



Article and photos by Larry Plachno

Van Hool's EquiCity tram-like bus won three different European Coach Week awards. Included was the Comfort Label Bus, the Design Label Bus and the Grand Award Bus. Van Hool was so proud that they parked the winning bus in the Kortrijk Marketplace displaying its awards.

Held every two years, Busworld Kortrijk is considered to be the largest and most important bus show in the world. This 22nd event was held at its usual location at the Expo in Kortrijk, Belgium from October 18-23, 2013. The event is held in nine halls plus a connecting Rambla. There are more than 300 exhibitors from 29 countries. Of that number, 42 exhibitors from 17 countries either manufacture or convert buses and coaches. At the 2011 event, there were more than 31,000 attendees who came from 118 different countries. This 2013 Busworld set a new record with 32,228 in attendance. I might also mention that this show is so large and so important that an entire day, Thursday, October 17, was limited to members of the press.

The event was founded about 45 years ago by the local bus operator's association, the B.A.A.V. (Beroepsvereniging van Autobus- en Autocarondernemers van West-Vlaanderen), a sister organization of the Federation of Belgian Coach and Bus operators. Luc Glorieux, the original founder, is now retired but still active in Busworld.

Over the years, Busworld has grown and become so effective as a meeting place between buyers and sellers that it has spawned similar events at other locations. Busworld events are now regularly held in China and India, two emerging hotspots for bus activity. The India Busworld is scheduled for February 6-8, 2015.

Busworld returns again to Istanbul, Turkey on April 24-27, 2014. The next Busworld in Russia is scheduled on October 22-24, 2014 in Kiev. The first Busworld to be held in the Americas will take place in Bogota, Columbia on May 29-31, 2014.

Trends

Several trends in the European market were obvious at Busworld. One of the major driving factors was the economy. Bus and coach sales in Europe took a nose dive in 2008. Most observers will suggest that the numbers have bottomed out and are slowly moving up again. Recent months have seen a mixed bag of sales with some brands and countries up and others down, often depending on local circumstances. For example, England did better because of the 2012 Summer Olympics.

Europe is moving to Euro-6 engines (the equivalent of our EPA) in January of 2014. Hence, this was big news with many manufacturers. Several buses on display were lettered to show they were equipped with a Euro-6 engine. Europe went with SCR (Selective Catalytic Reduction) engines before they became available in the United States and Canada. What we call diesel exhaust fluid (DEF) in the United States has been known as AdBlue in Europe for years.

There is one interesting factor in common on both sides of the Atlantic. In spite of the new engine technology including SCR, EGR (Exhaust Gas Recirculation) and particulate filters, tests show that the new engines have improved fuel economy. Several of the manufacturers mentioned the fact that, because of their economy, the new engines will actually pay for themselves. There was a report of impressive fuel economy on a Neoplan coach with a Euro-6 engine that will be mentioned later.

Another trend in common with the United States and Canada is the movement towards alternative fuels and electric power in transit buses. Many of the transit bus builders not only offer CNG power but also biodiesel and biogas. However, as with this side of the Atlantic, the trend is obviously to electric buses. While some of the manufacturers have offered electric trolley buses in the past, almost all of them either have or are working towards all-electric battery-powered transit buses. An interesting alternative currently available from Volvo and others is the rechargeable hybrid bus that recharges along the route to reduce the need for the hybrid engine.

As you might expect, we noted some new technology in various areas. Included are the usual systems. One of the more interesting was a system offered by Irizar that monitors driver fatigue to reduce fatigue-based accidents.

I would be remiss if I failed to mention that the Europeans buy and operate a wider range of different bus models than are typical here in the United States and Canada. On this side of the Atlantic, the 45-foot long coach is pretty much standard equipment while the Europeans will operate buses of varying lengths. It is not unusual for a popular coach model to be available in as many as four different lengths. In addition, the Europeans have a wide range of good quality minibuses available. Instead of the cutaways and inexpensive body-on-chassis minibuses found in the United States and Canada, smaller European buses are more likely to be integral or at least of higher quality.

This brings up the obvious trend that many European manufacturers are working hard to expand their market share. I suspect that at least part of this comes from the questionable economy, causing the manufacturers to look for new ways to expand sales and market penetration. The result is that some of the smaller manufacturers are trying to grow beyond their current regional status and start selling buses in more countries.

