THE ARAI DIFFERENCE

When you think about how a helmet works to protect the head inside, if you think of absorption of the impact, you are partly correct.

That is, there is a limit to the amount of energy any helmet can manage to absorb. In this regard, it may be worth noting that the impact test speed for absorption by most standards is less than 28 km/h.

As the kinetic energy goes up in proportion to the square of speed, the amount of energy involved in a real crash can be far bigger than the level any make of helmet can manage to absorb.

However, the basic function of a helmet protecting the head from a severe blow of an impact is not only absorption.

As many riding impacts are off center, or come at an angle, the intrusion of energy might be diminished as the helmet may skip or slide over obstacles avoiding some of the energy.

This enhances the chance that energy getting into the helmet stays within the level absorption could handle. We refer to this as Glancing Off.

Did you know Arai is one of very few in the world aware of the importance of Glancing Off?

Witnessing such scenes repeatedly, Arai has come to believe that Glancing Off of the impact energy is a key to the enhanced head protection by helmets, and Arai has been working to elevate its level ever since.

Although there has been no literature or article referring to Glancing Off, we have studied the principles and functions of it through our own experiences and have been working to enhance its effectiveness independently.

The basis of Glancing Off is undoubtedly a Rounder, Smoother and Stronger Shell, but when it comes to designing the structure of it on that basis, there has been no simple solution or magic wand. The real crashes are too unpredictable.

Did you know what Arai has actually done to raise the performance level of Glancing Off?

We at Arai are proud to work for the protection of fellow riders, and feel it has become an important part in the meaning of our existence, but the unpredictable nature of some crash impacts can overwhelm even our helmets.

To live with such a fact, we have been struggling to enhance every aspect of a helmet’s ability to protect, no matter how small, and believe there is always some room left for improvement hidden within the many details of Glancing Off, even though we did not know how much each improvement would add.

This accumulating, building and evolving of numerous improvements, for the enhancement of Glancing Off, has been the foundation of the difference of Arai through our long history.

Today, many in the world say that the protection performances shown by Arai are different from others. There is an old saying; “The whole can be far greater than the sum of its parts.” If you consider some extreme performances shown by Arai, you might find some truth in that old saying.

Even though most of those parts may not be readily visible or likely to serve as a sales feature, they contribute to the cost of seeking to improve performance. But we have come to be convinced that this is the way to the enhancement of head protection against severe and unpredictable crash impacts.

Knowing that no one and nothing is perfect, we believe these extra efforts are worth the additional costs, especially considering that what we are seeking to protect is priceless.

Michio Arai
Owner and CEO, Arai Helmet, LTD.
**How Does a Helmet Protect Your Head?**

**Head Protection Can Be Called Managing Impact Energy. Except Managing That Energy Is Not Just Absorbing It.**

In the event of an impact, energy is created, and the role of a helmet is to 'appropriately manage the impact energy' to protect the rider's head. That energy management is generally achieved by 'absorption' of the impact energy around the head, thus protecting it. The outer shell deforms and the cells of the inner EPS liner crush, and that destruction manages impact energy by converting it into work. However, the truth is even the best helmet has limits to how much energy it can manage.

On the other hand, the helmet isn't only absorbing energy, but rather in a large crash when the rider's head is repeatedly protected by the helmet, we understand that it's working to manage impact energy in another important way.

That is 'glancing off'. Many people probably don't even realize this, but at the moment a helmet is impacted, it struck off center it can slide on the crash surface, minimizing the impact energy that might otherwise be transferred to the rider's head. Therefore, if not directed toward the center of the helmet, the head inside can be protected, even with high energy levels and the liner's limited energy absorption ability. Even in extreme crashes we've witnessed 'glancing off' and 'energy absorption' as two halves of energy management that work together to increase the chances of head protection. This holds true for any kind of helmet.

However, helmet standards place their emphasis on impact absorption and do not show anything about glancing off. Glancing off is the synergy of various elements working together, and there is no set way to impact a helmet to test for it. There is a test for shell strength to resist penetration, though because it's difficult to put numbers to the shell form and such for glancing off, there remains no definition. Any helmet makes use of glancing off, but due to the difficulty in numerically capturing each helmet's difference in ability, there are many cases where safety standards simply don't define glancing off.

In addition to passing standards, Arai makes continual efforts to improve our helmets' glancing off ability and pursue gains in head protection.

**The Limit of Absorption Ability**

The amount of energy in a crash can be expressed as distance and force, where distance is the physical space between the helmet shell surface and the rider's head, or in other words the helmet size. If you make the helmet user-friendly, there will be a limit to its size. Regardless of construction or material employed, there's still a limit to the space available in a helmet.

