thai Specialties
6. Be Shop 5
   Mini market with sandwiches, hot dishes, soft drinks, snacks and hot beverages
7. Brasserie 58
   Table service ‘Brasserie’
8. Eaters
   Asian streetfood with pokeballs & banh mi
9. Mr. Boudin
   Belgian upgrade hot dog
10. Belgian Beer Bar
    Belgian beers, salads, sandwiches, croques & sweets
11. O’Gin bar by Open Up Farm Distillery
    Gin bar & meet stew based on gin
12. Dim’s
    Dim sum & bao
13. Fritter De Carte
    Belgian fries & ris candel and paulycroc
14. Mamy
    Croque Monsieur, pancakes & cookies
15. Joris
    Assortment of belgian artisan sweets
16. Hot-Dog
    Hot-dog
17. Cocotte en scène
    Fresh juices, smoothies & healthy bagels
18. Le Pain Quotidien
    Baguettes, sandwiches, salads, soups & sweets
19. Ellis Gourmet Burger
    Famous burgers & fries
20. Be Shop 9
    Mini market with sandwiches, hot dishes, soft drinks, snacks and hot beverages
21. Chess Catering
    Self-service with pasta, salads, vol-au-vent, 1/2 chicken
22. Les délices d’Eric
    Assortments of hot coffee, pancakes, waffles, sweets, sandwiches,...
23. Kafee veio
    Barka, waffle & croque monsieur
24. La Belle Lieggeoise
    Waffles, sweets

Opening hours catering
07–11 OCT
10:00 until 19:00
12 OCT
10:00 until 18:00
LEYLAND HOSI & SILICONE SERVICES LTD 9238
LINDE 435
LOUD ENERGY 682
LUMINATOR TECHNOLOGY GROUP 428
LUMIFAN 428
M & S OTOMOTIV 733
MAELLCO 530
MAHLE B&B S R.L 743
MAGNETIC POWER ENGINEERING CENTER STEYR 8164
MAGNETIC TIE 683
MAGTEK 7154
MAN TRUCK & BUS 401
MARCOPOLO S.A 720
MASTÁ 507
MATTIE GROUP 535
MAYEKER GMBH & CO. KG 742
MCY SAFETY BELTS S.R.L 724
MCY 401
MCY TECHNOLOGY LIMITED 733
MEBUSA 754
MELLOR 505A
MERCUS 708
METELONX 450
MEV'S AUTOMOTIVE 828
MIKROSHING TECHNOLOGY CO., LTD. 7296
MITS AUTOMOTIVE 11969
MNM SP. Z O.O 754A
MOBILE CONTROL SYSTEMS 423
MODECOM 688,691
MOVED 690
MULI ELECTRONIC 7188
NUIL CO., LTD 764
NANING AE SYSTEM TECHNOLOGY 11673
NAVIX TECHNOLOGIES 489
NET FLOOR COVERINGS 641
NGRO MERCHANT AUTOHAUS, CO., LTD 543
NIKASA 7698
NISCO TD & CO. LTD 7105
NIPRO SDI 7105
NEW INNOVATION SOLUTIONS 7419
DENTILGON POWER SYSTEMS, INC 11642
DE INDUSTRY 981
DEUG & OENIG (OMNIBUS ELECTRONICS & SERVICE GmbH) 3830
OFFICE CINO DORIN SPA 536
OFFLEX 3846
OLMAIA AUTO GLASS 624A
OMR OMNIBUS-HANDEL MARI-JO ROTTINGEN GMN 764
ONAN GB 418
OPTOS 8168
ORIONER LTD 621
ORTOGLASS 642
ORTM ELEKTROMISZKOLA A.S 707
OTL PLASTIK 835
OYJ NUMATIC OTOMOTIV 5026
OTO LCD 5026
OTO-MIXOTMOTIV 456
OTO TRIM 456
OTOMOTIV 5026
OZKAYF KABLO A S 684
ÖZKURAD R.S 7001
ÖZKURD 7142
PACIFIC TUR 7664
PALETTON ENGINEERING LTD 936
PALAZ SAFETY BELTS 7560
PALME DESIGN 1140C
PAS 6088
PASSENGER LIFT SOLUTIONS 618
PAYEPLAST 922
PC DIALY STYLE OF P.C.I. SRL 674
PETEL COMMUNICATIONS 767
PERF'O 436
PHARMACIA 7564
PHONEY CONTACT T-MOBILITY GMBH 718
PILARIS GB 9328
PLANTING AUTOMOTIVE FINLAND 9328
PLASTIC SEATING 650
PINTCINDUSTRY 11577
PLASTIC OTOMOTIV 11578
PLASTIC IMMUN 952
PLASTOFORM D.D. 11508
POLARIS ELECTRONIK 671
POLYTECHNIKA 80 11349
POLYTECHNIKA SEAT TECHNOLOGY 524
PONETTE ELECTRONICS-HUNGARY KFT. 8088
PRIMA INDUSTRIES 516
PROTECTIA A.D 1183
PURPLAST OTOMOTIV 670
PYE 949
PYCASA 1194C
QUANTUM MACHINEGIR GROUP CO., LTD 7168
RAAF 792
RAFOL Consulting 7764
RAPMON CARLO SPA 6064
RAUVERS 716
RCHR EUROPE 1146C
REFI DRIVE GMBH 8088
Otakor featuring four new models

Otakor is growing steadily in Europe, their largest export market, and displays four new models and innovative services at Busworld. Otakor also presents its telematics system BusMonitor and EV charging solutions.

