

AUTODESK AND KARELCAD HELP KELLY RACING DEVELOP ENGINEERING STRENGTH

Kelly Racing driver Todd Kelly sees a new long-term relationship with industry leaders Autodesk and KarelCAD as an important step in the growth of the new V8 Supercar team.

Kelly Racing's engineering team will use Autodesk digital prototyping software for all the team's CAD (computer aided design) development well into the future, with maintenance and assistance coming from KarelCAD's professional support team.



KarelCAD engineer James Tennent has already begun to work with Kelly Racing's engineering team on further improving the team's design capabilities.

The deal has been welcomed with open arms by Kelly Racing's engineering team of Todd Kelly, David Swenson Barry Ryan, Oscar Fiorinotto, Peter Craik and James Small.

Indeed, the team's pace at the Supercheap Auto Bathurst 1000 and L&H 500 at Phillip Island in recent weeks has been testament to the engineering progress that Kelly Racing has achieved during it's first year of operation.

Todd Kelly sees this deal as one of the most important steps forward for the new team, which officially opened its doors in March this year.

"Engineering is such a huge part of what we do because so many components in these cars are custom made," said Todd Kelly.

"It's forever evolving, all the suspension, anti-roll bars, uprights and diff-housings. The amount of change that's been happening in all those areas in the last five years has been massive.



"The teams that are really good at designing those elements of their cars and have the engineering capacity to keep updating and improving – drawing those things and getting it made and getting it on the cars as fast as possible – are the teams that win races and ultimately win championships.

“So this relationship with Autodesk and KarelCAD is massive for us. It's a real performance component of what we do and as well as that, I love that part of things as well.

“So to have a relationship with such a renowned company like Autodesk, and to have the ongoing support of KarelCAD's expert team, is huge.

“It's probably the biggest thing we've been able to lock away in the young age of our team on the engineering side of things.”

(NB: A full interview with Kelly is available below.)

Kelly Racing's Head of Research and Development David Swenson, who is also the Race Engineer for Rick Kelly's #15 Jack Daniel's Racing Holden Commodore, says that the Autodesk digital prototyping solution is the best available for motorsport and automotive applications.



“The Autodesk suite of software is exactly what we need here at Kelly Racing,” said Swenson.

“Its provision of a seamless range of tools will allow us to produce more integrated designs faster and more efficiently.”

Nick Ryan, Commercial Manager for Kelly Racing, sees the long-term relationship with Autodesk and KarelCAD as an important step forward for the team.

“Although in our infancy, the plans for Kelly Racing are significant in terms of our future development and ongoing expansion,” said Ryan.

“Therefore the need for us to align ourselves and secure the best products and services available is paramount.

“The association with Autodesk and KarelCAD is major coup for Kelly Racing and their commitment to the team with our long term partnership is testament to their understanding and belief in our program and we look forward to sharing in much success together.”



Karsten Hojberg, Director of Manufacturing Solutions, Autodesk Australia & New Zealand, expects Kelly Racing to benefit greatly from the technology now available to the team's engineering department.

"Autodesk's Digital Prototyping solution is ideal for this environment and it's a perfect fit for Kelly Racing," said Hojberg.

"It is going to allow Kelly Racing to explore 'what-if' scenarios in a risk-free, virtual environment allowing them to reduce the cost and increase the speed of their race car development.

"It not only gives them the ability to visualise, simulate and engineer their cars but the Digital Prototyping solution also gives them the ability to manage their data throughout the entire process."

Rod Hunt, Sales Execution Manager of Manufacturing Solutions, Autodesk Australia & New Zealand, is looking forward to the new partnership with Kelly Racing.

"We are excited to be onboard with Kelly Racing at such an early and crucial stage in this team's history," said Hunt.

"We have no doubt that this will be a successful and rewarding partnership."

Paul Laycock, CEO of KarelCAD, sees the new partnership as a great example of how KarelCAD's efforts can have an immediate benefit to the engineering efforts of the team.

"KarelCAD has been working with the design industry for over 23 years and we see the partnership with Kelly Racing as a positive test of the use of Autodesk design solutions and KarelCAD integration and training and how it can directly affect the performance of Kelly Racing," said Laycock.

