DO WE WANT TO LET GO?
Technology takes a back seat as we ask people to imagine their everyday lives in a world of self-driving cars

ADVENTURES IN STEREO
Meet the Hi-Fi specialists bringing “true sound” to Volvo cars

BRIDGE OF WEIR
Where tradition and technology meet to create the finest Scottish leather

NEW YORK CITY
A wake-up call on the importance of sleep in the city that never does
It’s good to have someone on your side. Someone to inspire and encourage you. Someone to share your experiences with. At Volvo Cars, we believe in sharing. We share our knowledge, we share our ideas and we share a desire to inspire people and help them explore the world around them. Because when we work together, who knows where the journey will take us?
THE CURIOUS SWEDE

WAKE UP! IT'S TIME TO SLEEP

Sleep deprivation is dangerous, especially behind the wheel. Drowsy driving can have similar effects on your body as drinking alcohol. It slows your reaction time, impairs judgment, decreases awareness and makes you more aggressive. So what could we do to detect and combat drowsy driving? To find out, we travelled to New York City and met the taxi drivers whose job it is to stay alert at all times.

INSPIRED BY NEXT-GENERATION DRIVERS

Autonomous drive technology is set to revolutionise the relationship between drivers and their cars. But what will it feel like to actually "drive" a self-driving car? And how will it feel to share control and the fun of driving with a computer? We invited people from all around the world to imagine what their everyday lives could be like in a world of self-driving cars.

THE STORY

THE ALCHEMY OF LEATHER

For over thirty years, leather from Bridge of Weir Leather Company in Scotland has been adding a timeless touch of luxury to the interior of Volvo cars. We travelled to Scotland to find out why the leather that comes from there is considered by many to be the finest automotive leather in the world.

PASSIONATE PEOPLE BEHIND VOLVO CARS

VOLVO CARS VALIDATION TEAM

As a Validation Engineer for Volvo Cars, it’s Peter Hellgren’s job to ensure that your Volvo feels exactly the way it should. To find out more about the work carried out by the Volvo Cars Validation Team, we joined Peter on an expedition along Sweden’s west coast where three new Volvo 90 series cars were put through their paces.
The effects of drowsy driving are very much like drunk driving. Impaired reaction time, judgment and vision. Anyone who has to drive tired – whether it’s on the job or driving home late – is at risk. So what could we do to detect and combat drowsy driving? To find out we had to go to the experts. And who better than the taxi drivers of New York – the city that never sleeps.
New York. Like a shark you need to keep moving to survive. The city is dirty. Loud. And alive with the endless possibilities that inspire songs and movies. With so much to do, it’s no wonder people don’t sleep. But a lack of sleep has been linked to everything from unhealthy lifestyles to erratic behaviour and dangerous driving. Getting enough ZZs is the key to staying focused and productive. Never more so if your job is to drive a taxi all day or all night.

TAXI!!

But with 14,000 yellow cabs in Manhattan alone, they are hard to come by, which is why the key to staying focused and productive. Never more so if your job is to drive a taxi all day or all night.

Between vehicles, commuters, tourists and skyscrapers towering above us, perhaps the question is not when but where do they take their breaks in a city where space is the real currency? Heading down Lexington Avenue, my driver points out some of the relief stands the city has to offer. Perhaps the question is not when but where do they take their breaks in a city where space is the real currency? Heading down Lexington Avenue, my driver points out some of the relief stands the city has to offer.

A lack of sleep has been linked to everything from unhealthy lifestyles to erratic behaviour and dangerous driving. Getting enough ZZs is the key to staying focused and productive. Never more so if your job is to drive a taxi all day or all night.

Before travelling to NYC I talked rest and driving safety with Mikael Ljung Aust, Driver behaviour specialist at Volvo Cars. He says that after spending a long time behind the wheel, it’s difficult to know how much recovery you’ll need before it’s safe to continue driving. A coffee and a 15-minute power nap is a good starting point. But it all depends how much driving you’ve got left,” Volvo Cars’ drowsiness research focuses on two perspectives: how to make people act earlier on signs of sleepiness and how to detect if a driver no longer is in control of the car and thus needs help to control it to avoid a collision. “It’s hard to predict exactly when a person will fall asleep, even in a lab with strict monitoring,” says Mikael. That’s why Volvo Cars focuses equally on developing preventive safety as well as protective systems.

STOP FOR A CUP OF JOE

So, how do New York’s cab drivers know when it’s time to take a break? My driver from last night explains that whenever he feels his eyes start to twitch, he pulls over and takes a nap — no matter where he is. He relies on himself to recognise the signs of fatigue. But, as Mikael says, “It’s not always easy to know when you are just a little tired or if you are too tired to drive. Not only that, you don’t make your best decisions when you’re tired.”

Although the driver always bears responsibility, a “co-pilot” improves your chances of getting home safely. Cameras, lasers and radar monitor both the car’s movement and the driver’s behaviour to alert, assist and wake up drowsy drivers. One of these alerts is the “coffee cup.” You’ve probably seen it appear in your car’s information display. But chances are that you linked it to your driven miles and not the way you’re driving. The engineering behind it is way smarter – your driving is actually matched with a special algorithm that simulates a drowsy driver. It can even tell you where it’s safe to pull over. Coffee anyone?

NEW YORK is the third most populous state in the U.S., after California and Texas. Of its population of 19 million, a little over 8 million live in New York City alone. The city is a melting pot of cultures, languages and traditions, with a unique personality. It’s the city that never sleeps, where anything is possible.

To make living and commuting easier, companies are recognising that, in today’s offices, break rooms are just as important as conference rooms. For two drivers, their entire workplace is their cars. They read the news waiting for red to turn green, eat lunch parked next to sidewalks — with people not as conference rooms. For two drivers, their entire workplace is their cars. They read the news waiting for red to turn green, eat lunch parked next to sidewalks — with people not

LET’S CHANGE CULTURE

New York is the third most populous state in the U.S., after California and Texas. Of its population of 19 million, a little over 8 million live in New York City alone. The city is a melting pot of cultures, languages and traditions, with a unique personality. It’s the city that never sleeps, where anything is possible.

Companies are recognising that, in today’s offices, break rooms are just as important as conference rooms. For two drivers, their entire workplace is their cars. They read the news waiting for red to turn green, eat lunch parked next to sidewalks — with people not always respecting the off-duty sign. It’s a stressful environment and stress causes people to sleep less. Along with the cigarettes, caffeine and catnaps to stay alert, that seems a risky approach.

Although the driver always bears responsibility, a “co-pilot” improves your chances of getting home safely.
DRIVER ALERT CONTROL
Intended primarily for use on long stretches of road where boredom can take over, Driver Alert Control detects when a driver begins to drive less consistently. An on-board camera compares the road markings with the drivers steering wheel movements. If the car does not follow the markings, the system sends an alert to the driver.

LANE KEEPING AID
Lane Keeping Aid is designed to sense when a driver loses concentration or control of the car in some way. If the system detects a driver is not in control, e.g. if they begin to stay across the lane markings, Lane Keeping Aid helps by gently steering the car back into the right lane. If the steering intervention is not enough, the driver is warned by vibrations felt in the steering wheel or by a warning sound.

DRIVER STATE ESTIMATION
We are also constantly working on developing new safety innovations for the future. One of these innovations is Driver State Estimation. Driver State Estimation is a driver awareness monitoring system that recognises the driver’s visual characteristics and monitors their behaviour whilst driving. The system uses infrared light sensors mounted on the dashboard to monitor what the driver is looking at. The position of the head and how open the eyes are. If the system senses the driver is not paying attention, and there is risk of a collision, it automatically activates the relevant safety system.

To find out which safety innovations are available for your Volvo model, contact your local Volvo dealer.

4 WAYS WE CAN HELP YOU STAY ALERT AND ON THE RIGHT TRACK

REST STOP GUIDANCE
New Volvo cars are fitted with a number of innovations designed to help drivers stay alert on the road. And these functions are often designed to work together. For example, if the Driver Alert Control function senses you are in need of a rest, the Rest Stop Guidence function will provide you with directions to the nearest rest area.

EVERYTHING YOU NEED FOR A GOOD NIGHT’S SLEEP

- MOOSE PLUSH TOY
- WATER BOTTLE EVA SOLO
- STELTON TO GO CLICK
- HARMAN KARDON SOHO WIRELESS
- KLIPPAN CAR BLANKET

collection.svenskcar.com
Every Volvo car and every Volvo driver is unique. But this doesn’t mean we should stop searching for exciting new ways to express our individuality – especially when we’re out on the road. No matter what Volvo model you drive, you’ll find a selection of exterior styling accessories exclusively designed to help enhance your car’s appearance and help you project your own unique personality.