It is also obvious that many of the manufacturers are trying to expand sales by offerings in new or niche markets. Van Hool leads the pack in offering just about every type of power out there from overhead trolley wires to hydrogen fuel cell. Others are offering a wider range of buses and some obviously intended for niche markets. For example, Intergralia from Spain offers some impressive special interiors in Sprinters.

All of this is creating more competition in the European bus market. Bear in mind



The city of Kortrijk is so proud to be the location of the Busworld event that they put banners and signs on and above several of the streets. This particular banner was suspended above the street just south of the town Market or Square. For those who know Kortrijk, the railroad station is about two blocks to the left.

that since Europe is fairly small in area the buses are easier to support after sale. And, since the average European coach only needs a one-million-mile longevity, construction standards are easier to deal with than in the United States and Canada. While some of the European manufacturers have dropped hints about joining the American market, success in the American market can be elusive because of the amount of after-sale support needed.

Finally, while I never did compare the Busworld 2011 and 2013 show catalogs I did note that some former exhibitors are gone while some others are either new or noteworthy. The most obvious absence was Viseon, the company that took over the old Neoplan plant in Pilsting, Germany. They started out building the unusual things like airport apron buses and trolley buses and then began developing a product line of their own. Current information suggests that their product line may be shut down or close to it. We also noted that Golden Dragon from China, a company that displayed at Busworld 2011, was not there this year.

On the other hand, there were some new or notable names. Intergralia from Spain showed up with Sprinters with custom interiors and even held a press conference. Not only were they expanding sales to new areas but they discovered a market for custom Sprinter interiors. Volgabus from Russia had a display and showed an interest in selling buses to the West. We also noted that Karsan from Bursa in Turkey was at the show and held a press conference.

European Coach Week

Held the week prior to Busworld Kortrijk, European Coach Week is a series of trials, presentations and bus tests held at Kortrijk to determine winners in several categories. This year was the 16th edition and witnessed a major change of policy (see the news item in the November, 2013 NATIONAL BUS TRADER).

As in previous years, there will be an annual Grand Award Coach and Grand

Historical buses are more likely to be found at the IAAA show in Hannover. Otokar from Turkey was celebrating their 50th anniversary this year so they brought along and displayed this bus that they built in 1968.



Award Bus. The separate competition for midi and mini buses was eliminated although separate competition for coaches and buses was retained. Replacing the former awards are a new series of “Best of Category” labels in safety, ecology, comfort, ergonomics, styling and design. This new arrangement allows ECW to present multiple labels in any given category or none at all. In addition, labels were awarded to various components and products.

The ECW awards were presented at a press conference on the evening of Wednesday, October 16. The winners were as follows. The Comfort Label Coach went to the Van Hool TX 16 Astron. The Comfort Label Bus was awarded to the Van Hool ExquiCity. The Safety Label Coach was given to the Setra TopClass while the Safety Label Bus went to the Mercedes Citaro Low Entry.

Both the Setra TopClass and the Van Hool TX 16 Astron were awarded the Ecology Label Coach while the BYD Electric, the Dutch YPTI Ebusco and the Van Hool Fuel Cell Bus received the Ecology Label Bus. There were no winners in the Innovation Coach or Bus category and no winner in the Design Label Coach category. However, the Design Label Bus was awarded to the Van Hool ExquiCity.

Finally, the two major awards were announced. The Grand Award Coach went to the Setra TopClass while the Grand Award Bus was given to the Van Hool ExquiCity. I counted a total of 12 awards with six going to Van Hool and three going to the Setra TopClass.

IRU Awards

Immediately following the ECW press conference announcing the awards, the International Road Transport Union had their own press conference to announce their awards. The IRU City Trophy was



Europe has some remarkably high quality body-on-chassis buses. This Irizar i3 joins an Irizar body with a Scania chassis and was on display near the south entrance of the Expo. If you see something unusual, it is because this bus was right hand drive for the British market.

awarded to the city of Skopje, the capital of Macedonia for its overall ambitious policy to promote group tourism by coach as an important part of the city’s public transportation system. While it has no connection with this award, I note that the new Van Hool factory is located in Skopje.

