

High flyer Robert Kranjec lands a BMW S 1000 RR

Citius. Altius. Fortius. This is the Olympic motto, which basically means 'faster, higher, stronger'. However, for the Winter Olympic sport of ski jumping, a more appropriate motto would be 'far, further, the furthest'. And as in any sport, the best in ski jumping are those that reach for the very limits of human capacity – and in some instances, perhaps even exceed them.



There can't be many things that come close to the natural high of gliding quickly through the air, strapped to a pair of huge skis on which you are absolutely dependant on making a successful return to the ground. Motorcycling has its similarities though, with just a narrow strip of tyre rubber keeping the machine in contact with the road, and the chance of a bruise or two if you exceed the limits of your ability!

One motorcycle fan, who is also rather good at ski jumping, has just taken delivery of a new BMW S 1000 RR. Robert Kranjec knows a thing or two about extreme sports, having won an Olympic bronze medal in 2002 in Salt Lake City, and finishing in sixth place at this year's Winter Olympics in Vancouver. He also achieved his first World Cup victory in Kuusam, Finland in the 2005/06 season.

In a sport dominated by Austrians, Scandinavians, Swiss and Germans, the young Slovenian ski jumping ace has enjoyed considerable success. In fact, his strength actually lies in the 'ski flying' discipline, which is an extreme form of ski jumping on special hills that can propel jumpers as far as 239 metres – the current world record.

Imagine the kind of forces a ski jumper must overcome to fly that far? In fact, it's more like gliding, because during the take-off and flight phase of the jump the athletes actually lie on an air pocket they have created, that enables them to take advantage of the natural and physical forces. True, sometimes things go wrong and

like a broken winged Icarus, a jumper tumbles down the slope, but in order to minimize the occurrence of such unpleasant events, more and more importance is being placed on the technical aspects of this sport.

In another parallel with motorcycling, an understanding of aerodynamics is vital and a more scientific approach is delivering results via research of materials used by ski jumpers, development of skis and other equipment, and improvement of the actual jumping technique itself. For 29-year-old motorcycle enthusiast Robert Kranjec, his BMW S 1000 RR is the pinnacle of aerodynamic efficiency, being wrapped in a fully-enclosed fairing that is the result of many hours of development in the BMW wind tunnel.



As Robert's S 1000 RR is equipped with an exhaust system from Akrapovic, the top athlete visited the Slovenian company for a tour last year, where he saw its wind tunnel and had the idea of using it for research to help him improve his performance.

During training, a ski jumper only has the opportunity to make three or four real jumps a day, and will therefore only spend an average of around 15 seconds in the air. Obviously, this doesn't allow for too much analysis, but a controlled environment, such as a wind tunnel offers much more, because a 10 minute 'training' session in the wind tunnel is equivalent to 200 live runs on a ski jump. Additionally, certain elements can even be measured – particularly frontal resistance during the in-run section of the jump.

Robert (and also his colleagues from the Slovenia ski jumping team) mainly used the wind tunnel to test and train the take-off and flight phase of jumps, and during this process, engineers from Akrapovic were able to offer advice with regard to improvements, thus further challenging the extreme limits of top sportsmen.

As for his S 1000 RR, it's hard to imagine a more advanced motorcycle, especially as the series production machine from BMW Motorrad is the most innovative in-line four-cylinder superbike available, offering a new benchmark in riding dynamics, safety and innovation. With class-leading innovations such as gearshift assistant (quick shifter), different power modes, traction control and Race ABS, motorcyclists can reach levels of riding they didn't even know they had. As for Robert, we just hope he keeps both wheels on the ground...

