

NEW YORK



THE RACE TO BETTER DATA
APRIL 25TH-28TH, SARATOGA SPRINGS

20-degree side-force CFME & walking speed CFME

Scott Fritz Business Development Director



CPFM long distance friction surveys

- Drive 100 miles with a dual sided friction system
- Fill water tank
- Inspect test tires
- Drive 100 miles with a dual sided friction system
- The 20-degree side force system is designed for 200-300 miles a day

intelligent **S**afety **A**ssessment **V**ehicle

+ Digital imaging system



+ GNSS DGPS geospatial location



+ Geometry
Cross fall, Grade, Horizontal and Vertical curvature



+ Rutting
Full Lane Width

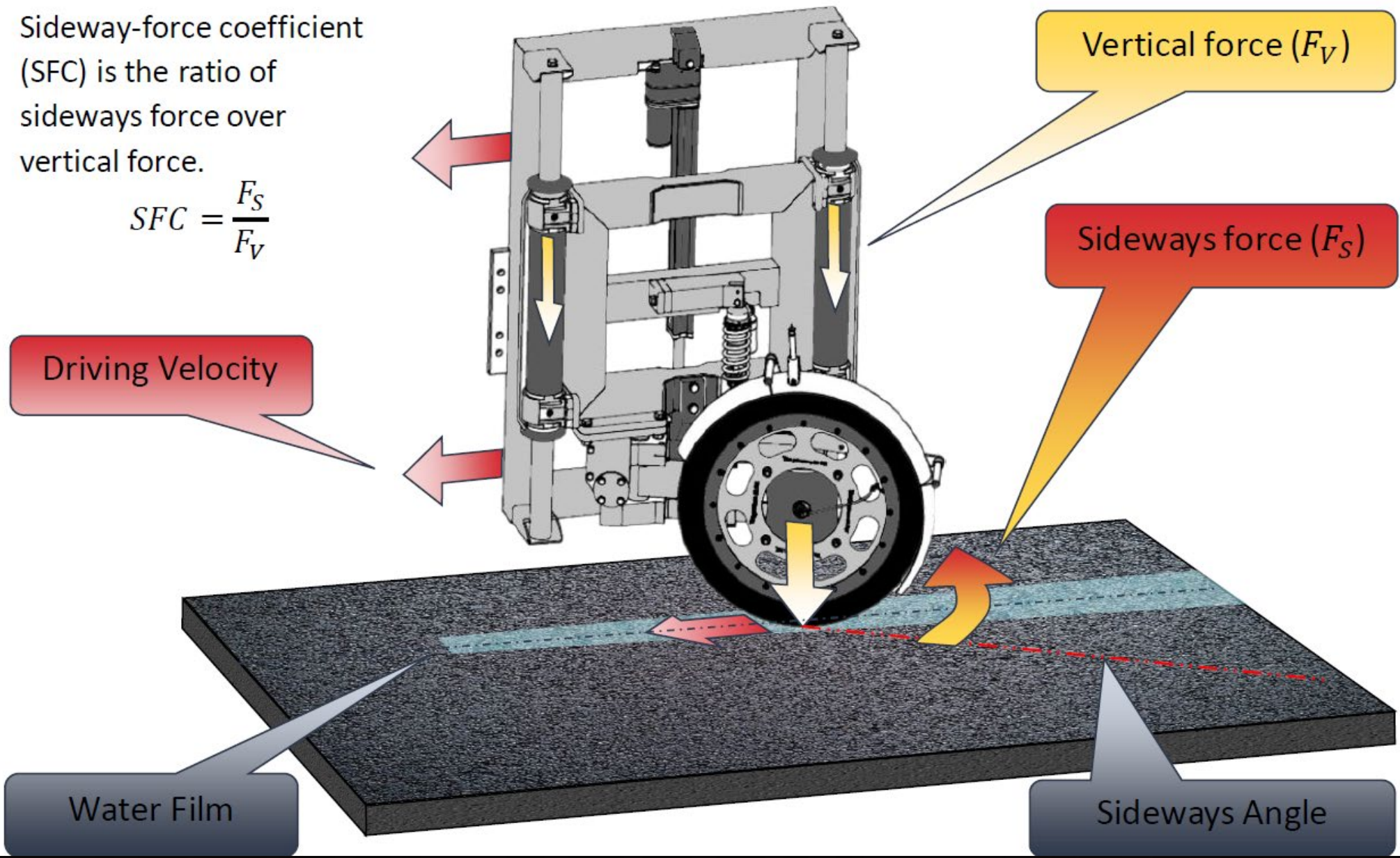
+ Texture
Centre and Both wheel paths

Continuous Friction Response
Sideways Force Coefficient
Vertical Loading Force, Air, Tyre & Water
Temperature

Friction + Geometry + Rutting + Texture + Imaging + Location

Sideways-force coefficient (SFC) is the ratio of sideways force over vertical force.