The amount of energy in a crash can be expressed as distance and force, where distance is the physical space between the helmet shell surface and the rider’s head, or in other words the helmet size. If you make the helmet user-friendly, there will be a limit to its size. However, because of the limited amount of space between the shell and rider’s head necessary to manage impact energy (see below 'The Limit of Absorption Ability'), Arai on a motorcycle, have we to prepare for impacts that far exceed our imagination. So it follows that glancing off is critical for supporting that. Arai’s helmet exhibits results due to its strong shell combined with its round smooth surface and achieves the important goal of not letting energy into the helmet.

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**Aiming to be the Best in the World**

When it comes to proficiency in head protection, Arai has the goal of making a helmet superior to all others and continues to make our helmets this way today. We have seen this confirmed in many of our rider crashes over several decades, and we pursue gains in protection even if just a little. Because we come from this background, we've come to recognize the importance of the smoothness of the helmet as a component above all others and continue to employ it in our approach. Head protection is the foundation of our belief in being the best in the world and we pursue the value of both glancing off and impact absorption equally. This is the difference of Arai.

**Glancing Off Works Together with Energy Absorption Invisible to Your Eyes.**

When we talk about ‘impact absorption ability’ there will be a limit regardless of any manufacturing technique employed, because of the limited amount of space between the shell and rider’s head necessary to manage impact energy (see below 'The Limit of Absorption Ability'). Arai on a motorcycle, have we to prepare for impacts that far exceed our imagination. So it follows that glancing off is critical for supporting that. Arai’s helmet exhibits results due to its strong shell combined with its round smooth surface and achieves the important goal of not letting energy into the helmet.

**Helmet Scars from Impacts**

Impact absorption testing is representative in helmet standards testing. It numerically measures the impact when a helmet collides with an obstacle straight on. Diagonal scars are left on the helmet where it received a perpendicular impact. On the other hand, impacts can be received from different angles and the scars flow horizontally from the impact point. See riding impact case examples.
The Never-Ending Evolution of Glancing Off.
Seeking Various Improvements Every Day. Introducing One Part of the Challenge

Glancing off cannot be adequately quantified as a basis of head protection. In actual crashes, an impact can come from any angle and speed and cannot be prepared for. Also, the exact speed and angle of an impact cannot be replicated 100%. So, as for the development of ‘glancing off’, there’s nothing that can be done except to accumulate improvements that we think we should do through experimentation and small adjustments to combat every possibility.

The Evolution of Form Continues as Time Goes By

From the scars left by actual rider impacts, we can gather that the helmet was able to slide past obstacles and not catch or snag because of its smooth surface. In other words, we surmise they exhibited ‘glancing off’ properties. So, the shape of Arai helmets will be round and smooth to the very end. We have kept the same basic shape since the beginning, and think it alleviates impact energy more so than a shell with an exaggerated shape with hard edges that may catch. Our helmets evolved from a cannonball shape when first introduced, into an egg shape today, to better blend the entire outer surface more smoothly. The current shape of an egg is a simple sphere evolved in nature for survival. Arai also evolved towards the egg shape with the notion to protect the rider’s head as much as possible from impacts that might exceed expectations.

For Many Years We’ve Seen Our Liner’s Performance Tested

Even the best ‘glancing off’ ability alone won’t protect the rider’s head. ‘Impact absorption ability’ is necessary to pass even the strictest helmet standard in the world. In the impact absorption ability test, the shell surface deforms when it receives an impact with the helmet hitting obstacles of certain angles and shapes. If the impact surface is narrow, concentrating the impact energy, the EPS liner must naturally be thicker. However, while that makes it easier to pass helmet standards, making the EPS liner thicker only in the necessary places ends up distorting the helmet shape away from ‘round and smooth’. It doesn’t maintain a form ideal for making the most of ‘glancing off’.

Arai’s proprietary 1-piece multi-density EPS liner has finely-tuned sections with various densities. It can make the most of its ‘glancing off’ ability because the EPS density varies according to the corresponding shell surface, allowing the shell to remain ‘round and smooth’. This 1-piece multi-density liner is indispensable for improved results in Arai’s strength of the shell shape pursuing ‘glancing off’ performance.