The international jury gave the IRU Bus Excellence award to the Romanian company Societatea de Transport Public SA Alba Iulia for its extremely high quality standards in terms of customer care, environmental responsibility, and the use of new technologies and innovative solutions. The IRU Coach Tourism Innovation Award was given to the Danish family-owned coach company Papuga A/S for its “Let’s Cycle Together” concept which allows cycling enthusiasts to tour Europe by coach.

Exhibitors, Coaches and Buses

With more than 300 exhibitors and more than 40 bus manufacturers or converters on the show floor, it is frankly impossible to cover all of them. Even if we did, you probably would not be interested. Hence, we tried to concentrate on companies connected in some way to the United States and Canada or were interesting because of their product offerings.

Van Hool from Belgium had a large display area in Hall 6. They easily stole the show with the European Coach Week awards. The Van Hool TX 16 Astron won the comfort and ecology awards while the Van Hool ExquiCity tram-bus walked away with awards for Comfort, Design and the coveted

The Van Hool TX 16 Astron won the European Coach Week Comfort Label and shared the Ecology Label for coaches. The TX series was introduced two years ago by Van Hool.



Van Hool’s tram-like EquiCity bus won three different ECW awards including Grand Award Bus. It is available with numerous power options including an electric trolley bus.





The Setra TopClass coach won the ECW Safety Label, the Ecology Label and the Grand Award Coach. The model on display was an S 516 HD/2.



Setra was so proud of their new TopClass awards that they invited a dancing group to their display area to celebrate on Thursday, October 17.

Grand Award Bus. In addition, the Van Hool Fuel Cell Bus received the Ecology award.

Two years ago Van Hool was moving up from their T9 series of coaches to their new series which they elected to call TX. This year Van Hool displayed a range of TX coaches. All were equipped with the Paccar DAF Euro-6 engines.

Van Hool has started production at their new plant in Macedonia. At the time of Busworld, the first production unit had already reached the Van Hool factory in Belgium. The new "X" series coaches will be introduced to the North American market in November as the TX45 and the CX45. Filip Van Hool mentioned that at the time of Busworld, 125 of the TX45 and 600 of the CX45 coaches had been sold.

Van Hool continues to retain its leadership position in alternative fuels. Introduced at this show was the new A308-E all-electric transit bus that is about 31 feet long. It can be charged both inductively and conductively. The first units will go into service in Bruges, Belgium in the spring of 2014. Van Hool's ExquiCity tram-bus continues to enjoy success. Approximately 92 have been sold since it was introduced two years ago and examples now operate in several countries.

Mercedes-Benz and Setra operate under the **Evobus** name and had adjacent display areas in Hall 5. The Mercedes-Benz Citaro Low Entry transit bus took the European Coach Week award for Safety.

The Mercedes-Benz display stressed their new Euro-6 engine technology. Their

Tourismo coach was highlighted as the best selling tour coach in Europe. Offered for the first time was the short Turismo K model with a length of about 34 feet. All of the Turismo models are now available with optional right hand drive and Euro-6 engines. Noteworthy was the premier at Busworld of the Intouro model with new vehicle lengths and a new engine. The Travego is now also available in a two-axle version with Euro-6 and there is a new version of the Citaro LE (low entry) transit bus.

Highlighted was the Omniplus service for Mercedes-Benz and Setra buses that now has more than 600 authorized service outlets throughout Europe. Used bus outlets for Mercedes-Benz and Setra have now been combined into a European network called BusStore. In addition to coaches, this will include transit buses and minibuses. The operation is based in New-Ulm, Germany at the Setra facility and has a Web site showing inventory. Also mentioned was the Fleet-Board telematics system that uses the Internet. Although designed primarily for Mercedes-Benz and Setra buses, the system can be retrofitted on other brands of buses.

As usual, **Setra** had its own adjacent display area. Again we note that Setra came out very well in the European Coach Week competition with their TopClass coach winning the Safety label, the Ecology label and the Grand Award Coach.

Setra used the Busworld show to introduce its new TopClass 500 series coaches, the next step up from their 400 series that has been considered the finest of European coaches for many years. While the new 500 series TopClass coaches retain their basic Setra appearance, there are some obvious changes. The former flat La Linea on the side of the coach is now in a two-piece, three-dimensional form culminating in an arrow-shaped light. The new Mercedes-Benz Euro-6 OM 471 engine now sits behind a shield-shaped engine compartment door. There are also some interior improvements

The Mercedes-Benz Citaro Low Entry won the European Coach Week Safety Label. It shared the Mercedes-Benz stand with coaches and an Sprinter. The Citaro comes in several variations and is one of the more popular transit buses in Europe.