"By having direct control of how engine components and systems are designed, Kelly Racing will see immediate improvement in their performance and by using the KarelCAD integration and training will always be moving forward with their use of the correct technology and design systems."

Kelly Racing will hit the track in two weeks time for the Nikon SuperGP on the Gold Coast for Races 19 and 20 of the 2009 V8 Supercar Championship Series on October 22-25 in Surfers Paradise, Queensland.

Q&A with Todd Kelly:

QUESTION: This new relationship with Autodesk and KarelCAD must be a big part of strengthening the engineering side of the business?

"Engineering is such a huge part of what we do because so many components in these cars are custom made.

"All the suspension, a lot of the ancillaries, all that stuff we make in-house. At the end of the day those are all parts that makes the car fast, if you've done a good job with all of it.

"It's forever evolving, all the suspension, anti-roll bars, uprights and diff-housings. The amount of change that's been happening in all those areas in the last five years has been massive.

"The teams that are really good at designing those elements of their cars and have the engineering capacity to keep updating and improving – drawing those things and getting it made and getting it on the cars as fast as possible – are the teams that win races and ultimately win championships.

"Triple Eight has obviously done the best job of that for the last few years and we realise that from where we are at, being so new, that's where we need to focus our energy as well, into designing and getting as much drawn and machined and put on the cars as quickly as we possibly can.

"So this relationship with Autodesk and KarelCAD is massive for us. It's a real performance component of what we do and as well as that, I love that part of things as well.

"The engineering side of racing, and being involved with the process of designing parts and getting them on the car and then as a driver, having that background and then actually feeling the result of what all those things do in the cars, is probably the most enjoyable part of what we do, being a professional driver.

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"It's probably the biggest thing we've been able to lock away in the young age of our team on the engineering side of things."

QUESTION: When people look at a new team, there seems to be two ways to go, in being a customer or forging your own path, and Kelly Racing definitely has the approach of being self-sufficient and putting in the effort to be a team based on engineering strength.

"In history, the teams that follow and copy never beat the teams that design it

themselves and do a good job.

"There's two parts - one, being a customer is twice as expensive, because there has got to be a bit of money in it somewhere if you're going to sell your components to someone else.

"Secondly, there's always that question mark of if you're buying components off of another team, are you getting exactly the same spec as what they have got on their own cars?

"When we started to set the team up and hired the engineering department with different people that have got experience in what we do, our aim was always to get enough brains in the place and enough people with the enthusiasm to work it out for ourselves, with the aim to become leaders in that side of it. We are still evolving our own company as far as scoping out what else is out there and different technology as well.

"So certainly, I think we've got the brain power in our place with our engineering department to design our own stuff. The biggest thing that we struggle with is just the time to go away racing and engineer the cars for race meetings as well as trying to redesign all this stuff and put it into production through a season.

"It's a lot of stuff to try and bite off and chew in such a short time. But now that we've got all the right people and the software and equipment to do it, we've got some pretty big plans on what we want to get done to our cars in the second half of this year.

"That's probably the most important period. We're on our feet now and we've got all the little silly things like pit equipment and all the procedures you need at the track.

"We're up and running now, we're on top of the day-to-day running of everything and now that we're at that point, the make or break of what we're going to be capable of is what we do with the second half of this year now, as far as where we can get to with the cars to hit next year as a championship contending team.

"With the inception of this team, we always said that we want to get to the point that by the end of our first year, we are in a position where we can pull the cars out of the truck and have a crack at winning a race.

"We always knew at the start of the year, if we had said that we were going to go to Clipsal and our goal was to qualify on the front row and win, everyone would have said 'you blokes have got to be joking' and we've always been quite realistic about that.

"I think what we said back then was that to get to the end of the year where we can be in a position to attack the championship the following year, that's a pretty

serious goal.

“With this relationship with Autodesk and KarelCAD, that's well on track. We've got a pretty big schedule of engineering work to get done and it's all of those things that we wanted to do so that we can hit the road running next year.”

For more information about KarelCAD Solutions and BIM Design Tools please contact our solutions team on 1800 223 562 or visit www.karelcad.com.au