Continually Seeking the Strongest Materials and Best Techniques at the Forefront of Technology

Shell strength is very important for enhancing ‘glancing off’. In an actual crash, if the shell deforms or is completely destroyed, it can no longer slide and will stop and catch on that point. A helmet that can’t slide can’t maintain its ‘glancing off’ ability and that impact energy can reach the rider’s head. Since we’ve decided on being the number one helmet in the world for protection, we’ve pursued shell strength as well as weight reduction by accumulating improvements that embody the lifeblood of Arai. This evolved into the development of the CLC shell process (complex laminate construction) which encompasses both strength and lightness. Although the cost of the material utilized is 6 times higher than conventional fiberglass, Arai exploits its use for a stronger and lighter helmet. To resist cracks from spreading to the helmet’s edge, the critical edges of the shell have a Super Fiber Belt which reinforces these areas like the bands of a barrel. The resin blend as well is evolved through our obsession with strength and weight reduction as we continue to accumulate various improvements.
THREE ARAI HELMET SHAPES

1. MEASURE
Have the circumference of your head measured to get an idea of where to start. The image here shows the proper placement of a measuring tape to get the most accurate measurement.

2. TRY ON AN ARAI
A HELMET NEEDS TO BE TRIED ON IN ORDER TO DETERMINE A PROPER FIT.
With an Arai helmet, regardless of your presumed head shape, a side-by-side test fit, like a Quantum-X against a Signet-X, will give you apples-to-apples comparison to find your best fit. And, not surprisingly, in some cases your perfect fit isn’t the interior shape you thought you were.

3. MICRO FIT
INTERIOR LINERS AND CHEEK PADS
Many Arai models feature removable cheek pads that have a 5mm peel off side and removable head liners with a 5mm peel off side on the temple pads. You can remove these to micro-fit if necessary without having to buy additional pads. Often this allows you to stay in your fitter size rather than the traditional solution of moving up a size, which decreases comfort and performance while increasing noise and movement. You can also order optional thicker or thinner head-liners and cheek pads allowing you to even further customize your Arai helmet. To order a liner of a different thickness, start with the Lining Code that matches your helmet size, then specify the desired thickness. For example, an optional 5mm liner for a large helmet would be specified as a 9L-5mm liner. All thicknesses of cheek pads will fit in all helmet sizes in their respective models.

THE ARAI FIT

THE PROPER CROWN FIT
The interior must fit snugly all around the crown of your head. You should feel a firm, even pressure at all the contact points around the interior perimeter, with no tight pressure points that could become uncomfortable over time. The perimeter pads should be supporting most of the helmet weight, with the top crown pad touching the top of your head and supporting only some of the helmet weight.

THE PERFECT FIT
Over the last several years, we measured the head shapes of thousands of consumers across the U.S., providing us with the first hand information that led to the development of our latest Long Oval (LO) helmet, the Signet-X. The Quantum-X is the Round Oval (RO) counterpart to the Signet-X, and all other models have the Intermediate Oval (IO) head shape, which make up our three fit packages. Head shape is vital for proper fit in addition to helmet size. Only Arai offers three unique head shapes in our helmets to achieve the best fit possible.

DON’T GUESS SIZE
Try the helmet on for a while before you buy it. Have your head measured using the method we describe, and remember that if it feels too snug on your cheeks, our cheek pads are adjustable. Shape and fit can change as helmet models evolve so it’s best to check.
Based on Arai’s F1 GP helmet’s GP-6RC technology, the Corsair-X RC uses the same carbon fiber found on the newest generation of commercial airliners, combined with Arai’s own resin plus Zylon reinforcement.
Purpose-built for the street. A benchmark in comfort, quiet, stability and ventilation. Arai applied the same tireless 24/7 focus devoted to our race helmets to designing it, refining and adapting proven concepts to a new purpose. On the rounder end of the head shape spectrum, the Quantum series has always been the go-to helmet of choice. The Quantum-X brings that shape back in a feature-rich package.

**QUANTUM-X FEATURES**

**IMPROVED GLANCE OFF ABILITY** | A smooth shell is key to a helmet’s ability to slide across a surface or Glance Off an obstacle during an impact. Arai’s VAS shield system lowers the pivot point by an average of 24mm, making the shell surface area in the critical temple area much smoother and better able to reduce impact energy getting into the helmet.

**QVF AND QVR INTAKE/EXHAUST DUCTS** | The Quantum-X features QVF three-position intake and QVR exhaust ducts for excellent air intake and exhaust performance when riding. Even when the front shutter is closed on the top duct, a side vent still serves as an exhaust vent.

**FCS® CHEEK PADS** | The contoured shape – combined with multiple layers of varying foam densities supported by a foam “spring” – cradles the face like nothing that has ever come before, even from Arai. The spring makes on-off easier, while helping to block more wind noise.