Volvo has been a leader in alternative fuels in Europe. Shown here is a 7900 hybrid that was originally introduced by Volvo in 2010.



This is the European version of the Volvo 9700. Note the rear passenger door. Prevost sells the Mexican-built version in the U.S. and Canada.

including a wider boarding area with a curved handrail and a fan-shaped layout in the cockpit area.

The TopClass S 516 HDH on display had a new TopSky Panorama glass roof that is 50 percent larger than on the 400 series. The nearby S 517 HDH had the same impressive roof as well as a kitchenette. An S 431 DT double-deck coach had seating for 78 passengers with club tables between seats on the lower level and a kitchenette with a 40-cup coffee maker. A two-axle S 516 HD on display was equipped with a wheelchair lift and featured a coin-operated hot beverage dispenser that gives change.

Temsa had the entire north side of Hall 7 for its display and showed both transit buses and coaches. Their company motto continues to be "Value in Motion." Temsa Global General Manager Dincer Celik made a presentation at a press conference on the press day that made it obvious that Temsa was doing much better than average in sales. Temsa sales in 2013 were expected to exceed 2012 by 25 percent and set a new record in both production and sales. Production for the first six months of 2014 is already booked. Temsa coaches are now sold in 64 countries including Europe and the United States.

Built in Turkey with integral construction, the Temsa coaches feature high durability and low fuel consumption. The low entry transit model is proving to be popular and uses a ZF transmission and axles. Temsa has also had success with their school bus, which unlike American school buses is more of a transit-type bus. Temsa also offers CNG engines in transit buses.

Temsa coaches are sold by CH Bus Sales in the United States. Currently two different models are available, the 35-foot TS-35 and the 30-foot TS-30. Both use Cummins engines and Allison transmission. Celik mentioned that Temsa sales into the United States are expected to reach 200 units in 2013 which would make Temsa second in coach imports.

CH Coach Sales will be offering a 45-foot Temsa coach in the United States in 2014.

Once again **Volvo** had their display in the northeast corner of Hall 5. In the United States, Prevost is part of the Volvo group and sells the Mexican-built Volvo 9700 coach. Volvo was introducing their new Euro-6 engines including an 11-liter engine in their 9700 and 9900 coaches. In spite of all of the new technology, Volvo claimed a reduction in fuel usage with the new engines. Both coach models have received a new design for the front and rear, new rearview mirrors and lower weight.

Volvo continues to be a leader in alternative fuels and reduced emissions. On display was a Volvo 7900 hybrid transit bus, a model originally introduced by Volvo in 2010. Since then, nearly 1,200 units have been

sold to customers in 21 countries. Moving on from there, Volvo is now working on a 7900 hybrid articulated that will seat 154 passengers and will substantially reduce fuel consumption. The first deliveries of this new model will come in the spring of 2014.

Volvo is now moving towards more efficient battery packs and is developing plug-in hybrids where batteries will be charged for six to nine minutes at terminals to reduce engine usage. These units are expected to go into commercial production in 2015. A ceremony was held announcing a Memorandum of Agreement with Luxembourg that establishes the Grand Duchy of Luxembourg as a test arena for sustainable public transport systems.

Founded by Gottlob Auwärter in 1935, **Neoplan** coaches were originally imported

Temsa Global General Manager Dincer Celik addresses the bus journalists during their press conference. Temsa is doing very well in sales and should become the second most popular import in the United States in 2013.



to the United States in the 1970s. A licensee, Neoplan USA, built Neoplan transit buses and coaches at Lamar, Colorado and Honey Brook, Pennsylvania for years but is no longer in business. The European Neoplan was acquired in 2001 by MAN (originally Maschinenfabrik Augsburg-Nürnberg) and some of the Neoplan coach models are still in production. MAN and Neoplan had their buses on display in Hall 2 at Busworld. All of the buses on display had Euro-6 engines.

