

Ten ways to improve fuel economy

PACCAR & DEALER
TMC
Technical & Maintenance Conference

Operating Costs
are killing
Us

Business
used to be
Profitable

Chet Cline

AIR CTI – SMART TRUCKS



According to Safe Rates.com.au

\$674,000 for fuel

\$77,000 for tyres

\$104,000 for maintenance

\$64,000 for servicing

Cost for 1,200,000 km. truck life:

\$548,000 for the driver

\$504,000 for finance

\$457,000 fixed over heads

\$2,426,000 cost overall, or \$1,465 per day, or \$1.95 cost per km



The Realist Savings Can Be Huge:

\$65,000 if 10% fuel saved

\$10,000 if 15% tyres saved

\$7,000 if 10% maintenance saved

\$46,000 saved from 2% trip time reduction

and less downtime

**\$128,000 saved, and we haven't even started
on what is possible**



**EVERY DAY I'M OFF THE ROAD,
\$1,465 IS LOST**



The Effect of Load on Fuel Savings

Bridgestone tests indicate that reducing payload 10,000 pounds produces about a 3.9 percent savings in fuel.

**FUEL
SAVINGS**

20

15

10

5

15.5%

7.7%

3.9%

80,000

70,000

60,000

40,000

(empty)

GROSS WEIGHT

BRIDGESTONE



Weight Savings with Wide Base Radials



WIDE BASE
181 lb per TIRE



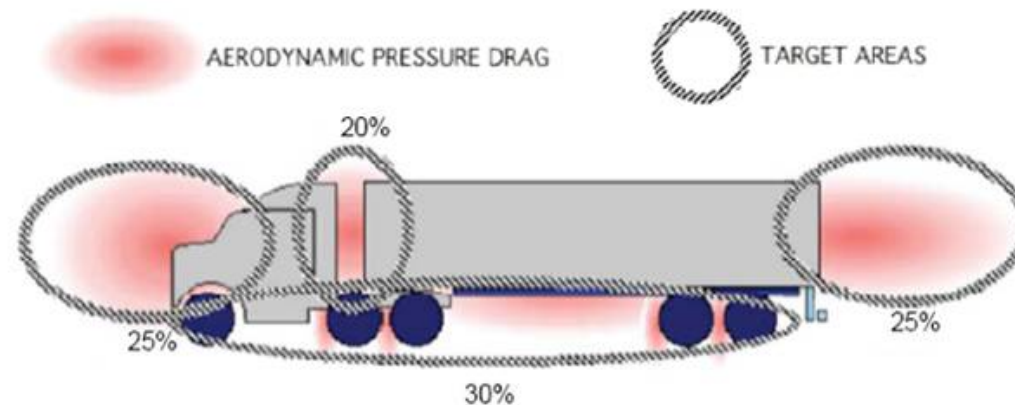
LOW PROFILE
250 lb per PAIR

*Wide base tires can allow weight savings to be converted into revenue-producing payload
and may be more fuel-efficient than ordinary dual assemblies.*

BRIDGESTONE



Pie in the Sky? No



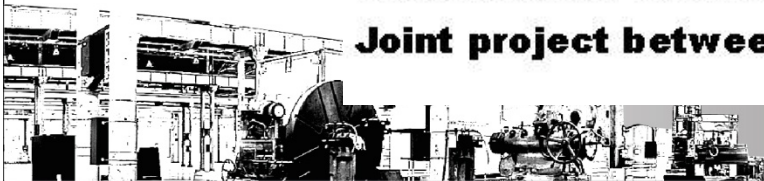
25% - 35% Prime Mover Drag

65% - 75% Trailer Drag

Implementation of known second generation technologies can reduce wind averaged aerodynamic drag by 30 per cent. At highway speeds this corresponds to at least a 15% reduction in fuel consumption.