**ARAI ROUND OVAL SHAPE** | The Quantum-X features a new round oval fit package that is designed to deliver a comfortable fit for riders with a round overall head shape.
Purpose built for the street, the Signet-X is a benchmark in comfort, quiet, stability and ventilation. Arai applied the same tireless 24/7 focus devoted to our race helmets to designing it, refining and adapting proven concepts to a new purpose. On the long, narrow end of the head shape spectrum, the Signet series has always been the go-to helmet of choice. The Signet-X exemplifies that shape in a feature-rich package.

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**LONG OVAL FIT PACKAGE** | The Signet-X’s longer interior shape is specifically designed for riders whose helmets can cause painful forehead hotspots due to interior shapes that aren’t made to fit their longish oval heads.
DEFIANT-X FEATURES

AGGRESSIVE STYLE | Still very much an Arai, just with a little bit of attitude. From the distinctive chin bar design, with hidden vent closures for a clean look, to the low-profile double side exhaust slots that help pull air through the helmet more efficiently.

COMMUNICATION | If you like to stay in touch while riding, Arai makes it easier to install your speakers with a molded recess in the ear pocket EPS base. Hidden behind the noise absorbing foam below the covers, the recess provides just enough room for the speakers to sit flush and not press against your ears.

INTERNAL AIR CHANNEL | Improved ventilation with an enhanced air extraction system, pulling hot/moist air from the eye port area through ducted channels behind the cheek pads that exhaust out the side cowl vents. This helps keep the rider cool and helps to reduce fogging.

5mm PEEL-AWAY CHEEK & SIDE-TEMPLE PADS | Arai’s exclusive 5mm peel-away surface pads on both sides of the headliner and in the FCS® Cheek Pads give you the option of 10mm more interior width if needed (minimizing the need to purchase optional thickness pads). Yet another level of fit customization no other helmet brand offers.

DEFIANT-X

You value independence. You’re self-defining. What you believe in is Yours, and Yours alone. For riders looking to establish their own identity, the Defiant-X is your self-defining helmet.

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The all-new Arai Regent-X is designed to isolate you from distractions with the kind of comfort only Arai can deliver. Built with the same protection as our flagship Corsair-X model, the Regent-X features a new interior for both comfort and ease of taking it on and off.

**COMFORT: 5mm WIDER BASE** | The exclusive shell flares 5mm around the base, making it easier to get the helmet on and off. But even with the larger opening, the helmet remains secure with the FCS2 cheek pads providing stability as well as effectively blocking external noise from getting inside.

**REAR VENTILATION** | New one-piece exhaust vent improves exhaust performance and aerodynamic stability. And as the extraction of heat build-up is important for both rider comfort and moisture build-up in the eye port area that can cause shield fogging, the top exhaust vent on the Regent-X remains open at all times.

**FCS2 CHEEK PADS** | The contoured shape – combined with multiple layers of varying foam densities supported by a foam “spring” – cradles the face like nothing that has ever come before, even from Arai. The spring makes on-off easier, while helping to block even more wind noise.

**INTERIOR** | Adjustable perimeter liner and cheek pads allow owners to custom fit to their exact size requirement. Soft-brushed removable liner allows for easy cleaning, and provides incredible comfort.
The original Arai SZ open-face sport helmet was born in 1988. Now 30 years later, the RAM-X comes with the VAS-Z Pro Shade System shield pursuing protection in an evolutionary form that strives for glancing off. The open face that evolves everything — ventilation, interior, liner, and shell, bringing even more comfort as a touring model. The RAM-X raises the bar for the next generation of protection.

**COMPLETELY REDESIGNED SHELL AND SHIELD SYSTEM** | The RAM-X features the newly developed VAS-Z shield system, with a lower pivot point that allows the shell to be smoother in the temple area improving the helmet’s ability to slide more smoothly should it contact the ground or obstacles, contributing to gains in protection. This lower pivot position is possible due to the dual-pivot assembly, creating a “Variable Axis System” for which the system was named, allowing the shield to function where a single pivot could not.

**VENTILATION** | Utilizing the same diffusers as Arai’s flagship Corsair-X model, with a revised stationary aero stabilizer wing to improve helmet stability and further reduce rider fatigue. Possibly the most ventilated open face helmet on the market today, and for those riding at slow speeds or in extreme temperatures we think you will agree.

**PRO SHADE SYSTEM** | Up, down or in the middle, the new shield system adapts to many light conditions without sacrificing helmet impact absorption performance. The Pro Shade’s unique design lets air pass through even at high speed.