Introduced at Busworld was the Neoplan Jetliner with a Euro-6 engine. Also on display was a Neoplan Cityliner and we found a new Starliner outside. The product line now also includes the Tourliner model which apparently is new. MAN's Emergency Brake Assist (EBA) can now be ordered for the Neoplan Starliner and Cityliner. Now available to operators in Germany, Austria and Switzerland is a Neoplan VIP card that provides certain advantages including a discount on parts and special rates on training and courses.

One of the major announcements at Busworld was that a Neoplan Cityliner coach with a six-cylinder MAN D26 440 horsepower Euro-6 engine broke what the Europeans call the 20-liter barrier. On an 820-mile test, the coach came in with a fuel consumption of 19.8 liters per 100 kilometers. If my computer is correct, that translates into 11.88 miles per gallon, which would be something worth talking about and something I would like to see on this side of the Atlantic. It does go to show that some of the new engines will pay for themselves in fuel savings.

MAN offers both hybrid and CNG power on its line of Lion transit buses. MAN had the Technical University of Munich carry out a study involving 15 metropolitan areas that resulted in a comprehensive 48-page study titled "What Cities Want." It provides several innovative solutions and offers an overview of strategies. Copies are available



The Neoplan name is still alive in Europe and is part of MAN. Shown here is a new Jetliner that was on display. A Cityliner was also on display and we found a Starliner parked outside.

from MAN (just Google "What Cities Want" and you will find a PDF online).

There are surprises at every bus show. One of the more interesting surprises at this year's Busworld was finding TAM buses on display. Based in Maribor, Slovenia, TAM (originally Tovarna avtomobilov Maribor or "Automotive Factory Maribor") was founded in 1947 when the area was still part of Yugoslavia. In the early 1990s, several TAM coaches were imported into the United States and were sold to commercial charter and tour operators. Two integral school buses were also imported that unfortunately failed to catch on.

The company was recently revived with the TAM-Durabus investment project. Their current product line includes VivAir Airport Buses, Viva-C transit buses focusing on low-

emission drive trains including a fully electric bus, and VIVE coaches and European-type school buses. Noteworthy is the Viva-C 1050 EV low entry, low-floor electric bus. In addition to on-board batteries, it can "top off" its electrical charge at stops along the way.

VDL is primarily a consolidation of smaller bus builders in The Netherlands including Berkhof, Jonckheere and Bova. While not well known in the United States, I know of two Jonckheere body-on-chassis buses that ran for an operator in Tulsa. Once again their display area was the northwest corner of Hall 4. While VDL offered no new products at the 2011 Busworld, they did have some news and new offerings this year.

Prominently displayed was their new Futura FMD2, a multi-purpose coach

One of the biggest surprises was finding a TAM airport bus on display. The company, now called TAM Durabus, is back building buses at the old plant in Maribor, Slovenia.



VDL proudly displayed its new Future FMD2 model. Based on the award-winning FHD2 model, the FMD2 is a multi-purpose coach that is equally at home in tour or scheduled service.





Shown here is an overall view of the Irizar display area. The coach in front is their pb model followed by an i6 and i4 model. All these were integral.



Irizar offers the Magic Eye from Datik that monitors drivers and can detect fatigue. Their coaches also have other modern electronic systems.

designed for both tour and scheduled service but also capable of being used as a school bus. It is based on the Futura FHD2 that won the Coach of the Year 2012 award. It is available in lengths of 40 or 42 feet. The drive train includes a DAF engine mated with a ZF EcoShift, EcoLife or AS Tronic transmission.

In the transit market, VDL introduced their new Citea MLE. This midi low entry transit bus is available in lengths of 29 or 35 feet. It is designed for lines with lower passenger volumes or older cities with narrower streets. VDL also announced the availability of a Citea low floor articulated bus at the end of 2013. It will be available in lengths of 59 or 62 feet with a Euro-6 engine.

Earlier in 2013, VDL introduced its Citea electric model. It has a length of 39 feet and

is available with various electric drive and battery packages. An option is also available to allow recharging during operation to reduce the number of batteries needed. The VDL motto is "Profit of Ownership" and they do make a special effort to match the right product with the right customer.

Based in Sweden, **Scania** built more than 6,000 buses in 2012. Their display was located at the north side of Hall 6. Among the more interesting news was that Scania is now adding a 7-liter diesel engine to its Euro-6 engine line that already included a 9- and 13-liter engine. This smaller engine is intended for use in transit operations and in less-demanding topography.

