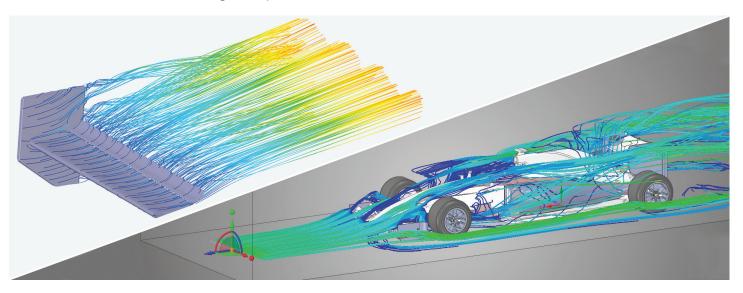


Engineering Analysis of Race Cars

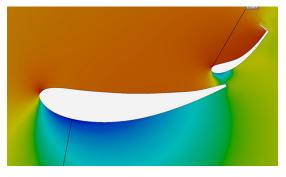
Aerodynamic Performance - CFD

• Wing • Spoiler • Airdam • Diffuser • Race Car



Typical Output

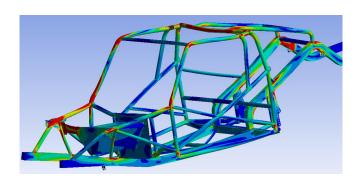
- Drag Force
- Down Force
- Drag Coefficient
- Pressure Coefficient
- Velocity Streamlines



We Can Create from:

- Pictures
- Cad File
- Scan File (We can Scan)
- Drawing
- Template

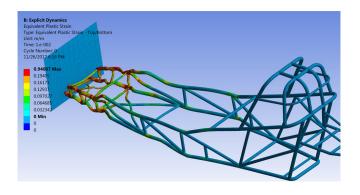
Chassis Stress Analysis - Finite Element Analysis



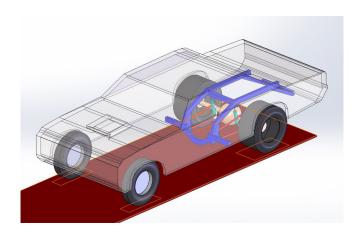
- Torsional Rigidity
- Tubing Stress
- Factor of Safety
- Suspension Mount Forces
- Deflection
- Reaction Forces
- Minimize Weight / Maximize Strength
- · Optimized Design

Crash Simulation - Explicit Dynamics

- High Speed Crash
- Large Material Deformation
- Driver "G" Loads
- Driver Cell Condition
- Deformation Well Defined



Vehicle Dynamics - Multi-Body-Dynamics



- Drag Car Launch Dynamics
 - Engine Torque Input
 - · Driveline / Wheel Torque Input
 - 4 Link Instant Centers
 - Springs/Shocks/Chassis Stiffness
 - · Weight Transfer / Chassis Twist / Deflection
 - Suspension Forces / Ground Forces
- High Speed Turning
 - Chassis and Suspension Modeling
 - · Deflection and Roll
 - Suspension and Tire Forces

Laser Scanning Gets the Geometry Accurately

Scanning provides a fast and economical method to quickly get the most accurate geometry whether a wing, chassis frame or body. Can be performed at our location or yours.