$$SFC = \frac{F_S}{F_V}$$



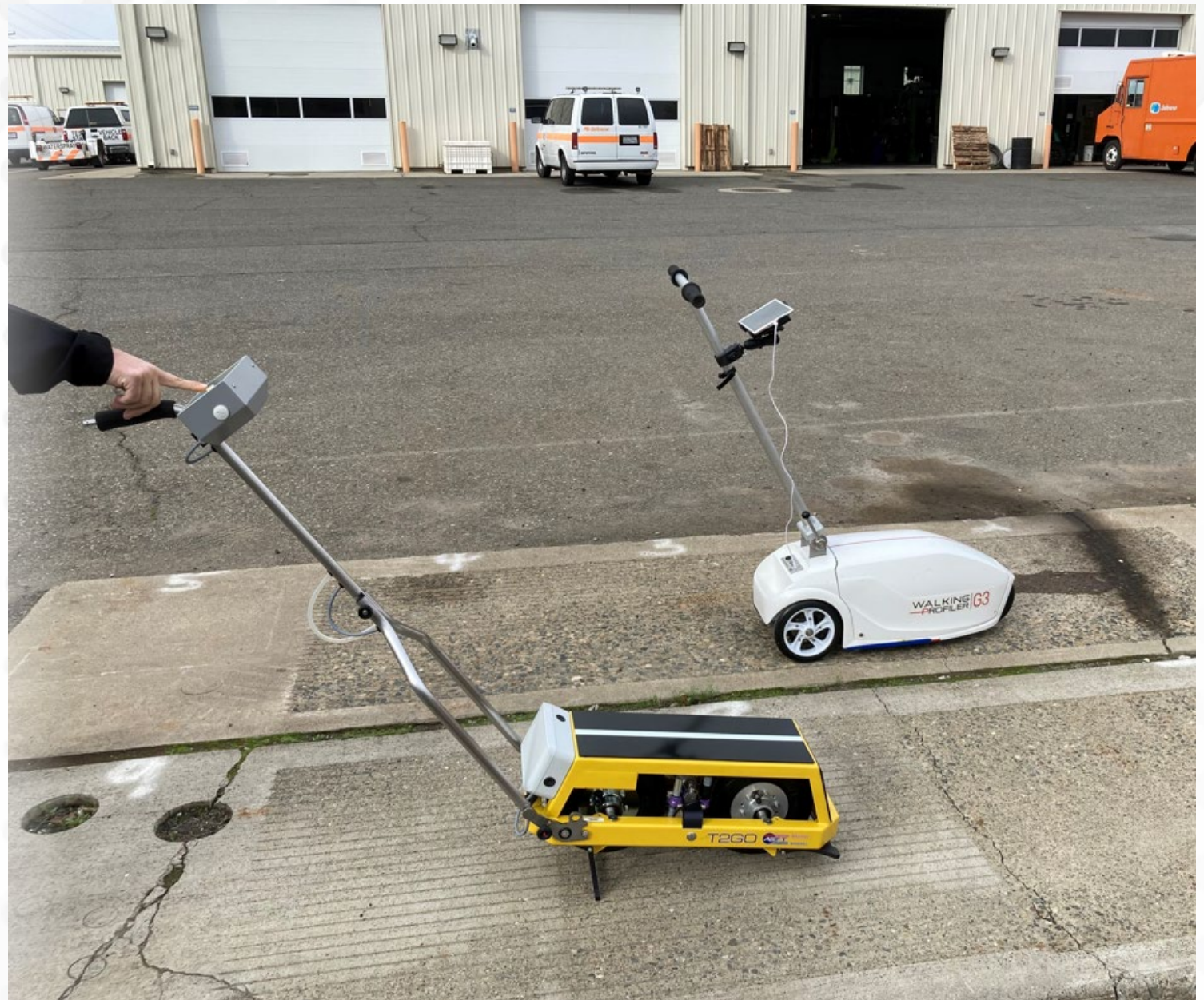
- Tire toe angle (20°- 34% slip)
- Dynamic vertical load system
- Continuous tire pressure monitoring
- Dynamic speed-controlled water system
- Ambient air/surface temperature monitoring
- Tire temperature monitoring
- Fully automated calibration procedures

Full compliance with BS 7941-1:2006
(British Standards, 2006)

Pavement
Friction

Pavement
Texture

Two
measurement
concepts





(APT) accelerated pavement testing

- Walking speed CFME approved for:
Road markings/helidecks
Bicycle paths
Walkways
2020- certified for roads in Europe
- Racing teams, Tire manufacturers, Car manufacturers, Test tracks
- Virtual reality software & Driving simulators

Texas Motor Speedway

IndyCar Racing Series



We have an opportunity to collect and maintain a large amount of data.

In the 2020s, it is possible to obtain ***mountains of data*** or as they call it today, **BIG DATA.**

Move on with the changes!