- 30% Trailer Front Base
- 30% Trailer Rear Base
- 30% Undercarriage
- 10% Side and Top Surfaces

Joint project between Linfox, MaxiTRANS, Monash University



Certified SmartWay Trailers

- US EPA Certified SmartWay trailers
 - Utility
 - Wabash



12

Mandatory In California:

- **Aero aids**
- **Low rolling resistant tyres**
- **Tyre pressure monitors**



**4% fuel
saving**



**5 psi difference in dual tyres
causes an 8 mm difference in roll-
ing distance. This equates to drag-
ging the smaller tyre 135 kms in
60,000 k's.**

Air in the fuel wastes



**Meritor
PSI**



**ALCOA
AIR CTI**



TIREMAAX®



FASS





Cab roof deflectors



**Nose
cones**



**Boat tails or
Tail cones**



Side skirts

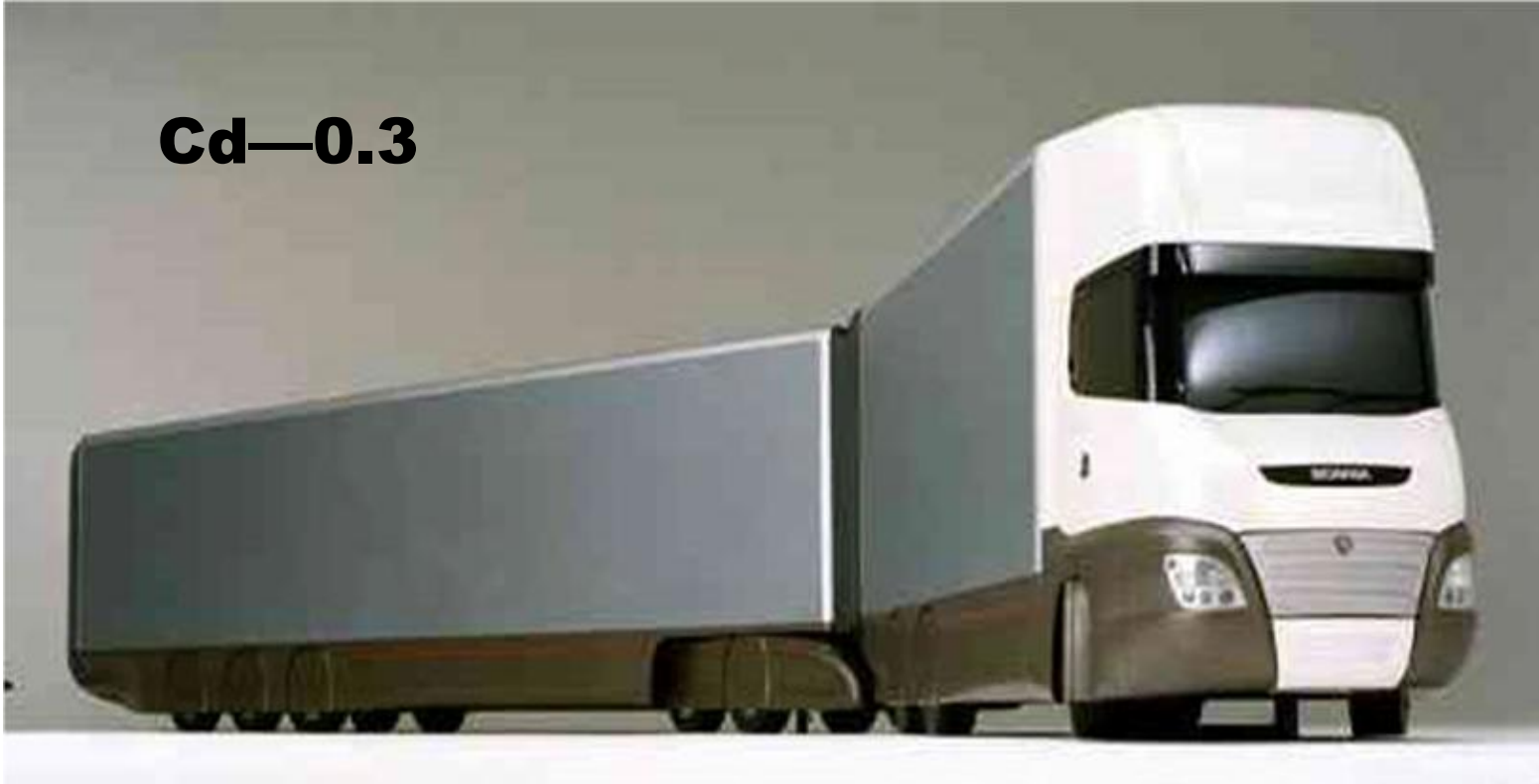




Common errors



Cd—0.3



The Future

