

Buying your bumpers: Considerations on riding gears.



volpara@homemail.com

"Modern cars are fitted with seat belts, air bags, side impact beams and whole a host of advanced safety features but, unfortunately, even this is not enough to prevent the thousands of road deaths we see each

year. So when you consider that the only protection afforded to a motorcyclist is the shell of a garment-the importance of choosing to wear a product that is designed and manufactured to the highest performance standards cannot be overstressed." In practice when you buy helmet, jacket, pants, gloves and boots you are selecting the first line of defense/protection: these are the only "bumpers" you have when biking.

When thinking about the safety features in motorcycle clothing the mind moves to impact and abrasion resistance properties: *"Will this jacket protecting my body if and when I crash?"* While these are important requirements, we should also consider the role that riding gear have in preventing the accidents: visible and comfortable items can play a major role in safe riding. The entire riding experience can be greatly improved by the use of correct gear. Dressing responsibly is a first step to ride responsibly.

When you get on your motorcycle you become invisible! At least to drivers who aren't paying much attention, which seems to be a lot of them.

Here's where basic black isn't a good fashion statement - brighter colors for your leathers and helmet actually make you stand out!

Motorcycles are narrow, single-track vehicles. Perception testing has proven that they are indeed much more difficult to spot in a busy traffic situation. And even if the other driver does see you - he or she will probably estimate that you are further away than you actually are, and that you're going slower than you really are!

<http://www.safetycouncil.bc.ca/>

• **Fatigue** reduces alertness and increases the chances of wrong judgments: when you are tired it becomes difficult to evaluate risks, speed and distance. A cold or hot rider cannot scan accurately the environments, cannot predict the incoming hazards, and cannot react promptly. Good clothing maintains an acceptable body temperature in most weather conditions, protects from rain, disperses body moisture and reduces disturbances from the outside.

• **A well fitting** suit, a properly sized helmet, comfortable gloves and boots can transform a ride. If jackets and pants are too loose or too tight fatigue will set in earlier: a flapping jacket "hits" your arms and body millions of times in a short ride, a tight helmet brings pain while a large one moves dangerously around the head reducing vision. Tight gloves or boots cut blood circulation reducing sensitivity.

• **Brightly colored clothing** will mark your presence on the road better than the classic "all black" gears. Red and Yellow based jackets are a good contribution to road safety and can be selected without compromising good taste. If black is your choice you should consider a high visibility vest to wear on top of the jacket.

The following "experience's rules" can help you in selecting the right protective gear:

Think before you buy. I know it easy to buy from catalogues and web-site, but you should really try the item before you buy it. Check with friends and ask to try for comfort and sizing. If you cannot try make sure that you can return it if found not fitting. Check with other riders, read on magazine, surf the web for user's reports. Above all think seriously about your real needs and, for a second, forget "image".

Think while you buy. Kep your head cool and evaluate objectively. You are going to part with a good amount of cash and you better know what you are doing. Following the last trend can prove a waste of money. Will you wear what you buy for long time, next year, in any situation? You do not have to buy immediately... see alternative, try different sizes... look for special sales... experiment.

Buy on the bike. Test all the gear while sitting on the bike in normal riding position. Seat on the bike with the new jacket and pants on and you will discover that shoulders, arms, legs take a different "turn" when riding. A good riding gear normally does not look so good when hanging around. Vice versa, if it looks good on the mirror it may be uncomfortable on the saddle. Buy your gloves on a size that will allow air between hands and leather. Remember winter socks when buying boots. Be meticulous about the size of your helmet (see window below). In general it is fitting when you can stick just one finger on the back between the rim and the skull. Moving the helmet while on, must move your eyebrows. Buy your jackets long enough to protect your back when riding and buy your trousers with the option of going inside and outside the boots. When raining, your gloves must be tucked inside the end of the sleeves:

check jacket and gloves for this feature.

Buy quality for long time. Riding gear is not always the stuff of fashion. Garage's lockers and guard robe full of equipments are evident signs of bad judgment. You only need a good winter setting and a good summer one. You need more if you practice different aspects of the motorcycling sport: for off-road riding you need additional gear, for circuit racing you need special gear. In all situations the plan should always be the same: buy good quality at good price and keep it for long.

Accept mistakes and react promptly. If you buy something wrong take your losses and bin it. Riding with inadequate gear is a pain for you and for your companions.

