



Become a “Why Not” Engineering Culture

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August 16, 2016

Hendrick Motorsports Overview

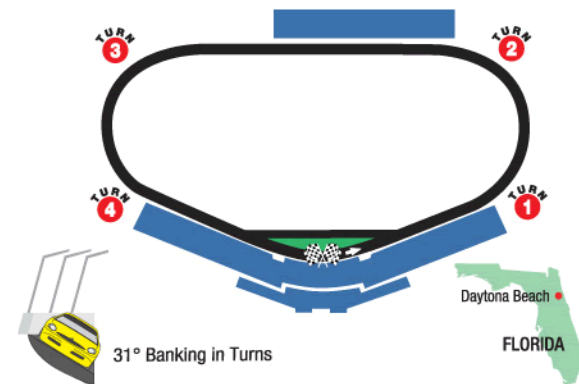
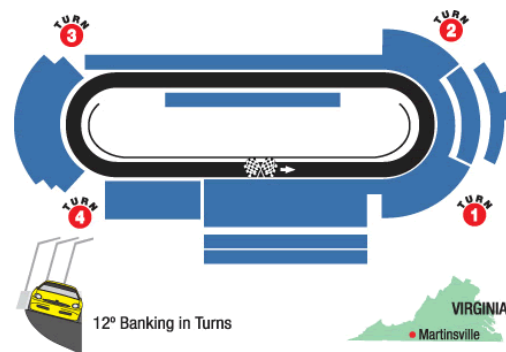
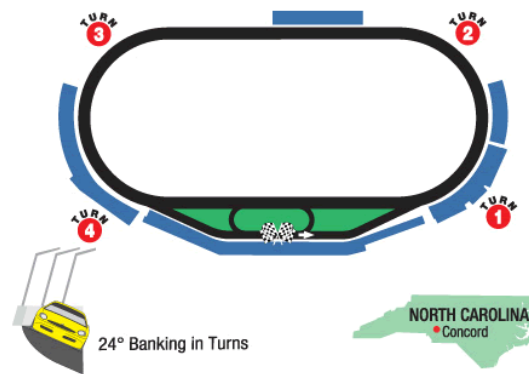
- 4 car team in NASCAR Sprint Cup Series
 - #48 Jimmie Johnson, #88 Dale Earnhardt Jr., #5 Kasey Kahne, #24 Chase Elliott
- Owner Rick Hendrick
 - All-time leader in Sprint Cup owner's championships
- 420,000 square-foot technology center with more than 600 employees
 - Over 75 Chevy race cars designed and built each year
- Outdoor performance field and state-of-the-art training facility for pit crew athletes



- NASCAR season is 39 races
- 42 weeks from Mid February to November



- Hendrick Motorsports assigns 14 race cars to each team
- Different types of cars based on 'style' of track
 - Short tracks
 - Intermediate tracks
 - Superspeedway tracks
 - Road courses



Utilization of ROMER Arms

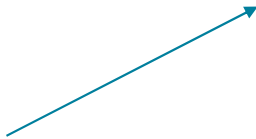
- Hendrick Motorsports utilizes ROMER arms extensively throughout the build process
 - Chassis construction
 - Body placement and shaping
 - Car assembly
 - Individual Components

Chassis Construction

Chassis Construction



Chassis





Simulation



ROMER Absolute 7700 Series

- Most accurate
- Available in 5 sizes and 3 configurations
- Full featured standard offering



QC



Body Placement and Shaping

New Body Inspection Process beginning in 2007

Previous NASCAR inspection process had individual templates put on the car one at a time

