

BENTLEY

THE MAGAZINE FOR ASSOCIATES OF BENTLEY MOTORS LIMITED





WELCOME

Dear Colleague

Bentley has a long history of rising to a challenge, whether it's at Le Mans or the Arctic Circle, as detailed in our lead story on the World Ice Record. And it's great to see a new generation of Bentley associates following in that tradition, like the intrepid band who cycled from Crewe to Le Mans to raise money for Children in Need, or like Elaine Wright and Mark Byass, who recently toured the world delivering the Faraday Lectures to the engineers of tomorrow. Maybe one day some of these 'newcomers' will be receiving their 25 or 40-year awards, like the colleagues I met at the Loyal Service Awards evening recently. Although it's doubtful that I'll still be in charge in 2032 when they do...

Everyone on the Board of directors is united in their wish to make this the kind of Company where great people are proud to work. This issue, we'll be looking at 'Trust', another Bentley value that's crucial to that aim. It's another of those deceptively simple words, easy to say but much harder to live up to. It's a different kind of challenge, compared to breaking a world record... but one I am sure we can rise to.

DR. -ING. FRANZ-JOSEF PAEFFGEN
Chairman and Chief Executive



BENTLEY

WORLD NEWS & EVENTS



WHEELSPIN ON ICE AT 200 MILES AN HOUR

Continental GT captures world record

The Gulf of Bothnia, 100 miles south of the Arctic Circle, might seem an unlikely venue for an attempt at a world record, with temperatures at minus 25 Celsius and a white sheet of sea ice as far as the eye can see. But when the record in question is the World Ice Speed Record and the car chosen to smash it is a Bentley Continental GT...

Ash Mason, Bentley Technical Support manager for the event, takes up the story.

On 20 February 2007, months of planning, preparation and testing comes to an end as the Continental GT's driver – four times World Rally Champion Juha Kankkunen – sits at the start of a ten kilometre (6.21 miles) track carved across the frozen sea to make his first timed run. His challenge – and it's a mighty one – is to drive the Bentley faster than the Bugatti EB110 Supersport which set a highly credible 296.34km/h (184.14mph) a few years before in the same area of Finland.

The Bentley is near-standard, and only benefits from minor modifications, such as a roll cage and one or two aerodynamic tweaks to reduce the destabilising effects of side winds. The engine also runs on fuel of a slightly higher octane rating (while the



Ice-cool: Multiple WRC champion Juha Kankkunen prepares for the delicate task of balancing a 200mph Bentley on ice while the press records the moment. The Continental GT, co-sponsored by Bentley partners Breitling, featured minor aerodynamic modifications but was otherwise standard. A clip showing the record attempt can be found on iFilm at <http://www.ifilm.com/video/2856102>



turbochargers also get a performance-kick from the ultra-low temperatures). Naturally, the Continental GT is running on studded snow tyres, which are off-the-shelf items made by Nokian.

The Guinness Book of Records sets strict rules for the world record attempt. The speed is measured over a distance of exactly one kilometre in both directions, within one hour; the ice has to be natural – it cannot be roughed up or treated with chemicals; and the tyres have to be approved for road use in the country in which the record attempt takes place.

During trial runs the car is stable to around 200km/h (124.27mph), then has to work hard on the rough, low grip surface to maintain traction. The adverse conditions present a real danger to driver and car. At around 270km/h (167.77mph) wind resistance slows the rate of acceleration, but a kilometre still rolls by in just 13 seconds, the car remaining stable on the frozen track. Achieving 300km/h (186.41mph) takes more commitment, with wind resistance proving the Bentley's biggest

enemy. Eventually, drag overcomes traction and despite the car having more power in reserve, the wheels start to spin in sixth gear approaching 300km/h (186.41mph), causing it to yaw slightly. This attempt is not for the faint-hearted.

But Juha and the Bentley team are confident that speeds in excess of 300 clicks are achievable to make the record their own, and with the daylight fading, the time has come to make the real attempt. After a series of final checks to the timing equipment and its back-up systems, Juha dons his helmet and manoeuvres the Bentley onto the track.

Despite a slight crosswind, Juha accelerates along the measured kilometre hitting a peak V-max of 330km/h (205mph) and averaging 326.68km/h (202.99mph). Even allowing for less favourable wind conditions in the opposite direction, the Bentley still achieves 316.62km/h (196.74mph), equalling a two-way average of 321.65km/h (199.86mph). The Finnish Motorsport adjudicators give their nod of approval, confirming that Juha and his Bentley

have well and truly smashed the World Ice Speed Record.

Juha Kankkunen is euphoric: "The Bentley performed impeccably. I was amazed how stable and secure it felt at these high speeds, despite the track's rough and icy surface being scattered with powdery snow; I even managed to stop the car from its top speed within 600 meters."

Our admiration goes to Juha for his skill, courage and determination just to keep going that little bit faster. Also, our thanks go out to all who worked on this project.