From individual styling elements that give the exterior of your Volvo a subtle new dimension to a complete new look that will transform your car, Volvo Cars exterior styling has something to suit everyone. To find out which exterior styling accessories are available for your car, visit accessories.volvocars.com or contact your local Volvo dealer.

**NOW EVERYONE CAN BE UNIQUE**

**Volvo V90 Cross Country Side Scuff Plate**
This exclusive side scuff plate in brushed stainless steel is designed to give the car a robust and rugged appearance. The sill décor is etched with Cross Country and is installed under the doors to enhance the car’s adventurous Cross Country character.

**7-Open Spoke Matt Tech Black Diamond Cut Alloy Wheel 8,5×21”**
A unique 21” aluminium wheel for the V90 Cross Country that combines a larger diameter and high-tech Diamond Cut design to create a robust, expressive and give the car an even more powerful look.

**Roof Box, Designed by Volvo Cars**
This aerodynamic roof box is exclusively designed by Volvo Cars. It is easily opened from both sides and easily mounted thanks to the “Quick-grip” function. It is capable of carrying 350 litres and is compatible with all Volvo Cars load carriers.
For Volvo Cars, innovation is never just about technology. We always start by asking, “How can we make life better and easier for people?” And then we search for answers. When it comes to the next step in the development of our workshop offer – which we call Service by Volvo – one of the answers is: Two is better than one. Because working as a team can make a big difference.

In 1924, Assar Gabrielsson and Gustaf Larson met at the Sturehof restaurant in Stockholm and made an agreement. The two Swedes would start a car manufacturing operation together. Three years later, the first Volvo car rolled out of the factory door.

Gabrielsson was the businessman and Larson the engineer. They complemented each other perfectly, and for many years, they shared the same office where they sat opposite each other at a large desk, their door always open.

Volvo Cars’ founders’ way of working together and making the most of each other’s skills illustrates a fundamental principle: Working in pairs can give better results. Two minds are smarter than one, four eyes see more than two, four hands work faster than two. And today, this simple principle is used to change the way Volvo technicians work when they service or repair your Volvo.

**WHY THE NEED?**

Just about everything has improved and evolved since the birth of the automobile in 1886. Engineering, technology, performance, safety, fuel efficiency, manufacturing processes, quality – everything. But one thing hasn’t really changed. And that is the way cars are serviced in the workshop. It’s one technician working on one car. Every technician working on their own. There may be more advanced equipment and electronics today but basically the way of working hasn’t changed.

When we at Volvo Cars asked ourselves how we could make life easier for our workshop customers, we identified time as one of the most important factors. Having your car serviced should take as little time as possible. So why are workshops still working according to pre-industry logic? Why are technicians not working in teams, like in a Formula One pit stop – ok, perhaps not at that advanced level, but at least in pairs?

If it’s not rocket science, it has to be something to improve the process. The Volvo workshop offers to make your life as a Volvo driver as convenient and trouble-free as possible. Volvo workshops all around the world are now in the process of changing their way of working. Not only are Volvo technicians trained to work in pairs, the entire organisation of the workshops is being changed, so that everybody can work together as a team. And as it turns out, this focus on teamwork also leads to even more radical improvements than just reducing the time it takes to service your car.

Let us explain how. When the technicians work together on the same car, the job can be finished in half the time. When we looked into this further, we realised that 80% of our customers could have their car ready within the hour.

Only the more advanced jobs would take longer. This would also mean that it could be more convenient for people to wait while the job is done, instead of having to drive back and forth in a rental car. Now, they could just relax for an hour with a cup of coffee and a magazine, or connect via the Wi-Fi and get some work done.

**LEARNING AND SHARING**

So this is what we’re aiming for now, as one of the next steps in the development of Service by Volvo – which is our umbrella name for everything the Volvo workshop offers to make your life as a Volvo driver as convenient and trouble-free as possible.

Volvo workshops all around the world are now in the process of changing their way of working. Not only are Volvo technicians trained to work in pairs, the entire organisation of the workshops is being changed, so that everybody can work together as a team. And as it turns out, this focus on teamwork also leads to even more radical improvements than just reducing the time it takes to service your car.

This is something that is also integrated in the daily work in a systematic way. At daily meetings in front of a visual board, the team of technicians have a common view of how things are going. If the workload feels uneven, it can be balanced within the team. If someone has found a new, better way to do something, this can be shared and made into a standard for the workshop.

If there has been a problem, then this is discussed and actions are taken to find its root cause, so that it can be solved once and for all. In traditional workshops, it is not uncommon that the same problem needs to be solved over and over again. This is because there is no process in place for making problems visible and solving them together as a team.
EVERYTHING GETS BETTER

In addition to the technicians working in pairs on your car and improving their work methods together as a team, the new way of working also involves every customer getting their own Personal Service Technician. This is because talking directly to the person doing the job on your car will make things easier and reduce the risk of misunderstandings.

All in all, this new way of working will mean that Volvo workshops will be able to outperform any other carmaker’s workshops when it comes to solving all customer needs with the highest quality and in as short time as possible.

It will be some years before every single Volvo workshop works exactly like this. Changing traditional ways of working always takes time. In the meantime, you can always benefit from everything else that is already – and always – included in Service by Volvo. Every time you service your Volvo at an authorised Volvo workshop you get your car’s software updated to the latest version, which means that your car can actually become a little better after every service.

You will also get your Volvo Assistance extended for another 12 months, so you’re always assured of quick help should anything happen. We will perform a complimentary health check of your car and also wash it for you. To mention a few of the ‘extras’ that are always included when servicing your car at a Volvo workshop.

Also, should there be anything else your car may need – for example; repairs, wheels, windscreen replacement, A/C service or cleaning – we can, of course, take care of that too. That’s what Service by Volvo is all about – offering everything you may need, in the simplest way possible. And soon, as more and more Volvo technicians start working together in the new way, your visit to the Volvo workshop will be even quicker, easier and more convenient.

To find out more about our workshop offer, visit volvocars.com
For the last hundred years we’ve had a simple view of cars – we drive them, they don’t drive us. It’s even become a classic image of power and control as we lean back in the driver’s seat, with a firm grip of the wheel, gazing toward the horizon. But modern technology is changing how we do things. And autonomous technology will shape a new kind of driver.

So what will it be like to “drive” a self-driving car? What happens to that power and control? Do we want to lose it? Do we want a computer to have all the control – or all the fun? Resistance to new things is not new; it’s difficult to want something when we don’t know how it may change our lives.

As one of the safest car manufacturers in the world, Volvo Cars has the ability to reassure people about the safety of letting go of the wheel. But how does Volvo Cars see the actual benefits of self-driving cars? Well, we’ve got a few ideas of our own but we’re more interested in what you think and how you embrace the journey into the unknown. Because ultimately that’s what it will mean. At Volvo Cars, our job is to listen and respond with designs and technologies to help you make the most of it.

So, we invited men and women from all around the world to imagine what their lives might be like in a world of self-driving cars. Could Carolina, Sacramento, Ray, Mui and all the others embrace the freedom of not having control? And how might life change for Henning and his wife who are both blind?

Meet them and join the conversation on volvocars.com
“The time of being scared of technology is over.”

PETER MUTAHI

“It’s going to be hard to give up the wheel. The driver’s seat is a seat of power.”

SACRAMENTO ROSELLO
“I’d trust an autonomous car more than some of the drivers on the road.”

JONATHAN BAUER

“I don’t enjoy driving. There’s too much work involved.”

MUI KUEN LO
“The world might not change. But our lives would.”
HENNING BACKS
was quite a year for music. The Beatles, The Beach Boys and Bob Dylan all released groundbreaking albums that completely transformed the cultural landscape. But while Lennon and McCartney and their contemporaries were busy reinventing the way music was made, a classical music enthusiast called John Bowers was focusing his attention and expertise on reinventing the way we listened to it.

THE SEARCH FOR ‘TRUE SOUND’

A small TV repair shop in the sleepy English county of West Sussex may not seem the most likely setting for a musical revolution, but it was here that John Bowers first began designing and building the loudspeaker that would later become the speaker of choice for serious audiophiles all over the world. After discovering the stereo recordings of his favourite classical pieces rarely recreated the thrill and vibrancy of a live performance, Bowers set himself the task of designing a loudspeaker that would enable the listener to experience music in a way that was pure, satisfying and as faithful to the artist’s original intentions as possible. Bowers called this ‘true sound.’ Now, fifty years on, wherever a premium audio experience is paramount, you’ll find the ‘true sound’ of Bowers & Wilkins – whether it’s the world-famous Abbey Road studios, the Primavera Sound Festival or the latest Volvo cars.