**GLASSES COMPATIBLE** | Removable foam in the top of the earcup allows the arms of glasses to easily slide into the helmet. The earcups are easy to remove from the helmet and have removable covers for easy washing and access to this removable part.

**INTERMEDIATE OVAL**

**DIAMOND BLACK**

**ALUMINUM SILVER**

**BLACK FROST**

**DIAMOND YELLOW**

**FLUORESCENT**

**GUN METALLIC FROST**

**MODERN GREY**

**LIGHTER** | A new resin (Z Resin) developed & blended in house, combining several resins with different characteristics, bonds the many layers and materials of the shell more securely using less resin, improving shell strength as well as reducing weight.
The XC-W is yet another example of Arai’s decades-long tradition of improving on what works, and redefining how open-face helmets can look – and protect. The most telling feature is the extended coverage in the lower jaw-cheek pad area – extending 1 3/16” forward compared to the previous model (and traditional open-face ¾ helmets). The XC-W is color matched to the 2018 Honda Gold Wing Red, Silver and Blue motorcycles and comes standard with a peak.

**XC-W FEATURES**

**TDF-3 FRONT VENT** | Working with the DDL-4 exhaust vents, the TDF-3 front vent is designed to further improve intake airflow to the XC-W’s interior. The sleek vent design minimizes drag and noise, but still captures enough air to keep riders cool. The closure toggle is easy to locate and operate, even with heavy gloves.

**SIDE COWL EXHAUSTS** | Completing the XC-W’s advanced ventilation package, these exhaust vents further help in quick removal of stale interior air. The unique cowl, exclusive to the XC-W, provides exceptional airflow with a smooth aerodynamic style.

**UNIQUE CHEEK PAD DESIGN** | Adding to its distinctive look, the XC-W’s cheek pad design is similar to that of a full-face helmet, with its full-coverage EPS base and removable covers. These pads also incorporate Arai’s facial contour shape that provides a secure fit without excess pressure.

**VENTED NECK ROLL** | Arai’s vented neck roll uses the prevailing airflow behind the rider’s neck to further enhance ventilation by extracting more interior heat and stale air. Utilizes this aerodynamic effect to enhance rider comfort without adding weight.

**ADJUSTABLE PEAK** | The peak shields your eyes from the harsh sun glare during those long rides into the sun. And because Arai sweats even the tiniest details to make your ride better, there’s also a matte-black band under the peak’s leading edge to further reduce glare.
CLASSIC-V FEATURES

ONE-PIECE, MULTI-DENSITY EPS LINER | Optimized from decades of research and development for maximum protection throughout the entire liner. Designed in concert with Arai’s proprietary outer shell, the multi-density EPS beads are molded into a single liner, maximizing energy absorption requirements as needed in each area of the helmet. This tuning maximizes impact energy absorption ability while maintaining a uniform and compact helmet.

FOCUS ON PROTECTION | With a focus on protection, even our retro ¾ helmet gets our peripherally-belted (PB-clc.) shell, providing tremendous strength in an incredibly small and lightweight package. Adding reinforcement where needed, without increased weight or shell thickness.

VENTILATION | This smooth, retro helmet is actually fully ventilated: air enters via three intakes, flows over the head and exits through a multi-staged channel that leads to all-new Venturi exhaust ports.

BUTTON CLOSURE GOGGLE STRAP HOLDER | Completing the old-school look is the faux-stitched leather goggle strap holder that helps keep your goggle straps from sliding up the helmet when riding.

CLASSIC-V

Heritage styling with modern luxurites, including traditional stitched faux leather edge trim and faux leather interior accents. Behind the vintage look are modern technologies: patented hidden interior ventilation and Arai’s uncompromising level of quality and protection. The Classic-V: Look cool. Stay cool.
Offering three distinct configurations allows the user to choose which works best for their riding needs. The XD-4 is similar in appearance to the previous XD-3, but greatly improved in all-around performance. The combination of the new comfort headliner, with microfitting 5mm peel-away temple pads, and our patented FCS® cheek pad design, also with 5mm peel-away layers, add a new dimension to the concept of helmet fit and customization. It takes a unique sense of commitment to continually strive to improve your product – especially when it’s already regarded as the very best.

**EXHAUST PORTS & SHELL SHAPE** | These top-diffuser-vent ports nearly double the XD-4’s airflow, while its shell shape provides better aerodynamic stability at higher street speeds in concert with its high-flow peak and side cowl vents. The high flow peak reduces drag at highway speeds and helps direct air into upper intake vents for improved internal ventilation.