Keep your gear in good order (before, during, after the ride). If you buy quality you want to keep it up. Allocate a dry and ventilated space for all your clothing and gear. Always clean helmet before storing it in a bag to protect from scratches: be fanatic on the cleanness of the visor... your life depends from it. Clean your boots let them dry slowly and, once every 1000 K, give them the comfort a good protective cream. Hang your leather suits, fabric combination, gloves in a ventilated cupboard. Do not force dry and remove with mild soap and sponge insects, bugs and road debris. Always wear an "under-suit" (thermal in winter, cooling in summer): it is easy to wash regularly that your leather and it will keep your riding gear in top condition. Check www.extremerracing.co.uk or www.underleathers.com

When it comes to protecting your body from injuries in case of crash new considerations come into play.

"If you ride a motorcycle and your hearing sounds muffled afterwards or if your ears ring (Tinnitus), then you are suffering temporary hearing damage which if repeated regularly will become permanent. The brain will compensate for this temporary loss by tuning out the ringing, so you may not even notice it. By the time you are aware of the problem, you will have experienced significant permanent damage. It's also worth remembering that hearing damage is cumulative and builds over time. So even though you are not aware of the problem now, it might catch up with you in later life."

Noise/Hearing Protection. Every time you ride your ears are at risk. Wind, engine, roads generate a constant noise that not only reduces your capacity of concentration but can also damage

(This is the third special issue on Motorcycle Gear: the 2000 "Dressed to Ride" and 2001 "Ride in gear" editions can be found at www.ommriders.org under the "Equipment" section")

hearing. How can you reduce noise? A good helmet is a first step but the real solution is given by ear plugs: at the beginning earplugs could be slightly uncomfortable but after two or three rides you will not saddle up anymore without put them on. All good bike catalogues sell good quality ear plugs or you can log in at www.earplugs.gb.com where you can find QD1QUIET (OMM recommendation) and also order a trial pack of different models for 9 Euro. If you are considering "tailor made" earplugs check at www.earplugco.com

Vision protection. Take good care of your visor: wash it with mild soap (no other chemical) and abundant water. Clean it at the end of each ride before storing: dead insect acid can mark permanently the anti-scratch surface. Use "City Fog" www.modernworld.com/fogcity/motorcycles.html in winter: it is the only solution (if you do not have a double glazed visor already fitted) to keep misting away. Buy a good pair of sunglasses for biking. Gargoyles lenses with a double curve are optically perfect passing standards for combat use. See them at www.gargoyle-sinc.com and order the Legends model with replaceable lenses at www.riderwearhouse.com Keep always a pair of clear lenses glasses as emergency answer to visor damages.

Your suit or combination of Jacket and Pants should have Body Armor. These are protectors in crucial part of the garment made with energy-absorbing material and designed to reduce the impact on bones and skin.

- Soft armors are made of sandwiched layers of foam or rubber type material of different intensity.
- Hard armors consist of a hard plastic shell lined with foam.

It is crucial to have these protections placed on the body with little space for movement in case of impact: the most radical (and intelligent) solution is to use an under suit with fixed protections. You can use it with different combinations of suits and jackets and the proximity to the skin assure a good level of tightness. Leader in the sector is Bohn www.bohnarmor.com who in the year 2000 introduced revolutionary honeycomb armor composite. "The strength, lightness and energy absorption capabilities of honeycomb construction have long been recognized in aircraft and motor sport industries, but its use in body protection is a groundbreaking first. The honeycomb(breathable) is constructed as a sandwich with comfortable outer absorbent PE foam and rubber based foam inside. Each insert is preformed for the placement and, in the case of elbows/forearm and knee/shin, is articulated to provide unbroken protection coverage." Dainese www.dainese.com offers valid and well proven products in the same area.

If you decide not to go for an armored underwear make sure that your jacket and pants have fixed pocket for the protections in the following areas

- Shoulders
- Elbows
- Lover arm
- Knees
- Hips
- Lover leg

The European community introduced a CE symbol/mark for motorcycle protective clothing and body armors as guarantee that the product

passed the Directives of the Community's safety legislation. CE marks (EN 1621-1 and EN 13595), with the accompanying leaflet, indicate that the product has been designed, manufactured and tested to ensure an appropriate level of safety.

The Female point of view.

As a female motorcyclist, it's easy to become despondent when shopping for well fitting bike gear. Don't misunderstand me, I think male motorcyclists are great, I'm just not the same shape as one.

It may just be the region in which I live but in my experience, I am always offered the smaller male sizes (have you ever seen a woman the same shape as a small man?), some lovely suede 'chaps' or some flimsy pink 'fashion' leathers that are about as protective as a pair of silk pajamas of the same sickly hue. A lot of my female riding acquaintances voiced disappointment with their kit too.