A COLLABORATION IN PERFECT HARMONY

Volvo Cars and Bowers & Wilkins share a lot in common. Both companies share a proud pioneering heritage as well as a passion for engineering excellence and an obsessive attention to detail. But most importantly, both companies design everything around a desire to meet the needs of people. So, when it came to creating the premium sound system for the new 90 series Volvo cars, naturally, Bowers & Wilkins’ expert engineers and designers were involved from day one. It was a collaboration that worked in perfect harmony and the result was an exceptional listening experience that effortlessly combined superior sound with stunning Scandinavian design.

Thanks to today’s technology, we can listen to our favourite artists whenever and wherever we like. As a result, music has become an integral part of our lives. Now, Volvo Cars has teamed up with British Hi-Fi specialists Bowers & Wilkins to make the music we love an integral part of our cars as well. After all, every journey deserves a great soundtrack.

A small TV repair shop in the sleepy English county of West Sussex may not seem the most likely setting for a musical revolution, but it was here that John Bowers first began designing and building the loudspeaker that would later become the speaker of choice for serious audiophiles all over the world. After discovering the stereo recordings of his favourite classical pieces rarely recreated the thrill and vibrancy of a live performance, Bowers set himself the task of designing a loudspeaker that would enable the listener to experience music in a way that was pure, satisfying and as faithful to the artist’s original intentions as possible. Bowers called this ‘true sound.’ Now, fifty years on, wherever a premium audio experience is paramount, you’ll find the ‘true sound’ of Bowers & Wilkins – whether it’s the world-famous Abbey Road studios, the Primavera Sound Festival or the latest Volvo cars.

A COLLABORATION IN PERFECT HARMONY

Volvo Cars and Bowers & Wilkins share a lot in common. Both companies share a proud pioneering heritage as well as a passion for engineering excellence and an obsessive attention to detail. But most importantly, both companies design everything around a desire to meet the needs of people. So, when it came to creating the premium sound system for the new 90 series Volvo cars, naturally, Bowers & Wilkins’ expert engineers and designers were involved from day one. It was a collaboration that worked in perfect harmony and the result was an exceptional listening experience that effortlessly combined superior sound with stunning Scandinavian design.

Quality, not just quantity

The key to successfully recreating the signature Bowers & Wilkins sound in a Volvo lies in the meticulous tuning and unique placement of the speakers. Tuning the sound system in a car is an art form that requires hours of listening, a lot of patience and more than a few pairs of expert ears. But you can imagine the amount of time, effort and expertise that went into tuning and positioning the 19 premium speakers that are integrated into the new 90 series. Built using only the finest materials and the finest loudspeaker technology, each speaker occupies a unique position in the car to help achieve optimal sound quality. These speaker positions are worked on for years in advance of production and the efforts of audio experts and countless computer simulations are utilized to help find the perfect audio sweet spot. However, once the sweet spot has been located, the fixed nature of the cabin allows the engineers to achieve extremely accurate levels of tuning.

Of the 19 speakers on-board, one in particular stands out. Tweeter-on-Top is a feature found in Bowers & Wilkins’ most advanced Hi-Fi speakers and has never before been used in a car audio system. Strategically mounted on the dashboard, the exposed Tweeter-on-Top speaker points back into the cabin rather than upwards towards the windscreen. This helps minimize acoustic reflection from the windscreen and removes almost any interference. This ensures a superior level of sound that is more detailed, pure and authentic – especially when it comes to reproducing vocals.

Thanks to today’s technology, we can listen to our favourite artists whenever and wherever we like. As a result, music has become an integral part of our lives. Now, Volvo Cars has teamed up with British Hi-Fi specialists Bowers & Wilkins to make the music we love an integral part of our cars as well. After all, every journey deserves a great soundtrack.
SOUND SHAPED FOR PERFECTION

As well as the Tweeter-on-Top technology, the new 90 series sound system includes one of Bowers & Wilkins most well-known innovations - Kevlar® speaker cones. Made from the same material used in body armour, Kevlar® speaker cones are particularly effective in cars as they feature unique break-up characteristics that help prevent distortion and improve off-axis performance, i.e., sound that doesn’t travel directly from the speaker to the listener’s ear. As well as the conical Kevlar, the system also features spiralling diffusion channels that reduce echoes to a minimum. These spiralling channels were inspired by another of Bowers & Wilkins legendary innovations, the Nautilus speaker. Based on a brief given by John Bowers to his engineers just before his death, the Nautilus speaker was the iconic result of a five-year research and development project whose aim was to create a loudspeaker that was as close to perfection as possible – regardless of cost. Twenty years later, there is still nothing that looks or sounds like the Nautilus.

Another element of the speakers' design that helps contribute to the crystal clear sound is the high-quality stainless steel speaker mesh. As well as being extremely stylish, the solid properties of the stainless steel help reduce vibrations and interference, while the holes in the mesh are precision etched to help deliver just the right levels of acoustic transparency. This is achieved by placing the largest holes at the centre of the cone and allowing them to get gradually smaller as they move outwards.

As a final touch, and to ensure that the distinctive ‘true sound’ of Bowers & Wilkins is in place, each car’s audio system is calibrated by the same engineers who calibrate the Bowers & Wilkins home speaker systems. Once the system has been calibrated and the sound given the thumbs up, then it’s time to roll – or rock depending on your musical preference.

FIFTY YEARS AT THE FOREFRONT

After fifty years of uncompromising audio innovation, Bowers & Wilkins are still following their own unique path and staying true to John Bowers’s sound set of principles. It’s the dedication to developing groundbreaking new technologies combined with a complete disregard for fashion or current trends that has enabled the company to remain at the forefront of audio exploration for as long as it has.

With their desire for innovation, appreciation of genuine craftsmanship and unwavering belief that form should follow function, Bowers & Wilkins fit perfectly with Volvo Cars’ Scandinavian design philosophy. Not only that, they embody the same adventurous spirit. Volvo Cars and Bowers & Wilkins. Two pioneers bound by sound.

The best loudspeaker isn’t the one that gives the most; it’s the one that loses the least.

John Bowers, founder of Bowers & Wilkins
This new collection is the result of this exciting new collaboration between the premium Swedish bag designer and Volvo Cars. Inspired by a shared love of the outdoors and classic Scandinavian design, Volvo Cars and Sandqvist worked together to create three eye-catching and enduring new designs that combine urban style with outdoor functionality. The collection includes a weekend bag, a back pack and a messenger bag. Each bag is made from waterproof Cordura® fabric, which is as strong as it is stylish, and features details in vegetable tanned high quality leather.

The Volvo Car Lifestyle Collection includes a wide range of lifestyle items and accessories. To view the complete collection, visit collection.volvocars.com

Cordura Back Pack

Cordura Messenger bag

Suunto Traverse Graphite Watch

AN ENDURING SENSE OF STYLE

DESIGNED BY VOLVO CARS AND SANDQVIST
EXPLORING THE SKIES on Concorde, setting sail aboard the iconic cruise liner, the Queen Elizabeth II (QE2), or pulling away in style from Paris Gare de l’Est train station on the Orient Express. For many this still represents the pinnacle of luxury travel, from a time when no expense was spared in making passengers feel comfortable and special. But even though these examples are from a bygone age, our longing for luxury and comfort remains — no more so than when we’re in our cars. So, how can we experience a similar level of luxury today? Well, the secret lies in the leather.

PART OF A FINE HERITAGE
It’s no coincidence that this article began by mentioning Concorde, the QE2 and the Orient Express. Yes, they are all prime examples of luxurious first class travel, but they all have something else in common — they all featured exquisite upholstery crafted from the finest Bridge of Weir leather. The very same leather that allows you and your passengers to experience luxury travel every day. Because behind each piece of Bridge of Weir leather in your Volvo, you’ll find the same levels of care, craftsmanship and knowledge that went into the leather used in George and Ray Eames iconic armchair, the chairs in the clubhouse of the Royal and Ancient Golf Club of St. Andrews and last, but certainly not least, the seats that grace one of Britain’s most esteemed institutions, the Houses of Parliament. So, as you can see, the leather in your Volvo is part of a very fine heritage.

Founded in 1905 and situated on the outskirts of Glasgow, Scotland’s largest city, Bridge of Weir is now the oldest independent automotive leather manufacturer in the world — and the leather produced there is considered by many to be the world’s finest. A true family business in every sense, the company’s roots can be traced back to 1758 and there are now sixth, seventh and eighth generation members of the family working there, all of whom are leathermakers. This has resulted in a unique leather manufacturing process steeped in tradition and shaped by leather making skills that have been passed down through the generations.