When it comes to public transport buses, the new KENT C HYDROGEN steals the show. This 12-metre-long city bus seats up to 82 passengers. The newcomer stands out for its highly secure and lightweight Type-IV (carbon-reinforced structure) hydrogen storage tanks placed on the roof of the vehicle. With a hydrogen storage capacity of around 1,600 litres and 38 kg, refuelling is done in less than 10 minutes and it offers a driving range of over 500 km.

The Otakor Territo, which attracts carriers with its high passenger capacity (up to 63 passengers) and large luggage space, is now electrified. With a length of 13 metres, the e-TERRITO is designed to meet a wide range of applications and is distinguished by its optimal range, high performance, zero emissions, versatility and independent front suspension. Up to 15 battery packs can be provided for a combined 450 kWh. The central drive motor is a powerful 410 kW Voith. The energy supply is provided by lithium iron phosphate batteries. The battery modules are installed at the bottom of the bus to achieve a low centre of gravity, allowing for better road handling.

The smallest model is the 6.60 m e-CENTRO, which can also be equipped as a level 4 autonomous driving vehicle, i.e. without a driver. In car park C, demo rides with this car are offered. Thanks to its high-tech equipment, the vehicle can determine its position on the road in the most optimal way, taking into account current information on the road situation. The autonomous e-CENTRO offers an uninterrupted transport experience at any time of the day, regardless of whether the weather is sunny or rainy. The autonomous e-CENTRO promises a comfortable ride and can accurately stop at stops. This bus can also self-manage stop and travel times and navigates smoothly at intersections and roundabouts. It slows down at speed bumps and pedestrian crossings and also gives pedestrians priority. It comes with advanced hill performance. The autonomous e-CENTRO, can follow the vehicle ahead at the safe distance from other vehicles, can detect potential hazards while driving and quickly perform emergency braking or evasive manoeuvres. Meanwhile, as an all-electric van, it does not disturb passengers or the environment. Otakor has traditionally been performing strongly in the small tourism vehicle market. Two of them are on the stand. The revamped Navigo T, with a length of 8,400 mm, accommodates up to 35 people. The Cummins ISBe 4.5 delivers 151 kW (210 hp) with 832 Nm of torque and is coupled to a 9-speed Allison automatic transmission. The NAVIGO has gained the attention of European operators and achieved great success in the market for compact coaches. The NAVIGO, which had its front end completely changed, now features more dynamic and sharp lines. The interior of the bus has also been redesigned. The new dashboard is now more user-friendly and aesthetically pleasing. The brand new, larger Ulyso T is a completely redesigned touring car and ideal for one-day excursions and short trips. The 10.10-metre-long coach offers 5.5m³ of luggage space and can carry up to 43 passengers in comfort. Here, the Cummins ISBe 6.7 is the power source delivering up to 233 kW (320 hp). The six-speed ZF EcoLife automatic transmission transfers torque of 1,182 Nm to the drive wheels. This vehicle guarantees low operating costs and versatility.

**BUSMONITOR: OTOKAR’S TELEMATICS SYSTEM**

Preventive maintenance is crucial for fleets to streamline their operations. Operators would greatly benefit from integrating predictive maintenance systems and technologies into their business processes. In order to meet the needs of operators, Otakor has developed its BusMonitor telematics system. Visitors to the Otakor stand at Busworld can receive detailed information and watch a demo of the system used in the BRT line in Istanbul.

BusMonitor enables real-time monitoring of fleet performance with a user-friendly interface. It detects anomalies of all vehicle types by defining alarm limits for the data obtained from the Canbus line, regardless of manufacturer. While it communicates information about the vehicle’s location, speed, range and engine performance, BusMonitor also provides route history and fault codes. Thanks to the flexibility of the system, customers can track the performance of both their assets and drivers through customisable reports. The Turkish company Otakor exhibits 7 buses from its range of city and regional buses at Busworld Europe.
Pilot Seatings is a company based in Turkey. Established in 1963, they produce interior parts for coaches and buses. In 1967, they produced driver seats for Mercedes.

Nowadays, they produce seats for all types of activities: driver seats for coaches, for construction vehicles, for agricultural machinery, passenger seats, seats for the navy and also for railways.

These seats stand out for their finish. They can be upholstered in leather or fabric, or a combination of both. The back of the seat features a newspaper basket and a table for the passenger. There is also a footrest.

The passenger seats are equipped with the latest safety features. They have a modern design and provide maximum safety and comfort for passengers.