When it comes to Helmets, then ok, we are all pretty much the same there. Jackets don't tend to accommodate some of our best assets, trousers are always too long (not to mention very squarely cut) and boots never take into account my calves in relation to my ankles. Gloves don't escape either – I always get useless bits of spare material at the end of the very square fingers. I have to ask myself 'am I as well protected as I could be?' and I feel the answer is no.

Unisex is a phrase that I have come to loath – this normally means – designed for a man, but will just about fit a woman (suppliers are rubbing their hands with glee as they have just increased their customer base without doing any extra legwork).

In terms of colors/design the existing styles from leading manufacturers are quite varied, it seems a puzzle to me that the shape of the clothing can't be as well.

It would appear that unless you can afford to have clothing that is tailor-made, you are stuck with flapping about in what can sometimes feel like your Dad's best gardening overalls. Here's hoping that some manufacturer's will stumble upon my words and take note.

www.totalbikebits.com/tbb_modern/female_riders/clothing.htm

Resistance to abrasion, laceration and melting is the next thing you want to look for when selecting a new suit or combination.

"Experience shows that good quality bovine leather is difficult to better in terms of protective qualities such as abrasion resistance. Sheep and goat leather generally have lower tear strengths and are thinner so are unlikely to offer the same level of protection as bovine material."

Synthetic materials such as Cordura™ are used today by several manufacturers of quality motorcycle wear. Aerostich is quite confident that the Cordura™ used in their suits is superior to Kevlar and to the normal combination of Kevlar and Lycra: "In pure, undiluted form, Kevlar® is lighter than nylon and has greater tensile strength. It won't melt like nylon after touching a hot muffler (or from the friction-generated heat of a high speed slide on hot pavement). Unfortunately, it's expensive and difficult to work with, which limits design and construction possibilities. And believe it or not, pure Kevlar® fabric actually is much less abrasion-resistant than

Cordura nylon. Kevlar® fibers have far less elasticity than Cordura® nylon fibers, a crucial handicap in a crash. Even the smoothest pavements have a rough aggregate surface that causes abrasive pulling. Nylon's stretchy fibers will elongate, ride over the surface irregularities, then snap back into the weave (like a tree bending in a strong wind), but Kevlar® fibers quickly reach their tensile limit and snap. To solve these problems, manufacturers blend Kevlar® with Lycra® and nylon. In this blend, "Kevlar®" is only about one third actual Kevlar®. This creates problems. Because of the additional nylon and Lycra®, much of its slight weight advantage over Cordura® is lost. It also loses some of its fire-resistant qualities. The blended Kevlar® fabric may burn or melt (just like nylon) when it comes in contact with a flame, hot component, or high frictional heat.... We've tested (and will continue to test) Cordura® nylon against the alternatives. Its superior comfort, easy workability and excellent abrasion resistance make it our choice for quality, versatile, high performance riders' clothing." The advantage of synthetic materials is the association with Gore-Tex® or similar membranes is not only in impact protection but also in superior defense from weather (wind, rain). With these materials, "Hot-tape" sealing on all seams is the only guarantee for waterproof construction. For leather or synthetic material stitching is very important and it makes the difference between a poor unsafe suit and a protective one. Reinforced and protected stitching, in structural areas, reduces the chances of seams opening during an accident, limits the penetration of water and assures a long life of the garment.

You look for visibility, comfort, safety and protectionš but what about style?

As the Romans used to say "De gustibus non est disputandum" or more simply "One cannot dispute about taste". In our experience **Simplicity rules**. So many new gimmicks and so many new gadgets are constantly coming into the market that it is almost impossible to follow the developments of high tech motorcycle gear. In prolonged use most of the innovations are more a nuisance than an advantage. That's the reason why we take Simplicity as a valuable guide. When you stay on the road for days, covering miles in different weather situation and in changing environment you do not want to complicate your life with over-structured removable lining, adjustable multiple straps, external shells and so on. The "Layering" system adopted by our friends the climbers works well on the bike allowing the simple freedom of adjusting garments to the situation. In addition you should consider "multipurpose" gear in order to use most of what you wear on the bike when you are not on the bike. If **Simplicity, Layering and Multipurpose** are principle that you share you will agree with our recommended selection of useful gear. **OMM Riders are not sponsored by any Company, we do not receive free gear to test, and we do not have any favor to return to any producer. This is pure voice of pure experience.**

1. Two pieces underwear (long sleeve and long pants) for sweat absorbing in hot weather. Choose **CoolMax®** from DuPont and you will not regret it. In term of multipurpose you can use the combination as sleeping wear or use the top as a normal shirt.