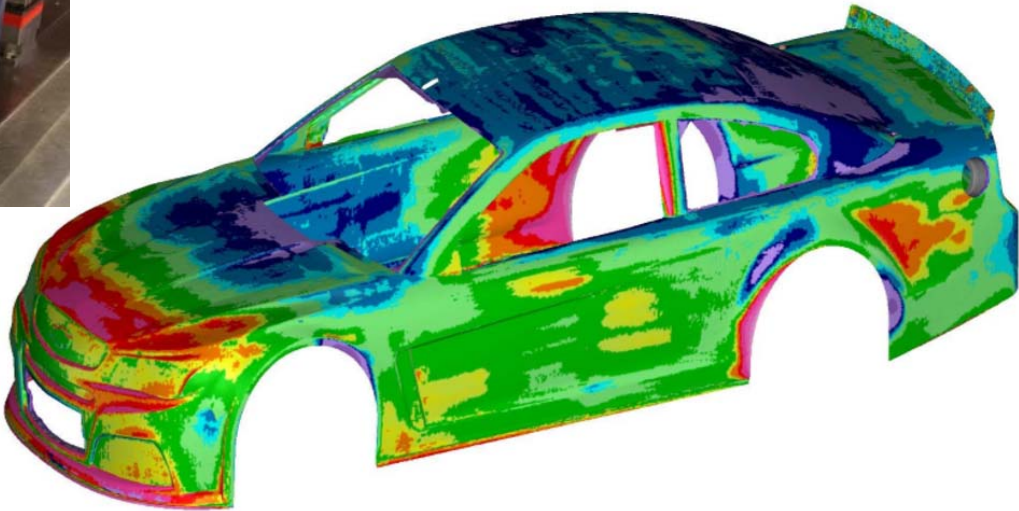


- This allowed the teams to offset and rotate the templates to increase aero performance
- But yielded a car that looked “twisted”

Body Shop



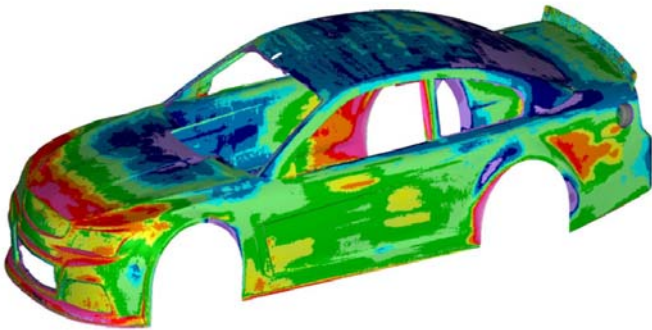
ROMER Arm Scanning



ROMER Absolute Arm with HP-L-20.8 Laser Scanner



Hendrick Motorsports selected the predecessor to the HP-L-20.8 as the scanner of choice due to the flying-dot technology, and upgraded with the launch of the HP-L-20.8 scanner as the wider scan line allowed them to reduce scanning time by more than 50%.



The ability to select line width to be as wide as 220 mm (8.6 in) for large areas and as narrow as 25 mm (1.0 in) for fine detail scanning allows the best of both worlds in one scanning device.

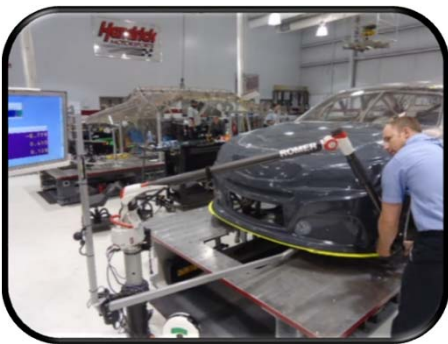
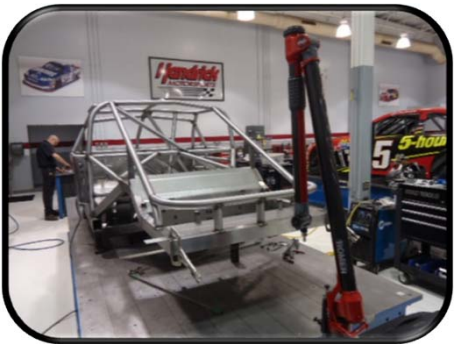