There is also a line of seats for buses. They are ergonomically designed especially for urban transport, with a very light specific weight. The seat covers can be easily taken off and refitted if necessary. They are also protected against vandalism (scratches, graffiti).

The driver’s seat is equipped with the latest safety features. The seat comes with all possible adjustments for driver comfort: air suspension with weight adjustment, seat adjustment, backrest adjustment, lumbar support adjustment, three-point belt, etc.

The seat is also equipped with a microphone connected to the bus’s entertainment system, which allows the driver to communicate with passengers.

In a nutshell, a manufacturer that will certainly be found in many passenger transport production facilities.

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**The 360-degree charging solution to electrify your bus fleet**

ABBB E-mobility knows the importance of flexibility to bus operators, especially as they attempt to navigate rapidly evolving fleet and infrastructure requirements. That’s why our new HVC360 power cabinet offers not just best-in-class power density, but smart energy management too. Intuitive and robust, it ensures a seamless end-user experience and integrates hassle-free into existing infrastructure.

Compatible with both CCS and pantographs, HVC360’s cutting-edge design allows the installation of dispensers up to 150m from the power cabinet itself and supports up to four outlets at once. The solution is configurable, scalable and upgradeable, perfectly meeting the individual challenges of fleet and depot electrification.

But ABB E-mobility’s 360-degree solution is about more than just hardware. Backed up by a 97% up-time commitment with industry-leading service as well as smart software solutions, the HVC360 covers every element of the transition to electric mobility.

Simple integration with existing business tools, automated charge planning, and real-time monitoring all help to ensure a smooth transition to electric operation, while technology including real-time emissions reduction reporting and proactive service monitoring promotes sustainability and reliability.

*Visit us on the ABB E-mobility stand in Hall 7, Booth 784 to learn more.*
Hispacold presents new innovative products

Hispacold is presenting at Busworld in hall 5, stand 509, a new CO2 HVAC unit, and a predictive maintenance system that is based on artificial intelligence. In 2022 Hispacold achieved €54 million in sales and says it is returning to pre-pandemic revenue levels.

The electric eBreeze HVAC consists of two systems which have a reversible heat pump for producing cold and heat and an air renewal system that allows them to work with 100% fresh air. Available in multiple configurations, the e-Breeze systems reduce weight by more than 20% compared to previous Hispacold electric ranges, and they require 40% less refrigerant gas charge than previous ranges, as the Spanish company announces. The B100 CO2 unit, a new design of the environmentally friendly CO2 HVAC system for buses uses this natural refrigerant. Also it presents its range of NetiOs control panels to the sector and the Thermion range of BTMS units (battery thermal management system) which allow the battery temperature to be maintained within the optimal operational range. On the Hispacold stand it will also be possible to see the new, smaller version of the air purifier, the mini eco3, which can treat up to 8 m³ of air, and is therefore particularly suitable for treating the volume of air around the driver of a bus, ambulance, or public service vehicle.

Then there is Signum: a new predictive maintenance and efficiency system based on artificial intelligence. The Signum project aims to develop a smart system that is based on two complementary goals: to generate a maintenance system that can anticipate when a technical intervention is really necessary for a vehicle, before a breakdown occurs, in order to reduce costs and intervention times. On the other hand, the energy optimization of the operation of air conditioning equipment reduces operational costs. Besides all the new products Hispacold is celebrating this Busworld a special jubilee. Purchasing Manager Maribel Ceballos is 45 years at Hispacold. Not only that, she also was the very first woman to be hired in the factory. She started working as management secretary, and after that in logistics, planning, sales and for the last 20 years she has been in charge of purchasing. In those days it was uncommon to have women working in factories or in the bus sector. Besides this, she has been part of the Busworld history for 20 years.
Busworld all about people
Flemish Mobility Minister Lydia Peeters, ceo Filip Van Hool and Busworld and president Redgy Deschacht proudly pose in front of the Van Hool A12 BE, the electric city bus of which transport company De Lijn bought 36 units.
Marcopolo, Brazil’s leading designer of mobility solutions and one of the largest in the world, is reinforcing its presence on the international market by participating in Busworld Europe. On a 500 sq m stand, the brand, which is already present in a large part of the global market, will display two major projects: the Marcopolo G8, the company’s new generation of road vehicles, and a model powered by a hydrogen fuel cell. The strategy is to emphasise the company’s progress in the mobility segment and offer competitive advantages such as the combination of renowned Brazilian design and global technology, as well as the high level of quality and sophistication of its products, the result of expertise acquired in countries such as South Africa, Argentina, Australia, China, Colombia and Mexico, in addition to Brazil.

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Marcopolo is constantly investing in innovation, technology, production optimisation and engineering management in all its plants. As a result, the company has become much more flexible and efficient, able to develop and produce road and city bus models to meet any requirement. In addition to the marketing expertise accumulated over 74 years – more than 60 years of presence in the international market, with activities in more than 100 countries – Marcopolo is constantly investing in innovation, technology, production optimisation and engineering management in all its plants. As a result, the company has become much more flexible and efficient, able to develop and produce road and city bus models to meet any need.

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