2. Two pieces thermal underwear (long sleeve and long pants) for cold weather. Ample choice of option in this category. **TherMax®** is one of the most valid choice with brushed inner

"Sweat ain't pretty, and too much of it definitely isn't cool. When your body produces excessive amounts of sweat, it means it's using its energy to try and keep cool. This is energy you could be using to perform. If the sweat doesn't evaporate quickly, your body core temperature heats up, producing more sweat. The specially-engineered DuPont fibers used in CoolMax® fabrics transport perspiration away from the body to the surface of the garment, where it can evaporate quickly. At the same time, the uniquely-shaped fibers provide great breathability, even when wet. The breathability (called air permeability by fabric techies) further enhances the thermoregulatory effect. You stay dry. You stay comfortable. And you have more energy and endurance.

www.dupont.com/coolmax/html/

surface for warmth and comfort and anti-stain and anti-odor properties for long trips. Multipurpose as the previous underwear. At www.aerostich.com/ridewearhouse.store you can find Expedition-Weight Underwear, a heavy duty (and, we say, bulkier) thermal. "This garment is used in the US Army Extreme Cold Weather Clothing System (ECWCS) and meets stringent government performance specifications. It is rather thick (as a sweatshirt) but the 100% polypropylene fleece is smooth on the outside for easy layering and brushed on the inside for comfort"

3. Fleece is the best fabric for your next layer. Isolating as wool but twice lighter and quickly drying, this man-made material is ideal for bikers. Polartec® is the best known of the fleeces, invented in 1980 by Malden Mills <http://www.polartec.com> is available in 200 and 300 weight and several Companies offer Polartec® made combinations (check one of the best at www.cabelas.com). Aerostich makes, in a special fleece TL Tec®, pants and jackets to wear under motorcyclist protective clothes.

The **Darien Liner Jacket** is a piece of clothing you will use more than any other jacket on and off the bike. Fully reversible, with one side in fleece and the other lined in waterproof nylon, the jacket has a set of well designed features for multi use. With four pockets and underarm vent zip the jacket can be folded into its own compact zippered pocket and carried on a belt as a fanny pack. **Aerostich Fleece pants** come in standard (200), wind-block (300) and light (100) configuration. Made of TL Tec® fleece these pants are designed with an articulated knee pattern that reduce pressure while riding. Two-way full-length zippers on the outside of both legs provide an easy entry/exit even with boots on. When comes to multipurpose nothing can beat Aerostich Fleece: the liner will turn into a quite elegant rain and wind-proof jacket to go around after parking the bike while the pants can be used as a piece of relaxed after-sport gear.

4. Suit/jacket and pants combination in man made material. All major manufacturer of Motorcycling Clothing have their answer to your need for the protective outer-layer. **Dainese** www.dainese.com, **Spidi** www.spidi.com, **Rukka** www.rukka.com, **First Gear** www.intersport-fashions.com, **Motoport** www.motoport.com are the first of the reliable names. **Frank Thomas** (www.frank-thomas.co.uk), **Polo** www.polo-motorrad.de and **Hein Gericke** www.hein-gericke.de Catalogues are an endless source of good price, good quality items.

"Clothing is like sex. The first part and the last part are most important. Gotta have the right underwear. Gotta have the right coat and right hat and right mittens and socks and boots."

Read the full article from R. Murray Hamlet "Winter: Keeping Toasty And Staying Warm." in the Read and Ride section of www.ommriders.com

Still, when times come to select the suit to use for long rides, my hand goes without doubts to **Aerostich Suits**. If you have a Touring/Enduro bike, choose the **Two Pieces Roadcrafter** suit or the **Darien combination**, if you have a more sporty vehicle **One Piece Roadcrafter** suit is almost unbeatable for protection, comfort and simplicity. www.ridewearhouse.com The two elements of Protection and Simplicity make Aerostich a winner. You can wear under the shell what you like: a suit if you are going to work, a full winter layering for hard rides or just light pants and t-shirt in the summer. In this way you do not need to carry additional clothing. Zip-out from your Roadcrafter or Darien and you are "normally dressed". If you choose the two pieces Roadcrafter of Darien you can also use the jacket as a casual piece off the bike. Ventilation is assured by large underarm zipper and full back zipper. We rode in temperatures above 40 C and we kept pretty cool and dry (while riding). Plenty of pockets (useful ones) and plenty of body armor: the back protector can be transferred from one Jacket to another. In addition you get the famous Riderwarehouse service: alteration, repairs and additions are done in short time with a friendly assistance.

With a little more complication, more weight but additional safety you can go for the relatively new inflatable vests from **Spidi** (D.P.S.). These jackets include a fast reacting mechanism (operating with a connecting cable jacket-bike) inflating the parts more exposed during a crash when you "leave the bike" abruptly.

