



*Interview with Dr. Kentaro Zens, Project Engineer Aerodynamics/Aeroacoustics at Audi AG, responsible for the aerodynamics and aero acoustics for the R8 series.*



## Automotive IQ

Thanks for being with us today. What are some of the upcoming challenges in aero acoustics, for example, that you find for the next few years?

**Kentaro Zens:** *Especially* in aero acoustics since the cars are getting more and more silent and quieter over time. I think the situation becomes more and more important. Since the cars are better sealed than before all the real acoustic phenomena now come into the picture.

## Automotive IQ

How in particular has Audi dealt with these challenges in the past and maybe also moving forward?

**Kentaro Zens:** We started to develop lots of different techniques. We are now able to look into aero acoustics in early stages on mock-up cars made out of clay with acoustic mapping and acoustic pictures actually. There you do an acoustic screening from outside of the car and then correlate that to acoustics you have inside with an acoustic head, sitting on the driver's seat.

## Automotive IQ

On the actual models?

**Kentaro Zens:** Yes. So we try to get in to that in the really early stages because that's when you can still introduce some changes.

## Automotive IQ

Out of the projects that you worked on, is there a particular project that sticks out in your mind as very memorable and maybe why?

**Kentaro Zens:** Not really because this is actually my second car project I'm working on. I worked on the Q5 before and now on the R8. On the R8 the focus is on down force and not so much on aero acoustics as it was on the Q5.

## Automotive IQ

**Automotive IQ:** In regard to interior noise?

**Kentaro Zens:** Yes. Because you have a thunderous engine in the back and you want to hear that.

## Automotive IQ

Of course, so it's a different kind of aero acoustics. I suppose that factors in too, maximizing the "good" sound.

**Kentaro Zens:** Yes, definitely.

## Automotive IQ

Thanks for speaking with us.