“I used to get brought round the factory on a Saturday morning by my grandfather. I’m seventh generation since the business first began in 1758, so it’s kind of in the blood,” explains Bridge of Weir’s Sales Director, Jamie Davidson, whose great-grandfather, Arthur Muirhead, founded the company way back in 1905.

“It was my great-grandfather who decided to move to Bridge of Weir and set up a factory that would produce leather for the transport industry,” continues Jamie. “There wasn’t so much industry in the area at the time, so there was a lot of good people looking for work. We’ve now got third and fourth generation employees here at Bridge of Weir. People are so important in this business. No two hides are the same, so we have to inspect every single one. And you can’t do it without the human eye.”

When Bridge of Weir Leather was founded, the city of Glasgow was synonymous with manufacturing quality and engineering excellence. The ships, trains, buses and trams that were built here were among the best in the world and they needed quality leather to match. It was leather from Bridge of Weir that was chosen to supply the finishing touch. As time went on, and their reputation for outstanding quality grew, the company began to focus more on supplying leather for the automotive industry. And it was their pioneering work in this field that first caught the eye of the designers at Volvo Cars. Today, Bridge of Weir supplies the leather for almost all Volvo models.

But how did this relationship between Scotland and Sweden begin?
THE STORY

IT ALL BEGAN WITH THE VOLVO 740

“We started with the Volvo 740 back in 1983,” explains Jamie. “The upholstery we produced was a single-tone colour, which is what most cars have today, but interestingly we then developed a two-tone, almost cloud-like effect on the leather. So it almost looked used, like a good antique armchair that gets better with age.” It was Bridge of Weir’s work on another Volvo model, however, that really took the two companies relationship to the next level. “The big turning point for me was the Volvo 850. We were sole suppliers which was very unusual. But by that point Volvo had the confidence to give us all the colours for that car. That really cemented our relationship.”

But Jamie believes the relationship between Volvo Cars and Bridge of Weir runs deeper than simply business. “Both are good honest companies and I think we’ve got a lot in common. Volvo’s catchphrase is ‘quality, the environment and safety’. I’d like to think we stand up for the same values.” The two companies also share cultural and geographical similarities. Gothenburg and Glasgow are both industrial cities, both are situated on the west coast and both tend to live in the shadow of their supposedly more cosmopolitan capital cities in the East. Perhaps it is this underdog status that has resulted in both cities having such proud manufacturing heritages.

“I really feel there’s no barrier between Scotland and Sweden. There are many similarities between the Gothenburg locals and the west of Scotland/Glasgow locals with their backgrounds in heavy engineering and shipbuilding – they even share a similar sense of humour.”

WHERE TECHNOLOGY MEETS TRADITION

Today, we spend more time in our cars than ever before. As a result, a car’s interior design is becoming more and more important to both customers and car manufacturers alike – especially as most modern cars are now able to offer similar levels of performance. So what is it that can make the difference?

“There are a lot of things that people look for in the interior of their cars nowadays,” says Debra Choong, Head Designer at Bridge of Weir. “They look for details and bespoke design, but they also look for comfort. You spend a lot of time in your car – it’s like a living room – so comfort is a big issue. People are also becoming more aware of environmental issues. They like to know the story of where the goods come from, which materials have been used, so these are things we try and focus on as well as the design side of things.”
Debra originally trained to be an architect and this has given her a unique perspective when it comes to designing upholstery. “I have always been interested in designing interior spaces, looking at where people live, how their spaces affect them. So, all the training I have through architectural design has naturally evolved into what I do now at Bridge of Weir.”

To come up with new design ideas, Debra and the design team combine innovative new design methods, such as 3D printers and digital embroidery machines, with the tried and trusted methods of the past. And it’s this respect for tradition coupled with a willingness to embrace the latest design technology that enables Bridge of Weir to remain at the forefront of leather manufacturing and design.

But what do Volvo Cars look for in their leather and how does Bridge of Weir go about bringing this interior design vision to life? “Volvo want very soft, natural-looking leather,” explains Debra. “But they want it to meet high standards for wear-ability. It’s an exciting challenge to develop a leather that has that magical combination of an ultimately natural look, but that is durable and has high performance qualities.”

“We work in conjunction with the Volvo Cars Design Team,” continues Jamie Davidson. “We try to visit their design department once a month and we have built a very strong relationship there.” Bridge of Weir also holds an annual trends show where they present their ideas regarding future design trends and innovations. But developing a leather that meets the designers’ demands is just the start, as Jamie explains. “Once you have the aesthetics, the feel, the colour and the touch, the leather has to then be tested in our laboratory. This is another challenge because Volvo Cars’ specifications are quite rightly very rigorous.”

Bridge of Weir has a full on-site laboratory, which allows them to carry out a wide range of testing every day. These daily tests include testing for emissions, durability, abrasion resistance and whether the leather causes fogging in the cabin. But they also carry out more extreme annual tests, which involve placing pieces of leather in a climate chamber for around eight weeks in order to monitor how the finish performs in both extreme high temperatures and extreme low temperatures. It’s reassuring to know that when it comes to testing the materials that will go into your Volvo, nothing is left to chance.

A FOCUS ON SUSTAINABILITY

Volvo Cars and Bridge of Weir have been working together now for over thirty years. And during that time, both companies have seen a lot of changes. Changes not only in design but also in manufacturing and processing techniques. A lot of these changes came about thanks to collaborations between the experts at Bridge of Weir and the Technical team at Volvo Cars. One of the biggest developments was the creation of a chromium-free tanning process.

Jamie takes up the story, “We used to chrome tan all of our leather, which is the standard tanning method used in the shoe and garment industry. But we worked together with Volvo Cars to develop a chromium-free leather, which is organically tanned with natural agents like chestnut, mimosa and Tara. That was a major change and that happened around the end of 1999.” Not only is chromium-free tanning better for allergy sufferers, it’s also better for the environment. Taking care of the environment is something Bridge of Weir has invested a huge amount of time and resources in, with the result that they now have the lowest carbon footprint of any leather maker in the world. They even have their very own, self-funded thermal energy plant. Designed by Dr Warren Bowden, Director at SLG Technology, one of the sister companies to Bridge of Weir, the thermal energy plant at Bridge of Weir is a patented world first and is a key factor in the company’s mission to develop the highest quality, low-carbon leather. The leather industry generates a huge amount of waste – Bridge of Weir alone accumulates around 100 tonnes a day. But thanks to their innovative approach to resource management and recycling, this waste is now taken care of.
It's funny. I can't get into a car without touching the seats before I actually sit on them.

Jamie Davidson, Sales Director, Bridge of Weir Leather Company
ENJOY THE GREAT INDOORS
CLEANZONE

Picture yourself enjoying a breath of fresh air. Where are you? In a meadow, atop a mountain? I bet not many of you imagined yourself behind the wheel of your car. But, why not? Even when you find yourself surrounded by rush hour traffic, it is still possible to enjoy clean in-car air – providing the car you’re sitting in is a Volvo, of course.

What if, wherever you went, you could take your very own private little bubble of fresh air with you? It wouldn’t matter if you were in the big, smoky city or driving down a dusty highway, you and your passengers would only breathe clean in-car air – regardless of the conditions outside. Well, this is the thinking behind Volvo Cars’ CleanZone concept: a unique approach that uses innovative solutions to improve in-car air and create an altogether healthier driving environment.

Back in the mid-1990s, we began carrying out tests with the aim of creating a driving environment that was both comfortable and safe for hypersensitive people. The Volvo S80, introduced in 1998, was the first model in which the benefits of these tests were clearly noticeable. But it was with the release of the Volvo XC90 that a new standard was set in the quality of air we can expect to breathe in our cars. The reason for this dramatic improvement in interior air quality was the introduction of a larger, more efficient multi-filter. Thanks to its size, the new multi-filter is capable of intercepting more particles and pollen than ever before. It also features a layer of active charcoal, which is designed to effectively remove a wide variety of contaminants that can cause harm to a driver’s health.

AIR THAT’S CLEANER INSIDE THAN OUT

This new multi-filter, however, is just one of the elements that make up the state-of-the-art Interior Air Quality System (IAQS) that can now be found in new Volvo cars. There is also a sensor that monitors incoming air for noxious substances. If the level of harmful substances detected is deemed too high, e.g. if you happen to be driving through a tunnel, the car’s air intake closes automatically. By working together, the new multi-filter and sensor are able keep out a host of harmful and irritating pollutants.