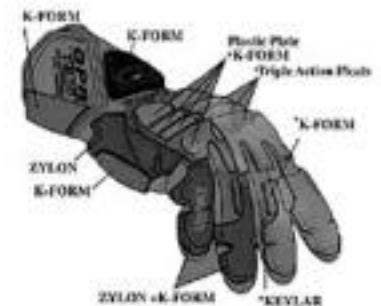
5. Leather Suit. If you are riding a sport bike a leather suit is the best tool. This is a quite expensive piece of equipment and you should carefully select the best for you thinking it will last for long time. A good leather suit gives a perfect fit when riding but it looks "baggy" when you walk. Try it on the bike or order on measure. Here you want to look for the quality of the leather, the thickness, the stitching and the protections. Go to **BKS** www.bksleather.co.uk or **Crowtree** www.crowtreeleathers.co.uk and you will find a full manual on "how a good leather suit must be constructed". These two brands are probably the best but then, if the prices sound too steep, you can always move to Dainese, Spidi, Alpinestars or similar knowing what to look for. BMW has leather suit waterproof with a new technology but 1. It is expensive 2. It is not produced by BMW 3. It is a touring suit. Buying a leather suit for touring may not be the best solution. If you are logging considerable mileage in a touring bike (or in a chopper) leather will show limitations: it is heavy and not multi-purpose as a quality man-made material.

6. Waterproof over suit. As mentioned above this is an essential piece of the layering system whichever protective suit you use. In heavy and continuous rain only a fully sealed overall will keep water at bay. The investment is low and the space in your luggage minimal. Most of the suits come with their own pouch: look for an easy fitting for an easy entry/exit (after all you will do it in emergency and you do not want tro-

ubles on the side of the road under rain). *Hide magazine* (August 2002) gave the "recommended triangle of quality" to the following waterproof over suits: **Frank Thomas Aqua**, **Ixon Glide**, **Furygan Armor** and **BMW Pro Rain** while the "best buy triangle of quality" went to **Spada 406 Over suit** www.harperaceshop.co.uk/itmidx31.htm.

7. Socks. Often neglected piece of layering that can make a substantial difference in weather protection. A good pair of walking socks makes the wearing of the boots more comfortable. For maximum weather protection look no further than Wool Boot Socks from TechSpun. The "Environmental Sock System" with a guaranteed comfort range of -40°F to +120°F does not feel, look, wear or perform like any other sock. It is a multi component sock system consisting of a Coolmax® liner sock and two unique reversed terry naps U.S. Wool and Polypropylene blend boot socks. The "Extreme Weather" boot sock provides excellent insulation from -40°F to +120°F. The "All Weather" boot sock is a lighter weight version for less extreme temperature and load conditions from 0°F to +100°F. Check and buy at www.techspun.com

8. A touch of perfection for "intimate" layering. The LDComfort riding shorts replace your normal briefs or boxers with an underwear piece designed specifically for the motorcycle rider to eliminate troublesome hot spots, shifting, binding, pressure points and chafing. Manufactured from 90% cotton blended with 10% Lycra with no seams in the seating area can be purchased at www.ldcomfort.com



9. Gloves. When the biker goes down, hands are usually the first to take the impact. Wind, sun and flying stone can seriously damage your hands: a bee at 120kilometers per hour on your knuckles can be quite painful and it may generate dangerous reactions. A good set of leather gloves makes the difference... and the search for the perfect glove never ends. Ideally you should have in your stock **three sets of gloves**: a full leather pair with high specifications, a pair of emergency gloves in hard leather and finally a pair of heavily insulated winter gloves. You search for an ideal balance of strong protection and good feel for the controls. Fit is crucial and you should spend good time in testing it before buying: too loose or too bulky gloves can generate blisters and reduce your capacity of controlling the bike. On the other hand too tight gloves can cut circulation and generate cold, numb hands. Leather tends to open up and get looser after wearing and you should take this factor into consideration: wear the gloves and sit on the bike before buying: check the grip, check if you have loose wrinkles on the palms and check if the seams are comfortable. Specification should include: impact pads around the knuckles and back of the fingers, padded wrist protection, palm abrasion protection, adjustable straps around the wrist and the ga-

untied. Straps are extremely important because in case of accident they keep the gloves on. Protection comes in different form: Kevlar layer between the leather layers, Carbon fiber panels on the outside, Kevlar panel on the outside etc. For winter gloves top insulation, good and comfortable lining securely fixed inside (not to come loose when taking the gloves off), water proofing are essential and an aluminum foil panel between layers is highly recommended. Brands? Rider Power, the research among bikers conducted every year by Ride Magazine list on the top three positions for sport gloves **Nankay** www.performance-motorcycle-parts.com, **Kushitani** (depicted above www.kushitani.com) and **Held** www.held-usa.com/heldtech.html or www.held-biker-fashion.de). OMM experience adds to this list **Alpinestars** www.alpinestars.com, **Spidi**, **Dainese** and, as multipurpose gloves, the **Elkskin Roper 445 of Raiderwarehouse**. In the same web site you can find good suggestions on the Zen Glove Maintenance.