**PAINT / INTERIOR**

**WHITE**

**INTERMEDIATE**

**OVAL**

**FLUORESCENT**

**YELLOW**

**SKU**

**XD-4**

<table>
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<tr>
<th>SKU</th>
<th>HEADSHAPE</th>
<th>SHELL SHAPE</th>
<th>EXHAUST PORTS &amp; SHELL SHAPE</th>
<th>BROW VENT FACESHIELD</th>
<th>FULLY REMOVABLE/REPLACEABLE/WASHABLE INTERIOR</th>
<th>5MM PEEL-AWAY SIDE-TEMPLE PAD</th>
<th>WARNING</th>
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| XD-4 | INTERMEDIATE | OVAL | These top-diffuser-vent ports nearly double the XD-4’s airflow, while its shell shape provides better aerodynamic stability at higher street speeds in concert with its high-flow peak and side cowl vents. The high flow peak reduces drag at highway speeds and helps direct air into upper intake vents for improved internal ventilation. | Brow vents in the XD-4 faceshield provide airflow to the temple area of the head. Using the eye port to improve ventilation, avoiding additional holes in the critical forehead, Arai improves rider comfort while maintaining shell integrity and impact energy management performance. | Arai’s Dry-Cool® technology keeps you drier and cooler for greater long haul comfort. Easily removed/replaced for custom fitting or thorough cleaning after a long ride, race weekend or a season of casual touring, the Arai interior makes it easy. | Arai’s exclusive peel-away side/temple crown pads give you the option of 10mm more interior width if needed. Yet another level of fit customization no other helmet brand offers. | Although the XD-4 model shield will fit earlier XD versions, DO NOT INSTALL THIS SHIELD ON ANY EARLIER XD MODEL. As there are no receiving ducts for this shield’s Brow Vents in earlier XD helmets, debris, insects, etc., might enter through the vents and interfere with the wearer’s vision and/or damage the eyes. Further, if the XD-4 shield is tinted, light entering through the vent slots may distract the wearer. | The visor/peak supplied with the XD-4 helmet is not suitable for high-speed use. At such speeds, air catching a side or main surface of the peak may cause difficulty in returning the head to a forward and/or level position. To understand and prepare for this possible effect, you should first try to experience it at low speeds, gradually increasing speed so that you will know what to expect and determine when the peak should be removed for higher-speed riding. | The XD-4 offers three distinct configurations depending on rider preference or riding conditions. Change the look every time you ride, or even during the same ride. | www.araiamericas.com | 37

**XD-4 FEATURES**

**BROW VENT FACESHIELD**

Brow vents in the XD-4 faceshield provide airflow to the temple area of the head. Using the eye port to improve ventilation, avoiding additional holes in the critical forehead, Arai improves rider comfort while maintaining shell integrity and impact energy management performance.

**FULLY REMOVABLE/REPLACEABLE/WASHABLE INTERIOR**

Arai’s Dry-Cool® technology keeps you drier and cooler for greater long haul comfort. Easily removed/replaced for custom fitting or thorough cleaning after a long ride, race weekend or a season of casual touring, the Arai interior makes it easy.

**5MM PEEL-AWAY SIDE-TEMPLE PAD**

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**GO CONFIGURE**

The XD-4 offers three distinct configurations depending on rider preference or riding conditions. Change the look every time you ride, or even during the same ride.
The latest expression of the ultimate off-road helmet, the VX-Pro4 evolved from the much-loved VX-Pro3 model. So it’s still the perfect choice for MX, enduro and off-road use. Just as in every Arai helmet, the basic and simple organic shell shape is based on the R75 shape concept. The absence of exaggerated edges or protrusions on the shell should not be mistaken for a lack of imagination. It’s a visual demonstration of our commitment to maintaining the integrity of the shell with crash impact performance.

A SMOOTH INSTEAD OF RIGGED SHELL | The shell itself is consistently round and smooth, maintaining the Glancing Off shape concept in areas above the acknowledged test line and influencing those below the test line. Here, the rounded chin bar maintains the same compact shell length as the previous model, the VX-Pro3. The result is less protrusion, which may be less likely to catch and dig in during a spill.

SHELL MATERIAL | In order to maximize performance, we precisely assemble the shell from multiple proprietary components. Super Fiber, one of the primary materials, costs up to six times more than standard fiberglass but provides 30% higher tensile strength and increased penetration resistance. The PB-cLc (Peripherally Belted Complex Laminate Construction) method demands precise and time-consuming assembly by master crafts- men from many individual pieces.

