GLANCING OFF & PRIORITY FOR PROTECTION

GLANCING OFF - THE KEY TO EVERY ARAI HELMET

Glancing Off is a core feature of every Arai helmet. It refers to the ability of a helmet to slide over – quite literally 'glance off' – obstacles in an angled impact, minimising the amount of energy transferred to the head. Where the R75 outer shell and EPS liner have their limits of energy absorption, Glancing Off works to ensure that impact energy is decreased before it even reaches the inner layers. In an impact, a helmet typically strikes an obstacle at an oblique angle, rather than 90º degrees. Through Glancing Off, the obstacle 'moves past' the impact point on the helmet, sliding and dispersing energy from the moment of impact.

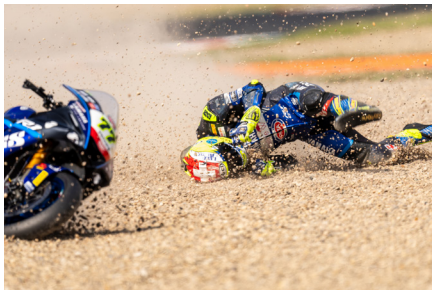
Head impacts for motorcycle riders are unpredictable and can occur at any angle, making the Glancing Off ability of an Arai helmet critical in helping to disperse energy. By creating helmet shells rounder, smoother and stronger that are then tested in road, off-road and race conditions, Arai has been able to continually develop Glancing Off in the pursuit of head protection gains.

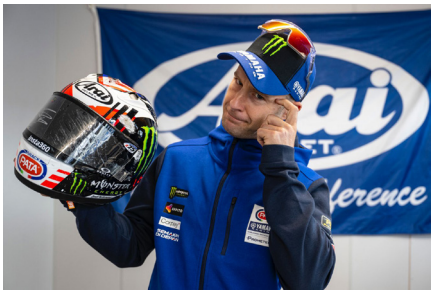
While helmet safety standards tests exist for shell strength and penetration resistance, it is difficult to define a helmet's Glancing Off ability in just numbers, and many safety standards do not recognise Glancing Off at all. This is why Arai creates helmets that not only meet and exceed these standards; they also demonstrate the vital importance of Glancing Off to head protection in potential impacts.

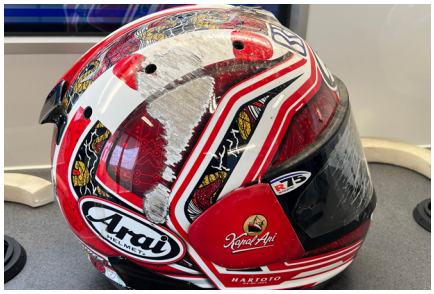
MANAGING IMPACT ENERGY

When an impact occurs, the role of a helmet is to manage impact energy so that it protects the rider's head. Much of this energy management is achieved by the outer shell and inner EPS liner absorbing the energy that enters the helmet around the head. In an impact the outer shell deforms, followed by the EPS cells crushing, and this absorption process helps disperse impact energy to protect the head.

Due to the small space between the shell and head to fit energy management layers, there is a natural limit to the amount of energy that can be absorbed by a helmet before another protective element takes effect to disperse impact energy – this is what Arai calls 'Glancing Off'.







PRIORITY FOR PROTECTION

Arai believe a helmet should protect the rider's head via two protection factors - Glancing Off and impact energy absorption. While impact energy absorption can be measured, the ability to glance off cannot. In most real-world situations riders are traveling above the speeds of a test environment, which is why the combination of these protection factors is so important to every Arai helmet, and what makes it truly different to anything else. This is the Priority for Protection.

Created in Japan by dedicated and deeply passionate craftspeople, every Arai helmet is the result of countless improvements made in its never-ending quest for improved head protection. The Value of Arai is, and always will be, to protect what is priceless.

VALUES OF ARAI

SOLUTIONS OF ARAI

GLANCING OFF IN ACTION

PENETRATION TEST

ECE 22.06

Our Glancing Off logo represents the ability of Arai helmets to deflect off obstacles,thanks to their round, strong, and smooth shell shape.