The Volvo S90, V90 and XC90 also have a new display that lets you know if the quality of the air in the car deteriorates. An icon on the 9-inch centre display touch screen changes from blue – which means that conditions are fine – to grey if, for instance, you open a window and unfiltered air gets into the cabin or you turn off the air quality sensor. However, air continues to be passed through the multi-filter. It’s a gentle reminder that CleanZone is always watching out for your wellbeing.

The Volvo S90, V90 and XC90 also have a new display that lets you know if the quality of the air in the car deteriorates. An icon on the 9-inch centre display touch screen changes from blue – which means that conditions are fine – to grey if, for instance, you open a window and unfiltered air gets into the cabin or you turn off the air quality sensor. However, air continues to be passed through the multi-filter. It’s a gentle reminder that CleanZone is always watching out for your wellbeing.

Today, up to 45 per cent of the industrialised world’s population suffer from some form of allergy or hypersensitivity – 10 per cent of which suffer from asthma. We took this information and used it to help us in the design our new multi-filter. But our commitment to creating the healthiest in-car environment doesn’t stop with the air conditioning system. The CleanZone concept applies to the whole of the car’s interior – from the quality of the air to the substances and materials used.

Since metals, plastics and fabrics may give off harmful chemical emissions, we have established a rigorous testing programme to ensure that every aspect of the interior is as safe and healthy as possible. Metallic components, such as handles, buttons, keys and safety belt latches are tested for nickel leakage, while textiles are chosen and tested to make sure they contain no harmful substances.

THE BEST NOSES IN THE BUSINESS

Another part of the testing programme includes subjecting cars to a sunshine simulation test. During the simulation, the car is heated until the interior temperature reaches 65°C. This helps detect harmful emissions that can cause headaches and dizziness as well as trigger asthma. Then, of course, there’s the Volvo Cars Nose Team who use their expertise to painstakingly smell different objects, such as floor mats and other fabrics, to determine whether their odour is too strong.

Alongside this testing programme, we have also developed a number of innovations to help ensure everyone who travels in a Volvo enjoys the cleanest in-car environment from the moment they step into the car. One of these innovations is remote cabin ventilation. Remote cabin ventilation enables drivers to activate the car’s ventilation system in advance using their key as a remote control. Once activated, the ventilation system automatically vents out the existing interior air. So when you open the door, the air that greets you is free from odours and emissions.

As awareness of the negative effects of air pollution increases, so do drivers’ demands for a cleaner in-car environment. CleanZone is our unique way of giving it to you.
We negotiate rocky lanes, fast-flowing streams and inclines that induce a sharp intake of breath.

Remote and spectacular, the Isle of Skye off the Scottish coast has mountains, winding roads and challenging weather. We experience its rugged beauty from the luxurious sanctuary of the new Volvo V90 Cross Country.

THE ADVENTURE STARTS LONG BEFORE WE REACH OUR DESTINATION
A remote outcrop at the top of a winding road, overlooking the edge of the North Atlantic. We're driving here using the very latest technology: the new Volvo V90 Cross Country, a car designed to take you to the heart of the adventure in supreme comfort and style, whatever the conditions. The landscape we're travelling through is straight out of a classic adventure novel. We're in an isolated corner of the Scottish Highlands, a beautiful but treacherous place where the right equipment is essential. I remember this when I get into the V90 Cross Country to shelter from the fierce storm that is rolling in over the mountains. Watching the rain through the panoramic roof, I switch on my heated seat, use Apple CarPlay to select a track to play through the Premium Sound by Bowers & Wilkins speakers and settle in for the drive ahead.

The road starts to bend and snake into the mountains and I recall a conversation I had with Volvo Cars' dynamics expert Mattias Davidsson before this trip. He explained what makes this car special. "The slightly softer suspension and longer wheel travel of the V90 Cross Country results in a very high level of suspension comfort. But what is really amazing is the car still handles incredibly well, too. We have achieved the perfect balance between agility and comfort."

Our path takes us off main roads and into the inviting landscape ahead. This means negotiating rocky lanes, gravel paths, fast-flowing streams and inclines that induce a sharp intake of breath. A 3D map on Sensus Navigation, displayed vertically so it’s easier to read, confirms just how remote this landscape really is.

Using the drive mode selector, I change from Dynamic to Off-road mode. The V90 Cross Country now displays a remarkably different character. According to Mattias, Off-road mode gives you extra confidence in all driving conditions. "In Off-road mode the engine and gearbox are optimised for traction", he said. "The accelerator is adjusted to avoid inadvertently exceeding 40 km/h, the steering is set to comfort and the all-wheel drive distributes power between the front and rear wheels. This makes you feel very much in control."

The grip from the all-wheel drive chassis and impressive ground clearance allow the V90 Cross Country to effortlessly make its way in this inhospitable terrain. And with Hill Descent Control, which is automatically activated in Off-road mode, the car can safely negotiate steep gradients. It’s a car that instils a lot of confidence in the driver.

As we pass fields of heather and hills shrouded in mist, the connection with nature, the sense of freedom and the comfort of being suitably equipped for the conditions inside a spirit of adventure that you can only experience on journeys like these. Our journey culminates at the Quiraing, a beautiful and mysterious escarpment on the Isle of Skye, overlooking the Sound of Raasay. Surrounded on three sides by forbidding but spectacular mountains, we have reached the end of the road. It is now time to explore this wilderness on foot. I reluctantly leave the sanctuary of the V90 Cross Country.

* Apple CarPlay is a trademark of Apple Inc.
It’s a crisp October morning and I’m standing outside the Volvo Cars factory in Gothenburg, Sweden. Volvo models of every shape, size and colour stretch out as far as the eye can see. It’s like visiting a town founded and inhabited solely by Volvo enthusiasts. I’m here to meet Peter Hellgren. Peter has been working as a validation engineer for Volvo Cars for over 20 years and today, I will be joining him and two of his colleagues on a validation expedition, where three new Volvo 90 series cars will be put through their paces. But before we set off, what exactly does a validation engineer do?

“Validation is all about feeling,” explains Peter. “We analyse and test the car at every stage of the development process to make sure it feels the way it should. It’s all about meeting the customers’ expectations on an emotional level.” In short, Peter’s job is to test from prototypes to the factory model to ensure the car delivers everything the product description promises it should.

EVERY EXPEDITION HAS SOMETHING TO TEACH YOU

We set off on our expedition. Peter and I lead the way in a brand new V90 while Thomas and Bengt, the other validation engineers taking part in today’s expedition, bring up the rear in two stunning new S90s. The reason for today’s trip is to give the three cars a final workout before they embark on a full-length expedition in two weeks’ time, where Peter, Thomas and Bengt will carry out their validation work all over Europe — from the sunny climes of southern France to the breathtaking heights of the Italian Alps.

On today’s expedition, however, we are driving to Bohuslän, a province located on the northernmost part of Sweden’s west coast. Now, this may not sound as exotic as ascending the Alps or cruising down the Autobahn, but when it comes to validating a new car, every expedition has something to teach you.

When you collect a new car from the dealership, there are certain things you already know. You know how the car is going to look, you know how fast it can go and you know which features it comes equipped with. But one thing you can never be 100% sure of is how it is going to feel once you’re behind the wheel and out on the road. Or can you? Well, thanks to the expertise of people like Peter Hellgren, you can. Peter is a Volvo Cars Validation engineer and his job is to make sure you experience your Volvo exactly the way Volvo Cars intended.

BUILDING CARS IN A CAVE

The CAVE (Cave Automatic Virtual Environment) is a room in which the walls and ceiling double as projection screens to help build 3D versions of the car during the early design stage. Peter gets a feel for the car as it will appear in the real world.

45

MORE THAN A FEELING

PASSIONATE PEOPLE

VOLVO CARS VALIDATION TEAM

TEXT / PHOTO © KENNETH ANDERSSON / NICKE JOHANSSON
PASSIONATE PEOPLE BEHIND VOLVO CARS

DESIGNING FROM THE DRIVER’S PERSPECTIVE

“When it comes to validation, we always assess the car subjectively,” explains Peter as we cruise smoothly up the E6 towards the town of Stenungsund. “But we never say ‘I think’, we always say ‘These are my findings and these are the reasons behind my findings.’ At the end of each day, we discuss our findings together and give each part of the car we have tested a mark out of ten. If a part of the car receives two very different marks, we discuss why that could be.” But who decides what kind of things Peter and his colleagues should look out for?

“The type of testing we carry out depends on the type of car Volvo want to develop,” says Peter. “We receive an order to develop a car with certain characteristics, e.g. dynamic steering. We then take that order and interpret it from a driver’s perspective to see if it sounds feasible.” Every order for a new Volvo car comes with different demands from different Volvo departments. So Peter and his team must work closely with each department to find the right balance of properties and ensure that the car works as a whole.