On display were two low-floor Citywide models as well as a 57-passenger Omni Express high deck coach and a 49-passen-

ger 39-foot touring coach. Scania also offers a multi-purpose body-on-chassis coach with a body from Higer in China but none were on display at this show. Scania offers Euro-6 engines that run on biodiesel, biogas and bioethanol.

One of the more interesting items mentioned during the press conference is that Scania offers custom tailored fleet management, maintenance and driver training programs internationally. The Scania experts come into your operation and can set up an efficient program right in your own garage and service facilities. They currently are operating this kind of service in France, Mexico and South Africa. The program is geared to each operator's needs and uses monitoring and feedback to fine tune the operation for maximum benefit.

Based in Spain, **Irizar** has long had an excellent reputation for body-on-chassis coaches and is a leader with this type of bus in the British market. Hence, a new Irizar i6 and the new Irizar i3 with right-hand drive on a Scania Euro-6 chassis were on display outside at the south door of Busworld. This was a confirmation of Irizar's continuing commitment to offer body-on-chassis coaches with different chassis brands.

However, Irizar started a strong move to producing integral coaches two years ago and their display area in Hall 4 showed only integral models. Included were Irizar PB, Irizar i6 and Irizar i4 coaches. All were equipped with Paccar-DAF Euro-6 engines. Irizar offers both the ZF Ecolife and the ZF AS Tronic transmissions.

Irizar's theme of "Fast Forward to Tomorrow with Irizar Technologies" makes reference to a wide range of new technology Irizar is offering on its coaches. Included under the Intelligent Transport Systems banner is EcoAssist that contributes to more efficient and environmentally responsible driving. However, what particularly caught my eye was their "magic eye" from Datik, now

Scania is a major bus builder and offers a wide range of transit buses and coaches. They also offer body-on-chassis buses with a Higer body from China. Shown here is a Touring HD model specially painted to show that it has a Euro 6 engine.





Solaris builds buses in Poland and is primarily a transit bus and tram builder. Solaris was one of the pioneers in electric buses and introduced their electric bus two years ago.



Otokar is an interesting builder from Turkey. Much of their product line consists of short but durable buses that are popular on the narrow and congested streets of Istanbul and elsewhere.

part of the Irizar Group, that mounts on the dash and detects driver fatigue. By watching driver behavior, and particularly eye blinking, it can determine when a driver is suffering from fatigue and warns him to pull over.

Solaris from Poland had the same display area in Hall 4 as it did two years ago. Solaris is increasingly popular on the European market with Poland becoming the second most popular area to build European buses, next to Turkey. The company is primarily a transit builder but does offer a fairly wide product range. Included in their product line are electric tram cars, trolley buses and a wide range of transit buses under the Urbino name from conventional transit buses to articulateds. Solaris also offers an upscale suburban bus they call the InterUrbino.

Solaris offers Euro-6 engines from both DAF and Cummins and supplies an 8.9 liter Cummins engine for customers who want to use CNG or compressed biogas. There is also a hybrid option on the transit buses. However, Solaris has been a leader in electric bus technology and introduced their electric bus two years ago at Busworld. Their newest development is a roof-mounted "pantograph" that allows the electric bus to charge along its route or at terminals. This extends the range of the bus beyond the usual plug-in batteries.

One of the more interesting recent Solaris deliveries consisted of 10 Urbino buses with 36-foot trailers for the municipal transit operation in Munich. The major advantage of the trailers, unlike articulated buses, is that the trailers can be attached to increase rush hour capacity but disconnected for base service when that extra capacity is not needed.

One of the largest bus builders in Europe, **Iveco** had a display area located on the south side of Hall 3. They have plants in France, the Czech Republic and Italy. At their press

conference, Iveco claimed that they supply one out of five buses in Europe. They also mentioned a corporate restructuring that created a new Iveco Bus Division. In common with the other bus builders, they are also moving to Euro-6 engines.

Their fairly complete product line includes the Magelys Pro tourism coach with a length of 42 feet, the 39-foot Urbanway city bus, and the 19-passenger Tourys minibus. In addition, their Crossway line includes a wide range of variations including low entry, suburban and school bus versions. Iveco is also working on an electric plug-in bus.

