

# ALCOA TECHNICAL BULLETIN

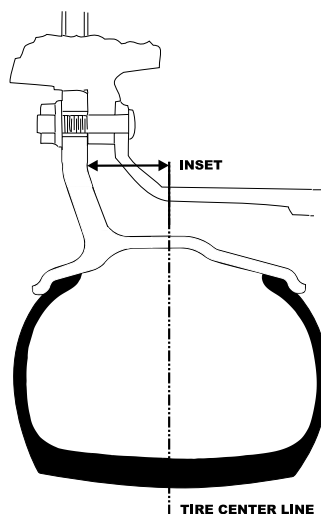
November 10, 1999

## Wide Base and 9-Inch Wheel Fitment Check for Steer Axle Load Rating

Alcoa offers 22.5 x 11.75, 22.5 x 12.25, 22.5 x 13.00 and 22.5 x 9.00 inch wheels for steer axle applications with axle ratings up to 23,000 pounds (10,433 kg.). Some of these designs have inset dimensions that, when installed, increase the track of the vehicle which may reduce the Gross Axle Weight Rating (GAWR) of the vehicle.

One of the many parameters considered in axle and axle component design is the inset of the wheel that has been selected for the axle design. As the rim and wheel assembly moves farther outboard (i.e. greater track), the loading characteristics increase, negatively impacting the life on the bearings and other major components. Vehicle and axle manufacturers may de-rate the axle or may not approve the use of a wheel if the wheel fitment creates a greater track than the originally intended wheel.

Alcoa recommends that prior to purchasing wider wheels, the vehicle manufacturer or axle manufacturer be consulted for technical assistance.



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