FINDING THE RIGHT COMBINATION

The Volvo Cars Validation Team is made up of 15 engineers, each with their own area of expertise. And according to Peter, it’s this combination of different competencies that is the key to good validation work. “It’s important that we are all different and that we can look at things from a different point of view. But there must be a good balance between the team members and we must have the right levels of experience and knowledge.”

As well as testing a car’s hardware, Peter and his team must also test the software. This can take time as there is more software in today’s cars than ever before. At Volvo Cars, there are test labs where the different types of software are run to make sure everything works. Here the validation engineers can also test how buttons function and how they feel to operate in real-life situations. So, it is a combination of the technical and the tactile.

Validation is about meeting the customers’ expectations on an emotional level.

Another important factor of Peter’s work is understanding how different cultures affect the way people drive and being able to validate a car from the perspective of that particular culture. For instance, when Peter has the task of validating a car intended for sale in China, he must do so from the perspective of a Chinese driver. In order to learn about different driving cultures, Peter has driven extensively all over the world — in China alone he has covered a staggering 50,000 miles in the past year or so. Out of interest, I ask him to describe the driving culture in Sweden: “In Sweden, we respect other road users and we respect the rules,” he answers with a smile.

THIS IS HOW IT SHOULD FEEL

After driving for almost an hour, it’s time for us to change cars. So, we climb into the black S90 R-Design and swap the motorway for some small, winding country roads. In contrast to the motorway, these small Swedish country roads are clearly more difficult to handle, as evidenced by the sheer volume of tyre marks on the road in front of us. Of course, not everyone is as skilful a driver as Peter. And as he effortlessly negotiates the seemingly endless hills and turns, he moves the car through the gears and smiles. “This gearbox feels good,” he says. “This is clearly a moment where all the hard work comes together and the car feels exactly as it is supposed to feel.”

As we drive along the country roads, Peter points out a farmhouse on the hill. “Do you know there’s a farmer up there who keeps camels?” he asks. And with that unexpected piece of information, we leave the country roads, head back towards the motorway and continue on to Bohuslän.

The rest of our expedition takes us into town centres, across farmland and finally into a beautifully picturesque fishing village called Hunnebostrand. Here Peter, Thomas and Bengt study the cars’ engines and discuss their findings for the trip so far. Then, after a brisk walk along the shore to take in the view and some fresh air, it’s time for our little Volvo convoy to set off for home. On the way back to the Volvo Cars factory, I ask Peter if he is always in validation mode or if he can switch it off at will. “No, I am always in validation mode,” he laughs. “You start to validate everything, from choosing a sofa to a new mobile phone.”

So, the next time you climb into your car and everything works and feels exactly the way you expect it to, remember, that’s no coincidence. Passionate people like Peter have worked tirelessly, in all kinds of conditions, to make sure your Volvo feels as good as a Volvo should.
"When the going gets tough, the tough get going!" This rousing proverb has long been used as a pick-me-up in challenging times, but in today's world, with its abundance of variety and choices, is the best we can offer ourselves? Wouldn't it be more beneficial to take a break, or even better, a nap? Well, for the climbers who scale Peru's Sacred Valley, the option of stopping and resting when the going gets tough is a very real and very welcome option, especially when it includes all the comforts of home.

Located en route to Machu Picchu, the world famous Inca citadel in the sky, the Sacred Valley in the Peruvian Andes is a breathtaking sight. Not only is it a place of astounding beauty that plays host to rare orchids and ancient Inca ruins, the cliffs of the Sacred valley are also home to a more recent man-made wonder: Skylodge Adventure Suites. Situated 400 metres up the cliff, each translucent, octagonal Skylodge capsule is not only against the face and could easily be mistaken for an abandoned alien aircraft. Skylodge was the brainchild of local master welder, Ario Ferri, who designed the capsules himself in his little shop. He was then part of the construction team that spent two months carrying the various parts of each capsule up the mountain. An undoubted labour of love, Skylodge has taken the concept of the hanging "portaledge" mountaineering tent one step further and created a luxurious suspended space that includes tables, beds, temperature controls, running water and even a toilet. Now it may look daunting from the ground, but the Skylodge is not just for hardened mountaineers to enjoy. Thanks to a climbing system known as via ferrata, Italian for "iron road" - where iron rungs are inserted into the cliff face to help create a more accessible route - even everyday climbers can safely make their way up the Sacred Valley mountains. And before you know it, you will find yourself staring up at the stars from the comfort of your very own sanctuary in the sky. Now that's what they say you should do when the going gets tough!
It was early morning on the 8th of May 2010 and Timo Räisänen woke to discover that he was in bed alone. He got up and found his pregnant wife Lina in the bath. The contractions had started and soon they were on their way to hospital. But before they could get very far, they were forced to stop by the side of the road. A couple of minutes later, their son Arvo was born in the backseat of the family’s Volvo V70.

Six years have passed since that foggy May morning and Timo describes Arvo as a really cool and kind kid – but things happen around him all the time. He has an enormous amount of energy and always has something on the go. Perhaps this energy and lust for life is typical of someone who couldn’t wait another minute to be born?

“It was early morning on the 8th of May 2010 and Timo Räisänen woke to discover that he was in bed alone. He got up and found his pregnant wife Lina in the bath. The contractions had started and soon they were on their way to hospital. But before they could get very far, they were forced to stop by the side of the road. A couple of minutes later, their son Arvo was born in the backseat of the family’s Volvo V70.

Six years have passed since that foggy May morning and Timo describes Arvo as a really cool and kind kid – but things happen around him all the time. He has an enormous amount of energy and always has something on the go. Perhaps this energy and lust for life is typical of someone who couldn’t wait another minute to be born?

“I WILL NEVER PART WITH THIS CAR”

Timo has always liked his Volvo. He says he bought it because it was Swedish, tough and the world’s safest car – it was also the last model year that you could order oxblood upholstery in. But after his son took his very first breath in the car, it has changed from a mode of transport to a treasured member of the family.

“We have actually tried to sell the car several times, but in the end we always change our minds. I now realise that I will never be able to part from this car after all we’ve been through. It feels so incredibly safe and secure, but also a little exciting. It has an awesome personality. But most of all, it stepped up when it mattered most.”

ARVO LIKES THE FAMILY CAR TOO, BUT FOR SLIGHTLY DIFFERENT REASONS.

“I like it because it’s grey. And I like it because it’s cool. You don’t feel anything when you’re in it, you just go forwards. And we listen to music all the time, like Sweet Home Alabama. I think that’s fantastic.”

When you’re expecting a child, being unable to make it to the hospital in time is a nightmare for many parents. But for Timo and Lina, the day Arvo was born was an experience they wouldn’t change for the world. And as Timo tells the story now, a big grin breaks out across his face.

“Somehow, it felt very natural. Lina was so self-assured and cool, and that made me feel calm. I transformed into a man of action, placed a warning triangle 30 metres from the car and then everything seemed to take care of itself. I watched as my hands reached out, wrapped themselves around the baby and then lifted him up to Lina. I massaged him with just enough pressure and then came that first cry – it felt fantastic.”

“ARVO IS VERY SPONTANEOUS, AND TO BE BORN IN A CAR IS A VERY SPONTANEOUS THING.”

Fast and dramatic, but unbelievably cool nonetheless, this is how Timo describes the morning Arvo was born. He says it’s typical of him and Lina that things happen spontaneously and then it’s just a matter of getting on with it. As musician and producer, Timo and Lina are used to collaborating, but working together to bring Arvo into the world, just the two of them, was very special.

“He was incredibly handsome when he was born; he looked like a little Italian businessman. But after three weeks he had transformed into a right little roly-poly,” laughs Timo.
Peaceful, picturesque places by the sea, the pulse of the big city and inviting country roads that wound their way through breathtaking Swedish landscapes. These are just some of the unforgettable memories that Jonathan and Anne Johnson Griffin took back to Oregon, USA, after visiting the home of Volvo to personally collect their brand new XC90.

The next day they set off for Sweden’s capital city, Stockholm. On the way, the family stopped off for a traditional Swedish fika in the spectacular Uppgrenna Nature House. Inspired by the look of traditional Swedish farmyard barns, Uppgrenna Nature House is a modern, eco-friendly meeting place complete with spa and conference rooms. “The Nature House café was amazing,” exclaims Anne. “The surroundings were like something out of a Swedish fairy tale.”

