

## Automotive Brake Cooling CFD Simulation

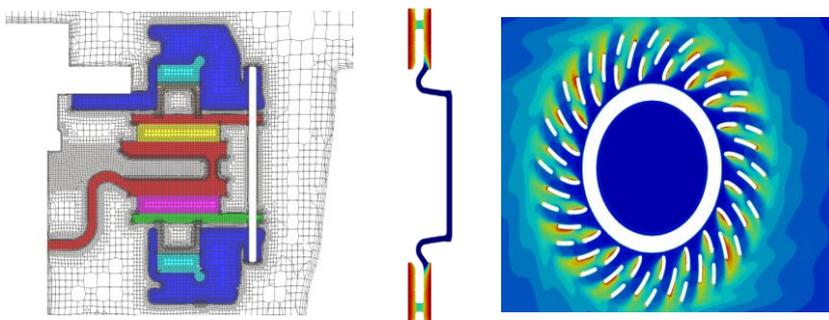
The application of iconCFD® Products & Expert Services to automotive Brake cooling simulation

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The advanced thermal models available in iconCFD v4 allow the most efficient brake simulation applications for vehicles. ICON's tools simulate the heat transfer on rotating systems on multi-region CHT problems with great ease.

Automatic multi-region meshing in iconCFD Mesh allows the setup of both fluid and solid regions at one time. This enables the modelling of all solid regions of the brake system, wheel hub, axle etc. as well as the cooling air flow and brake fluid to evaluate the peak brake fluid temperature during braking events. Transient heat up and cool down events of the braking cycle can be setup and simulated and there are multiple models available. The tools also allow to optimize the internal cooling channel layout to achieve the maximum cooling performance and best mass flow generation. Advanced DOE optimization techniques can be run on-premise or from any location with the iconCFD Platform cloud service.

To find out more and watch the video visit [www.iconcfd.com/icon-article-automotive-brake-cooling-cfd-simulation](http://www.iconcfd.com/icon-article-automotive-brake-cooling-cfd-simulation).



For over 25 years, ICON has been a globally trusted partner for simulation-driven product engineering to world leading OEMs, emerging disruptors and suppliers. Our on-premise and cloud-based iconCFD® products and expert services deliver significant operational, commercial and competitive benefits for clients – fast, accurate, flexible and scalable – all at substantially less cost than the big software vendors and conglomerates. The potential savings for your company could run into \$millions. ICON engineers' expertise is not just limited (like some) to simulation objectives but extends to the physical testing process and critically, how the new designs will be integrated into the development of the whole vehicle.

## Trust ICON

Improve your competitive edge with ICON as your partner:

- Pioneers and leaders of unlimited CFD technology
- Employed by over 65% of Top-20 automotive OEMs in the past 5 years
- An engineering partner to industry for 30 years
- Operational/performance quality: ISO certified
- Global presence; offices in Europe, America, Asia
- 200+ people in group and 100+ CFD/CAE specialists
- Engineering application led software development

Better, Faster,  
Cheaper, Easier.

## Contact ICON

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