10. Boots. An ancient proverb says that the health starts from the feet. And we cannot disagree with ancient wisdom: in a long ride you live for hours (on and off the bike) in your boots and it then that you can spot the difference between a good pair and a bad one. If you think about long rides of 2/3 weeks, when every piece of equipment has to perform several tasks, you will appreciate high specification boots with plain black look to be used as normal shoes after riding. On the other end for a day on the circuit or for a sport ride on Sunday you may want to look for a more technical boot as you will do for an off-road excursion.

How many pairs? The answer is in how many motorcycle activities you have. In our experience three pairs should cover the entire range: Touring, Sport and Off road. For the **Touring pair** here the specifications you should look for: high enough (over the ankle) to comfortably tuck in the end of leather trousers but not too bulky so you will wear them under the pants when it rains or when off the bike; good padding and hard protection on the sides and reinforced heel cup/front area; elasticized calf and gearshift reinforcement, water proof with Gore-Tex or similar lining. Check the position and the protection of the zip (Velcro closure is the best) to be sure that water will not leak through. De-

The biomechanically designed inner structure combined with the protective outer provides superior energy absorption. **INSIDE STRUCTURE.** Based on racer requests, the inside structure of the **SUPERTECH** provides biomechanical foot movement for better control, a torsion bar for ankle support and a double hinge in the ball of the foot that replicates the profile of the foot for increased feeling of the brake pedal and shifter. The inside structure is also removable for easy cleaning and/or replacement. **HIGH IMPACT PLASTIC STRUCTURE.** Every part of the boot skeleton is injected with high impact resistant PA66 carbon fiber reinforcements. **LEG AND FOOT PROTECTION AND FITTING.** Shin, heel, ankles, toes and the external side of the foot are protected by the inside structure. Gel padding protects the heel and ankle areas and a breathable lining reduces perspiration and the buildup of heat. Kevlar® speed laces provide the inner structure with a precise fit. Alpinestars Supertech Specifications

mand a gripping sole (oil resistant) offering positive sensitivity: try them on the bike and check the comfortable use of brake and gear levers | absence of friction against the bike.. Favorite brands? Again from Rider Power a short list: **Altberg** www.altberg.co.uk, **Daytona** www.daytona.de, **BMW**, **Sidi** www.sidisport.com and **Alpinestars**. We totally agree with this list placing Alpinestars, Daytona and Altberg at the top of the touring boots quality and durability list. Strictly black with no graphics (think entering a restaurant with them on). When it comes to **Sport Riding** technology takes control and the current trend is to have articulated inner boot with protective external structure (**Alpinestars Supertech**, **Sidi Vertebra** nor **Daytona Evo Sport GTX**). You should consider, before spending a considerable amount of money for a sport boot, the occasion for use. These high tech boots are hopeless when walking and the coolness of the look disappear into ridiculous when you are off the bike. Normally a good pair of high specifications touring boot will do the job more than adequately. Off Road Riding requires a special pair of boots and the list of recommended brands includes the two above (**Alpinestars**, **Sidi**) the famous brands of **AXO** www.axo.it and **O'Neal** that you can see and order at www.imotorcyclestore.com.

When buying, try the boots with tick socks: in winter you will use thermal ones (they now produce them in breathable water repelling material) while in summer you can use a walking sock further reducing vibrations.

Maintenance of the boots is essential to preserve your (heavy) investment in time. Clean them regularly and on monthly basis spend some leather protection cream on it. Every season do full treatments with water repelling product for leather (again you can find them at www.riderwarehouse.com). Let them dry without forcing with heat and take the habit of stuffing newspapers inside when not in use (a cheap and good deodorant).