During their press conference, Iveco unveiled a new concept bus called the Ellisup. It has tram-like design and is powered by electricity but the wheel arrange-

ment is very unusual. With front, rear, and center doors it has two wheels between each door, looking much like a tram or rail car. What makes it particularly unusual is that the wheels are driven by motors on the axles with a transmission-like arrangement using a system developed by Michelin Tire. The Ellisup uses a lithium battery package and can be charged at a quick charge station at the end of the line.

Otokar from Turkey was also located in Hall 3. They are best known for a wide variety of smaller buses that are the Turkish equivalent of Jeeps in the Philippines and work well on smaller, congested European streets. This year the company celebrates its 50th anniversary. To commemorate, they brought along a bus they built in 1968 and showed it in their display area.

Iveco is one of the largest bus builders in Europe. At Busworld they unveiled their new Ellisup model. With its appearance and unusual wheel arrangement, it looks more like a tram car than a bus.





BYD from China displayed one of their single-deck electric buses that was specially equipped for cold weather conditions. They are planning to build a bus production facility in Europe.



King Long from China has displayed at the last five Busworld shows and celebrated the delivery of their 40,000th export. They had three buses on display including this XMQ6120C model.

They had seven buses on display and introduced Euro-6 versions. Included in the Otocar product line is the 39-foot low-floor Kent C, the 30-foot Vectio U that will carry up to 51 passengers, the matching low-floor Vectio U LE, plus the Territo U that comes in both 39- and 43-foot versions and is available in a 63-passenger school bus version. Otocar also offers the midi-size 25-foot Navigo T and the 33-foot Vectio T that serves as a short tourism coach.

An interesting exhibitor at Busworld was **Intergalicia** from Spain. Their specialty is custom interiors on the Sprinter or similar Volkswagen chassis and their market is increased luxury and custom features for smaller groups. Intergalicia has been building buses for more than 50 years and had

three vehicles on display in Hall 1. They were one of the exhibitors looking to increase market share with sales in additional countries. Currently well-known in Spain, they are looking to improve sales in France, Luxembourg, Belgium and Poland.

The Intergalicia in-urban model seats up to 22 passengers and a 26-passenger version is under development. With a little more personalization, the in-vip model had a capacity of 15 passengers in two-and-one seating. Intergalicia also offers a school bus/scholar interior but no example was on display.

Certainly the most impressive of the three vehicles was the in-deluxe model with a highly customized interior. A door behind the driver closed off the passenger area that

had only four seats plus a luggage area and mini-galley at the rear. Each seat had a wide range of equipment including a 21.5-inch iMac, an iPad located at the side, and a table that retracts with the flick of a switch. Features included on-board Wi-Fi, a high quality sound system and a special climate control system.

We did stop in to visit the displays of three prominent bus builders from China. **King Long** displayed at Busworld for the fifth time and had an area in the southwest area of Hall 4. They had three buses on display and held a delivery ceremony for their 40,000th exported vehicle. Bus manufacturing numbers in China are very high when compared with the United States. The latest figures I saw indicated that China is the largest bus market in the world with about 30 percent of total sales.

Yutong launched two new bus models for the European market at Busworld. Both comply with Euro-6 emission standards. One of the new models is the Yutong EC 12 which can be outfitted as either a school bus or an intercity bus. The bus on display had the school bus interior. Yutong also showed their IC 9 intercity and tourism coach. On display was the intercity version with large luggage compartments, a refrigerator and a wheelchair lift. Yutong's Plant No. 1 can produce more than 285 buses per working day while the new energy Plant No. 2 will produce about 30,000 buses annually after it is completed.

BYD displayed one of their all-electric ebus single-decker transit buses in Hall 8. The company is the world's largest manufacturer of rechargeable batteries. BYD entered the automotive business in 2003, building electric autos. They then developed their all-electric bus that has had substantial success in China and is now being offered in Europe and North America. At Busworld, BYD made the announcement that they are planning on building a Euro-

Intergalicia from Spain offers special and custom interiors in Sprinters and similar vehicles. This in-deluxe model has seating for only four passengers and walls finished in Spanish olive wood. Each passenger has a 21.5-inch iMac, a table that disappears at the touch of a switch and an iPad in a side pocket.



pean bus assembly facility. A number of countries are being considered where access to markets and local skills would be attractive, but no final decision has been made.