CHIN BAR VENT GRILL | Installed on the uniquely rounded chin bar, the stainless mesh grill is now mounted from the outside on the exterior vent cap and can be easily removed for cleaning or damage replacement. The vent cap is also designed to break away from the chin bar in the event of impact.

IMPROVED PEAK | The peak is 14mm longer and 5mm wider than the previous model for improved ability to deflect roost and flying debris. To compensate for increased lift, the air outlets on the improved peak have been made larger as well. Made with durable, yet extremely flexible material, mounted with plastic screws designed to break on impact, so as not to snag on impact which could send energy into the helmet or cause excess rotational force.

REAR DUCT | The Air-Through top-rear-duct center brace also functions as a goggle-strap locator. The diffusers can be removed or replaced quickly and easily by removing a single screw on the rear-duct center brace.

EMERGENCY RELEASE SYSTEM | The revised Emergency Release Cheek Pad system has the release tab repositioned and is easier to access by rescue staff. Pioneered by Arai, the concept behind the emergency release cheek pad design was to allow trained medical personnel easier access to an injured rider, reducing the chance of unintentional injury.

SHELL MATERIAL | In order to maximize performance, we precisely assemble the shell from multiple proprietary components. Super Fiber, one of the primary materials, costs up to six times more than standard fiberglass but provides 30% higher tensile strength and increased penetration resistance. The PB-cLc (Peripherally Belted Complex Laminate Construction) method demands precise and time-consuming assembly by master crafts- men from many individual pieces.

CHIN BAR VENT GRILL | Installed on the uniquely rounded chin bar, the stainless mesh grill is now mounted from the outside on the exterior vent cap and can be easily removed for cleaning or damage replacement. The vent cap is also designed to break away from the chin bar in the event of impact.

IMPROVED PEAK | The peak is 14mm longer and 5mm wider than the previous model for improved ability to deflect roost and flying debris. To compensate for increased lift, the air outlets on the improved peak have been made larger as well. Made with durable, yet extremely flexible material, mounted with plastic screws designed to break on impact, so as not to snag on impact which could send energy into the helmet or cause excess rotational force.

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Modern helmets are designed for both performance and affordability, often incorporating features that enhance rider comfort and safety. Here are some key features and benefits of Arai helmets:

### Features and Benefits

- **Felt Reinforcement**: The felt acts as a reinforcement layer without adding significantly to the weight of the helmet.
- **PB-cLC Shell**: The Peripherally Belted Complex Laminate Construction shell is the accumulation of years of Arai's experiences in shell making, handmade with over 25 individual pieces bound by Arai's new proprietary resin and reinforced by the Peripheral Belt. VAS Shield Mechanism: The Variable Axis System (VAS) incorporates a moving pivot point allowing for a lower shield mount position. A dual-function lever allows easy operation of the shield to be opened just a bit while still fastened and is larger to allow for intuitive and seamless shield operation. The innovative latch captures and securely holds the shield closed to help resist unexpected opening. The demist function allows the helmet's fit may begin to feel a little “loose,” not as snug as when purchasing an Arai. Arai for $200 or less. So, if you see an advertisement that appears to defy logic, walk away and hold onto your money.

- **Hyper-Ridge**: Flares out to provide a larger opening for easier ingress and egress; the reinforcement band circles the bottom of the shell adding strength and lowering the helmet’s center of gravity.

- **Cowl Exhaust Vent**: Exhausts heat more efficiently; these vents are sculpted into the rear shell shape for optimal aerodynamic characteristics.

- **Brow Vents**: Very comfortable soft material provides all day comfort for those long rides.

- **QVF Series Top Vents**: These provide better airflow for cooler heads, especially in the upper neck area. The dual-function lever also allows for easy operation of the shield to be opened just a bit while still fastened and is larger to allow for intuitive and seamless shield operation.

- **Anti-Microbial Interior Lining**: Exclusive liner with anti-microbial material stays fresher between cleanings.

- **Emergency Release Cheek Pads**: These allow for easier access to an injured rider by pulling out the cheek pad to allow for a clear view of the head injury.

- **Emergency Release Neck Pad**: The mesh may be replaced with a new one to keep the neck area cool and comfortable.

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### ARAI'S 5-YEAR WARRANTY

All Arai helmets are warranted against defects in materials and workmanship and are serviceable only for the properly fitted first user for five years from date of first purchase, but no more than seven years from date of manufacture. It should be replaced within five years of first use. Throughout the years, Arai has recorded the manufacture date on helmets in a standard month/day/year format (02/00).