11. Helmet. We can write books about helmets or close the subject with two words "Buy quality". We spend an average of 40.000 kilometers per year on the saddle and for all that time the best part of our body is inside a helmet. Selecting a good helmet, with a comfortable fit and good ergonomics is not so simple and it takes time and trials. You must be comfortable, quiet and protected: and these three characteristics can only be bought at a price. The old saying "If you have a 10 dollar brain by a 10 dollar helmet" still rings true... with some caveat. The exasperation of marketing techniques and the issuing of "champion's replica" designs inflate the price well above the real value. The suggestion is to go for middle of the line quality brand in plain colors: in this way one saves money while avoiding any short cut in quality. Check on the window below expert's suggestion on selecting the right size; as usual it is a bad idea to buy a helmet by mail unless one had the opportunity to try the real thing on the right size.

Next question is "Full face, Flip open face, Open Face?" Our suggestion is to go for a full face helmet offering more protection and more silence. Flip-Open are now well tested and most of the good brands have a model that passed safety standards. Several friends who, in the past, had never considered wearing anything else but full face are not captured by the convenience of flipping up the front of the helmet at stops to communicate with fellow riders. (Nolan N100

The **Quality Control Sticker** indicates what test the helmet passed. Normally helmets from a single production batch are tested to check impact and penetration resistance, reaction to cold and hot temperatures, retention of chin strap and visor mechanism, visor optical qualities and impact resistance, response of the helmet surface to acids or solvents. In Europe the standard is market ECE22.05, in England BS6658.1985 with ACU (Auto Cycle Union) mark for racing approved helmets (Gold Kite). In USA the mandatory sticker is Department of Transportation DOT FMVSS218. Snell Memorial Foundation <http://www.smf.org/stds.html> issuing Snell M2000 is a private testing organization issuing quality control certificates and stickers.

was rated best buy by the severe Motorcycle Consumer News). Stay away from open face: they look cool and stylish but when you go down you like to have your cheeks and chin well padded. Even more important, stay away from cheap, un-tested, un-certified helmets: these lids can be more dangerous than riding without helmet and this says all.

Whatever your choice of model and brand check the date of construction and the "Quality Control Sticker". Coming to Brands, the favorites of American bikers were this year **Arai** www.araihelmet-europe.com, **Shoei** www.shoei-europe.com/en/ and **AGV** www.agv.it. In RiderPower research 2002 (Ride Magazine UK) Arai comes first, Shoei 6th, AGV 14th. In between we have **Schuberth** (2nd) www.schuberth.de and **BMW** (5th) for flip face helmets, **Suomy** (4th) www.suomy.com, **Axo** (10th), **Nolan** (12th) www.nolan.it, **Shark** (17th) www.shark-helmets.com and **Caberg** (18th) www.caberg-helm.com for full face helmets. In our experience Arai, Shoei and AGV are the best choice with AXO for the off road. It is also worth to check the brands involved in GP racing. These manufactures get superior experience from their pilots and transfer the findings in the street models. Three categories 2002 champions wear Rossi (500) on **AGV**, Melandri (250) on **Nolan** and Arnaud (125) on **Shark**. Finally, remember that your helmet, if not properly kept, will age with the protective material and the outer shell losing the shock absorption properties. A little crash, falling from the shelf, can shatter the internal structure: the helmet will look OK but it is no more effective. Always place your helmet in a safe place (on not on the top of the handlebar or on the mirrors or on the saddle... helmets bounce well).

Useful information on safety in biker's clothing can be found at <http://www.motorcycle-training.f2s.com/safety.html#Clothing>. Bikers can find test of gear at FAQ on clothing at www.windfalls.net/ukrm/ukrmfaq4.html, www.mcnews.com/mcnews/articles/product_comparison.ht, www.motorcycle.com/mo/mcbe-ware/newproducts.html and several Bikes Directories in the web.

It is good practice before you buy just to type the name of the product under your consideration in one of the main engines on the web and check the results. OMM Riders are at disposal to discuss their own experience.

Summary of the web sites mentioned in this bulletin.

Choosing a Helmet with an Expert.

Safety experts agree that the most important factor in choosing a helmet is choosing one that fits properly. Since a new helmet can cost several hundred dollars, it's worth taking a little extra time to make certain that your shiny new lid fits as well as possible. Here's how to go about it. The first step is to measure your head. Even if you think you know what size helmet you need, it's worthwhile to take the time to double-check. Get someone to help and a small measuring tape. Measure the circumference of your head from about one inch above your eyebrows in front to the point at the back of your head that gives you the largest measurement. Measure several times just to make sure you've got it. Now match the measurement with the helmet sizes on the chart we've provided, rounding up to the next largest number if your measurement falls between sizes. Next, it's time to try on a few helmets. Don't worry about colors and graphics yet, our first concern is finding the right fit. Grasp the helmet by the chin straps with the top of the helmet down and the front of the helmet facing you. Balance the helmet with your fingers, and slide your thumbs to the inside surface of the chin straps. Now spread the helmet apart and slip it over your head. You may need to tip it backward or forward a bit to help slip it on. The helmet should go on with some resistance if it's in the proper size range.