When the family arrived in Stockholm, it was low at first sight. Stunning architecture, delicious street food and a superb choice of clothes and furniture shops…the list could go on. “In Stockholm, there was a surprise waiting around every corner,” explains John. Anne agrees, before continuing. “We were on our way to a restaurant one night when we came across an orchestra in full evening dress playing classical music in one of the town squares. Suddenly, the orchestra took everyone by surprise and started playing ‘Uptown Funk’ by Mark Ronson and Bruno Mars. That got the whole square swinging.”

During their stay in Stockholm, Jonathan and Anne found time to visit Stockholm Castle (home to the Swedish royal family), the Nobel Museum and the lively Hornstulls market. They also took a ferry around Stockholm’s many small islands and explored the cobbled streets and hidden alleyways of ‘Gamla Stan’ - the old town. “The old town was really beautiful. It’s a part of the city that has been around for centuries,” Jonathan says.

NEW ADVENTURES ON AMERICAN SOIL

On the way back to Gothenburg, the family stopped off at experience Gripsholm Castle. Located about 60km west of Stockholm, Gripsholm Castle was built by the first king of Sweden, Gustav Vasa, in 1537. It still belongs to the Swedish royal family and was used as one of their residences until the 18th century. It is now a museum and offers a fascinating glimpse into a time that has long since vanished. “The castle was an absolutely amazing preservation of the history and architecture,” says Jonathan.

When the family arrived back in their hometown of Portland, Oregon, it took time for everything they had experienced on their travels to really sink in. “It was an unbelievable journey. It’s a bit hard, but we loved every minute of it. It was a real adventure and will carry the memories with us for the rest of our lives,” says Anne. She and John cast a glance at their Volvo, which now stands proudly on their driveway after being shipped from Sweden – ready to take the Johnson Griffin family on new adventures and help them create new memories. Only this time on American soil.

MEMORIES FROM SWEDEN

When it came time for Jonathan and Anne Johnson Griffin to buy a new car, they decided on a Volvo XC90. And when the opportunity arose for them to travel to Sweden to collect it in person as it rolled off the production line and out through the factory doors, they grabbed it with both hands. Because as well as getting a brand new car, Volvo Factory Delivery Experience gave the couple an unforgettable Swedish adventure into the bargain.

To be able to collect your new car as it comes off the factory is an experience in itself, but to also get the chance to test it out in the very country that inspired it, is something else altogether. Throw in a crash course in Swedish culture, a visit to the Volvo museum and a tour round the Volvo factory to see how and where your car was built and you have a very unique holiday indeed. The last item on the tour itinerary made an especially strong impression on John, with one detail in particular standing out.

“When you see how much reinforced steel goes into a Volvo, you realise why they are the safest cars on the planet,” he says. And with their luggage safely and easily packed into their new car, the family decided to make the most of their thoughtful gift.

Wien they arrived at their hotel, the Clarion Post, the family decided to explore the area. “We had the view of a lifetime with our room positioned right by the water,” says Anne. “The surroundings were like something out of a Swedish fairy tale.”

Jonathan, Anne and Elle stayed at the first-class Clarion Post Hotel. Besides collecting their young daughter, Elle, along for the ride, you can see why John would find this reassuring.

During their stay, Jonathan and Anne found time to visit Stockholm Castle (home to the Swedish royal family), the Nobel Museum and the lively Hornstulls market. They also took a ferry around Stockholm’s many small islands and explored the cobbled streets and hidden alleyways of ‘Gamla Stan’ - the old town. “The old town was really beautiful. It’s a part of the city that has been around for centuries,” Jonathan says.

TASTING A SWEDISH TRADITION

With their luggage safely and easily packed into their new car, the family then continued their adventure with a drive along Sweden’s beautiful west coast. All the while, their daughter Elle sat comfortably in her child seat occasionally gazing up at her favourite part of the new family car – the large, panoramic sunroof.

Jonathan, Anne and Elle spent one night beside the sea in the picturesque fishing town of Klädesholmen on the island of Tjörn. They stayed at the hotel Salt & Sill, which was one of the most memorable places during their trip. “We had the view of a lifetime with our room positioned right by the water. You could literally open the door and jump in,” Anne says.

The surroundings were like something out of a Swedish fairy tale.”

AN UNFORGETTABLE ADVENTURE

VOYLO FACTORY DELIVERY EXPERIENCE

 VOLVO FACTORY TOUR

“Impressive glimpse of really innovative manufacturing.”

SALT & SILL HOTEL AND RESTAURANT, saltosill.se

“We had the view of a lifetime with our room positioned right by the water.”

UPPGRENNA NATURE HOUSE, uppgrennanaturhus.se

“A beautiful greenhouse café surrounded by breathtaking landscaping.”

BLAIR RESTAURANT, restaurangblair.se

“Fresh seafood with amazing drinks, especially ‘The Stockholm Sour’.”

GRIPSHOLM CASTLE, kungahuset.se/gripsholm

“An absolutely amazing preservation of the history and the architecture.”

Learn more about it on volvocars.com

READ MORE
GET READY FOR THE PERFORMANCE OF YOUR LIFE

Stay tuned at polestar.com

PLEASE NOTE THAT NOT ALL ACCESSORIES ARE AVAILABLE FOR ALL VOLVO MODELS. CONTACT YOUR LOCAL DEALER OR VISIT VOLVOCARS.COM TO FIND OUT IF A PARTICULAR ACCESSORY IS AVAILABLE FOR YOUR VOLVO.
After travelling the world for 12 years, Cologne-born entrepreneur Gundula Cöllen decided it was time to return to Germany and reconnect with her homeland. And when it came to choosing a city in which to settle down and start up a new business, she only had one place in mind – Berlin. “Berlin is so international. It’s a very free city and full of people who have lived all over the world, so it doesn’t feel like a city in Germany. The beauty of Berlin lies in the unexpected. You constantly get surprised in this city. You get surprised by the people who live here, by what people do here, by the exciting things that are constantly happening all around you.”

It was this sense of freedom and cosmopolitan spirit that convinced Gundula that Berlin was the perfect place for her to launch her new business: Becycle. Inspired by a love of fitness and a passion for music, Becycle is a boutique fitness studio where people get together to work out on specially designed stationary bikes to a soundtrack of pulsating electronic music. “Becycle is all about fitness and music,” Gundula explains. “Lots of people spinning together in a darkened room. It’s almost like working out in a nightclub.”

A WAY OF LIFE
Gundula first became interested in working out when she lived in London. A few years later she moved to Sydney, and she took her newfound passion for fitness with her. Since then, working out has grown from a pastime into a way of life. But it’s also a way of helping Gundula connect with the people around her. “In big cities it can be difficult to meet and connect with people. But I think fitness is a great way of helping people connect. With Becycle, we want to create a community where people can work out together and have fun together.”

Alongside fitness, Gundula’s other great passion in life is music – especially the local electronic music scene in Berlin. “Berlin is home to some of the best DJs in the world. No matter where you go in this city, you hear electronic music. So when I moved here I thought: how can I combine this amazing music with working out? The answer was Becycle.”
THE CONNECTED LIFE IN BERLIN

To make the most of life in a large city like Berlin, you have to stay connected – not just with work and friends, but with what’s going on around you. And Gundula believes the right car can play a key role in helping her keep control of her busy lifestyle. “Berlin is so big and my days are so hectic just now,” she says. “Before I start my day I try to organise my calendar. I always have a to-do list up and running – but I need a little help. So I use a lot of apps on my phone. Basically, I need to be connected, otherwise it’s hard to organise my life.”

A SONG FOR THE ROAD

“Driving here is very easy,” explains Gundula. “Berlin has a lot of very wide streets. And when you have a great navigation system, it’s much easier to explore different suburbs, see different things and discover new cafés and restaurants. In summer, I love to take the car with friends and travel to one of the beautiful lakes around the city. It’s wonderful to be able to spend the day out there and reconnect so easily with nature.”

And of course, for a music lover like Gundula, no car journey would be complete without a great soundtrack played through a great sound system.

“It’s ideal to have a large screen in the car that allows you to access certain apps and information you have on your phone. I use it to forward the information to your navigation system. You will then receive directions to your destination.”

Yet the most important thing for Gundula is something you can’t find in any showroom or at a factory – freedom. “When I have a car, I feel like I own the city because I can get anywhere. So, for me a car is freedom.”

INTEGRATED SPOTIFY APP

The integrated Spotify app lets you play high-quality music streaming in your Volvo without having to use your smartphone. The in-car app contains all your favourite playlists, artists and albums as well as the Spotify Connect functionality, which enables you to control the app using mobile devices without having to connect them to the car.