Chassis

Body



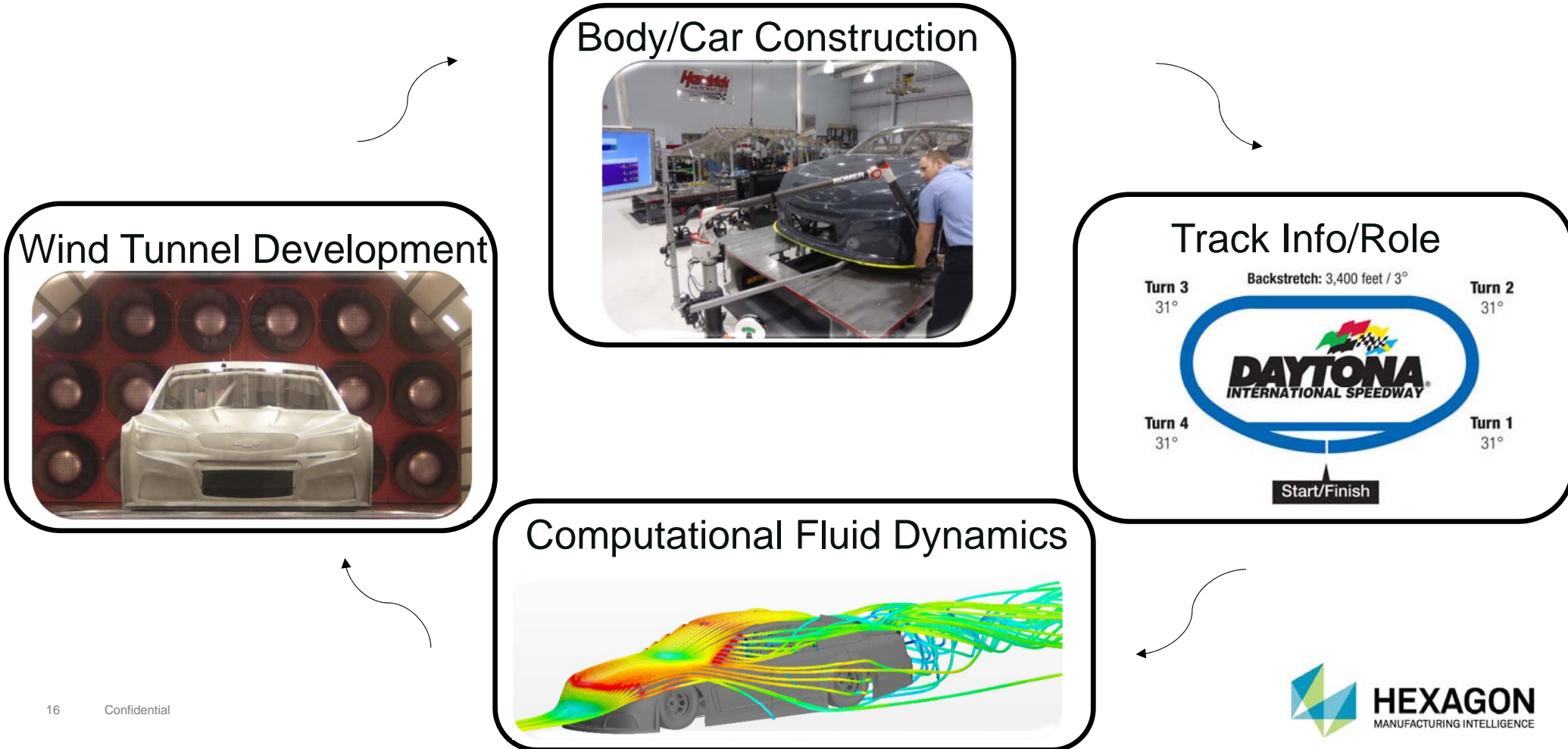
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ROMER Arm in Use for Final Check before Event