While the manufacture date has always been recorded on the chinstrap, as it is a permanent part of the helmet, the position on the chinstrap has changed over the years for various reasons. Most recently, the date of manufacture can be found etched on the metal D-ring on the chin strap. Therefore, we encourage everyone to be aware and use common sense when purchasing an Arai.

### WARRANTIES

**WARNING: IF IT SOUNDS TOO GOOD TO BE TRUE, IT PROBABLY IS!**

Common sense suggests that you can't buy a brand new, real Arai for $200 or less. So, if you see an advertisement that appears to defy logic, walk away and hold onto your money.

We don't have eyes on the entire internet, but we've heard stories and even found a few examples of unscrupulous websites offering Arai Helmets at ridiculously low prices. Most of these sites use real Arai images, offering crazy low prices – but be very uncomfortable. Never purchase helmets from outside your market as they may not comply with DOT standards. For further information on the Snell standard, check out Nell's website.

**WARNING: BUYING FROM OTHER COUNTRIES**

Each world market requires different helmet standards. Never purchase helmets from outside your market as they may not comply with legally required standards for your country, not to mention the fact that their interior fit may not have been designed for your market and as a result may be very uncomfortable. If the helmet suffers an impact and any doubt exists as to its further ability to protect, it should either be returned to the manufacturer for competent inspection or discarded and replaced.

### CONTRIBUTION OF OTHER SOURCES

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**WARNING: NO HELMET can protect the wearer against all foreseeable impacts. Nothing is a substitute for safe riding practices.**

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**WARNING: BUYING AN ARAI HELMET ONLINE**

Online shoppers take care to be sure they are dealing with an authorized Arai e-commerce retailer. These dealers have agreed to follow guidelines to help customers the best purchase possible – even long distance. They will not sell you a counterfeit helmet, so never purchase helmets from outside your market as they may not comply with DOT standards. For further information on the Snell standard, check out Nell's website.

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**SHIELD SYSTEMS**

**VAS-V BROW VENT MIRRORED SHIELDS**
For VAS faceshields on the Corsair-X, Signet-X, Quantum-X, Defiant-X and Regent-X.

**RAM-X SHIELDS SYSTEM | VAS-Z**

**XD-4 ANTI-FOG SHIELD**
XD-4 brow vent shield with anti-fog laminated film available in clear, light smoke, and dark smoke.

**PRO SHADE SYSTEM | VAS-V**

**VAS-V MAX VISION BROW VENT SHIELD**
For VAS faceshields on the Corsair-X, Signet-X, Quantum-X, Defiant-X and Regent-X. Three shield options available (clear insert sheet only).

**ENHANCE YOUR RIDE**
The Arai Pro Shade System shields are available for either the VAS or SAI shield system and will replace the faceshield of any current Arai full-face street helmet.

**ARAI PRO SHADE SYSTEM FOR VAS EQUIPPED ARAI HELMETS**
The Arai Pro Shade System for VAS-equipped Arai helmets (Corsair-X, Signet-X, Quantum-X, Defiant-X, and Regent-X) offers a quick, convenient shade to block ambient light, but also acts as an aerodynamic peak to block sudden bursts of light with a subtle dip of your head, allowing your hands to stay on the bars, right where they need to be.

When raised, the external lens works like a peak, minimizing glare when the sun is higher in the sky. Lowering the lens reduces the amount of light entering the helmet, which is particularly beneficial when the sun is lower in the sky. The lens can be quickly and easily raised and lowered by the rider depending on riding conditions. The external lens is designed to break away easily in the event of an impact and does not compromise the energy management capability engineered into the helmet shell.

**PRO SHADE SYSTEM OPTIONS**
The Pro Shade System can be purchased either as a complete system, with the standard (80mm tall) dark smoke external lens installed, or just the Pro Shade ready base shield with pivot mechanism to allow you to purchase your external lens of choice (sold separately).

**NOTES**
- A faceshield with pin, or a Max Vision Shield, is necessary for the installation of the pinlock insert.
- A Pro Shade System shield is necessary for the installation of the pinlock insert.
SHIELD SYSTEMS

VAS-V MAX VISION BROW VENT SHIELD
For VAS faceshields on the Corsair-X, Signet-X, Quantum-X, Defiant-X and Regent-X. Three shield options available (clear insert sheet only).

| CLEAR NORMAL | LIGHT SMOKE (SUNNY WEATHER) |
| SMOKO (INTENSE SUNSHINE) | CLEAR INSERT SHEET |

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