INTEGRATED CALENDAR FUNCTION

You can view and modify your calendar directly in the Volvo On Call app 24 hours before a meeting by giving the app access to your calendar. If a meeting notification in your calendar includes a full address and your car is equipped with Sensus Navigation, you can use the “Send to Car” function to forward the relevant information to your navigation system. You will then receive directions to your destination.

SEND TO CAR

Send to Car allows you to send destinations directly to your Volvo from your computer, mobile device, or by using the Volvo On Call app on your smartphone. So when you step into your car, the best route to your destination is ready and waiting for you.

INTEGRATED IN THE CITY

With meetings spread out all over the city, Send to Car allows Gundula to send destinations directly to the XC90’s Sensus navigation system from the browser in a computer or via the Volvo On Call app on her smartphone. This means the most effective route to her next meeting is already waiting for her when she activates the navigation system. Not only that, as the Sensus navigation system is connected to the Internet, the route is continually updated with the latest live traffic and weather information.

STAYING ONE STEP AHEAD

Every morning, Gundula gets up early, grabs a juice at her favourite juice bar and then drives to Tiergarten for a run. Tiergarten is one of Berlin’s largest and most popular inner-city parks, and to make sure she beats the morning traffic Gundula makes full use of the XC90’s navigation system. In fact, almost every aspect of Gundula’s day is made easier and more convenient by either the navigation system or other connected functions in the car. Whether it’s meeting up with her architect on site, or exchanging important messages with her business partner using Apple CarPlay*, Gundula’s world happens quickly, and things can change in an instant. This is where a state-of-the-art navigation system like Sensus navigation and features such as ‘Send to Car’ can help Gundula stay one step ahead.

But driving in Berlin isn’t just reserved for business. It’s a beautiful city, which is always evolving and fully deserves to be explored. And according to Gundula, the best way to explore it is by car.

THE CONNECTED LIFE IN BERLIN

To make the most of life in a large city like Berlin, you have to stay connected – not just with work and friends, but with what’s going on around you. And Gundula believes the right car can play a key role in helping her keep control of her busy lifestyle. “Berlin is so big and my days are so hectic just now,” she says. “Before I start my day I try to organise my calendar. I always have a to-do list up and running – but I need a little help. So I use a lot of apps on my phone. Basically, I need to be connected, otherwise it’s hard to organise my life.”

A SONG FOR THE ROAD

“Driving here is very easy,” explains Gundula. “Berlin has a lot of very wide streets. And when you have a great navigation system, it’s much easier to explore different suburbs, see different things and discover new cafés and restaurants. In summer, I love to take the car with friends and travel to one of the beautiful lakes around the city. It’s wonderful to be able to spend the day out there and reconnect so easily with nature.”

And of course, for a music lover like Gundula, no car journey would be complete without a great soundtrack played through a great sound system.

“It’s great to have a large screen in the car that allows you to access certain apps and information you have on your phone. I use it to forward the information to your navigation system. You will then receive directions to your destination.”

Yet the most important thing for Gundula is something you can’t find in any showroom or at a factory – freedom. “When I have a car, I feel like I own the city because I can get anywhere. So, for me a car is freedom.”

INTEGRATED SPOTIFY APP

The integrated Spotify app lets you play high-quality music streaming in your Volvo without having to use your smartphone. The in-car app contains all your favourite playlists, artists and albums as well as the Spotify Connect functionality, which enables you to control the app using mobile devices without having to connect them to the car.

INTEGRATED CALENDAR FUNCTION

You can view and modify your calendar directly in the Volvo On Call app 24 hours before a meeting by giving the app access to your calendar. If a meeting notification in your calendar includes a full address and your car is equipped with Sensus Navigation, you can use the “Send to Car” function to forward the relevant information to your navigation system. You will then receive directions to your destination.

SEND TO CAR

Send to Car allows you to send destinations directly to your Volvo from your computer, mobile device, or by using the Volvo On Call app on your smartphone. So when you step into your car, the best route to your destination is ready and waiting for you.

INTEGRATED IN THE CITY

With meetings spread out all over the city, Send to Car allows Gundula to send destinations directly to the XC90’s Sensus navigation system from the browser in a computer or via the Volvo On Call app on her smartphone. This means the most effective route to her next meeting is already waiting for her when she activates the navigation system. Not only that, as the Sensus navigation system is connected to the Internet, the route is continually updated with the latest live traffic and weather information.

STAYING ONE STEP AHEAD

Every morning, Gundula gets up early, grabs a juice at her favourite juice bar and then drives to Tiergarten for a run. Tiergarten is one of Berlin’s largest and most popular inner-city parks, and to make sure she beats the morning traffic Gundula makes full use of the XC90’s navigation system. In fact, almost every aspect of Gundula’s day is made easier and more convenient by either the navigation system or other connected functions in the car. Whether it’s meeting up with her architect on site, or exchanging important messages with her business partner using Apple CarPlay*, Gundula’s world happens quickly, and things can change in an instant. This is where a state-of-the-art navigation system like Sensus navigation and features such as ‘Send to Car’ can help Gundula stay one step ahead.

But driving in Berlin isn’t just reserved for business. It’s a beautiful city, which is always evolving and fully deserves to be explored. And according to Gundula, the best way to explore it is by car.
EACH UNIQUE SET OF VOLVO COMPLETE WHEELS is designed to suit individual Volvo models and the individuals who drive them. But where do these design ideas come from and how do the designers decide which wheels suit which Volvo model? Well, as Ole-Kristian Bjerke, Senior Designer at Volvo Cars explains, it all starts with a car's character.

"Wheels play a huge role in communicating a car’s character," begins Ole-Kristian. "Apart from the size, we need to specify what we want the wheel to express, i.e. sporty, rugged, elegant. Once we have decided upon the kind of look we want to express, then we start sketching out as many design ideas as possible."

At this early stage of the design process there is a lot of trial and error. And, inevitably, a lot of ideas are discarded along the way. "We try out lots of ideas," Ole-Kristian continues. "We try out different numbers of spokes, play with proportions and styling cues. Along the way, some ideas are rejected, some are changed and some are developed further."

CREATING HARMONY IN DESIGN

When designing a new set of wheels, Ole-Kristian and the design team always consider the car as a whole. After all, the wheels have to work in harmony with the car’s overall proportions, as well as integrate with the other styling elements. "The wheels bring out different qualities in a car," Ole-Kristian says.

"That is why an Inscription car has a different set of wheels compared to an R-design car."

But it’s not only the appearance of each wheel that has to be considered; all wheels have to meet the necessary standards and requirements. Ensuring a high quality finish and optimum driving characteristics are just as important as the design features, and these conditions are carefully balanced and well combined during the development stages. As Ole-Kristian Bjerke puts it: "It is about finding the correct balance between the right technical solution and the right aesthetics."

And when it comes to aesthetics, keeping up to date with what is happening in the design world is essential. "We always know what is going on when it comes to trends and what our competitors are doing," explains Ole-Kristian Bjerke. "It is a natural part of a designer’s job. We are always interested in what is going on in different fields of design, architecture and fashion."

REALISING THE VISION

Once the designs have been narrowed down to a handful of potential candidates, the design team prints out a full-scale version of each design and places them on a physical car. When the final proposals are chosen the digital surface modelling team, together with the designers, starts building the different designs using computer-aided design.

Ole-Kristian Bjerke explains what happens next. "Together with both our engineers and specialists from the wheel supplier, the final designs of the wheels are put into development. In this process, all technical and mechanical properties are checked and first-class surface quality ensured. Along the way, physical mock-up models of the wheels can be painted and placed on the car to get a real-life impression of how the finished wheels will look."

So, what happens when a new set of wheels is ready to roll? Well, for Ole-Kristian and the team, it’s on to the next challenge. Not only do they design wheels for new Volvo models, they also create exclusive new designs for model year updates. And with Volvo designs getting more ambitious all the time, the challenge of coming up with more ambitious and eye-catching designs is getting more exciting with every passing year.

GET THE VOLVO WHEEL APP ON THE APP STORE.

To see how a stunning new set of Volvo rims can transform the entire look of your car. Free on App Store.
Svenskt Tenn is an interior design company located on Strandvägen in Stockholm, Sweden. It was founded in 1924 by Estrid Ericson, who recruited Josef Frank to the company 10 years later. Together they created the elegant and boldly patterned personal interior design style that continues to pervade the collection to this day.

Since 1975 Svenskt Tenn is owned by the Kjell and Märta Beijer Foundation. Profits generated by the company are through the foundation used to promote scientific and medical research in Sweden as well as Swedish home decoration traditions.

Strandvägen 5, Stockholm | www.svensktten.com