Unfortunately, most people tend to choose helmets that are too large, so if the helmet feels snug at first, you're probably close to the proper size. Don't reach for a larger size unless you can't get the helmet on at all. Now that you have the helmet on, go find a mirror for a quick visual check. The helmet should sit squarely on your head, neither tipped forward nor backward. With a full-face helmet, your eyes should be centered in the opening with the padding of the liner fitting just above your eyebrows. While you're looking in the mirror, check for gaps between the padding and your head. The cheek and brow pads should be in firm contact with your face, without causing excessive pressure. Now put one hand on each side of the helmet and hold your head still while trying to rotate the helmet from side to side and front to back. The helmet should not slide around on your head without a lot of resistance. In fact, your skin and scalp should move with the helmet. Remember that helmets will "break in" just like hats, so the helmet that's just right for you may feel overly-snug at first. Note any pressure points or "hot spots." If the helmet fits properly, the pressure should be evenly distributed around your head. Make sure the chin strap is snugly fastened and try the "roll-off" test. Reach over the top of the helmet and grasp the bottom rear edge. Try to roll the helmet forward off your head while you hold your head as still as possible.

Pull as hard as you can without causing yourself pain. If the helmet moves significantly or rolls off your head, it's too large. Before you take the helmet off, think about pressure points again. Do there seem to be spots where the pressure is excessive? Remember pressure that may be only mildly irritating at first, can cause a raging headache after an hour in the saddle. Stay close to the mirror while you take the helmet off, then look for any areas of reddened skin that signal pressure points. If you find any, put the helmet back on and see if you feel extra pressure in the reddened area. When you think you've found the perfect fit, try on the same make and model of helmet in the next larger and smaller sizes, going through all the same tests. Before you make the final decision, put the helmet back on and wear it for at least ten minutes just to make sure you haven't missed any pressure points. Helmet manufacturers have different ideas about the general size and shape of the human head. If you have trouble finding the proper fit, try a different brand of helmet, or even a different model by the same manufacturer. Be patient, work through all the steps for getting the right fit and you'll end up with the helmet that's right for you.
<http://www.mcnews.com/mcnews/articles/helmet.htm>

Catalogues	Aerostich	www.riderwearhouse.com
Underwear and Thermals	Aerostich	www.aerostich.com/riderwearhouse.store
Fleece	Aerostich	www.riderwearhouse.com
Clothing	Aerostich and Darien	www.riderwearhouse.com
Helmets	AGV	www.agv.it
Leather	Alpinestars	www.alpinestars.com
Boots	Altberg	www.altberg.co.uk
Helmets	Arai	www.araihelmet-europe.com
Clothing	AXO	www.axo.it
Leather	BKS	www.bksleather.co.uk
Body Armor	Bohn	www.bohnarmor.com
Fleece	Cabelas	www.cabelas.com
Helmets	Caberg	www.caberg-helm.com
Leather	Crowtree	www.crowtreeleathers.co.uk
Clothing	Dainese	www.dainese.com
Boots	Daytona	www.daytona.de
Catalogues	First Gear	www.intersportfashions.com
Catalogues	Frank Thomas	www.frank-thomas.co.uk
Sunglasses	Gargoyle	www.gargoylesinc.com
Catalogues	Hein Gericke	www.hein-gericke.de
Gloves	Held	www.held-biker-fashion.de
Leather	Kushitani	www.kushitani.com
Underwear	LDC	www.ldcomfort.com
Clothing	Motoport	www.motoport.com
Gloves	Nankay	www.performancemotorcycleparts.com
Helmets	Nolan	www.nolan.it
Helmets	O'Neal	www.imotorcyclestore.com
Fleece	Polartec	www.polartec.com
Catalogues	Polo	www.polo-motorrad.de
Clothing	Rukka	www.rukka.com
Helmets	Shark	www.shark-helmets.com
Helmets	Shoei	www.shoei-europe.com/en/
Helmets	Shubert	www.schubert.de
Boots	Sidi	www.sidisport.com
Waterproof over suit	Spada	www.harpersraceshop.co.uk/itmidx31.htm
Clothing	Spidi	www.spidi.com
Helmets	Suomi	www.suomy.com
Socks	TechSpun	www.techspun.com
Under-leathers		www.extremereading.co.uk
Under-leathers		www.underleathers.com
Earplugs		www.earplugs.gb.com
Earplugs		www.earplugco.com
Fog City		www.modernworld.com/fogcity/motorcycles.html