Aerodynamics Development Loop

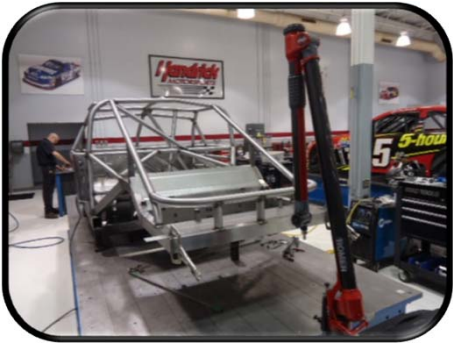




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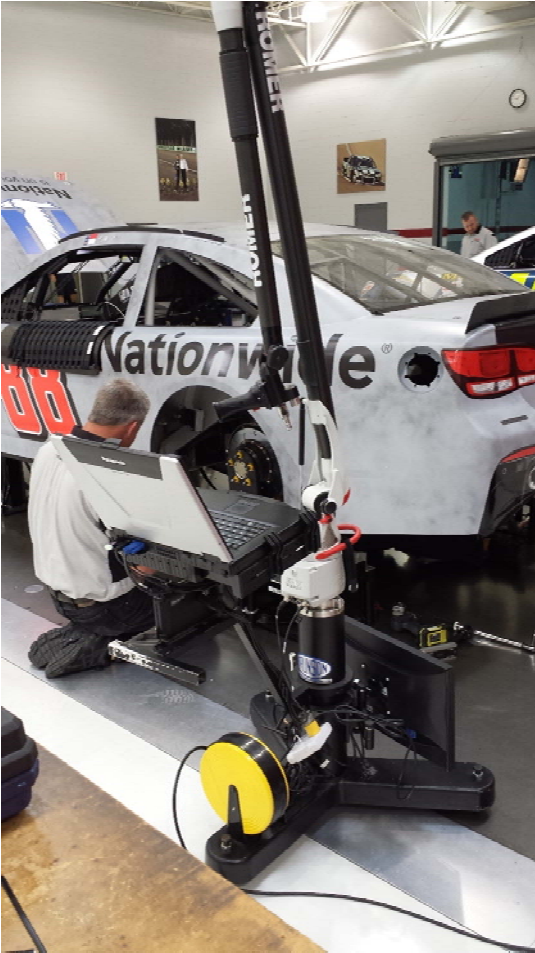
Body

Paint



Car Assembly

Car Assembly



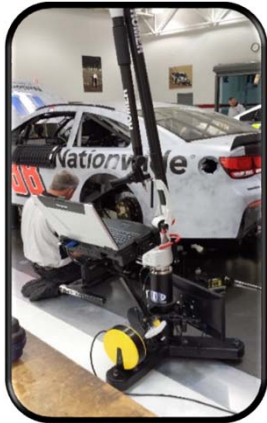
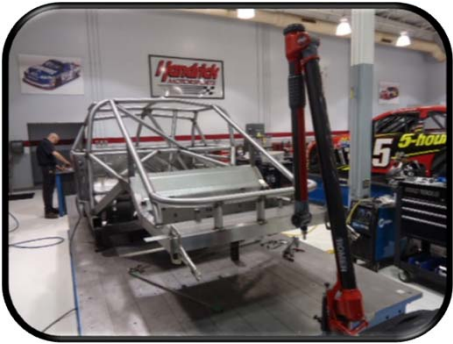


Chassis

Body

Paint

Assembly



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Inspection of Components

Rear Housing/Lower Control Arm





Components

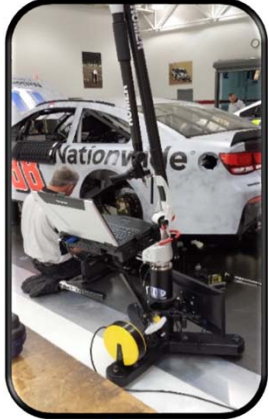
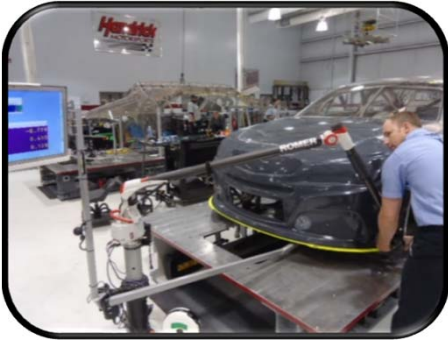
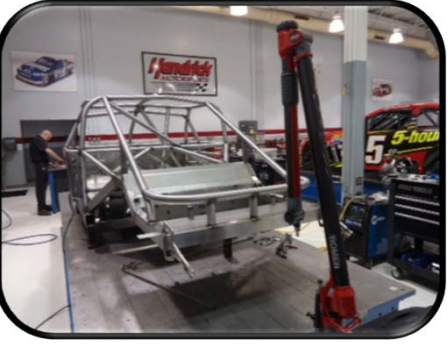


Chassis

Body

Paint

Assembly



QC

QC

QC



Manufacturing NASCAR Racers with Speed and Confidence

- Constant state of development and quick learning loops
- Hexagon Manufacturing Intelligence Products are integral in vehicle construction and assembly
- Hendrick Motorsports is looking forward to learning how to continue implementing Hexagon Manufacturing Intelligence Products into our process

Contact Information

- For more about ROMER Absolute Arms, call, click or visit:
 - [+1 \(401\) 886-2000](tel:+14018862000)
 - [ROMER Absolute Arms](#)
 - [Contact us for more information](#)
- For more information about Hendrick Motorsports, visit:
 - [Hendrick Motorsports](#)



Thank You

