AP RACING

CASE STUDY

AP Racing design high performance clutch and brake assemblies for many high profile customers, such as Formula 1 racing teams, and hence excellence in design is key to their success.

Nick Mennell, Engineering Director explains "Any design tools we use need to be serious systems that are fast, accurate and reliable.

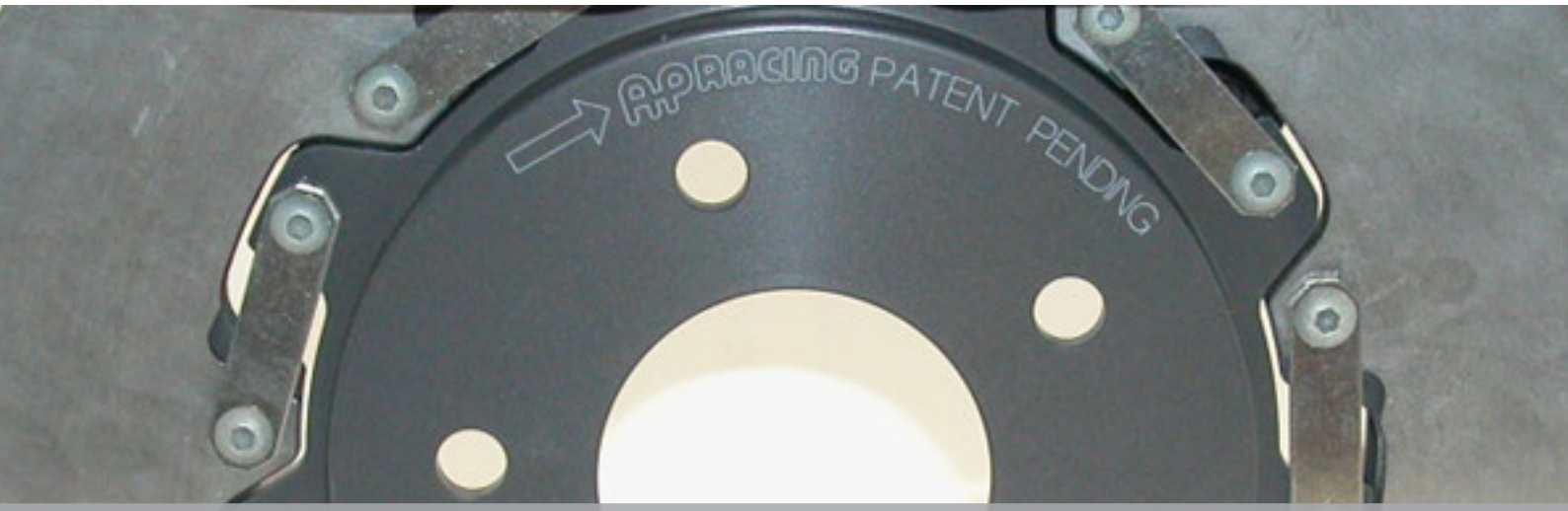
Many of our products have safety critical components that need to be as light as possible and still operate at the very limits of their performance envelope, so the ability to optimise designs through advanced analysis was very important to us.

Until we began using SolidWorks, we didn't believe that high quality analysis results would be possible from such an in-house system, but we now study the dynamic performance of new concepts to a very advanced level."

The net results they have achieved are dramatic. They now design and test around 75% in the design office, and only 25% on track. This saves vast amounts of time and money as they only go to the test track with designs they have already 'digitally tested and analysed'.

Mennell believes that with 19 seats of SolidWorks, 4 seats of COSMOS, and Working Model, their total installation was a large investment, but has more than justified itself already.

"In selecting a support company, it was very important to us that the supplier really knew about design and analysis, as so many CAD vendors know how to drive the software, but can't add value beyond how to model geometry.

NT CADCAM are really excellent. Their people really understand engineering design and advanced analysis, and they have worked with us on several projects and contributed to resolving many difficult analysis problems."

Nick Mennell would recommend NT CADCAM to anyone considering SolidWorks, who is serious about design and analysis.