Unfortunately, there were several other bus manufacturers that we were unable to get to. However, since we recently had inquiries about zoo and parking lot trams, I might mention City Train from Regensburg, Germany. They manufacture what they call "road trains" which are themed rubber tired tram cars looking like railroad cars. While relatively open, they do have a roof and can be linked like a train to transport people at zoos, amusement parks and parking lots. From what we saw, they actually run them on public roads in Europe.

Other Exhibits and Displays

While criss-crossing the halls of the expo between press conferences and display areas, we found several exhibitors with a connection to the United States and Canada. Here is a brief list.

ZF had a fairly substantial display area in Hall 6. Noteworthy developments included the new ZF EcoShift manual bus transmission, reduced noise with the ZF EcoLife transmission, and the expanded ZF AS Tronic transmission line for lighter and smaller buses. In axles, ZF introduced their new AV 133 low-floor bus axle and mentioned their AVE 130 Electric Portal Axle for electric drive in low-floor buses. More than 200 are now in use, mostly in Mercedes articulated transit buses using serial hybrid operation. ZF also talked about improvements in their Openmatics bus telematics system that are easier to use and offer more functions for end customers and software developers.

Q-Straint was located in an area on the Rambla where they showed their new Quan-



ZF had a substantial booth in Hall 6 and held a press conference for the bus industry reporters. Among the major new developments are improvements in ZF bus transmissions and axles for both low-floor and electric buses.

tum automatic wheelchair securement device. It is totally automatic and can be operated by the wheelchair passenger without a driver's assistance. The Quantum won an Innovation Label Award from European Coach Week for 2013.

Bitzer had a booth in Hall 1 and again brought a bus mock-up for photography. Bitzer recently optimized its compressors for vehicle air conditioning applications and began manufacturing their Roadstar compressor in Brazil, China, Germany and the United States.

Thermo King could be found in a booth in Hall 1 where they highlighted their Athenia™ range of air conditioning solutions. The Athenia E and EA modules have been specif-

ically designed for hybrid and electric buses and will be available in early 2014.

Sefac had a booth in Hall 6. While the booth was too small for a bus, they did show some of their lifting equipment. Their staff was available to explain about their wide range of lifts, jacks and other maintenance equipment.

Voith Turbo was located in Hall 5. They were proud to announce that the Voith Secondary Water Retarder won the European Coach Week Innovation Label Award for 2013. Voith also focused on their DIWA Efficiency Package and on Voith air compressors.

Holdsworth had an interesting display in Hall 6. The wall behind their booth was

The Bitzer booth was a busy place in Hall 1. They recently began manufacturing their Roadstar compressor in Brazil, China, Germany and the United States.



The Sefac booth in Hall 6 did not have a bus, but some of their lift equipment was on display. Staff was available to answer questions and provide information.



covered with samples of the fabrics they offer for bus upholstery. Their new collection is a 100 percent pile polyester upholstery fabric which allows customers to get creative and make a personalized design statement for their bus.

Valeo is well known for their heating, air conditioning and ventilation equipment. They offered several new products and innovations at Busworld including the first passenger cabin air filter with anti-allergenic properties in Europe. Valeo introduced a new double blower for bus and coach applications and large displacement compressors for compact solutions.

Busworld Academy

It might be noted that the new Busworld Academy got off to a start with this Busworld event. Stefan Meersseman serves as the president of the Busworld Academy. Calling itself a knowledge platform for the worldwide bus and coach sector, the academy held three conferences during Busworld. Additional information sessions are planned for the future.

Future Events

Future Busworld events are always listed on the Busworld.org Web site. According to the list we have, Busworld will return to Istanbul, Turkey on April 24-

27, 2014. Busworld in Bogota, Columbia on May 29-31, 2014 will be the first Busworld in the Americas. A Busworld is also planned in Kiev on October 22-24, 2014.

Busworld events expected in Asia in 2014 and in India from February 6-8, 2015. Busworld will return to Kortrijk, Belgium in October of 2015. □

While not a bus, the City Train can be used to transport people around zoos, amusement parks, parking lots and elsewhere. Built in Regensburg, Germany, the cars can be linked together like a train and pulled by various tractors including one shaped like a steam locomotive. Literature from the company shows that some are operated on regular streets.



From the December
2013 issue of
National Bus Trader



9698 W. Judson Rd, Polo Illinois 61064
(815) 946-2341
www.busmag.com